

**OCCUPATIONAL ASPIRATIONS, EXPECTATIONS, AND  
OCCUPATIONAL PRESTIGE JUDGMENTS OF PREPARATORY  
SCHOOL ADOLESCENTS IN ADDIS ABABA**

**Setegn Arasaw**

**ADDIS ABABA UNIVERSITY  
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES  
SCHOOL OF PSYCHOLOGY**

**January 2014**

**OCCUPATIONAL ASPIRATIONS, EXPECTATIONS, AND  
OCCUPATIONAL PRESTIGE JUDGMENTS OF PREPARATORY  
SCHOOL ADOLESCENTS IN ADDIS ABABA**

**by**

**Setegn Arasaw**

**A DISSERTATION SUBMITTED AS PART OF THE REQUIREMENTS  
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN APPLIED  
DEVELOPMENTAL PSYCHOLOGY**

**ADDIS ABABA UNIVERSITY  
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES  
SCHOOL OF PSYCHOLOGY**

## TABLE OF CONTENTS

Content	Page
LIST OF TABLES AND FIGURES .....	i
ABBREVIATIONS AND ACRONYMS .....	ii
ACKNOWLEDGMENTS .....	iii
ABSTRACT .....	iv
1. INTRODUCTION .....	1
1.1 Background .....	1
1.2 Statement of the Problem .....	10
1.3 Significances of the Study .....	21
1.4 Delimitations of the Study .....	24
1.5 Definition of Main Terms/Phrases .....	25
REVIEW OF RELATED LITERATURE .....	26
2. Introduction .....	26
2.1 Socio-historical Context of Occupational Decision Making .....	26
2.2 Structural Forces and Adolescents' Independent Occupational Development .....	33
2.3 Occupational Aspirations and Expectations .....	41
2.4 Occupational Aspiration-expectation Moderation .....	42
2.5 Gender Difference in Occupational Aspirations, Expectations and Prestige Judgment .....	44
2.6 Transformation in Occupational Choice Pattern .....	50
2.7 Holland's Theory and Dimensionality of Occupations .....	52
2.7.1 Holland's Occupational Structure – RIASEC .....	55
2.7.2 Dimensional Explanations of RIASEC Model .....	57

2.8	Labor Market Information and Accessibility of Occupations .....	58
2.9	The Link between Education and Work .....	64
2	METHODOLOGY .....	69
3.1	Population, Participants and Sampling Technique .....	69
3.2	Instruments .....	71
3.3	Procedures of Data Collection .....	75
3.4	Method of Data Analysis .....	76
4	RESULTS .....	78
4.1	Sources of Occupational Information for Preparatory School	
	Adolescents in Addis Ababa .....	79
4.2	Most Aspired and Expected Occupations .....	80
4.3	Occupational Prestige Judgment of Adolescents .....	82
4.4	Pattern of Adolescents' Occupational Aspiration-expectation Compromise ....	84
4.5	Congruence of Adolescents' Occupation-related Personalities with their Occupational Aspirations and Expectations .....	87
4.6	Occupational Aspirations and Expectations Difference across Fields of Study and Gender .....	88
4.6.1	Gender Difference in Occupational Aspirations .....	88
4.6.2	Gender Difference in Occupational Expectations .....	89
4.6.3	Fields of Study Difference in Occupational Aspirations .....	90
4.6.4	Fields of Study Difference in Occupational Expectations .....	90
5	DISCUSSION .....	92
5.1	Sources of Occupational Information for Preparatory School	
	Adolescents in Addis Ababa .....	92

5. 2. Most Aspired and Expected Occupations .....	95
5. 3. Occupational Prestige Judgment of Adolescents .....	99
5. 4. Pattern of Adolescents' Occupational Aspiration-expectation Compromise ...	101
5. 5. Congruence of Adolescents' Occupation-related Personalities with their Occupational Aspirations and Expectations .....	103
5.6. Gender Difference in Occupational Aspirations .....	107
5.7. Gender Difference in Occupational Expectations .....	108
5. 8. Fields of Study Difference in Occupational Aspirations .....	109
5.9. Fields of Study Difference in Occupational Expectations .....	110
6. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....	112
6.1. Summary .....	112
6.2. Conclusions .....	114
6.3. Recommendations .....	115
6.4. Implications to Educational Planning and Counseling .....	116
REFERENCES .....	118
Appendix A: Interview Guide questions	
Appendix B: Questionnaire (English Version)	
Appendix C: Questionnaire (Amharic Version)	
Appendix D: Transcribed Data for the Sixteen Interviewees (Translated Version).	

**LIST OF TABLES AND FIGURES**

Table 1: Reliability Indices of RIASEC Scale Items ..... 76

Table 2: Sample of the Study by the Demographic Variables and their Levels ..... 78

Table 3: Frequency of Sources of Occupational Information ..... 79

Table 4: Frequency of Aspired and Expected Occupation by Holland Types ..... 80

Table 5: Mean of Prestige Judgment of Three Occupations from RIASEC Each ..... 82

Table 6: Mean of Prestige Statuses of 18 Selected Occupations ..... 84

Table 7: Frequency of Occupational Aspirations, Expectations, and Aspiration-  
Expectation Discrepancies by Holland Types ..... 85

Table 8: Mean Values of Occupation-Related Personality, Commonness  
of Holland Types in Adolescents’ Occupational Aspirations  
and Expectations by RIASEC ..... 87

Table 9: Occupational Aspiration (Categorized into Holland’s RIASEC) by Gender ... 89

Table 10: Occupational Expectations (Grouped into RIASEC) as a Function of Gender.89

Table 11: Occupational Aspirations (Classified into Holland’s RIASEC)  
by Fields of Study..... 90

Table 12: Occupational Expectations (Categorized into Holland types)  
by Fields of Study ..... 90

**List of Figures**

Figure1: Prestige and Gender Type Ratings of Occupations in the Different  
Holland Fields of Work ..... 48

Figure 2: A Two Bi-polar Representation of Holland’s Occupational Space ..... 57

Figure 3: Prestige Status Given to Three Selected Occupations from Each of  
Holland’s RIASEC Types ..... 83

Figure 4: Adolescents’ Occupational Aspirations, Expectations and Aspiration-  
Expectation Differences ..... 86

## **ABBREVIATIONS AND ACRONYMS**

**AAEB** Addis Ababa Education Bureau

**MoE** Ministry of Education

**MoYS** Ministry of Youth and Sports

**NCCRN** North Carolina Career Resource Network

**NEAEA** National Educational Assessment and Examination Agency

**RIASEC** Realistic - Investigative - Artistic – Social – Enterprising - Conventional

**TVET** Technical and Vocational Education and Training

**VPI** Vocational Preference Inventory

**ZAA** Zone of Acceptable Alternatives

## **ACKNOWLEDGMENTS**

I sincerely thank my advisor Professor Habtamu Wondimu for his unlimited and developmental advices throughout this dissertation.

I thank AAU for giving me the chance to join its resourceful Campus, and for the research fund it rendered me to conduct this dissertation.

I thank the students at Kokebe Tsibah and Dejach Balcha Abba Nefso secondary and preparatory Schools for completing the questionnaire and giving interviews. I also thank the principals and teachers of those schools for the cooperation they gave me in administering the questionnaire and conducting the interviews.

## **ABSTRACT**

*In this study, occupational aspirations, expectations, occupational prestige judgments, and sources of occupational information of preparatory school adolescents were investigated. For this investigation, 420 students (Male = 142; female = 278) were randomly selected from two preparatory schools in Addis Ababa. A self report questionnaire and a semi-structured interview were administered to collect data. Descriptive statistics and chi-square were used to analyze quantitative data. Results of the analyses showed that Investigative and Enterprising type occupations were both the most aspired and expected types of natural and social sciences tracked adolescents respectively. Investigative type occupations were judged as prestigious by preparatory school adolescents. It was also found out that the student's own interest, family and elders were the three successively reported top sources of occupational information for adolescents of Addis Ababa government preparatory schools. The clustering of the adolescents' choices to only limited categories necessitates establishment of functional structures that assist students in expanding their restricted occupational aspirations, expectations and improve their occupational knowledge beginning in high school.*

## **CHAPTER ONE**

### **1. INTRODUCTION**

Adolescence is viewed as a time of role exploration and refinement of educational and occupational choices. It is marked by a diverse set of changes including school completion, making occupational choice, joining the labor force and gaining economic self-sufficiency. Adolescents have to stay not only well informed but also able to look for their future occupations to fit the changes in the occupational structure and economic environment. This research is about adolescents' occupational choice patterns and sources of occupational information. The findings, together with information contained in literature review, are expected to inform policy makers and career counselors to start designing strategies in ways that foster adolescents' occupational, educational, and intellectual development. In this research, the phrase 'occupational decision making' is made to include 'aspirations, expectations, compromise, and occupational choice' as subsets. The terms 'career' and 'occupation' are also used synonymously. This chapter will first present detailed background on occupational aspirations, expectations, aspiration-expectation compromises and occupational images of adolescents, then; it attends to the problem statement, significance, delimitations of the study, and definitions of key terms and phrases.

#### **1.1. Background**

Judgment and choice are inevitable aspects of our everyday living. Each individual possesses unique sets of values and capabilities. The continued development of these qualities is necessary for individuals to manage the inevitable occurrences of occupational problems arising throughout the course of their lives. The sets of values and

capabilities reinforce the individuals to think about their past, present and future lives. Choice of a 'right' occupation complements them. As they develop, individuals fit their lives into work. They start life as highly ambitious children and later adjust their ambitions into expectations that in turn develop into a more comprehensive, complex, and accurate picture of the social world. With age, one begins categorizing a holistic aspiration into dimensional preferences and then tries fixing boundaries for the preferences.

