

## IMPORTANCE OF SOCIALIZERS AND MOTIVATIONAL FACTORS IN CAREER CHOICE

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**ABSTRACT.** *Career selection is a complex and continuous process which starts from childhood, develop through teenage years and at the final stage of adulthood, the individuals families themselves with the available alternatives and choose one which suit them. The study aims to analyze the importance of socializers and motivational factors on career choices of the students. The results will facilitate the students in choosing the right profession which enable them to utilize their potential to achieve their objectives/ destination. It is based on primary data collected through questionnaire survey from the students studying in the colleges & universities of Islamabad, Rawalpindi, Taxila/ Wah Cantt: Chakwal & its vicinity, their parents and teachers. Based on the previous studies, six (06) socializers and twenty one (21) motivational factors are selected and opinion/ view points of the students, their parents & teachers are obtained. The responses are measured on Likert five (5) point scale. The results indicate that parents especially father is most influential in selecting profession of the students and directly or indirectly decides the students' future career pathway. Money/handsome salary, status, employment opportunities, career development, personal recognition, professional respect etc are found the most influential motivating factors in career choice. The influence of socializers and few motivational factors such as handsome salary, working conditions// hours, career development & security of job are found gender biased and in remaining motivational factors no significant difference is found.*

**Keywords:** Socializers; Motivational Factors; Career Choice.

**1. Introduction.** Career selection is a continuous & complex matter and Super (1953) describes the career selection process in five stages such as growth (childhood), exploration (adolescence), establishment (early adulthood), maintenance (middle adulthood) and decline (late adulthood). Ginzberg (1988) described the career choice as three stage process that started at childhood and developed through teenage years. At the final stage (age 17 years through young adulthood) they familiarize themselves with the career alternatives available to them and eventually develop a compromise which allow them to utilize their potential talent enabling to satisfy their goals and values as much as possible. Gati et al (1996) emphasize that the career selection/ decision making process has the same characteristics as any other decision making process such as it involves an individual who chooses the most appropriate career pathway from the various available alternatives/ career opportunities based on comparison & evaluation of alternatives. Moreover the career selection decision process has some specific features such as an individual makes decision from a wide range of career opportunities, for each career alternative a wealth of information is available and the facts that various aspects of the profession i.e. type and duration of the education, independence of work etc are to be taken in consideration.

The trend to shift from one profession to another is increasing day by day. People are found unhappy and unsatisfied with their present professions and are looking for the profession which suits their personality traits and are helpful in achievement of their goals. They find themselves unable to properly utilize their capabilities to get their desired objectives. They don't find the way to achieve the destination they are looking for and are capable to achieve. Their capabilities are not properly utilized in the manner and direction, helpful to get their desired goals and objectives. One of the reasons of such un-satisfaction is wrong selection of career pathway. Their present profession is not helpful to achieve their desired goals/ motives they are looking for.

Frequent profession/ career changes, under-utilized capabilities of the country's manpower and unsatisfied youth with their present job/ profession, make it imperative to study the involvement of the socializers and impact of the motivational factors upon the important decisions, the students make near completion of their education for their future career. The major objective is to find the effect of the motivational factors and the role played by socializers in career choice. It will be helpful for students' career counseling and making one of the most important decisions for their future education and career which enable them to achieve their desired objectives/ destination. Also it will be helpful for students in making crucial decision of career selection which is the base of their future happiness. They are going to select the profession enabling to achieve their motives & destination they are looking for. A little mistake at this stage will destroy their future happiness & plans, many years of expensive education wasted and they will not be able to achieve the destination they have set for themselves. To understand the importance of motivational factors and the role played by the socializers in students' career choice, will help for right profession selection for the young generation enabling them to utilize their potential for achievement of their objectives/ destination. The study will also facilitate the employers/ management to determine the remuneration (pay and allowances) to motivate their employees and increase productivity.

## **2. Literature Review**

Career choice starts from the childhood and is shaped by the personal and environmental factors (Bandura, 1986). Personal and social experiences influence the individual choice and based upon these experiences, the personal and professional goals, inspiration by the family members and peers etc, he chooses the career (Fischman et al, 2001). In general we can say that on the basis of personality traits, the career paths available to a student are determined. Then the demographic factors (parent's socio-economic position, birth order etc), socializers (parents, teachers, friends etc), opportunities and environmental factors, and motivational factors (money, status, career etc) influence him in selecting the career. Finally a profession/ career path is selected which enables the student to achieve his desired/ set goals. Hence career selection process is influenced by the following factors:

1. Students' Personality Traits.
2. Socializers (parents, teachers, peers etc).
3. Demographic Factors.
4. Environment and Opportunities
5. Motivational Factors

### **2.1. Students Personality Traits**

The 1950's and later decades developed many theories of Career Choice and Development. These theories fall in distinct categories such as trait and factor theories, development theories, learning theories, socioeconomic theories, and recent theoretical statements (Isaacson & Brown, 2000). Trait and factor theories placed priority on the development of one's individual traits. Traits are one's interests, values, personalities, and aptitude as well as select environments that are congruent with them [25].

Holland's (1959) Theory of Vocational Choice and the Big Five Personality traits [15] are the most notable in this field. Big Five Personality traits is a self assessment study to know the one's personality traits i.e. attitudes, values, believes etc and the Holland theory is based on the vocational choices compatible with the environment and their personalities.

#### ***Big Five Personality Traits***

The Big Five personality traits are five broad factors or dimensions of personality discovered through empirical research [15]. It is a descriptive model of personality which is not based on the theory of any one

particular psychologist, but rather on language, the natural system that people use to understand one another. It is based on self assessment questions/ items which the individual answer accurately and honestly. The responses/ results are compiled on 05-point scale and accordingly decision about his personality trait is made. These five categories are shown in table 1:-

**Table 1. Big Five Personal Factors**

| Personal Factors   | Relationship to Job Performance  | Relationship to Team Performance   |
|--|--|--|
| <b>Extroversion:</b><br>(Communicative, Outgoing, Sociable, Talkative)         | <ul style="list-style-type: none"> <li>Positively related to job performance in occupations requiring social interaction.</li> <li>Positive related to training proficiency for all occupations.</li> </ul>  | <ul style="list-style-type: none"> <li>Positively related to group performance.</li> <li>Positively related to degree of participation within group.</li> </ul>  |
| <b>Agreeableness:</b><br>(Friendly, Cooperative, Relationship oriented)        | <ul style="list-style-type: none"> <li>Positively related to job performance in service job.</li> </ul>  | <ul style="list-style-type: none"> <li>Most studies found no link between agreeableness and performance or productively in group.</li> <li>Some found a negative link between person's likeability and group performance.</li> </ul> |
| <b>Conscientiousness:</b><br>(Hardworking, Intellectual, Achievement oriented) | <ul style="list-style-type: none"> <li>Positively related to job performance for all occupational groups.</li> <li>May be better than ability in predicting job performance.</li> </ul>  | <ul style="list-style-type: none"> <li>Should be positively related to team performance.</li> </ul>  |
| <b>Emotional Stability:</b><br>(Neuroticism—Low on emotional stability)        | <ul style="list-style-type: none"> <li>A minimal threshold amount may be necessary for adequate performance.</li> <li>Greater degree not related to job performance.</li> <li>Positively related to performance in service job.</li> <li>May be better than ability in predicting job performance across all occupational groups.</li> </ul> | <ul style="list-style-type: none"> <li>Should be positively related to group performance</li> </ul>  |
| <b>Openness to experience:</b><br>(Innovative, Creative, Flexible)             | <ul style="list-style-type: none"> <li>Positively related to training performance.</li> </ul>  | <ul style="list-style-type: none"> <li>Data unavailable</li> </ul>   |

### ***Holland's theory of Career Choice***

The basic assumption of Holland's (1959) Theory of Vocational Choice is that the unique patterns of ability or traits of an individual can be measured and matched to occupation [51]. Holland (1992) outlines six types of personalities of individuals and six types of work environments. The personalities and environments are both labeled as Realistic, Investigative, Artistic, Social, Enterprising, and Conventional and their characteristics are describe at table 2.