Assessing adolescents' occupational interests provides a way of summarizing progress and result of such developmental processes. Self-knowledge and occupational knowledge consist of networks of complex memory structures that evolve over the lifespan (Peterson, Sampson, Lenz, & Reardon, 2002). Adolescents pass through progressive compromises while implementing their occupational choices. Differences in aspiration-expectation refinement and occupational prestige judgments are made more acceptable by what appears to be a gender accentuation phenomenon (Gottfredson, 1981).

Occupational decision making is not a one point activity; it is a continuous matching process (of person and environment) that develops, clarifies, become more realistic, and concrete through time together with an individual's identity attainment process. It is a continuous process of improving the match between the self and situations (Savickas, 2002). The choice of an occupation is an expressive act which reflects the person's motivation, knowledge, personality, and ability. Occupations represent a way of life afforded by the social context, an environment rather than a set of isolated work functions or skills.

Realistic choice or expectation is a function of aspiration in relation to ability and circumstances. Some researchers (e.g., Armstrong, Day, McVay, & Rounds, 2008; Deng, Armstrong, & Rounds, 2007; Holland, Whitney, Cole, & Richards, 1969) and writers (e.g., Hogarth, 1980; Stragleman, & Warren, 2008) have indicated occupational choice as an integrative framework to capture individual differences in judgment and decision making.

Individuals, first aspire, and then continue adjusting their aspirations into a reality differently. The adjustment appears to occur largely as a natural process of learning what is typical and acceptable within one's surroundings long before adolescents enter the job market. Aspirations, as future-oriented thoughts, include both hopes (hoped-for selves) and fears (feared selves). The drive to compromise or adjust originates from such conflicting future motivations. Occupational choice is a process of understanding oneself and the world of work, and having the ability to integrate these two domains to explore a compatible and satisfying career; it is the result of a dynamic interaction of person and context (Hirschi, 2011).

If there is a good fit, in terms of the interests, needs, and occupational personalities of a person and the experiences, rewards and challenges that a job has to offer, it is expected that there will be greater job satisfaction and fulfillment and a lesser tendency to change jobs over the course of a career (Johnson & Mortimer, 2002). Person-job congruence enhances work motivation; consequently, it is expected that when people choose jobs they prefer to engage in, they will be more motivated and satisfied at work, which in turn, will lead to higher performance (Barrick, Mount, & Gupta, 2003). However bold and

intuitive it may be, people often tend to connect their present state to their presumed future destinations.

Judgment is a function of maturity and learning. Broadly speaking people's judgments are categorized into two: expressed preferences (evaluations) and predictions (speculations) (Hogarth, 1980). Individuals combine the past with the present to think both about the present and the future. But their power of linking the present to the future is not the same. Their compromising patterns differ accordingly; for example, it may be either experiential or anticipatory. Their ability and power of narrowing the gap between where they are and where they want to be differs based on the effort they spend and their capacity to adjust goals aspired (Creed & Hood, 2014). The entire process of occupational decision making, however, requires connecting one's internal world (current self) with the external context (career self/situation). Hence, judgment accuracy in occupational choice is a function of individual's characteristic and structure of work environment (Hogarth, 1980).

People's identities have often been bound up with their work and work values (Stragleman & Warren, 2008). Work has a powerful influence in shaping people's self-images (Habtegiorgis, 2000). Congruence (person-environment fit) encourages job stability. A matured individual is viewed as a relatively stable entity that moves in and out of environments rationally when the perceived fit is (is no longer) optimal. Hence, there are two ways of bringing optimum job satisfaction: modifying character or changing work environment. In other words, a person resolves incongruence by seeking a new and congruent environment or by changing personal behavior and perceptions.

With different degrees of individual variations, people tend to change as a result of the kind and nature of work they or their role models do. A person's occupational choice plays an important role in his or her entire life. An individual's social status, income, life style, choice of friends, mental, and physical health are influenced by the type of work he or she does (Ohiwerei & Nwosu, 2009). Despite such centrality of occupational choice in life, there are differences in the importance people place on work and livelihood (Muchinsky, 2001).

During the entire process of developing occupational identity, societies, in general, deal with inconsistencies in their conceptualizations and operationalizations of roles and statuses. The meaning they give to work and working (work value) varies across their life spans, gender, and context. Some people consider work as mere instrumental to everyday living; others view it as lifetime livelihood. The meaning people attach to occupations depends on value they attach to money and life. Money and life have fluctuating values over time and space. This might be the probable reason for the tempting tendency among individuals to use the terms job, work, vocation, occupation, career, and profession in a mixed manner; sometimes interchangeably, other times distinctly.

However, most research on occupational interest works on the assumption that people's perceptions of occupations and their associated activities remain relatively the same over a long period of time in each stage of human development (e.g. Deng et al., 2007; Gottfredson, 1981; Rojewski & Kim, 2003). Despite this relative stability, during the entire development of making occupational decisions, most individuals make compromises because different occupational self-concepts are incorporated during the

different developmental stages (Armstrong & Crombie, 2000; Gottfredson, 1981). As perceptions of compatibility and accessibility change, so too a person's occupational aspiration though the 'self-defined social space' (Gottfredson, 1981) or 'occupational map' (Savickas, 2002) may remain stable.

When asked what they want to be when they grow up, children may answer "a doctor," "a pilot," "a teacher," "a movie star," "a policeman", "a father," "a mother," "a footballer" or any number of other lists. In childhood, the future seems to hold almost unlimited opportunities. At adulthood the children may be found occupying statuses and roles they hadn't aspired in their early ages. Researchers have concluded that childhood aspirations cannot be taken seriously because of its simple, fanciful, crude, and unstable nature (e.g. Beal, 2011; Gottfredson, 1981; Gottfredson & Lapan, 1997; Santrock, 2005). Children's choices involve fantasy and immediate gratification, with little conception of future time as different from present; even when it shifts it is to dichotomous thinking that has to do or act like same gender parent, but with little understanding of parent's purposes (Nelson, 1978; cited in Gottfredson, 1981). Children's aspirations are spontaneous, stereotypical, narrow, and fluid (Lent, 2005). For children, occupational choice is a highly public way of asserting who they are (Gottfredson, 2005). It is the social aspects of jobs that often concern them most and that they consider first; external factors influence their thoughts and acts.

Adolescence is a unique period of development with regard to future orientation, distinct from both childhood and adulthood (e.g. in terms of simultaneously thinking about multiple components – education, occupation, marriage, health – and integrating them)

(Beal, 2011). The most influential period in terms of career commitment is during adolescence when important decisions about the future are made (Schoon, 2001). Hence, adolescence, compared to childhood, is a period when future-oriented goals can be meaningfully assessed. How do adolescents go about finding their futures, then? How do they translate their early unlimited aspirations into relatively real-life expectations? How do adolescents project their various leveled self-conceptions onto their various perceptions of future careers and make optimum job-self compatible decisions? How do they make work fit into their developing lives? The answers to these questions vary widely across adolescents and contexts.

Occupational identity development is part of adolescents' total self identity development. Occupational identity is related to the concept of 'ego identity' and is achieved through the same cognitive processes as ego identity (i.e., exploration, observation, reflection, commitment) (Erikson, 1968). Adolescents ask the questions "who am I?", "what shall I do?", "where do I fit in the society?", "how do I know", "how shall I decide" and form different answers at different times and places (Miller, 2002). High school students face many challenges as they prepare for the future (Schaefer & Meece, 2009). The ages and the rates adolescents choose job-self compatible occupations differ. There is considerable variation in the ability of high school students to cope with many of the developmental tasks they face in high school and in their early and later careers (Gottfredson, 1981). They often face choice dilemmas in their attempt to fit themselves to occupations and other societal expectations. The dilemmas do not always originate during adolescence; there existed conflict among occupational aspirations and preferences among families and society due to the inconsistent evaluation norms given to different occupations in

different contexts. Public opinion about occupations vacillates, i.e., in practice people do not place equal value on all work.

People's perceptions of occupational images or prestige statuses also vacillate. An occupational prestige judgment is a subjective evaluation given to a certain occupation depending on the image one has about that particular occupation. For sociologists, adolescents' judgments of occupations from low to high status jobs are attributed to preexisting social inequalities (Staff, Harris, Sabates, & Briddell, 2010). Stating the development of adult-like awareness of occupational prestige by youngsters around grades 6 to 8, Gottfredson (1981) goes on to explain, "only in adolescence do they turn to more personal interests, capacities and values as criteria for further narrowing their choices" (p. 549). Occupational-prestige judgment may depend on the image the person makes about the occupation based on, for example, the personalities of people in those occupations, the type of job they do, the type of lives they lead, the rewards and conditions of work, earnings and appropriateness of the job for different types of people. Judgments about occupations indicate the importance people place on a range of potential work features such as pay, job security, and autonomy and represent a key component of adolescents' desired occupational futures (Johnson & Monserud, 2010). An occupational image is a generalization a person makes about a particular occupation (Gottfredson, 1981). Aspirations, expectations, job value judgments can potentially serve as an internal compass, directing adolescents in the choices they make in their transition into adulthood (Finlay, Wray-Lake, Warren, & Maggs, 2014). Provision of educationally and vocationally relevant information facilitates adolescents' occupational choices.

From the researcher's personal observations, in schools and other social contexts in Ethiopian, students often make occupational decisions without adequate occupational information and knowledge. As such, they lack accurate information on both the nature of occupations and the educational requirements associated with their occupational choices. These constraints (of basic information on the possibilities open to them) have disastrous effects on their aspirations, chances, and opportunities. The effect can be manifested, for example, by 'foreshortening the adolescents' horizons' (Gottfredson, 1981) or 'locking them in' to only few alternatives that do not match their personalities (Nwagwu, 1976; Rojewski & Kim, 2003). Due to this, in many African countries (Asuquo & Petters, 2009; Nwagwu (1976), adolescents' occupational expectations fail to reflect the realities of social structures in their societies. Young adolescents in schools are often ambitious, confused and sometimes in a state of dilemma. The ambitiousness is not unique to African adolescents. American and British adolescents, too, are found to report aspirations and expectations that do not seriously consider potential career paths or seek information when engaging in occupational choice activities. This pattern is different from adolescents in Germany, Swizerlan, and Japan, countries with well structured school-work transitions (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002). Young people overall are very ambitious (Yates, Harris, Sabates, & Staff, 2011). Contemporary generations of American teenagers have high aspirations for educational and occupational attainment but have greater difficulty making clear plans for reaching their ambitions (Johnson & Mortimer, 2002).

In any nation, education and jobs are the most vital resources for the young. Hence, knowledge of aspirations, preferences, or interests of occupations is prerequisite for

effective guidance, educational planning, and policy making. Occupational knowledge and awareness of social contexts guides learning and connects adolescents' personal interests and abilities with appropriate work environment. Early identification of adolescents' occupational aspirations and expectations further fosters job specialization in the economy and lays the bases for a socially cohesive society.

Occupational aspirations should not be perceived as absurd ambitions. They need to be recognized as joint products of an individual's assessment of ability, interest, job-self compatibility and job accessibility (Baird, Burge, & Reynolds, 2008). Aspirations should be conceptualized as psychological resources that individuals draw upon to decide on future occupational choice, learning and performance. Most western research reviewed (e.g., Gottfredson, 1981; Schoon, 2001) focused on factors that influence occupational aspirations and expectations. However, adolescents' occupational aspirations, expectations, and patterns of aspiration-expectation compromises need to be explored before the factors that affect their choices in Ethiopian context.

## **1.2 Statement of the Problem**

Contemplating a compatible job after education gives one the motivational momentum to assume hope and success for a future life. Future thinking has implications for many life domains such as health, social relationships, family responsibility, and psychological well-being (Finlay et al., 2014). Many research endeavors start with basic assumptions. The general assumptions in this research are: (1) individuals show relatively different choice patterns in occupational aspiration and expectation before and after a certain developmental stage in high school that remain relatively the same in each developmental

stage; hence every individual has a path of personal occupational development, (2) When people freely indicate occupational preferences, they are choosing trait relevant contexts and opportunities to express their talents and personalities, i.e., relationship between inner world of a student and an occupational environment is expressed through his or her preference of occupations. Conceptualizing occupational choice as an expression of personality assumes that particular personality characteristics match the particular characteristics and affordances of an occupation (Schoon, 2001). According to this view occupational choice is a result of a process in which people seek environments that are compatible with their personality characteristics. To use Holland's (1997) terms (cited in Reardon & Lenz, 1999, p. 102), the study uses individuals' 'Personal Career Theory (PCT)' manifested in choice behavior as an input and 'Realistic-Investigative-Artistic-Social-Enterprising-Conventional (RIASEC)' hexagon as a unifying framework to explore and integrate adolescents' varied occupational aspirations, expectations and pattern of aspiration-expectation compromises.

Assessment of occupational aspirations and expectations for planning future educational and occupational options remains an important area of study. Previous research on Western and African adolescents reported mixed results concerning stability or malleability of adolescents' occupational aspirations and expectations.

Asuquo and Petters (2009), and Nwagwu (1976) indicated that African students are unrealistic in the area of their hopes and expectations for entry into certain occupations in their society. Career aspirations expressed by adolescents are generally believed to be unstable and to change many times before adulthood (Schoon, 2001). Rojewski and Kim (2003), on the other hand, reported early development and attainment of occupational

aspirations and their stability through adolescence. Achter and Lubinski (2005) argued that, on average, vocational preferences tend to crystallize by approximately age 18 in the general population; among the intellectually gifted, however, crystallization may occur at an earlier age. Beal and Crocket (2010) stated, “future-oriented cognitions showed moderate stability over a 1-year period” (p. 264). Mello (2008) added “gendered patterns of educational and occupational expectations remained generally stable from adolescence to adulthood,” (p. 1076). “Occupational aspirations can change over time, but they tend to become increasingly stable as adolescents mature” (Rojewski, 2005, p.136). Career-related interests do tend to stabilize over time and for many people, are relatively stable by late adolescence or early adulthood (Hansen, 2005).

Agreeing to its stability at adolescence, Gottfredson (1981), has expressed the development of aspiration gender specifically as “girls’ aspiration start out ‘too high’ and boys’ aspirations ‘too low’,” (p. 563); “boys preferences typically filter up and girls’ typically filter down from their earliest choices in response to their changing assessment of jobs and self,” (p. 564). Mello (2008) did not report a decline in females’ educational and occupational expectations: “gender differences in educational and occupational expectations were generally stable from adolescence into adulthood, in contrast to predictions,” (p.1077). In Mello’s (2008) study, females exceed their male counterparts in both expectations and completion of both educational and occupational domains. Although Mello contended gender differences in educational and occupational expectations and its stability from adolescence into adulthood, the finding fails to give any justifications for females’ exceeding males. Jozefowicz, Barber, and Eccles (1993) mentioned institutional barriers, societal gender-role stereotypes and psychological

perceptions as contributing factors for the gender differences in range restrictions in occupational aspirations and expectations. For Johnson and Mortimer (2002), the factor is the discrimination created by the labor market. They explained that because of discrimination in the labor market, opportunities are not the same for men and women, and this must be taken into account in models that purport to represent the attainment process.

Stability or malleability of occupational choice is rooted in personality and socialization. Because many young adolescents are still dependent on their parents and the family context, parent-child interactions and family dynamics have important influences on the timing and type of occupational preferences (Vondracek, Silbereisen, Reitzle, Wiesner, 1999). In the present technological era, adolescents are also exposed to external influences. In an attempt to explore his or her occupational identity an Ethiopian student, therefore, may find himself amidst of two worlds: his own society and a globalized environment. The influence of these two environments on the attitudes and values of adolescents is immense. Adolescents in a typical developing society face dilemmas in their attempt to reconcile the life styles of these two worlds (Nwagwu, 1976).

Staff et al. (2010) viewed the dilemma and uncertainty in occupational decision making as a role exploration opportunity that help adolescents in ensuring good choices regarding school, work and intimate relationships. They argued that such lack of clear occupational aspirations may provide youth with the flexibility needed to succeed in an unpredictable labor market. It allows them to adapt more easily to opportunities available to them in their surroundings by creating temporary tension that later evolves into good intention. Based on this conceptualization, Staff et al. (2010) go further advising countries with

structured school-to-work transitions, such as Germany, Switzerland and Japan, to revise their programs in ways it promotes the presumed flexibility in occupational decision making.

However, popular belief does not encourage unplanned life. Leaving the future for mere chance and relying on indecisive behavior may end up in aimlessness, nonstandard, low-quality, and low-paying jobs. Turner and Lapan (2005) argue that the flexibility in adapting to new challenges and opportunities should not be at the expense of losing core identities. Hence, vocational psychologists, contrary to Staff et al.'s (2010) ideals, advise adolescents to plan their future however uncertain they may be about its unfolding.

Aspirations are developmental (malleable) constructs because adolescents incorporate new dimensions of the 'self' when they continuously are exposed to new societal expectations and social comparisons in their progress through high school to college level. Individual's active role in choosing, creating, and experiencing their environments based on their unique personalities, interests, and talents develops from childhood to adolescence to adulthood (Achter & Lubinski, 2005). With changing self and changing situations, person-job fitting is a never ending process (Savickas, 2002). Career development involves continual growth and change in knowledge structures; because both the occupational world and individual's self are ever-changing, the need to develop and integrate these domains never ceases (Peterson et al., 2002). For many, aspirations are downgraded over time (Johnson, 2001). The malleability becomes clear particularly when adolescents report discrepancies or aspiration-expectation compromises/adjustments (Armstrong & Crombie, 2000; Beal & Crockett, 2010; Gottfredson, 1981).

Specifying the total adjustment process (occupational decision making pattern) to occupational prestige, Gottfredson (1981) stated that many of the low-level jobs that involve great physical effort or even danger are held by males. The reason for this, according to her explanation, is because of male's presumption that displaying strength and bravery showing behaviors give them respect and make them more masculine. Gottfredson (1981) found out that females cluster around moderate-prestige occupations; 'as jobs become more female, they become more homogeneous and moderate in prestige. There are no very high-level female jobs; neither is there any very low-level female jobs' (p.553). She summarized that low prestige jobs are more gender-typed than are higher level ones. On the other hand, mentioning the 2003 US Department of Labor's statistics, Betz (2005) reported that in the US work force more than 90% of preschool and kindergarten teachers, dental hygienists, secretaries, child-care workers, cleaners and servants, nurses, occupational and speech therapists, and teachers' aides are women; on the contrary, men were 18% of elementary and middle school teachers in 1981, they were only 9% in 2003.

In sum, the above mixed reports on stability or instability of aspirations, expectations, and occupation prestige judgment suggest that although some adolescents maintain their aspirations and expectations for the future, for others, future-oriented cognitions are in constant change. Moreover, educational and career options can also be restricted because of restricted learning opportunities (and internalized stereotypes) rather than because of inadequate ability or potential. These restricted learning opportunities can also, however, lead to lower self-efficacy expectations. Thus, narrowed interest development can restrict women's career options.

What are the consequences of holding unrealistic aspirations and expectations? Talking of future thinking, parents would be happy when their children keep on extending their ambitions to prestigious occupations of their standards. However, research suggests that unrealistic plans will be psychologically harmful to adolescents and young adults who cling to dreams that do not materialize. Adolescents who planned and felt entitled to a certain level of attainment they never reached will be more likely to experience anger, frustration, anxiety, alienation and self-destructive behavior than those who realistically plan for more modest achievements (Baird et al., 2008; Gottfredson, 1981). These researchers further speculated that unrestrained praise and encouragement for unrealistic plans may also contribute to negative personality traits like narcissism or emotional fragility. Contrary to the researchers' assertions, many parents perceive lack of ambition and lack of elevated achievement motivation as failure of character.