**Table 2. Six types of Personalities**

| S.No | Personalities | Characteristics   |
|------|---------------|---|
| 1    | Realistic     | <ul style="list-style-type: none"> <li>Like to work with animals, tools, or machines; generally avoid social activities.</li> <li>Has a good skill in working with tools, mechanical or electrical drawings, machines or plants etc.</li> <li>Values practical things you can see, touch and use like plants &amp; animals, tool, equipments or machines.</li> <li>Sees self as practical, mechanical, and realistic</li> </ul> |
| 2    | Investigative | <ul style="list-style-type: none"> <li>Likes to study and solve math or science problems, generally avoids leading, selling or persuading people.</li> <li>Is good at understanding and solving science &amp; math problems.</li> <li>Values science.</li> <li>Sees self as precise, scientific, and intellectual.</li> </ul>   |
| 3    | Artistic      | <ul style="list-style-type: none"> <li>Likes to do creative activities like art, drama, crafts, dance, music or creative writing.</li> <li>Have good artistic abilities--- in creative writing, drama, crafts, music or art.</li> <li>Values the creative art--- like drama, music, art, or the work of creative writers.</li> <li>Sees self as expressive, original, and independent.</li> </ul>                               |
| 4    | Social        | <ul style="list-style-type: none"> <li>Likes to do things to help people--- like teaching, nursing, providing information etc</li> <li>Is good at teaching counseling, nursing or giving information.</li> <li>Values helping people and solving social problems.</li> <li>Sees self as helpful, friendly and trustworthy.</li> </ul>   |
| 5    | Enterprising  | <ul style="list-style-type: none"> <li>Likes to lead and persuade people and to sell things &amp; ideas.</li> <li>Is good at leading people and selling things or ideas.</li> <li>Values success in politics, leadership or business</li> </ul>   |

|   |              |   |
|---|--------------|---|
| 6 | Conventional | • Sees self as energetic, ambitious and sociable.                                   |
|   |              | • Likes to work with numbers, records or machines in a set ordinary way.            |
|   |              | • Is good at working with written records and numbers in a systematic, orderly way. |
|   |              | • Values success in business.   |
|   |              | • Sees self as orderly, and good at following a set pattern.                        |

The study indicates that most people are of one of the above mentioned six personalities and that individuals search for a match between their personalities and environments in order to perform to the best of their abilities. People who choose to work in an environment similar to their personality type are more likely to be successful and satisfied. The theory proposes that “Birds of the same feather flock together” i.e. people like to be around others who have same personalities. In case the same environment is not available then at least they like to get the environment similar/ compatible to their personality as is presented in table 3.

**Table 3. Personalities/ Environments and their Compatibility**

|   | Personalities and Environments | Compatibility |               |
|---|--------------------------------|---------------|---------------|
| 1 | Realistic                      | Investigative | Conventional  |
| 2 | Conventional                   | Realistic     | Enterprising  |
| 3 | Enterprising                   | Conventional  | Social        |
| 4 | Social                         | Conventional  | Artistic      |
| 5 | Artistic                       | Social        | Investigative |
| 6 | Investigative                  | Artistic      | Realistic     |

Splaver (1977) stated that in order to make intelligent plans, students should have a good understanding of their abilities and what they would like to be, & what they are like, are the determining factors in their career. The personality factors include their mental abilities (verbal comprehension, word fluency ability, spatial ability, numerical ability, reasoning ability, memory etc) special abilities and interests.

## 2.2. Socializers (Parents, teachers, Colleagues etc)

Parents and teachers play a very important role in career choice and influence them in choosing their professions. Middleton and Loughead (1993) presented three categories to describe types of parental involvement in adolescents' career development: positive involvement, noninvolvement, and negative involvement. Hartup & Stevens (1997) and Harter (1999) recognized that peers & friends have a strong influence on individuals' development and social adjustment. During adolescence, children are more inclined to share their personal thoughts with close friends than with their parents (Harter, 1999). They spend more time of their working hours with their friends and consequently may talk/ share more about their career paths options with close friends than with their parents. Fleshman & Blustein (1999) explored that the adolescents who have greater attachment with their peers were more like to find their career environment and make greater progress in making career choices. They explain these relations through two processes i.e. close relationship helps the individuals to learn more about themselves and the close relationship provides security & psychological support which facilitate commitment to a career plan. The greatest anxiety the adolescents feel is parents' negative involvement. In the negative involvement, parents are often controlling and domineering in their interactions with their children. The children often pursue the careers selected by their parents rather than those they desire so as not to disappoint their parents or go against their wishes. They feel a strong sense of frustration and guilt when they don't meet their parents' expectations. Chope and Consoli (2006) in their article regarding 'multicultural family influence in career decision making' pointed out that even grandparents, aunts, cousins, and uncles may have a role regarding career selection & education that is different from that in other cultures. Confrontation or disagreement with parents can be seen as a sign of disrespect.

Mayurg (2005) carried out cross-culture study to examine the career choice of Asian, black & white students at the University of Pretoria, to identify the factors motivating accountancy students to become Chartered Accountant and thereby to assist educational institutions and accounting practitioners to formulate their recruitment strategies to solve future personnel shortage and quality problems. They found that Performance in accounting at school and the advice given by parents, relatives and school teachers greatly influenced the students' decision to become a Chartered Accountant. Availability of employment was ranked as the most important benefit of a career as a CA. Hence following hypothesis was developed:-

### **Hypothesis 1: Parents influence their children in career choice.**

#### **2.3. Demographic Factors**

Family background provides the basis from which their career plans and decision making evolve. Family background factors found to be associated with career development include parents' socioeconomic status, their educational level, and biogenetic factors such as physical size, gender, ability, and temperament (Penick & Jepsen, 1992). The variable that had the most effect on educational plan and occupational aspirations was parental education. Gehrt (1990) found that a strong correlation exist between socio-economic status & educational level of parents and the students choice of career and curriculum emphasis. Arbona (1990) also stated that socioeconomic factors such as parents' educational and occupational status play a critical role in the career development of the students. Penick & Jepsen (1992) found that family background such as parents' socioeconomic status; their educational level, and biogenetic factors i.e. physical size, gender, ability, and temperament etc are associated with career development. Marso and Pigge (1994) found that the presence of teachers in the family was a significant factor influencing teacher candidate's decision to teach. DeRidder (1990) pointed out that lower level of parent education can retard adolescents' career development "Being born to parents with limited education and income reduces the likelihood of going to college or achieving a professional occupational goal and essentially predetermines the child's likely vocational choice" (p.4). Families with limited economic resources tend to direct them first to the male of the family and less hope to the daughters of the family (Mortimer et al, 1992). Wall (1996) found evidence that in some occupations the eldest son rather than the younger son would be more likely to follow the occupation of the father. Hackett and Betz (1981) studied the differences between the genders and suggested that a woman will have different career behavior than men because a woman typically lacks the strong expectation of personal efficacy for many career related barriers. Literature has shown that female undergraduates report lower mathematics self-efficacy than do male. Betz & Hackett (1986) report that for traditionally female occupations, females reported higher efficacy expectation than for traditionally male occupations. Tang and Talpade (1999) found significant differences between males & females with males leaning towards a higher satisfaction with salary/ pay than females, and females having a higher satisfaction rating with co-workers than males. Jones & Larke (2001) conducted research regarding factors influencing career choice of African, American and Hispanic graduate students and found that the students were more likely to pursue an agriculture related career if their father's occupation was agriculture related. They further found that due to limited job opportunities in agriculture, students choose other careers/professions. Hackett and Betz (1981) studied the differences between the genders and suggested that a woman will have different career behavior than a man because a woman typically lacks the strong expectation of personal efficacy for many career related barriers. Literature has shown that female undergraduates report lower mathematics self-efficacy than do male. Betz & Hackett (1986) reported that for traditionally female occupations, females reported higher efficacy expectation than for traditionally male occupations. Miller et al. (2002) found that females were far less likely to enter science-based occupations than males. Heckert et al.(2002) found that in career choice, female students put more emphasis than males on factors such as working conditions, working hours, career certainty etc. Small & McClean (2002) found that males more likely want to run their own business than females. Noon & Blyton (1997) argued that females desired more intrinsic rather than extrinsic rewards than males from their employment. The link between birth order and occupation has a long history. According to Spraggs (2002) in wealthy families, the eldest son inherits the family estate. Wall (1996) found evidence that in some occupations the eldest son rather than the younger son would be more likely to follow the occupation of the father. On the basis of these researches following hypothesis is developed:-

### **Hypothesis 2:- Influence of socializers and motivational factors in career choice is gender biased.**

#### **2.4. Environment and Opportunities**

Environment is the complex physical factors that make up the surroundings and in turn act upon us such as forces of family, political, social and economic issues. Opportunities are the choices that give a individual a selection between two or more outcomes. Environment and opportunities may influence the career students choose. The students who have lived on an island may choose a career dealing with the water, or they may choose to leave the island behind, never to have anything to do with water again. Maybe someone in the student's life has made a significant impact or impression, leading to a definite career choice. Parents'

educational background may influence student views on whether or not to continue their education. Someone they saw on television may have influenced the student, or parents may have demanded that they assume a family business. These are various environmental factors that would lead a student to a chosen career. Opportunity shaped career choices for students. Opportunity may influence how students have perceived their future in terms of the reasonable probability of a future in particular career fields. The issue of poverty has played an important determining role in the opportunities available to all. The income level of high school families may determine what career a student chooses during a specific time in the student's life; choices that will determine a large part of that student's future. Some students will have to budget education according to their personal income. Students in many cases will need the proper mentoring opportunities to succeed. These support groups will be another opportunity that if properly implemented, can help a student in the career choice process. The support system must have been in place and readily available for the student to utilize. The creation of support groups will have to be in place to sustain the student through times of financial, emotional, and educational need. Marso and Pigge (1994) described that the presence of teachers in the family was a significant factor influencing teacher candidate's decision to teach. Herr (1970) supported the findings of other researchers stating that one's career decision is affected by the employment opportunities available. Ozkale et al. (2004) carried out study on undergraduate Turkish students and selected 386 students to identify the factors influencing to choose engineering as career. The study found following three factors influencing the students to adopt engineering as career:-

- a. Interest in engineering.
- b. Desire to become a leader.
- c. Scores achieved in the university entrance examine.