An alternative view to holding unrealistic aspirations could be considering it as a source of motivation for occupational planning and exploration (as a positive attribution style). A positive attribution style refers to young people's self confidence that their own skills, abilities and efforts will influence the bulk of their life experiences, including their educational and career success; such attribution style has also been related to a decrease in the perceptions of career barriers among children and adolescents (Turner & Lapan, 2005). Through the provision of stable, accurate, educationally and vocationally relevant information, adolescents could be promoted to a constructive reframing of surface perceptions to a more meaningful academic and career development (Achter & Lubinski, 2005).

Published studies (e.g., Asuquo & Petters, 2009; Nwagwu, 1976) on African students' vocational aspirations show an obsessional preference for such scarce professional jobs like a doctor, engineer, university lecturer, lawyer, agriculture officer and top civil servant. The studies further explained that African adolescents' choices reflect more the prestige and income perceptions of their parents rather than expert and well-rationalized advice from teachers and career guidance officers that provide the information on the opportunities for entry into these occupations. Adolescents orient to social class reference groups when perceiving the occupational world and when evaluating their occupational futures (Gottfredson, 1981). Accordingly, adolescents from agrarian communities are broadly skilled, have developed skills in outdoor activities and are expected to be closer to nature because of the outdoor activities (Crockett, Shanahan, & Jackson-Newsom, 2000). Contrary to this argument, though the ecological context of most Ethiopian adolescents is rural-base, most of them prefer to work in furnished offices and want to work in cities. According to Ministry of Youth and Sports (MoYS, 2005) estimate, "out of the 20.726 million youth population of 2004/5, the largest majority (81.4%) was rural youth" (p. 1); hence, "attempts should be made to encourage trained youth to move to the countryside and develop the country's untapped natural resources and also to provide the rural youth with sufficient agricultural land," (p. 14).

Assessing adolescents' occupational aspirations and expectations is essential to plan future trajectories. Adolescents' expectations are a potentially important precursor of adult attainment and may illuminate how males and females vary in schooling and work (Mello, 2008). Nwagwu (1976) reported a similar pattern of findings across countries. In America it was found that students' preferences were out of tune with realities in the

labor market; in Nigeria, students' expectations were almost as high as their aspirations. American adolescents' achievement expectations are increasingly out of line with what is probable; it is clear that today's teenagers seem much more unrealistic in their expectations when compared with teenagers of the 1970s (Baird et al.,2008). Nwagwu (1976) remarked that this failure to react realistically to the economic conditions of their society appear most evident and dominant in most African countries where adolescents find it difficult to differentiate between optimum aspirations and achievable occupational expectations. Studying adolescents' aspirations and expectations is also useful to mitigate adverse consequences of inflated ambitions. Highly ambitious and unrealizable choices lead adolescents to frustration, insecurity and wrong-invested potential (Baird et al., 2008; Gottfredson, 1981).

Nwagwu (1976) also reported that African students ranked occupations in the same order that most students in America and Europe did. Mentioning researches conducted in Nigeria and Ghana, he found out that most male students aspire to be doctors, engineers, agriculture and veterinary officers and senior civil servants while over one third of the females wanted to be nurses. Gender difference in aspiration-expectations adjustment is also reported. Creed, Yin, and Hood (2010) found out that while male Chinese aspired for Investigative and Enterprising types of occupations, but expected Realistic and Enterprising ones; female Chinese aspired for Enterprising and Conventional types, but expected Conventional and Social occupation types. But, Beal and Crockett (2010) in their longitudinal study found out no significant gender difference in any future-oriented cognition.

Though African, American and European students may have occupational aspiration and expectation patterns that are similar on the surface in Nwagwu's finding, the underlying reasons for their choices may vary according to the values and contexts of their societies. Jozefowicz et al. (1993) reported that gender stereotypes from parents, significant adults, and social/cultural milieu contribute to gender variation in educational and occupational expectations. Feliciano and Rumbaut (2005) stated that women value altruism in occupational choice. An alternate perspective by Gottfredson (1981) and Gottfredson and Lapan (1997) suggest that males and females may vary in educational and occupational expectations because of perception of barriers to schooling and work. Females have been shown to perceive more barriers to schooling and work than males and compromise or reduce their aspirations and expectations. This perception of females is the anticipation of the gender discrimination in the world of work.

Although preparatory level is fairly a good position for adolescents to assess future prospects (both educational and occupational), there is no considerable research on the occupational aspirations, expectations, and occupational prestige judgments of students at this stage where adolescents take vital decisions on what types of jobs to move into. The end of high school is the time when the reality of the job market forces itself upon adolescents to transform into reality stage of occupational development; aspects of occupational choice such as prestige level or masculinity/femininity of jobs preferred seem well established by this period (Gottfredson, 1981). "By adolescence, young people have developed the same complex cognitive map of the occupational order adults possess," (Gottfredson & Lapan, 1997, p. 421). Therefore, it is imperative that organized effort be made to help adolescents identify and plan their occupational futures during

their stay in high school. Engaging young people in thinking about work and making explorations (but not necessarily deciding on a career path) earlier rather than later would be highly desirable (Johnson & Mortimer, 2002). Hence, to enhance our understanding of adolescents' occupational aspiration, expectation, aspiration-expectation adjustment and occupational prestige judgment, this descriptive research is designed to achieve a general purpose and answer specific questions.

### **Purpose of the Study**

The purpose of this study is to investigate the occupational decision-making patterns of preparatory school adolescents in Addis Ababa. To be specific, the research is designed to answer the following questions.

### **Research Questions**

1. What are the most aspired, expected and most prestigious occupations for preparatory school adolescents in Addis Ababa?
2. How congruent are adolescents' occupation-related personalities to their occupational aspirations and expectations?
3. What is the pattern of preparatory school adolescents' aspiration-expectation compromises?
4. How are gender and field of study differences manifested in adolescents' occupational aspirations and expectations?
5. What are the sources of occupational information to adolescents in Addis Ababa?

### **1.3 Significances of the Study**

Someone well suited to a career enjoys not just only financial rewards, but personal satisfaction as well. Not having a firm grasp on their capacities and personal traits, adolescents with weak occupational identities might not recognize inappropriate occupational aspirations and expectations. Adolescents in Ethiopia are left largely on their own to find out about educational and work possibilities.

If there is a place where adequate educational and occupational guidance and counseling services are required early for adolescents and adult job-seekers, it is in developing countries where most parents are illiterate and opportunities for further education and employment are limited. Hence, for any nation knowledge of adolescents' occupational aspirations and expectations is essential for effective educational planning, guidance and policy making which in turn play a key role of reducing unemployment anxiety, alienation, and other self-destructive behaviors from being a likely possibility for indecisive adolescents.

The first task in successfully selecting and developing a career is becoming familiar with the opportunities available. In other countries, the US, for example, work-related information has been developed and maintained by various agencies including the Census Bureau, the Department of Labor Employment and Training Administration, and the Department of Defense. Commercial enterprises and state governments have also developed or adapted occupational information data for use in career guidance and placement to assist job-seekers locate occupations that are consistent with their characteristics and educational preparations (McDaniel & Snell, 1999).

The primary beneficiaries of such systems are high school and college students facing the transition from school to work. In developed countries, students have access to these systems through different job link centers, career guidance and placement offices, libraries of their schools, for example. Such service giving systems are disorganized or nearly absent in Ethiopia. Of course the Ethiopian Ministry of Education (MoE, 2007) mentions specific structures that should do such a task; “የስራ ገበያ መረጃና ትንበያን አስመልክቶ አግባብነት ያላቸው በርካታ መረጃዎች በተለይም በሰራተኛና ማህበራዊ ጉዳይ ሚኒስቴር፣ በማዕከላዊ ስታስቲክስ ኤጀንሲ፣ በክልል ጥቃቅንና አካላዊ የንግድ ሥራ ኤጀንሲዎችና ሌሎች ተቋማት ይገኛሉ (ገፅ 23)”. “Information related to occupations and projected analysis of market scenario and other relevant opportunities are available specifically in The Ministry of Workers’ and Social Affairs, Central Statistics Agency, Regional Micro Enterprises and other sectors”. However, these listed sectors do not go beyond the provision of mere raw statistics of employed and unemployed people. Hence, one of the potential significances of this research is to indicate practical recommendations to relevant institutions so that they could design a system for collecting, organizing, and disseminating occupational information that connects job-seekers to appropriate work environments.

Knowledge of students’ aspirations and expectations provides basic information for preparation of occupational preference inventories and occupational reference resources. The occupational preference inventories will help to explore and verify adolescents’ interests, abilities, skills, and compatible occupations. The reference materials can provide important further information about related occupations, work characteristics, work skills, and training/educational requirements for adolescents so that they could

decide on locating suitable occupation before spending much money and time. Effective planning can help adolescents to organize life options or choices, improve occupational-decision making, and contribute to individual's preparation to adult life.

Studying occupational aspirations and expectations shapes future trajectories. It gives predictive value of later career attainment levels, social mobility, and career self-concept of adolescents. Analysis and presentation of projected scenarios (specifically educational and employment outlooks) add hope and confidence to adolescents' development. Furthermore, early exposure to appropriate information about occupations and labor market is essential for timely intervention to adolescents' challenges. It is important to begin career intervention at a young age to ensure an informed career exploration of young children and adolescents. The study also lays foundation for future researchers to examine the factors that determine development of vocational interest in childhood and early adolescence, the making and remaking of occupational choice patterns at adolescence and achievement of varying levels of career success and stability at adulthood.

#### **1.4 Delimitations of the Study**

Although occupational aspirations and expectations are related to a number of constructs such as age, gender, socioeconomic status, intelligence, achievement, self esteem, and self efficacy as determinants of career development, this study delimits itself to gender-based and field of study-related aspiration-expectation compromise. That is, the research is not to find out factors that affect patterns of occupational aspirations and expectations (antecedents of choice). Predictive variables and correlational studies naturally follow identification of adolescents' occupational aspirations and expectations.