The study also found considerable differences by gender. Women students have drawn their influence from acquaintances and family of both genders; where as male students were mostly influenced by women.

## **2.5. Motivational Factors**

Motivation is a psychologically complex issue. Maslow (1954), McGregor (1967), and Herzberg (1964) have offered psychological-based explanations for personal goal establishment and eventual attainment focusing on a range of factors (Ellis, 1984). Vasil (1996), in researching women's career development in academia, found peoples' perception of confidence in their ability to perform a given behavior successfully provided an internal barrier or motivation to career choice and advancement. Several researchers (Deci, 1975, Ellis, 1984; Herzberg, 1964; McGregor, 1967; Maslow, 1970) have investigated the contribution of self-efficacy theory to socialization and career development theories regarding the existence of internal and external barriers and/or motivators. Maslow's Needs theory can potentially influence career choice in several different ways, both through anticipated job satisfaction and making career choices. According to Maslow, if one need is satisfied, the other needs arise in a certain order of preference and that once a need is satisfied, it ceases to be a motivating factor. Although Maslow believed that the fulfilled needs couldn't serve as motivation, the research has shown that satisfying self-actualization need increases motivation (Heneman, Schwab, Fossum, and Dryer, 1980). The individuals, having self-actualizing experiences during career preparation, are more motivated to enter the career field in which they had that experience. Bandura's (1997) self-efficacy theory relates to the people believe whether they can be successful in their chosen careers and the number of career alternatives that they may consider. Bandura suggested that self-efficacy, or people's beliefs in their own abilities to complete a specific task, influences their performance, behavioral choices, and persistence. Self-efficacy complements skill sets in individuals seeking careers and may facilitate career attainment for those seeking careers in areas that align with their skill sets. Lent, Hackett and brown (1996) suggested that self efficiency facilitate career attainment in a give performance domain when paired with required skill. Interest in job related tasks can be viewed as an extension of self-efficiency because people often form an interest in an activity when they see themselves as competent in performing it and see it producing valued outcomes. They also develop a dislike for activities that they don't enjoy or anticipated negative or non-valued outcomes, and they often avoid attempting those activities. Herzberg (1964) distinguished between intrinsic rewards such as self respect, personal growth, sense of accomplishment etc and extrinsic rewards such as salary, fringe benefits etc and stated that intrinsic rewards are more satisfying and motivating than the extrinsic rewards. Dick and Rallis (1986) conducted research "factors and influences on high school students' career choice" to study the factors influencing to choose career in engineering or science and found that 'Pay/ salary' was a more important factor in career choice for men in general and genuine interest was a more important factor for women not choosing career in

engineering or science. He pointed out that the male- stereotyped occupations are perceived by young women as more difficult, but not more important, than comparable female stereotyped occupations.

Vasil (1996), in researching women's career development in academia, found peoples' perception of confidence in their ability to perform a given behavior successfully provided an internal barrier or motivation to career choice and advancement

Parker (1998) conducted a research on the organizations and their needs and found that Self-efficacy is an important motivational construct that influences individual choice, goals, emotional reactions, efforts, coping, and persistence and focused on the development of this type of self-efficacy within modern organizations.

Hallissey et. Al. (2000) examined 150 undergraduate students' motivations for selecting career in dentistry on Ireland and found that some students emphasized the service aspects of dentistry and others were motivated with career process and outcomes. He also compared findings of his research with the students from Israel, Australia, South Africa, USA and United Kingdom and found that the service element was less pronounced as a motivational factor between students from other countries as compare to the Irish students. Kyriacou et al. (2002) carried out study on Norwegian students to examine their views on a career in teaching. He selected sample of 84 Norwegian students and found that students' career choices are influenced by the availability of career opportunities and paths. Ozbilgin, Kusu & Erdogmn (2004) conducted research on "explaining influence on career choice in comparative perspective" and explored the factors that influence career choice of MBA students from three Countries Britain, Israel and Turkey. They reported that MBA students, in their career choices, would report micro influences more significantly than macro influences. Findings of the study showed that MBA students consider the impact of structural conditions as less significant on their career choice than their capacity to make free choices. The study also provides the understanding of the main cross national diversities and similarities in reporting of influences on career choice. Kniveton (2004) conducted study on 'The influences and motivations on which students based their choice of career' and found that money, liking for the job, status etc as most important motivational factors to work and considered money to be the value which enable them to buy. Following hypothesis is developed:-

**Hypothesis 3:- Handsome salary, status, job/ employment opportunities are the main motivational factors in career choice**

### **3. Methodology and Scale**

The research work is based on the primary data collected through questionnaire survey. Following three types of questionnaires were designed to collect the data:-

1. Questionnaire for the students.
2. Questionnaire for the Teachers/ Head of Departments
3. Questionnaire for the parents.

**Population and Sample:** The target population for this study is the students studying in colleges and universities of Islamabad/ Rawalpindi and its vicinity. Primary data was collected through questionnaire from the areas Islamabad, Rawalpindi, Wah Cantt., Taxila and Chakwal.

At first phase, pilot survey was carried out to test the validity of the data and to ensure whether the data so collected is relevant and sufficient with reference to the research question and hypothesis testing. In pilot survey, questionnaires from fifty (50) college and university students of Islamabad were collected that comprise fifteen (15) intermediate, twenty (20) graduation and fifteen (15) master class students. On the basis of pilot survey result, two items of the questionnaire were modified and also decided to obtain the opinion of teachers and parent of the students. Accordingly questionnaire for teachers/ head of departments and parents of the students are included.

In second phase, four hundred and fifty (450) questionnaires were distributed amongst the college and university students of Rawalpindi, Islamabad, Taxila, Wah, Chakwal etc, fifty (50) amongst the Teachers/Head of Departments and fifty (50) amongst the parent of the students, out of which three hundred and sixty two (362) questionnaires were returned by the students, forty eight (48) from teachers/head of departments and forty one (41) from the parents. Thus the percentage response of students is 80.44 percent, of teachers/ head of departments is 96.00 percent and that of parents is 82.00 percent.

The sample population of the students is segregated on the basis of following factors:

- i. Geographical localities
- ii. Class of Study
- iii. Gender
- iv. Geographical and class wise
- v. Geographical and gender wise
- vi. Gender and class wise

**i. Geographical area wise Segregation:**

| Geographical Area | Frequency  | Percent      | Valid Percent | Cumulative Percent |
|-------------------|------------|--------------|---------------|--------------------|
| Islamabad         | 156        | 43.2         | 43.2          | 43.2               |
| Rawalpindi        | 102        | 28.3         | 28.3          | 71.5               |
| Taxila            | 16         | 4.4          | 4.4           | 75.9               |
| Wah Cantt         | 47         | 13.0         | 13.0          | 88.9               |
| Chakwal           | 18         | 5.0          | 5.0           | 93.9               |
| Others            | 22         | 6.1          | 6.1           | 100.0              |
| <b>Total</b>      | <b>361</b> | <b>100.0</b> | <b>100.0</b>  |                    |

**ii. Class wise Segregation:**

| Study-Class  | Frequency  | Percent      | Valid Percent | Cumulative Percent |
|--------------|------------|--------------|---------------|--------------------|
| Intermediate | 84         | 23.3         | 23.3          | 23.3               |
| Graduation   | 138        | 38.2         | 38.3          | 61.7               |
| Master       | 102        | 28.3         | 28.3          | 90.0               |
| MS/M-Phil    | 36         | 10.0         | 10.0          | 100.0              |
| Missing      | 1          | .3           |               |                    |
| <b>Total</b> | <b>361</b> | <b>100.0</b> | <b>100.0</b>  |                    |

**iii. Gender wise Segregation:**

| Gender       | Frequency  | Percent      | Valid Percent | Cumulative Percent |
|--------------|------------|--------------|---------------|--------------------|
| Male         | 215        | 59.6         | 59.6          | 59.6               |
| Female       | 146        | 40.4         | 40.4          | 100.0              |
| <b>Total</b> | <b>361</b> | <b>100.0</b> | <b>100.0</b>  |                    |

**iv. Geographical Area and Class Wise Segregation**

|                       |            | Class-wise Segregation |            |            |             | Total      |
|-----------------------|------------|------------------------|------------|------------|-------------|------------|
|                       |            | Intermediate           | Graduation | Master     | M-Phil/ PhD |            |
| Segregation regarding | Islamabad  | 43                     | 54         | 35         | 24          | 156        |
| Geographical Area     | Rawalpindi | 20                     | 41         | 28         | 12          | 101        |
|                       | Taxila     | 8                      | 7          | 1          | 0           | 16         |
|                       | Wah Cantt  | 7                      | 14         | 26         | 0           | 47         |
|                       | Chakwal    | 6                      | 12         | 0          | 0           | 18         |
|                       | others     | 0                      | 10         | 12         | 0           | 22         |
| <b>Total</b>          |            | <b>84</b>              | <b>138</b> | <b>102</b> | <b>36</b>   | <b>360</b> |

**v. Geographical and Gender Area Wise Segregation**

|   |            |  | Gender Segregation |            |            |
|---|------------|--|--------------------|------------|------------|
|   |            |  | Male               | Female     | Total      |
| Segregation regarding Geographical Area | Islamabad  |  | 89                 | 67         | 156        |
|   | Rawalpindi |  | 57                 | 45         | 102        |
|   | Taxila     |  | 11                 | 5          | 16         |
|   | Wah Cantt  |  | 29                 | 18         | 47         |
|   | Chakwal    |  | 12                 | 6          | 18         |
|   | Others     |  | 17                 | 5          | 22         |
| <b>Total</b>                            |            |  | <b>215</b>         | <b>146</b> | <b>361</b> |

**vi. Gender and Class Wise Segregation**

|  |  | Gender Segregation |        | Total |
|--|--|--------------------|--------|-------|
|  |  | Male               | Female |       |



|                        |              |     |     |     |
|------------------------|--------------|-----|-----|-----|
| Class-wise Segregation | Intermediate | 52  | 32  | 84  |
|                        | Graduation   | 79  | 59  | 138 |
|                        | Master       | 62  | 40  | 102 |
|                        | MS/M-Phil    | 22  | 14  | 36  |
| Total                  |              | 215 | 145 | 360 |

**Questionnaire for the students:** The designed questionnaire for the students consists of two (2) parts. Part-1 comprises eight (8) items to gather the demographic data. The questions are designed to cover the family background and other demographic factors such as : Gender, age and class of the student, Parents' qualification, profession and monthly income. Part-II of the questionnaire comprises seven (07) items. In item No. 1 and 2, students were asked about their career selection decision whether they have decided or otherwise and who selected it. In item 3, students opinion about the involvement of Socializers in career selection, was obtained. The response, so obtained is measured on Likert's five (05) points scale i.e. Most of the time, some of the time, occasionally, Very rarely and not at all. In item No. 4, following six professions/ career pathways are taken from the Career Pathways System adopted by Michigan Department of Career Development and students were asked which one they have selected or will select. Item No. 5 is regarding the reasons of such selection. Item No 6 and 7 are very important and are designed to collect data regarding students' perception about the importance of the motivational factors and the five most important motivational factors they have considered/ will consider while selecting their career. About twenty one (21) motivational factors are selected and the response is measured on Likert's five (05) points scale i.e. strongly agree, agree indifference, disagree and strongly disagree.

**Questionnaire for the Parents:** In the questionnaire designed for the parent of the students, opinion of the father of the students was obtained about the influences of socializers (parents, teachers, peers etc) and the motives/ expectations the students desired while selecting their profession/ career pathways.

**Questionnaire for the Teachers/ Head of Department:** The questionnaire designed for the teachers/ head of departments comprises two parts. Part-1 comprises five (05) items to gather the demographic data. The questions are designed to collect the data regarding the level of classes they are teaching and the teaching experience. In Part-II of the questionnaire opinion of the teachers/ head of departments of the college/university was obtained about the influences of socializers (parents, teachers, peers etc) and the motives/ expectations the students desired while selecting their profession/ career pathways.

**Instruments and Scale:** Importance/ influence of the motivational factors can't be measured quantitatively but is constructive through other variables/scales for which Likert following five point scale was used to measure the extremes :-

- Likert's five (05) points scale i.e. Most of the time, Some of the time, Occasionally, Very rarely and not at all.
- Likert's five (05) points scale is i.e. strongly agree, agree, indifferent, disagree and strongly disagree.

**Statistical Tools:** Various statistical tools such as Cronbach's alpha, Frequency Distribution, Cross Tables, Multinomial Logistic regression are used to analyze the data using statistical package SPSS.

**Data Testing:** Reliability of the students data obtained through questionnaire survey was tested through Cronbach's alpha method and the results obtained are shown in Table-4. The results of the reliability statistics i.e. value of the Cronbach's alpha of the twenty one (21) motivational factors presented at table 4 is more than 0.7, hence we can say that the data is reliable.

**Table 4. Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No of items |
|------------------|--|-------------|
| 0.725            | 0.712  | 21          |

## 4. Results and Discussions

### Career Selection Decision

The frequency distribution of this item is presented in table 5 which describes the frequency and percentage of the students who have decided their career path/ profession and those who have not yet decided. The results show that out of three hundreds and sixty one (361) students participated in the survey, three hundreds and fifty three (353) students answered the question and eight (08) left it blank. Thus the response of the students in this item is 97.80%. As per results three hundreds and twenty six (326) students have decided the profession/ career path which they will adopt after completion of their education and remaining twenty seven (27) have not yet made any decision for their career path. Thus we can say that about 92.40% of the students

have already selected the career paths/ profession which they will adopt after completion of their education.

**Table 5. Career Selection Decision**

|         |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--|-----------|---------|---------------|--------------------|
| Valid   | I have selected my career path         | 326       | 90.3    | 92.4          | 92.4               |
|         | I have not yet selected my career path | 27        | 7.5     | 7.6           | 100.0              |
|         | Total                                  | 353       | 97.8    | 100.0         |                    |
| Missing | System                                 | 8         | 2.2     |               |                    |
| Total   |  | 361       | 100.0   |               |                    |

**Table 6. Career decision is made by (students who have decided or not yet decided)**

|         |                 | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------------|-----------|---------|---------------|--------------------|
| Valid   | Yourself        | 195       | 54.0    | 60.0          | 60.0               |
|         | Parents         | 114       | 31.6    | 35.1          | 95.1               |
|         | Brother/ Sister | 11        | 3.0     | 3.4           | 98.5               |
|         | Teachers        | 3         | .8      | .9            | 99.4               |
|         | Any other       | 2         | .6      | .6            | 100.0              |
|         | Total           | 325       | 90.0    | 100.0         |                    |
| Missing | System          | 36        | 10.0    |               |                    |
| Total   |                 | 361       | 100.0   |               |                    |

Table 6 presents the personalities who have decided / will decide the students' career. Three hundred and twenty five (325) students answered the question and remaining thirty six (36) students left it blank and refrained from answering the question of who decided or will decide their profession.

As per results at table 6, career path / profession of one hundred and ninety five (195) students have been selected / will be selected by the students themselves, Career path of one hundred and fourteen (114) students by their parents, career path of eleven (11) students by their brothers / sisters, of three (3) students by their teachers and career path of two (2) students by the other socializers.

**Table 7. Career decision is made by (the students who have already decided)**

|         |                 | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------------|-----------|---------|---------------|--------------------|
| Valid   | Yourself        | 190       | 58.3    | 60.1          | 60.1               |
|         | Parents         | 111       | 34.0    | 35.1          | 95.3               |
|         | Brother/ Sister | 10        | 3.1     | 3.2           | 98.4               |
|         | Teachers        | 3         | 0.9     | 0.9           | 99.4               |
|         | Any other       | 2         | 0.6     | 0.6           | 100.0              |
|         | Total           | 316       | 96.9    | 100.0         |                    |
| Missing | System          | 10        | 3.1     |               |                    |
| Total   |                 | 326       | 100.0   |               |                    |

In table 7, only those students are considered who have already selected their career path/profession i.e 326 students and excluded twenty seven (27) students who have not yet decided their profession and eight (8) students who left the item blank. Out of three hundreds & twenty six (326) students who have already selected their profession / career paths, three hundred and sixteen (316) students answered the question and ten (10) students left it blank. One hundred and ninety (190) students i.e. 60.1% answered that they themselves have selected their profession. The career paths of one hundred & eleven (111) students have been selected by their parents, whereas decision regarding profession of ten (10) students was made by their brothers / sisters.

**Career Paths / Professions:** Six (6) Career paths adopted by Michigan Department of Career Development were selected and students were asked to select the career path / profession which they adopt after completion of their education. The results of the response of the students are presented at table 8. It indicates that out of three hundred and sixty one (361) students, one hundred and fifty nine (159) students i.e. 44.5% will adopt the career path 'Business, Management, Marketing and Information Technology', eighty eight (88) students i.e. 24.6% will adopt the profession 'Human Services', fifty five (55) students will adopt the profession of Health Services, whereas 46 students i.e. 12.9% will adopt the profession of Engineering / Manufacturing and Industrial Technology. The results indicate that female students are more interested in the profession of health services i.e 22.6% than the male students' i.e. 10.2%.

**Table 8. Selection / Interest in Career Paths**

| Career Path/ Profession                              | Male  |      | Female |      | Total |      |
|--|-------|------|--------|------|-------|------|
|  | Freq: | %    | Freq:  | %    | Freq: | %    |
| Natural Resources and Agr: sciences:                 | 3     | 1.4  | 0      | 0    | 3     | .8   |
| Human Services                                       | 35    | 16.3 | 53     | 36.3 | 88    | 24.6 |
| Health Sciences                                      | 22    | 10.2 | 33     | 22.6 | 55    | 15.4 |
| Engineering/ Manufacturing and Industrial Technology | 45    | 20.9 | 1      | 0.7  | 46    | 12.9 |
| Business, Mgt, Marketing, and Information Technology | 103   | 47.9 | 56     | 38.4 | 159   | 44.5 |
| Arts and Communication                               | 3     | 1.4  | 3      | 2.1  | 6     | 1.7  |
| Total  | 215   |      | 146    |      | 361   |      |

**Influence of Socializers:** Results of the survey indicate that about 92.4% students have already selected the profession which they will adopt after completion of their education and profession of more that 35% students was selected by their parents. Amongst the socializers, fathers are most influential in career selection decision and their average weightage of involvement in the decision, measured on Likerts' five point scale is 4.4691 with variance 0.4469 (Table 9). Second influential socializer in career selection decision is mother and third one is teacher.