Although compromises in aspiration and expectation are applicable to many walks of life, this study focuses on compromises on occupations. In addition, although compromises are best measured over a longitudinal design, this research will use predominantly simulated compromises by preparatory level adolescents in Addis Ababa government schools. Staff et al. (2010) found out that adolescents who are uncertain about their aspirations in adolescence are likely to remain uncertain ten years later.

## 1.5 Definitions of Key Terms/ Phrases

The *key words/phrases* in this research are made to have the following meanings:

- ***Occupation*** — a relatively permanent field of work or livelihood chosen independently after completing certain level of university education or college training and/or learning
- ***Aspirations*** — idealized or ambitious hopes, considering all alternatives as equally possible and accessible
- ***Expectation*** — real-life based hopes; limiting alternatives to more probabilistic and realistic choices and decisions within perceived or real barriers
- ***Aspiration-expectation compromise*** — narrowing excessive and ideal perceptions of multi-potentiality to realistic and accessible alternatives considering a variety of factors
- ***Simulated compromises*** — imagining/anticipating (across space & time) and deciding on *current* choices by exchanging excessive and ideal alternatives with realistic and accessible ones; thinking both about the present and the future at a time and making current decision
- ***Occupational prestige judgment*** — status or level given to an occupation by adolescents considering their own evaluating criteria of the occupation's desirability
- ***Congruence***— the fit of adolescents' occupation-related personalities to their occupational aspiration and expectation; person-job compatibility.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2. Introduction**

In this chapter relevant literature pertinent to the issue under investigation is presented. Goals, including occupational aspirations and expectations, are internal representations of future, desired states. Their fulfillment requires consideration of both personal and environmental aspects. In the review, the socio-historical context of future career decision making and the social structures that are expected to facilitate adolescents' career decision making are presented in detail. Cross cultural explanations and research reports on occupational aspirations, expectations, aspirations-expectation discrepancy and transformation patterns are also presented. Theories that explain adolescents' career development and decision making across cultures are narrated. Particular focus is given to Holland's theory for its simplicity and practicability as organizing framework for occupations adolescents aspire and expect. Finally, reviews on the necessity of occupational information and relevant education as bases for occupational decision making are presented.

#### **2.1 Socio-historical Context of Occupational Decision Making**

Alike other human dimensions, occupational identity has its own contexts of development. Such contexts include broader institutions at international or national levels, the family, the workplace, and features of the local community. People are embedded in environments and the two reciprocally shape one other. The multilevel context, which includes the physical environment, culture, historical era, ethnic group, family, neighborhood, school, and other social institutions, influences development of

occupational identity. Career attitudes and aspirations are tightly tied to the social practices in which they are forged (Savickas, 2002). Career development processes are largely influenced by contextual factors (Cassie & Chen, 2012). Occupational identity refers to the integration and crystallization of an individual's energy, aptitudes, and opportunities into a consistent sense of uniqueness of himself or herself and fit into the world of work (Turner & Lapan, 2005). Occupational choice and development are profoundly affected by broad, cross-national differences in the structure of education and work and the connections between these institutions; at the micro level, parents' child-rearing orientations and behaviors, parental work conditions also affect children's and adolescents' developing interests, values, and aspirations (Johnson & Mortimer, 2002). The quality of parent-child interactions is a central mechanism through which parents' socioeconomic position influences children's work values and eventual occupational attainment. Occupational decision making is a compromising process that occurs without ignoring both the context and the agency of constructing a personal career. For the understanding of occupational development across the lifespan both individual and contextual factors have to be considered (Schoon, 2001). Hartung, Fouad, Leong, and Hardin (2010) pointed out that adolescents' belief orientations to either individualist or collectivist cultural bases affects their occupational plans and choice behaviors.

Adolescence is a period when adolescents form work values, identity, occupational aspirations, and expectations. It is a period when societal norms and expectations push adolescents toward future-oriented thinking, where they are preparing for a transition into adulthood, learning about preferences and interests that will shape their choices with regard to education, occupation, and personal relationships, among other domains (Beal,

2011; Johnson & Mortimer, 2002; Loughlin & Barling, 1998). As adolescents begin to engage in consideration of their future goals and desires, they become active participants in shaping their own development, choosing which options to pursue based on what is available (Gottfredson, 1981). Due to its contextual nature, career development is strongly affected by the historical, cultural, economic, and social contexts (Hirschi, 2011).

Maintaining its contextual nature, occupational aspiration is conceptualized as a developmental process by researchers. Gottfredson (1981) proposed four stages of career goals that progresses in line with self concept development: orientation to size and power (ages 3-5), orientation to gender roles (ages 6-8), orientation to social valuation (ages 9-13) and orientation to the internal, unique self (beginning around age 14). She described these developmental stages as “progressive and usually permanent” (p. 545). On the other hand, Hirschi (2011) stated that due to its contextual nature there can never be universal and irreversible stages in occupational development. Hirschi’s dynamic, unified, two-way developmental view of the person and his occupational identity is strengthened by Lent (2005). Lent (2005) explained that career-related interests and goals emerge, develop, clarify, modify, crystallize, become stable, and realistic congruent with emergent self-efficacy, outcome expectations, capabilities, and values, not necessarily as a one way process.

Hirschi (2011) also contended that occupational development at adolescence follows less of a normative, stage like manner. The process of socialization leads adolescents to absorb the cultural elements of the racial and ethnic group they belong (Bigler, Averhart, & Liben, 2003). Future-oriented goals are based on patterns of cultural norms (Beal, 2011).

However, the process of internalization of those cultural norms is complex and multifaceted.

To facilitate career choice patterns, adolescents require structured social settings. In this connection, Mortimer et al. (2002) elaborated that adolescents' planfulness and choices about school, work and family, which is malleable in line with historical experiences, take place within structured setting that in turn is subject to historical change. In the past, most adolescents learned vocations and occupations from their parents or some other adult members of the community for prestigious reasons rather than being trained for a career in schools (Asuquo & Petters, 2009; Santrock, 2005). Nowadays, they are connected to the outside environment in many ways which in turn influences their occupational decision making patterns. One's career interest stems from his life history or family background, culture, and personality.

Fitting one's dynamic personality with an unstable economy and inconsistent labor market demand is challenging for adolescents. Understanding their own abilities, interests, values, personality styles, the specifics of current labor market information, making more satisfying career decisions, and constructing their career pathways, all present special challenges to adolescents (Turner & Lapan, 2005). Careers are dynamic and people's livelihood is now dependent on how well they can adjust, create, and learn new things (NCCRN, 2008). Due to this, they are engaged in continuous occupational compromises until eventually they report they are being in the type of work they want (Gottfredson, 1981).

Occupational and educational aspirations are influenced not only by intra-individual changes but by systemic factors as well. A well structured education system is expected to equip the young with coping efficacy and resources which reduce emerging unemployment anxiety. Career counselors and consultants should help people learn the life-long skills they need to be healthy, self-reliant, and resilient citizens who are able to find work and balance their other life roles (NCCRN, 2008). An educational system does not have to influence learners to focus only on the social or economic environment that channel them into occupations regardless of their wishes (Gottfredson, 1981). It should compromise students' desires with the existing socio-economic structure. Regarding this ሐዲስ has noted:

ለማህበሩ ኑሮ የሚያስፈልጉትን ስራዎችና ተማሪዎችም በተማሩበት ትምህርት ስርተዉ ለመኖር የሚችሉ መሆናቸዉን አመዘዝኖ በጥንቃቄ ባልተሰራ የትምህርት ፕሮግራም ላይ መድከም በኢኮኖሚክ በኩል ኪሳራን በሰሊያል ጉዳትን ሳያስከትል አይቀርም። ... ስለዚህ አንዲህ ያለ ችግር አንዳይፈጠር ትምህርት ቤት በጠቅላላዉ የማህበሩንና የአያንዳንዱን ተማሪ ጥቅሞች በሚገጥሙበት መንገድ የትምህርት ፕሮግራሚን ትሰራለች (1940 ዓ.ም፣ገፅ 83) :: Translated as [Own translation],

*To work on an education program that does not carefully balance students' future employability desires with jobs that are required by the social structure is liable to both economic and social crisis. ... Hence, to prevent such problem from emerging, the school system in general has to design its programs focusing on the intersection point where individual student's and socio-economic structure's interests fit.*

Researchers of career development (e.g., Turner & Lapan, 2005) suggest educational programs to focus on three themes: benefits to students, benefits to employers, and benefits to the community. Teshome (1981) has emphasized the political consequences of poor quality education that fails to result in productive employment. “If education serves only a screening purpose and not the purpose of productivity, then the unemployment of school leavers may have direct political repercussions but not necessarily economic” (p.26). The Ethiopian education policy claims that problem

solving or solution-based learning organization increasingly has to become part of the effort to help youth make the transition from graduation to employment (*relevance*). The government, at large, insists on an agriculture-led economic development policy. The educational institution, as the foundation of all other social institutions, is expected to play key role in facilitating and practicing this key vision. But education is not only economic development and building of a nation; it is also about personal development and wellbeing. Lauer's (1998) idea strengthens this latter function of education:

.... education can enable an individual to think more deeply, explore more widely and enjoy a greater range of experiences. But as long as education is valued primarily for its economic payoff, its failure to yield that payoff will depress the quality of life, (p. 431).

Ministry of Education keeps on propagating its designing of policies and implementation strategies that are in line with people's demands. "Efforts were made to make the content and organization of education more relevant to the diversified needs of the population," (MoE, 2010, p. 8). It states that in educational institutions, new forms of vocation/job-related education should create options for many students, ranging from students with disabilities to students who are gifted. To offer such opportunities, institutions are expected to have multi-themed structure. Schools should have strong college and university preparation orientation. High school education should connect classroom learning to work context. Clear but broad occupational themes (fields of study) such as health careers, business and finance, natural resources, manufacturing sciences, communications and media, law and government, graphic arts, and environmental studies should be available for the young to experience disciplines earlier in the human life span (MoE, 2002).

The Ministry has formulated appealing strategies for every level. It has, for example, indicated the necessity of introducing interest assessment and provision of vocational guidance and counseling services to adolescents before they join Technical and Vocational Education and Training (TVET).

ሰልጣኞች በተለይም ወጣቶች ወደፊት የሚሰማሩበትን ሙያ መርጠው ትምህርትና ስልጠናቸውን እንዲቀጥሉ ለማድረግ በሙያ ምክርና ድጋፍ አገልግሎት አሰጣጥ ላይ ከፍተኛ ትኩረት ይደረጋል። .... በመሆኑም ሰልጣኞች ያላቸውን ተሰጥጦ ለይተው ያወቁና እንዲሁም ወደፊት ስለሚሰማሩበት የሙያ መስክ ጠንቅቀው የተረዱ፣ ችግር ፈች የሆኑና በራሳቸው የሚተማመኑ እንዲሆኑ የሙያ ምክርና ድጋፍ አገልግሎት ወደ ቴክኒክና ሙያ ትምህርትና ስልጠና ፕሮግራም ከመግባታቸው በፊት መጀመር ይኖርበታል (1999 ዓ.ም፣ገፅ 39) :: Translated as [Own translation],

*To enable students, especially the youth, choose their future desired vocations and continue the relevant education and trainings, provision of vocational guidance and counseling services will be given due attention. ... Hence, to cultivate graduates who would have realized their talents identified their future careers well, who are problem solving and self confident, vocational guidance and counseling services will start before they join TVET program.*

Ministry of Youth and Sports (MoYS, 2005), on its part, has conducted a survey of the state of unemployment and its causes in Addis Ababa. “Urban unemployment level in Addis Ababa is about 29 per cent. The main problems preventing people who have the skills and the intentions from setting their own business were lack of startup capital (54%) and land (19.5%). Other reasons included lack of operating licenses, equipment and the like,” (p. 17). The Ministry has also stated the measures taken to alleviate the problem:

The government has been making efforts in different sectors, to provide job opportunities for the youth, i.e., the youth provided with vocational trainings, working place, and guidance and credit facilities, either organized or individually, to enable them get jobs engaging in informal small scale business; and by involving them in government and private building, road, dam, and other construction works (p. 35).

However, this is easier said than done. Of course, there is expansion of schools and universities in every region to give the young an opportunity to learn. Specific reforms are taken to reduce educational wastage; even university admission is revised in favor of ‘science and technology’ and more vocational type schools are instituted to attack the ‘root’ cause of poverty in the country. However, confusingly, this ‘excessive educational reform and opportunity’ has failed to provide compatible employment opportunity and productivity. In practice, there is a dangerous match of what students need and what they get in educational institutions; there is a mismatch between educational outputs and the labor market. Though the government is reluctant to express it explicitly, unemployment and underemployment are inescapable realities of Ethiopian adolescents (Habtegiorgis, 2000). Structural unemployment is the result of the functioning of the politico-economic system itself (Lauer, 1998). The unsuccessful previous reforms may tempt critics to raise this skeptic question – if the governments’ preoccupation with education (policy reformulations, education expansion, curriculum revision) ends up in poor quality education, will its preoccupation with job creation result in productive employability and cultivate adolescents who have the responsibility for self employability?

## **2.2. Structural Forces and Adolescents’ Independent Occupational Development**

Structural forces (e.g. schools, media, gender, ethnicity, social class, the nature of the labor market) play a significant role in shaping life chances such as occupational aspiration, distribution of people in the labor market, and whether one will migrate or not (Brooks & Redlin, 2009). When such structural forces work collectively from center to periphery, they can play key role not only in merely setting adolescents’ aspirations and expectations but also in limiting perceptions of their abilities, skills, knowledge, and the

actions taken towards their fulfillment. Such influencing becomes an easy achievement when dealing with impressionable age groups such as adolescents. “Youth aged 15 years and above can be easily mobilized for development activities” (MoYS, 2005, p. 9).

If individuals are forced to think in a predefined direction within a spontaneous and weak support system, they gradually become weak, dependent, and incapable of making ordinary life decisions for themselves. Adolescents who do not feel in control of their own lives allow luck, fate, or powerful others to make their occupational choices (Savickas, 2002). They, imperceptibly, submit to the system’s political patronage pretentiously asserting agency or self-direction as the basis for their occupational interest development, choice, and attainment decisions. Another danger of dictating adolescents’ thoughts is that there will be high probability for the creation of an imperfectly realized division of labor where jobs are inappropriately allocated [*absence of people-work integration*] resulting in a society that lacks cohesion or social attachment (Stragleman & warren, 2008). Contrary to this, researchers on career development, Turner and Lapan (2005) for example, suggest that young people should be engaged in a nonthreatening method of exploring self in relation to the world of work in an environment that is supportive and caring. “Even though trends toward ‘individualization’ might allow young people more freedom to pursue their preferences, many will not be in a position to do so effectively,” (Johnson & Monserud, 2010, p. 200).

The quality assurance standards being applied by MoE – checking the mere existence or absence of mission and vision statements, academic programs, library resources, physical and technological resources, number and qualifications of staff, number of students and their entry qualifications, financial resources – mainly inputs rather than looking into

institutional processes, outputs and outcomes, is an evidence for Ethiopian education's focus on quantity rather than quality (Materu, 2007). In an interview, Ayalew Shibesh has expressed similar idea:

ጥራትን እንግዲህ ከግባትም፣ ከሂደትም፣ ከወጤትም አንጻር መለካት ይቻላል። ከግባት አንጻር መሻሻሎች ይታያሉ። ግብዓት የምለው የተማሪ-መምህር ጥምርታ፣ የተማሪ-ክፍል ጥምርታ፣ የአስተማሪ የትምህርት ደረጃ ወዘተ. በቁጥር ሊገለጹ የሚችሉ ነገሮች አሉ። እነሱን ስንመለከት ከጊዜ ወደ ጊዜ መሻሻሎች እንዳሉ ይገባኛል። ሂደቱ የማስተማር መማር ሂደቱ ላይ ነው ትልቅ ችግር ያለው። ወጤቱ ተምሮ የወጣው ሰው በተግባርም በነቢብም ሲፈተሽ በሚፈለገው ደረጃ የደረሰ ሰው ነው ወይ? ብለን ስንጠይቅ ትልቅ ችግር አለ። እና ጥራት ወርዷል ብቻ ሳይሆን አሁንም እየወረደ ነው (ዕንቁ፣2006ዓ.ም፣ ገፅ 17) ።

Translated as [own translation],  
*Quality [of education] could be evaluated from input, process and output perspectives. Input wise there are improvements. Input encompasses student-teacher ratio, number of students in a class, qualification of teachers etc.; aspects which can be expressed in numbers. When our focus is on these aspects, there are observable improvements. The process - the teaching-learning process, there is a problem at this stage. The output – when one asks, 'Are the graduates equipped with both the expected practical skills and theoretical knowledge?' The answer to this question is disappointing. Therefore, the decline in quality of [Ethiopian] education is not only a problem of the past it is also a problem at its worst now.*

Rather than being pushed towards predetermined choice, adolescents should be allowed to establish a cognitive map (zone of self-defined social space) organized according to the major dimensions of gender, field of work, and prestige (Gottfredson, 1981). A society and its institutions structure an individual's life course through social roles; through provision of job-creating contexts (Savickas, 2002). The purpose of an education system should be to streamline the self-created cognitive map of the adolescent with the existing socio-economic structure. Social policies need to be modified to facilitate young people's quest for vocational identity and work (Mortimer et al., 2002).

Unfortunately, the Ethiopian job market cannot meet all expectations of adolescents with its mainly service based economy. Currently, there is an oversupply of college graduates.

“In fact, as economies become increasingly focused on service and information, underemployment is likely to increase; the service economy is noted for a high proportion of low paying jobs and part-time employment” (Lauer, 1998, p. 406). Furthermore, structures that connect education to work environments are weak and haphazard. There is more propaganda masked inspiration without undertaking the necessary practical steps that help students realize their aspirations and expectations. If educational endeavors are of spontaneous outbursts of uncoordinated nature, they are unlikely to lead to systematic treatment of human problems and economic growth (Teshome, 1981). The over stimulating and euphoric propaganda sometimes reaches to the extent of self deceiving adolescents; they mistake lack of ability for lack of motivation. It may also unrealistically encourage the youth develop wrong perceptions of multi-potentiality by stunting differentiation. Social institutions affect occupational choices, work orientations, and attainments, as a person moves through the life course (Johnson & Mortimer, 2002).

In a haphazardly structured system there is a tendency for adolescents being pushed along by circumstance or other people and cluster into default options rather than doing exploration. The risk of such dictation is that because of external pressure, ignorance, unemployment anxiety, or inaction on their part, the adolescents may commit themselves to a choice before they really know the options accessible to them (Gottfredson, 2005). Inappropriately made career-decision may spell doom not only for the individual but also the entire society (Ohiwerei & Nwosu, 2009). Put otherwise, production function of society would be served by promoting greater efficiency in matching persons to occupations (Peterson et al., 2002). To achieve a cohesive society that settles on jobs that

match interests and abilities, people need to be encouraged to plan, construct, and control their future at adolescence. Regarding the importance of such freedom Gottfredson (2005) noted “thus, the more freedom people have in uncovering opportunities and enhancing their competitiveness, the more that differences in personal skill, initiative, and persistence will matter for opening up options, surmounting barriers, and reducing the need to compromise” (p. 83).

Career development and choice should be initiated as early as the nursery school years through the primary, secondary and to the tertiary school levels (Ohiwerei & Nwosu, 2009). The increasing accessibility (with poor quality and diversity) of post-secondary education, merely as an extension of preparatory school, has led to increased unrealism in Ethiopian adolescents’ educational and occupational plans. The ‘educated unemployed’, because of perception of ‘their over qualification’, are obviously reluctant to take jobs which have a low social status. They reach at a decision of ‘better to emigrate to foreign land than doing a low prestige job in ones country’.