**Table 9. Influence of Socializers**

| Socializers     | Influence of the Socializers (percentage) |              |              |             |            | Mean   | Standard Deviation |
|-----------------|---|--------------|--------------|-------------|------------|--------|--------------------|
|                 | Most of Time                              | Some of time | Occasionally | Very Rarely | Not at All |        |                    |
| Father          | 56.5                                      | 34.3         | 9.0          | 0.3         | 0.0        | 4.4691 | 0.6685             |
| Mother          | 36.1                                      | 33.8         | 23.3         | 6.5         | 6.3        | 3.9886 | 0.9397             |
| Teachers        | 8.4                                       | 20.0         | 40.3         | 28.3        | 2.6        | 3.0290 | 0.9641             |
| Friends         | 3.4                                       | 24.1         | 34.6         | 29.5        | 8.5        | 2.8442 | 0.9949             |
| Brother/ sister | 6.8                                       | 15.9         | 35.8         | 37.5        | 4.0        | 2.8409 | 0.9712             |
| Peers           | 1.2                                       | 3.6          | 7.6          | 40.9        | 46.7       | 1.7182 | 0.8484             |
| Others          | 0.9                                       | 1.2          | 2.6          | 34.4        | 61.0       | 1.4653 | 0.6896             |

**Influence of Motivational Factors:** Out of the twenty one (21) motivational factors selected for the study, money/ handsome salary is found the most important motivational factor which influence the career selection decision with average weight-age on Likerts' five point scale as 4.5706 & variance 0.485 followed by the motivational factors 'status/ prestige', 'job/ employment opportunities'. 'career development', 'personal recognition', 'professional respect' etc (table 5). Status / prestige is the second important motivational factor with average 4.5406 & variance 0.53, employment opportunities third influential motivational factor with average 4.5070 & variance 0.689 and the 4th one is career development with average 4.4178 & variance 0.618. Money/ handsome salary is the 1st consideration of 54.7% students at the time of deciding their profession and one of the five motivational factors of 90.30% (326 out of 361) students.

**Table 10. Influence of Motivational Factors**

| Motivational Factors                         | Influence ( % ) |             |           | Mean   | Variance | Consideration in career selection |              |
|--|-----------------|-------------|-----------|--------|----------|-----------------------------------|--------------|
|  | Agree           | Indifferent | Dis-agree |        |          | First(%)                          | Amongst Five |
| Money/ Handsome Salary                       | 92.8            | 5.3         | 2.0       | 4.5706 | .485     | 54.7                              | 326          |
| Status/ Prestige                             | 90.2            | 8.1         | 1.7       | 4.5406 | .530     | 8.3                               | 255          |
| Job/ Employment opportunities                | 89.4            | 5.9         | 4.7       | 4.5070 | .689     | 3.1                               | 214          |
| Advancement/ career development              | 89.1            | 7.8         | 3.1       | 4.4178 | .618     | 2.2                               | 40           |
| Personal Recognition                         | 87.9            | 9.3         | 2.8       | 4.2921 | .562     | 0.6                               | 136          |
| Professional Respect                         | 83.4            | 14.6        | 2.0       | 4.2247 | .586     | 0.0                               | 27           |
| Working condition / hours                    | 66.0            | 22.3        | 11.7      | 4.0111 | 5.352    | 5.6                               | 78           |
| To help others                               | 66.9            | 23.7        | 9.4       | 3.8714 | .983     | 1.9                               | 122          |
| To do something useful                       | 71.8            | 22.2        | 6.0       | 3.8661 | .671     | 1.1                               | 95           |
| Job independency/ autonomy                   | 65.2            | 21.2        | 13.6      | 3.8440 | 1.266    | 0.0                               | 10           |
| To achieve something                         | 60.5            | 24.9        | 14.6      | 3.6751 | 1.029    | 0.3                               | 18           |
| Faith/ Belief                                | 56.3            | 35.6        | 8.1       | 3.6555 | .738     | 18.6                              | 270          |
| Decision participation                       | 56.1            | 22.6        | 21.2      | 3.5196 | 1.287    | 0.3                               | 21           |
| Security of job/ pension etc                 | 51.8            | 28.7        | 19.5      | 3.4903 | 1.245    | 0.3                               | 61           |
| Control/ Lead others                         | 49.6            | 22.3        | 28.1      | 3.4123 | 1.640    | 1.1                               | 25           |
| Prior work experience/ something you good at | 45.1            | 31.9        | 23.0      | 3.2857 | 1.098    | 0.3                               | 9            |
| Association/ Impressed with someone          | 41.1            | 33.2        | 25.7      | 3.2263 | 1.425    | 0.0                               | 9            |
| Creativity                                   | 42.4            | 29.9        | 27.7      | 3.1939 | 1.107    | 0.8                               | 20           |
| To improve Self esteem                       | 41.7            | 26.5        | 31.8      | 3.1352 | 1.343    | 0.0                               | 31           |
| To enjoy work                                | 41.5            | 26.3        | 32.2      | 3.1317 | 1.328    | 0.3                               | 19           |
| Being selected by parents or someone else    | 28.2            | 48.8        | 22.8      | 3.0983 | .808     | 0.6                               | 11           |

The influence of some motivational factors such as salary, status, working conditions, employment opportunities etc are found gender biased and following five motivational factors most influential in career selection decision:

| Male |                                 | Female |                                 |
|------|---------------------------------|--------|---------------------------------|
| 1    | Money / Handsome Salary         | 1      | Status/ Prestige                |
| 2    | Advancement/ career Development | 2      | Money / Handsome Salary         |
| 3    | Job/ employment opportunities   | 3      | Job/ employment opportunities   |
| 4    | Personal recognition            | 4      | Advancement/ career Development |
| 5    | Status/ Prestige                | 5      | Personal recognition            |

Though the five most important motivational factors which the male and female students considered while selecting their career paths are the same but slight difference is noticed in their priorities such as money/ handsome salary is the most important motivational factors for the male students whereas ‘status/ prestige’ is most important for the female students which gained fifth position for male students. Similarly ‘Advancement / career development’ is the second most important motivational factors for male students whereas for female students it stands at fourth position. Job/ employment opportunities gains third position both for male & female students. The motivational factor ‘personal recognition’ is the fourth most important motivational factor for the male students whereas it is the fifth most important motivational factor for the female students.

### Multinomial Logistic Regression

Binary Logistic Regression is the relationship between a set of explanatory variables  $X_i$ 's and a Dichotomous (yes/no), (binary) response variable  $Y$ . In case the response variable has more than two categories, it is called as Multinomial Logistic Regression. The joint effects of all the explanatory variables are put together on the odds. In logistic Regression, the ratio of the probability of choosing one outcome category over the probability of choosing the reference category is often referred as relative risk and is sometime also referred as odds (<http://www.ats.ucla.edu/stat/ssps/dae/malogit.htm>).

$$\text{Odds} = P/1-P = e^{a + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p}$$

Taking the logarithms of both sides

$$\begin{aligned} \text{Log}_e(P/1-P) &= \text{Log}_e(e^{a + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p}) \\ \text{Logit } P &= a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_p X_p \end{aligned}$$

The coefficient  $\beta_1, \beta_2, \dots, \beta_p$  are such that the sums of the squared distance between the observed and predicted values (i.e. regression line) are smallest.

In the study, career path is taken as response (dependent) variable and the motivational factors as explanatory (independent) variables. Six career paths defined by the U.S. Bureau of Labour Statistics (<http://www.earsley.k12.mi.us/careerdevelopment.htm>) were considered in the study and as such Multinomial Logistic Regression is used.

Out of twenty one (21) motivational factors, seven most important/ influential motivational factors derived from the previous analysis, were considered as Explanatory Variables. These motivational factors are: money/handsome salary, prestige/ status, advancement/ career development, job/ employment opportunities, professional respect, personal recognition etc. The results of multinomial logistic regression using SPSS are presented at table 11; from the six career paths, with Cat-6 i.e. Natural Resources and Agriculture Sciences as reference category. The equations of Career paths/ Cat-6 of the motivational factors (dependent variables) i.e. Money/ Salary ( $X_1$ ), Prestige/ Status ( $X_2$ ), Career Development ( $X_3$ ), Job Opportunities ( $X_4$ ), Professional Respect ( $X_5$ ), and Personal Recognition ( $X_6$ ) is as under:

$$\begin{aligned} \text{Log (Cat-1 /Cat-6)} &= -3.559 -0.668X_1 -0.327X_2 +1.629X_3 +0.483X_4 + 2.018X_5 -1.173X_6 \\ \text{Log (Cat-2/Cat-6)} &= -1.492 +0.059X_1 -0.505X_2 +1.021X_3 +1.221X_4 -0.127X_5 -0.307X_6 \\ \text{Log (Cat-3 /Cat-6)} &= -1.112 +0.846X_1 -1.128X_2 +1.085X_3 +1.512X_4 -0.759X_5 -0.730X_6 \\ \text{Log (Cat-4 /Cat-6)} &= -12.632 +1.104X_1 +0.334X_2 +0.285X_3 +0.304X_4 +1.298X_5 +0.199X_6 \\ \text{Log (Cat-5/Cat-6)} &= 4.880 -0.836X_1 -0.665X_2 +0.511X_3 +0.957X_4 +0.367X_5 -0.516X_6 \end{aligned}$$

**Table 11. Parameter Estimates**

| Career Pathways  |                      | B       | Std. Error | Wald  | df | Sig. | Exp (B) | 95% Confidence Interval for Exp(B) |             |
|--|----------------------|---------|------------|-------|----|------|---------|------------------------------------|-------------|
|  |                      |         |            |       |    |      |         | Lower Bound                        | Upper Bound |
| Cat-1 (Arts and Communication)                               | Intercept            | -3.559  | 9.324      | .146  | 1  | .703 |         |                                    |             |
|  | Money/ Salary        | -.668   | .984       | .462  | 1  | .497 | .513    | .075                               | 3.524       |
|  | Prestige/ Status     | -1.327  | 1.116      | 1.415 | 1  | .234 | .265    | .030                               | 2.363       |
|  | Career Development   | 1.629   | 1.067      | 2.333 | 1  | .127 | 5.099   | .630                               | 41.249      |
|  | Job Opportunities    | .483    | .733       | .435  | 1  | .509 | 1.622   | .386                               | 6.817       |
|  | Professional Respect | 2.018   | 1.324      | 2.323 | 1  | .127 | 7.524   | .562                               | 100.789     |
|  | Personal Recognition | -1.173  | .982       | 1.426 | 1  | .232 | .309    | .045                               | 2.122       |
| Cat-2 (Business, Mgt, Marketing, and Technology)             | Intercept            | -1.492  | 6.837      | .048  | 1  | .827 |         |                                    |             |
|  | Money/ Salary        | .059    | .841       | .005  | 1  | .944 | 1.060   | .204                               | 5.515       |
|  | Prestige/ Status     | -.505   | 1.043      | .234  | 1  | .628 | .603    | .078                               | 4.663       |
|  | Career Development   | 1.021   | .671       | 2.315 | 1  | .128 | 2.777   | .745                               | 10.349      |
|  | Job Opportunities    | 1.221   | .609       | 4.024 | 1  | .045 | 3.392   | 1.028                              | 11.188      |
|  | Professional Respect | -.127   | .760       | .028  | 1  | .867 | .880    | .198                               | 3.905       |
|  | Personal Recognition | -.307   | .885       | .120  | 1  | .729 | .736    | .130                               | 4.170       |
| Cat-3(Engineering/ Manufacturing and Industrial Technology.) | Intercept            | -1.112  | 7.254      | .024  | 1  | .878 |         |                                    |             |
|  | Money/ Salary        | .846    | .940       | .809  | 1  | .368 | 2.330   | .369                               | 14.716      |
|  | Prestige/ Status     | -1.128  | 1.055      | 1.142 | 1  | .285 | .324    | .041                               | 2.561       |
|  | Career Development   | 1.085   | .699       | 2.405 | 1  | .121 | 2.958   | .751                               | 11.649      |
|  | Job Opportunities    | 1.512   | .652       | 5.377 | 1  | .020 | 4.536   | 1.264                              | 16.280      |
|  | Professional Respect | -.759   | .787       | .931  | 1  | .335 | .468    | .100                               | 2.188       |
|  | Personal Recognition | -.730   | .906       | .649  | 1  | .420 | .482    | .082                               | 2.845       |
| Cat-4 (Health Sciences)                                      | Intercept            | -12.632 | 7.258      | 3.029 | 1  | .082 |         |                                    |             |
|  | Money/ Salary        | 1.104   | .903       | 1.494 | 1  | .222 | 3.017   | .514                               | 17.721      |
|  | Prestige/ Status     | .334    | 1.064      | .099  | 1  | .753 | 1.397   | .174                               | 11.244      |
|  | Career Development   | .285    | .671       | .181  | 1  | .671 | 1.330   | .357                               | 4.950       |
|  | Job Opportunities    | .304    | .612       | .247  | 1  | .619 | 1.355   | .409                               | 4.497       |
|  | Professional Respect | 1.298   | .787       | 2.724 | 1  | .099 | 3.662   | .784                               | 17.112      |
|  | Personal Recognition | .199    | .910       | .048  | 1  | .827 | 1.220   | .205                               | 7.256       |
| Cat-5 (Human Services)                                       | Intercept            | 4.880   | 6.740      | .524  | 1  | .469 |         |                                    |             |
|  | Money/ Salary        | -.836   | .831       | 1.013 | 1  | .314 | .433    | .085                               | 2.209       |
|  | Prestige/ Status     | -.665   | 1.045      | .405  | 1  | .525 | .514    | .066                               | 3.985       |
|  | Career Development   | .511    | .667       | .588  | 1  | .443 | 1.667   | .452                               | 6.157       |
|  | Job Opportunities    | .957    | .608       | 2.483 | 1  | .115 | 2.605   | .792                               | 8.567       |
|  | Professional Respect | .367    | .760       | .232  | 1  | .630 | 1.443   | .325                               | 6.402       |
|  | Personal Recognition | -.516   | .885       | .340  | 1  | .560 | .597    | .105                               | 3.380       |

a. The reference category is: Cat-6 (Natural Resources and Agriculture sciences):.

The above results indicate that for one unit change in the variable money/ salary, the log of the ratio of the two probabilities,  $P(\text{cat-1})/P(\text{cat-6})$ , will be decreased by 0.668 , the log of the ratio of the two probabilities  $P(\text{Cat-2})/ P(\text{Cat-6})$  will be increased by 0.059, the log of the ratio of the two probabilities  $P(\text{Cat-3})/ P(\text{Cat-6})$ , will be increased by 1.104, the log of the ratio of the two probabilities  $P(\text{Cat-4})/ P(\text{Cat-6})$ , will be by 1.104 and the log of the ratio of the two probabilities  $P(\text{Cat-5})/ P(\text{Cat-6})$  will be decreased by 0.836. For one unit increase in status/ prestige, the log of the ratio of the two probabilities  $P(\text{Cat-1})/ P(\text{Cat-6})$  will be decreased by

0.327, the log of the ratio of the two probabilities  $P(\text{Cat-2})/P(\text{Cat-6})$  will be decrease by 0.505, the log of the ratio of the two probabilities  $P(\text{Cat-3})/P(\text{Cat-6})$  will be decreased by 1.125, the log of the ratio of the two probabilities  $P(\text{Cat-3})/P(\text{Cat-6})$  will be increased by 0.334 and the log of the ratio of the two probabilities  $P(\text{Cat-3})/P(\text{Cat-6})$  will be decreased by 0.665 etc.

Relative risk is another way of interpreting the regression result presented at table 11. The results indicate that one unit change in the variable 'money/status' we expect the relative risk of choosing Cat-1 over Cat-6 career option to decrease by  $\text{Exp}(.668)=0.513$ , the relative risk of choosing Cat-2 over Cat-6 to increase by  $\text{Exp}(.059)=1.060$ , the relative risk of choosing Cat-3 over Cat-6 to increase by  $\text{Exp}(.846)=2.330$ , the relative risk of choosing Cat-4 over Cat-6 to increase by  $\text{Exp}(1.104)=3.017$  and the relative risk of choosing Cat-5 over Cat-6 to reduce by  $\text{Exp}(.836)=.433$ . As regard one unit change in the variable 'job opportunities', we expect the relative risk of choosing Cat-2 over Cat-6 to increase by  $\text{Exp}(1.221)=3.392$  and the relative risk of choosing Cat-3 over Cat-6 to increase by  $\text{Exp}(1.512)=4.536$ .

From the results display at table 11, it can be said that the relative risk of choosing Cat-2 or Cat-3 over Cat-6 is higher for the people who have motivational factor 'job opportunities' in choosing career option.

### Analysis of the Students, Parents and Teachers Data

The data collected from the students, parents (fathers) and teachers through questionnaire regarding the agreement and disagreement about the effect of the motivational factors on career selection decision is presented at table 12. The response regarding strongly agree and agree are combined under heading agreed (A) and the response regarding strongly disagreed and disagreed are combined under the heading disagreed (D) to make it more meaningful. The indifferent is denoted by "I".

Descriptive statistics was used to analyze the data and the result are presented at Table 13.

A significant difference is noticed in the opinion regarding importance of the motivational factors in career selection decision. The students and parents data indicate that the motivational factor 'money/handsome salary' is the most influential motivational factor in career selection decision with 92.8% and 87.8% are of the opinion that it effects the career selection decision whereas the teachers data indicates its fifth position.