What happens to students’ interests and abilities when they are channeled to limited fields of studies in unstructured setting irrespective of planned person-job congruence? Feldman, Smart, and Ethington (2004) reported that students entering an incongruent field show an increase in the abilities and interests promoted by that field. “...students with personalities incongruent with their academic major were engaged in similar levels of activities as the congruent students and had similar levels of satisfactions and discontents,” (p.539). They reported this result after sampling students who completed four years of college education. They have also indicated that students of Realistic and Conventional majors were excluded, the two most inflexible occupational groups from

Holland's six job families, on the ground that there were only four students in the two environments in the college studied (insufficient number according to their justification). Hence, the reported result could be due to deskilling effect of an incongruent work environment, artificially heightened workplace socialization, or unrepresentative sampling procedure.

Many researchers, contrary to the above Feldman et al.'s (2004) report, indicated that people's skills and abilities flourish when they work in environments that fit their personalities. Barrick et al. (2003), for example, after meta-analyzing other related researches on vocational choice and personalities, summarized the results as "employee's satisfaction with a job, as well as propensity to leave that job, depends on the degree to which the individual's personality matches his occupational environment; people are most satisfied if they pursue careers that have a 'personality' similar to their own," (p. 46). People do their best when they work at what they love or have passion for. The pursuit of dreams motivates and directs, and helps clarify what is important to people. Occupational building makes us consider what we feel in our hearts (Ohiwerei & Nwosu, 2009). "Holland suggests that individuals will search for and enter work environments congruent with their subtype that will permit them to exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles" (Holland, 1997; cited in Spokane & Cruza-Guet, 2005, p.28). Job success and satisfaction are the twin outcomes of a congruent match between a person's abilities and interests and a position's requirements and rewards (Savickas, 2002). In brief, when work environments support expression of congruent personality, positive outcomes such as satisfaction, stability and achievement occur.

Mortimer et al. (2002) emphasized the essentiality of structured social settings to facilitate adolescents' occupational decision-making (of education, work, family, and health). They explained that choice making is constrained or enabled by the contexts adolescents live in such as institutions, organizations, availability of structured labor market, the social and economic conditions, in general. In Switzerland, for example, the education system encourages students to be engaged in career planning and decision making during the last years of compulsory school [*up to grade 8*] in order to successfully navigate high school-college or university transition (Hirschi, 2010, 2011). Aspirations may have limited consequences in situations of constrained opportunity (Johnson & Mortimer, 2002).

Periodically, observers make serious criticisms of education systems. Critics of the Ethiopian education policy remarked that the policy has more political objectives than educational one. The policy does not prepare students to take advantage of regional (African) and global opportunities. It is packed with illusive terms (e.g. equity, relevance, quality) that lack scientific operation. Of these, the critics added, especially quality has reached the stage of irreversibility (e.g. Amdissa, 2008). The atmosphere of educational institutions is no more a stimulating venue for learning; students are merely surviving the process than learning. The education policy claims cultivation of job creating citizens as its main objective. However, it is unlikely for adolescents in poor countries to create jobs relying on meager resources and informal and unstructured strategies of looking for and finding jobs.

Rather than doing what is practical to the young, the system accuses the past regime. “Little or no attention was given to youth’s issues in Ethiopia [*during the Dergue regime*]

and the youth have been suffering from various economic, education and training, health, HIV/AIDS, social evils, cultural, sports and recreational problems as a result” (MoYS, 2005, p. 1). To alleviate these problems, “the [*present*] government has launched and is implementing new educational and training policy which helps the youth to be engaged in vocational trainings based on their interests and inclinations, rather than attending only theoretical academic fields, and as a result the number of youth who join vocational institutions, colleges, and universities is increasing,” (p. 36).

However, the excessive educational opportunity has failed to produce the expected productive employment for the educated youth. The mismatch between the excessive educational opportunity and the resulted educated unemployed may invite a critical observer of the Ethiopian education to raise these summary questions. If the system is providing extensive (and expensive) educational resources to develop the intellectual foundations for work, why is work a very distant and rare prospect for the many educated youth? Of course, the expansion of educational institutions at all levels and the proliferation of a 3-year degree has increased educational credentials for many people; but do the graduates get the expected payoff? In sum, implicit to the above discussion is that occupational choice and career development of adolescents emerge from the intra and interpersonal interactions afforded by the context they inhabit. Self-defined social spaces of adolescents should be aided by structural projected scenario analyses of education, job, and employment opportunities.

### **2.3 Occupational Aspirations and Expectations**

There is a distinction between students' occupational aspirations and their occupational expectations. Whereas in the former the interests and ambitions of students are allowed to primarily influence what jobs they will like to do, in the latter they are required to take a number of real-life factors into consideration (Nwagwu, 1976). "Occupational aspirations differ from expectations in that aspirations are ideals, whereas expectations are what one perceives to be realistic" (Brooks & Redlin, 2009, p. 134). Baird et al. (2008) described the distinction as 'while aspirations are idealized hopes for the future, expectations are more probabilistic assessment of what is likely to come to fruition'(p. 946). Occupational aspirations are an individual's ambitiously desired career related goals or choices for the future unfettered by reality based factors like resources or constraints (Gottfredson, 1981; Patton & Creed, 2007; Ramnunan, 2001). Compromise is adjusting aspirations to accommodate an external reality (Gottfredson, 2002). The term interest is sometimes interchangeably used with aspiration, but Rojewski (2005) makes a distinction between the two as "while aspirations represent individual goals given ideal conditions, interests reflect an individual's emotional disposition toward particular career options" (p. 132).

Adolescents' aspirations are not mere absurd dreams; they rather are resources that reflect their speculative and planful living. Aspirations, expectations, and values serve as blueprints that pattern behavior and may play a part in explaining the kinds of adults that adolescents become (Finlay et al., 2014). Mortimer et al. (2002) elaborated adolescents' aspirations as planful competence - the thoughtful, assertive and self-controlled processes

that underlie choices and the pursuit of life goals. It is represented as a critical resource that facilitates occupational decision-making.

For Mortimer et al. (2002) aspiration is more than wishful thinking; it is a calculated connecting process of one's personality into future opportunities to lay firm foundations for adulthood life styles. It combines willingness with ability to translate interests and plans to goals. "Adolescents who are unable to plan their work and work their plan are less likely to transform their occupational dreams [*aspirations*] into reality," (Savickas, 2002, p. 169). Making occupational choice requires balancing job-self compatibility with job accessibility. If ambition is given great weight and perception of accessibility little, the resulting alternative is fantasy; if a fair balance is maintained the resulting alternative is likely to be realistic aspiration, expectation or realizable plan.

#### **2.4. Occupational Aspiration-expectation Moderation**

Aspirations are developmental, reflecting individual's assessments of personal capabilities and available opportunities, and are influenced by personal and societal characteristics including gender, race, ethnicity, intelligence, and socioeconomic status. The bases of decision making becomes complex in adolescence. Most research (e.g., Armstrong & Crombie, 2000; Bigler et al., 2003; Domenico & Jones, 2006; Gottfredson, 1981; Lent, Paixao, Silva, & Leitao, 2010; Rojewski, 2005; Rojewski & Kim, 2003; Schaefer & Meece, 2009; Schoon, 2001) has focused on these bases which influence the development of occupational aspirations and expectations. Such factors include perceptions of ability, socioeconomic status (social class), race, parental education level, residential preference, intelligence, educational requirements, influence of family and

friends and perceived community or societal barriers. Of these the vocationally relevant dimensions or elements of the self concept, for Gottfredson (1981), are gender, social class background, intelligence, competencies, and values. Knowledge of these bases can assist in understanding the process of compromise, which is part of adolescents' decision making process.

Adolescents' narrowing activities of where they are now to where they want to be in the future are influenced by the aforementioned factors or antecedents of career choice. The gap between what adolescents would like to achieve and what they expect to achieve is also strongly shaped by systems of social inequality such as ethnicity, social class and gender (Baird et al., 2008).

Ramnunan (2001) grouped the factors into social environmental, personal [*psychological*] and background variables. The social environmental variables include significant others and choice of school. The personal variables are composed of academic achievement, self-esteem, self-efficacy, self-concept, and academic level. The background or biographic variables are made up of socioeconomic status, gender, age, and early work experience. Some of these factors have moderating functions within the variables themselves. Education level and socio-economic status, for example, have moderating roles for occupational aspiration or expectation differences that might have been contributed by racial or ethnic variations (Rojewski, 2005). After acknowledging the role of these antecedent variables in providing context and shaping individual experience and learning about choice (mostly up to early adolescence), this research delimits itself to the process of occupational decision-making patterns of government preparatory school adolescents in Addis Ababa.

Although making choices may improve with age, specifying it to particular occupation that exactly fits one's personality is still troubling for adolescents. Regarding the continuous refinement of aspiration-expectation adjustment, Gottfredson (1981), explains "specific choices may be very unstable during adolescence, but general preferences (i.e., ones zone of acceptable alternatives) will be much more stable" (p. 568). Adjustments are made by lowering aspirations relative to perceived or real career barriers. Occupational aspirations, which are unrealistically high during adolescence, decline as young adults encounter the constraints imposed by available occupational opportunities on entry into the adult labor force (Johnson, 2001). Concerning the pattern of adolescents' aspiration-expectation compromises, Gottfredson (1981) has stated "vocational interests are sacrificed first, job level second, and gender type last, because the latter two are more central aspects of the self concept and more obvious cues to one's social identity" (p.549).

## **2.5 Gender Difference in Occupational Aspirations, Expectations and Prestige Judgment**

Most researchers include gender as their master variable in their research endeavors because they consider it as one of the most powerful and persistent influences in the career development of adolescents. Gender is a powerful influence in occupational behavior (Domenico & Jones, 2006; Gottfredson & Lapan, 1997; Stragleman & Warren, 2008). One of the main factors influencing the formulation of job aspirations and career development is gender (Schoon, 2001).