**Table 12. Percentage responses of the Students, Parents and teachers**

| S. No | Motivational factors                                | Students |      |      | Parents |      |      | Teachers |      |      |
|-------|---|----------|------|------|---------|------|------|----------|------|------|
|       |   | A        | D    | I    | A       | D    | I    | A        | D    | I    |
| 1     | Money / Handsome Salary                             | 92.8     | 1.9  | 5.3  | 87.8    | 4.90 | 7.3  | 87.2     | 0.0  | 12.8 |
| 2     | Status/ Prestige                                    | 90.2     | 1.7  | 8.1  | 65.8    | 17.1 | 17.1 | 89.6     | 2.1  | 8.3  |
| 3     | Working condition / hours                           | 56       | 11.7 | 22.3 | 33.3    | 35.9 | 30.8 | 58.3     | 8.4  | 33.3 |
| 4     | Faith & belief                                      | 56.3     | 8.1  | 33.6 | 36.6    | 22.0 | 41.4 | 41.7     | 22.9 | 35.4 |
| 5     | Advancement/ career Development                     | 89.1     | 3.1  | 7.8  | 80.5    | 4.9  | 14.6 | 97.9     | 0.0  | 2.1  |
| 6     | Job/ employment opportunities                       | 80.4     | 4.7  | 5.9  | 70.0    | 10.0 | 20.0 | 97.9     | 2.1  | 0.0  |
| 7     | Security of job/ pension etc                        | 51.8     | 19.5 | 28.7 | 75.6    | 4.9  | 19.5 | 68.1     | 0.0  | 31.9 |
| 8     | Job independency / autonomy                         | 65.2     | 13.6 | 21.2 | 29.2    | 41.5 | 29.3 | 42.6     | 14.9 | 42.5 |
| 9     | To control/ lead others                             | 49.6     | 28.1 | 22.3 | 56.1    | 12.2 | 31.7 | 46.8     | 6.4  | 46.8 |
| 10    | Do something you are good at/ prior work experience | 45.1     | 23.0 | 31.9 | 24.4    | 39.0 | 36.6 | 69.6     | 10.9 | 19.5 |
| 11    | To achieve something                                | 60.5     | 14.6 | 24.9 | 53.7    | 14.6 | 31.7 | 68.1     | 8.5  | 23.4 |
| 12    | To improve self-esteem                              | 41.7     | 31.8 | 26.5 | 22.0    | 58.5 | 19.5 | 73.9     | 15.2 | 10.9 |
| 13    | To enjoy the work                                   | 41.5     | 32.2 | 26.3 | 12.2    | 41.5 | 46.3 | 59.6     | 27.7 | 12.8 |
| 14    | To do something useful                              | 71.8     | 6.0  | 22.2 | 60.9    | 9.8  | 29.3 | 74.5     | 12.8 | 12.7 |
| 15    | To help others                                      | 66.9     | 9.4  | 23.7 | 61.0    | 4.9  | 34.1 | 73.3     | 15.6 | 11.1 |
| 16    | Professional respect                                | 83.4     | 2.0  | 14.6 | 75.6    | 0.0  | 24.4 | 83.0     | 8.5  | 8.5  |
| 17    | Association/ impressed with someone                 | 41.1     | 25.7 | 33.2 | 15.0    | 25.0 | 60.0 | 34.0     | 23.4 | 42.6 |
| 18    | Being selected by parents etc.                      | 28.3     | 22.8 | 48.8 | 48.8    | 0.0  | 51.2 | 14.9     | 53.2 | 31.9 |
| 19    | Decision participation                              | 66.1     | 21.2 | 22.6 | 75.6    | 0.0  | 24.4 | 55.3     | 12.8 | 31.9 |
| 20    | Personal recognition                                | 87.9     | 2.8  | 9.3  | 65.8    | 12.2 | 22.0 | 89.4     | 6.4  | 4.2  |
| 21    | Creativity  | 42.4     | 27.7 | 29.9 | 34.2    | 34.1 | 31.7 | 47.8     | 26.1 | 26.1 |

**Table 13. Statistics of Students, Teachers and Parents**

| S. No | Motivational factors                                 | Students |      | Teachers |      | Parents |      |
|-------|--|----------|------|----------|------|---------|------|
|       |  | Mean     | SD   | Mean     | SD   | Mean    | SD   |
| 1     | Money / Handsome Salary                              | 4.57     | 0.69 | 4.36     | 0.70 | 4.32    | 0.82 |
| 2     | Status/ Prestige                                     | 4.54     | 0.72 | 4.58     | 0.74 | 3.76    | 1.18 |
| 3     | Working condition / hours                            | 3.89     | 1.05 | 3.69     | 0.88 | 3.02    | 0.93 |
| 4     | Faith & belief                                       | 3.65     | 0.85 | 3.35     | 1.02 | 3.24    | 0.92 |
| 5     | Advancement/ career Development                      | 4.41     | 0.78 | 4.43     | 0.54 | 4.02    | 0.79 |
| 6     | Job/ employment opportunities                        | 4.50     | 0.82 | 4.46     | 0.71 | 3.83    | 0.90 |
| 7     | Security of job/ pension etc                         | 3.49     | 1.11 | 4.02     | 0.82 | 3.95    | 0.80 |
| 8     | Job independency / autonomy                          | 3.84     | 1.12 | 3.40     | 0.90 | 2.93    | 0.93 |
| 9     | To control/ lead others                              | 3.41     | 1.28 | 3.51     | 0.77 | 3.59    | 0.89 |
| 10    | Do something you are good at./ prior work experience | 3.28     | 1.04 | 3.76     | 0.87 | 2.85    | 0.88 |
| 11    | To achieve something                                 | 3.67     | 1.01 | 3.98     | 1.05 | 3.59    | 0.97 |
| 12    | To improve self-esteem                               | 3.13     | 1.15 | 3.65     | 1.10 | 2.51    | 1.19 |
| 13    | To enjoy the work                                    | 3.13     | 1.15 | 3.47     | 1.18 | 2.59    | 1.02 |
| 14    | To do something useful                               | 3.86     | 0.81 | 3.74     | 1.10 | 3.61    | 0.97 |
| 15    | To help others                                       | 3.87     | 0.99 | 3.80     | 0.97 | 3.78    | 0.85 |
| 16    | Professional respect                                 | 4.22     | 0.76 | 4.15     | 0.98 | 4.00    | 0.71 |
| 17    | Association/ impressed with someone                  | 3.22     | 1.19 | 3.06     | 0.92 | 2.78    | 0.86 |
| 18    | Being selected by parents etc.                       | 3.09     | 0.89 | 3.55     | 0.90 | 3.49    | 0.51 |
| 19    | Decision participation                               | 3.51     | 1.13 | 3.49     | 1.14 | 4.00    | 0.71 |
| 20    | Personal recognition                                 | 4.29     | 0.74 | 4.30     | 0.97 | 3.63    | 0.91 |
| 21    | Creativity   | 3.19     | 1.05 | 3.48     | 1.21 | 2.92    | 1.10 |

The motivational factor 'status/prestige' gains second position/ priority for the students and third for the teachers and fails to secure any position in the five most important motivational factors in the parents' data. The motivational factor 'Advancement/ career Development' is considered as the most important motivational factor in the teachers' data whereas it secures second position in parents' data and third in students' data. The same is the situation in other motivational factors.

## 5. Conclusion

Career selection is one of the most important decision of the students life for their professional education and career they will adopt. According to Gati et al (1996), the career decision process has the same characteristic as any other decision making process such as the individual who chooses the most appropriate career path from the available opportunities based on comparison and evaluation of these alternatives but it has a specific features and various aspects of each of the career alternatives such as type & duration of the required education, independence of work etc are to be considered. Choosing a career is not a static task but is a part of the developmental process.

The results indicate that 90.3% students have already selected the career path/ profession which they will adopt after of their education and decision about the career / profession of 60.1% students was made by the students themselves. Amongst socializers, the parents influence in career selection decision is found significant and profession/ career of about 35.1% students was selected by their parents. The data indicates that fathers are more influential in career selection decision followed by the mothers and then teachers. The results support Winter et al. (1988) who found that in career choice, parents still had a role to play even though there had been a general decline in the importance of parents in many aspects of adolescents, lives. The results of the study also support the findings of Kniveton (2004) who reported that parents have a greater influence in career selection decision than the teachers. The influence of friends & other peers is nominal and only 0.6% have selected the profession and also ranked at serial number 4 & 6 respectively amongst the socializers. The results contradict with the findings of Hartup & Stevens (1997) and Harter (1999) who reported that peers and friends have a strong influence on individual's development and social adjustment. They spent more time with their friends and consequently talk more with them about their career path options than with their parents. The reason might be the custom & traditions differences of the society. In Pakistan, involvement of the parents in the matters of their children is much more than the western countries. Due to less coordination with parents, the students might share their views, feelings and ideas with their friends.

Money/ handsome salary is found the most important motivational factor considered in career selection decision followed by the motivational factors status/ prestige, employment opportunities, career development, faith and belief, personal recognition, professional respect etc. 97.95% students said that the money/ handsome salary affects the career selection decision as against 2.05% who are of the opinion that it doesn't influence the decision. Furthermore 90.30% students (326 out of 361) have considered/ will consider the salary while selecting their profession. The results support the findings of Kniveton (2004) who found that 'motivations to work' are instant gratification such as money etc and majority of the sample considered 'money' to be the value for what it would enable them to buy. The study of Dick and Rallis (1986) also found that 'pay/salary' was a more important factor in career choice for men in general and genuine interest was a more important factor for women not choosing career in engineering or science.

The findings of the study are in line with various other studies such as Jones & Larke (2001) found that due to limited job opportunities in agriculture, students choose other careers/ professions. Kyriacou et al. (2002) said that students' career choices are influenced by the availability of career opportunities and paths. Herr (1990) found that one's career decision is affected by the employment opportunities available.

The influence of some motivational factors such as salary, status, working conditions/ hours etc is found gender biased. The results support the findings of Tang and Talpade (1999) who reported that significant difference exist between male & female with males leaning towards a higher satisfaction with salary / pay than females and females have a higher satisfaction rating with co-workers than males. Hackett and Betz (1981) also reported gender differences stating that a woman has different career behavior than a man.

## REFERENCES

- [1]. Arbona, C. (1990). *Career counseling research and Hispanics: A review of the literature. Counseling Psychologist*, 18 (2), (April 1990), 300-323 (ERIC #EJ 412885).
- [2]. Bandura, A.(1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- [3]. Bandura, A. (1997). *Self – Efficacy Theory. The exercise of control*. New York: W.H. Freeman & Company.
- [4]. Betz, N.E. & Hackett, G. (1986). Application of self-efficacy to understand career choice behavior. *Journal of Social and Clinical Psychology*, 4, 279-289.
- [5]. Chope, R.C., & Consoli, A.J. (2006). *A storied approach to multicultural career counseling*. In K. Maree (Ed.) *Shaping the story: A guide to facilitating career counseling*. 83-96. Pretoria, South Africa: Van Schaik.
- [6]. Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press.
- [7]. DeRidder, L.(1990). *The impact of parents and parenting on career development*, Knoxville, TN: Comprehensive Career Development Project. (ED 325 769)
- [8]. Dick, T.P. & Rallis, S.F. (1986). Factors and influences on students' career choice, *Journal for Research in Mathematics Education*, 22(4), 281.
- [9]. Ellis, T. I. (1984). *Motivating Teachers for Excellence. ERIC Clearinghouse on Educational Management: ERIC Digest*, Number 6. ERIC. Document Reproduction Service, No: ED259449.
- [10]. Felsman, D.E., Blustein, D.L. (1999).The role of peer relatedness in late adolescent career development. *Journal of Vocational Behavior*, 54, 279-295.
- [11]. Fischman, W., Schutte, D.A., Solomon, B., & Wu Lam, G. (2001). The development of an enduring commitment to service work. *New directions for child and adolescent development*, 93, 33-44.
- [12]. Gati,et.al. (1996). *Making career decisions: A sequential elimination approach. Journal of Counseling Psychology*, 33, 408-417.
- [13]. Gehrt, V. C. (1990). Student choice of career program in vocational high schools. *Dissertation Abstracts International*, 51, 11A. (UMI No. AAG9109941).
- [14]. Ginzberg, E.(1988). Toward a theory of occupation choices. *Career Development Quarterly* 35, 358-363.
- [15]. Goldberg, L.R. (1990). An alternative description of personality: The Big-Five factor structure, *Journal of Personality and Social Psychology*, 59, 1216-1229.
- [16]. Hackett, G. & Betz, N.E. (1981). A self-efficacy approach to the career development of Women,



- Journal of Vocational Behavior*, 18, 326-339.
- [17]. Hallissey, J., Hannigan, A. and Ray, N. (2000). *Reasons for Choosing Dentistry as a Career – A Survey of Dental Students Attending a Dental School in Ireland During 1998–99*, *European Journal of Dental Education*, 4, 77–81.
  - [18]. Harter, S. (1999). *The construction of the self. A development perspective*. New York: Guilford Press. Hartup, W.W., Stevens, N. (1997). *Friendship and adaptations in the life course*. *Psychological Bulletin*, 121, 355-370.
  - [19]. Heckert, T.M., Droste, H.E., Adams, P.J., Friffin, C.M., Robberts, L.L., and Wallis, H.A. (2002). Gender differences in anticipated salary: role of salary estimates for others' job characteristics, career paths, and job inputs, *Sex roles*, 47 (3-4), 139-151.
  - [20]. Heneman, H. G., Schwab, D.P., Fassum, J.A., & Dryer, L.D. (1980). *Personnel-human resource management*, Homewood IL: R.D. Irwin.
  - [21]. Herr, E.L. (1970). *Decision-making and vocational development (Guidance monograph series – Series IV: Career information and development)*. Boston, MA: Houghton Mifflin Company.
  - [22]. Hertzberg, H. W. (1964). *1 and 2 Samuel*: Translated by J. S. Bowden. OTL. Philadelphia: Westminster.
  - [23]. Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35-45.
  - [24]. Holland, J.L. (1992). *Making vocational choices* (2<sup>nd</sup> ed.). Odessa, FL: Psychological Assessment Resources. Retrieved on Aug: 27, 2009 from [http://www.careerkey.org/asp/your\\_personality/hollands\\_theory\\_of\\_career\\_choice.asp](http://www.careerkey.org/asp/your_personality/hollands_theory_of_career_choice.asp)
  - [25]. Isaacson L.E, & Brown D. (2000). *Career information, career counseling and career development*. Needham Heights MA: Allyn & Bacon.
  - [26]. Jones, W. A., & Larke, A. (2001). Factors influencing career choice of African-American and Hispanic graduates of a land-grant college of agriculture. *Journal of Agricultural Education*, 42(1), 38-48.
  - [27]. Kniveton, B.H (2004). *The influences and motivations on which students based their choice of career*. Loughborough University: Leicestershire.
  - [28]. Kyriacou, C., Coulthard, M., Hultgren, A. and Stephens, P. (2002). Norwegian University Students Views on a Career in Teaching, *Journal of Vocational Education and Training*, 54(1), 103–16.
  - [29]. Lent, R. W., Hackett G. and Brown, S.D. (1996). A social cognitive framework for studying career choice and transition to work. *The Journal of Vocational Education Research*, 21(4), 3-31.
  - [30]. Marso, R., and Pigge, F. (1994). *Personal and family characteristics associated with reasons given by teacher candidates for becoming teachers in the 1990's: Implication for the recruitment of teachers*". In Proceedings of Annual Conference of the Midwestern Educational Research Association, Chicago, IL, October 15, 1994. (ED 379 228)
  - [31]. Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Brothers.
  - [32]. Maslow, A.H. (1970), *Motivation and personality*, 2<sup>nd</sup> edition. New York: Harper & Row.
  - [33]. Mayburg, J.E. (2005). *An empirical analysis of career choice factors that influence first-year Accounting Students at the University of Pretoria : A cross-racial study*, University of Pretoria.
  - [34]. McGregor, D. M. (1967). *The Professional Manager*. Eds. W. G. Bennis and C. McGregor. New York, NY: McGraw-Hill.
  - [35]. Middleton, E.B., and Loughhead, T.A.(1993). Parental influence on career development: An integrated framework for adolescent career counseling, *Journal of Career Development* 19(3), 161-173.
  - [36]. Miller, L., Lietz, P., and Kotte, D. (2002). On decreasing gender differences and attitudinal changes: *factors influencing Australian and English pupils' choice of a career in science*, *psychology, Evaluation and Gender* 4(1), 69-92.
  - [37]. Mortimer, J. et al. (1992). *Influences on adolescents' vocational development*. Berkeley, CA: National Center for Research in Vocational Education, 1992. (ED 352 555)
  - [38]. Noon, M., and Blyton, P. (1997). *The Realities of Work*, Basingstoke: Palgrave.
  - [39]. Ozbilgin, M, kisku, K. and Erdogmus, N. (2004). *Explaining Influences on Career 'Choice' in Comparative Perspectives*, Cornell University.
  - [40]. Özkale, L. Küskü, F. and Salamer, G. (2004). *Women in Engineering Education in Turkey*, In *Proceedings of the 2004 American Society for Engineering Education Annual Conference & Exposition, Engineering Education Reaches New Heights*, July, 23-26, (CD-ROM).
  - [41]. Parker, S. K. (1998). Enhancing role breadth self-efficacy: The role of job enrichment and organizational interventions. *Journal of Applied Psychology*, 83, 835-852.

- [42]. Penick, N., and Jepsen, D. (1992). Family Functioning and Adolescent Career Development. *Career Development*, 40( 4), 208-222.
- [43]. Small, J., and McClean, M. (2002). Factors impacting on the choice of entrepreneurship as a career by Barbadian youth: a preliminary assessment, *Journal of Eastern Caribbean Studies* 27 (4), 30-54.
- [44]. Splaver, S. (1977). *Your personality and your career*. New York, NY: Julian Messner.
- [45]. Spraggs, G.(2002). *Outlaws and highwaymen*, London: Pimlico.
- [46]. SPSS, Inc. (1986). *SPSSx user's guide – A complete guide to SPSSx language and operations* (2nd ed.). New York: McGraw Hill.
- [47]. Super, D.E. (1953). A theory of vocational development. *American Psychologist*, 8, 185-190.
- [48]. Tang, T. & Talpade, M. (1999). Sex differences in satisfaction with pay and co-workers, *Public Personnel Management*. 28(3), 345.
- [49]. Vasil, L. (1996). Social process skills and career achievement among male and female academics. *Journal of Higher Education*, 67, 2-22.
- [50]. Wall, R. (1996). Marriage, residence and occupational choices of senior and junior siblings in the English past', *History of the family* 3, 259-271.
- [51]. Zunkar, V.G. (2002). *Career Counseling: Applied concept of life planning*, (6<sup>th</sup> ed.) Pacific Grove, CA: Brooks/Cole.