Researches on gender difference in occupational aspirations produced mixed results. In Hirschi's (2011) longitudinal study a chi-square test showed no difference in gender in

career choice readiness. Another research indicates a lack of gender differences, with male and female Canadian (Armstrong & Crombie, 2000) and American (Rojewski & Hill, 1998, cited in Patton & Creed, 2007) adolescents equally likely to have discrepant aspirations and expectations. Women's increasing labor force participation and contribution to family income, for example, has been identified as a possible potential factor to alter the historically gendered nature of vocational socialization (Johnson & Mortimer, 2002).

A number of researchers (e.g. Deng et al., 2007; Gottfredson, 1981), (Rojewski, 1996; Rojewski & Yang, 1997; both cited in Patton & Creed, 2007) have reported gender difference with female adolescents aspiring for either high or low prestige occupations; males for moderate-prestige occupations. Creed et al. (2010) have compared Chinese boys and girls using chi-square and reported the difference as, compared to girls, boys were more likely to aspire for Investigative and Realistic careers, and less likely to aspire for Artistic, Enterprising and Social careers,  $\chi^2(5) = 17.25, p = .004$ . Boys were more likely to expect Enterprising and Realistic careers, and less likely to expect Social and Conventional careers,  $\chi^2(5) = 31.32, p < .001$ . Put otherwise, girls differed from boys in being less likely to aspire for Realistic occupations and more likely to aspire for Investigative, Artistic and Social occupations. Girls also held different expectations than boys; less likely to expect Realistic occupations, and more likely to expect Artistic and Social occupations.

Some studies have indicated that girls are much more likely to restrict their range of potential occupations earlier in life than boys, resulting in lowered occupational and educational aspirations. Wahl and Blackhurst (2000) cited in Patton and Creed (2007)

has reported that females restrict their range of potential occupational aspirations at an early age and are more likely than males to adjust their narrower educational and occupational expectations downward over time. One of the most disturbing outcomes of the circumscription process is young women's frequent avoidance of the more highly paid and higher prestige math, science, and technology-based careers (Turner & Lapan, 2005). Mello (2008) associates this 'occupational foreclosure' to females' anticipation of more perceived barriers.

Attribution of barriers varies for males and females. Despite their anticipation of more barriers in educational and occupational scenarios, females generally are believed to have more positive image of the future than their male counterparts who think too far into the future regarding a career (Mello, 2008). Eccles, Jozefowicz, Barber, and Belansky (1993) also provided a similar but going round type of explanation. They explained that females are less represented in male-dominated occupations such as technology, physics, and applied mathematics, not for they are less capable than their male counterparts in these areas as it traditionally is thought but it is for they do not want these occupations 'push them away' from people oriented occupations. Feliciano and Rumbaut (2005) added another feminist-like explanation, "males begin with lower educational and occupational expectations than females in junior high school, and are also less likely to translate high expectations into realities in early adulthood" (p. 1087).

Davey and Stoppard (1993) as cited in Rojewski (2005) attribute the gender difference in occupational aspirations and expectations to females' adherence to a more flexible life role orientation (i.e., family and career salience) than their male counterparts. Gender

self-concept and gender stereotyping of occupations are other possible explanations for observed gender difference (Gottfredson, 1996; cited in Rojewski, 2005).

Mello (2008) indicated that as an individual matures, knowledge about gender variation in opportunities and barriers in schooling and work increases. Betz (2005) calls the barriers ‘socialized’; “socialized belief systems or behavior patterns that lead women themselves to avoid certain career fields” (p. 256). These socialized barriers grow to become stereotypes that in turn guide occupational choices of women. Spokane and Cruza-Guet (2005) explained that because of their preoccupation with family issues and the effect of the traditional gender role socialization, women developed reduced self efficacy in mathematics and science activities which in turn become barriers for them to be directed by their personal preferences. Staff et al. (2010) stated that “women may feel less competent than men in making career decisions and therefore have greater occupational uncertainty” (p. 6).

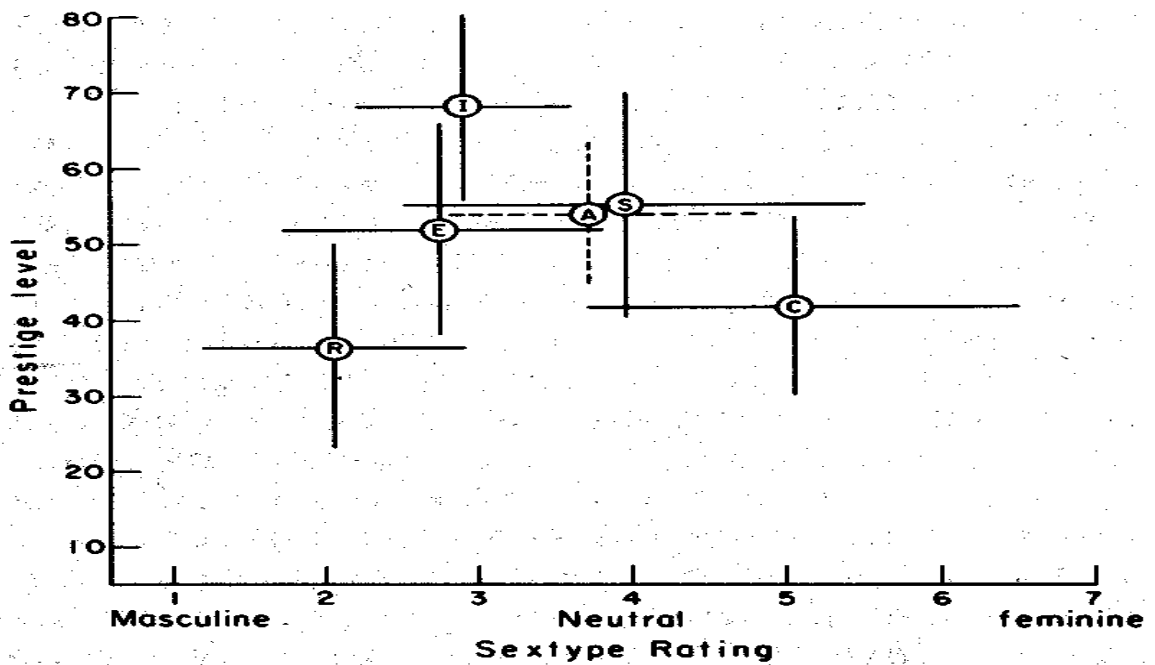
Gender also has been identified as a key factor in occupational prestige and aspiration-expectation adjustment. Deng et al. (2007) have indicated that Realistic (R) occupations, despite their lower prestige level like Conventional (C) occupations, are preferred by men whereas Social (S) occupations are preferred by women; Investigative (I) occupations are judged as prestigious types and are preferred by both males and females.

Gottfredson (1981) reported the difference in relatively more elaborated terms:

Investigative work (science and medicine) is the field with the highest prestige. It is somewhat masculine on the average but it is not highly gender-typed because many neutral jobs can be found in the field. Moving down in prestige we see that Enterprising work (sales and management) is somewhat masculine and Social jobs (social service and education) are somewhat feminine on the average than is Investigative work. Artistic

(aesthetic and literary) work is approximately the same in prestige and gender-type as is Social work. Going further down in prestige, we find that jobs are more gender typed. Realistic (manual and technical) work is clearly masculine and Conventional (clerical and accounting) work is clearly feminine on the average (p. 554).

Comparing vertical and side moves (shifts between levels/fields to moves within), Gottfredson (1981) indicated that adolescents are more likely to shift within fields at the same level than move up or down between levels. Pictorial representation of Gottfredson's (1981) explanation is presented below.



Note: R= Realistic, I=Investigative, A=Artistic, S=Social, E=Enterprising, C=Conventional

Figure 1

Prestige and Gender type Ratings of Occupations in the Different Holland Fields of Work, as reported by Gottfredson (1981, p. 553)

Female adolescents evidence less gender traditional occupations in their aspirations than in their expectations. The US Department of Labor defines gender traditional or gender

neutral jobs as those in which fewer than 25 per cent of the positions are held by one gender (NCCRN, 2008). At the practical stages women in general tend to concentrate in the lower paying, less prestigious jobs (Eccles et al., 1993). Women remain seriously underrepresented in scientific and technical careers and in high-level positions in business, government, education, and the military (Betz, 2005).

Chi-square analyses by Jozefowicz et al. (1993) resulted that while males aspired for science/math-related occupations and protective service jobs, females aspired for human service jobs and health professions; business, law, writing or artistic occupations are aspired by both males and females. Achter and Lubinski (2005) in their study of talented adolescents reported that on preference measures, males and females differ in their interest of working with people versus working with things; females as a group are more attracted to opportunities and environments involving the former, males the latter.

Similarly, Gottfredson and Lapan (1997) have stated “Realistic work is perceived as highly masculine and Conventional as highly feminine, with Investigative, Artistic and Enterprising being less gender typed” (p. 421). In the preparation ages (school part-time work), some jobs such as busboy, gardener, manual laborer, newspaper carrier are held almost exclusively by male adolescents, while other jobs such as baby-sitter, maid are held almost exclusively by female adolescents (Santrock, 2005). Such early school part-time work encourages taking responsibility, independence, job-seeking skills and role experimentation, develops work interest, and relationship patterns (work ethic) in adolescents, skills that they would not learn in school. But prolonged part-time work with poor quality results in lowered occupational aspirations and negative work attitude (Loughlin & Barling, 1998).

An alternative to this and a proxy to college or university apprenticeships could be devising a program in which high school or preparatory level students pass some time with a person who works in a field that they are interested in joining. Students are likely to get essential information at this stage more comfortably than at colleges or university level apprentices because they are being understood as naïve adolescents who seek only information, not jobs.

The order of magnitude of employment, with the two genders combined and occupations categorized into Holland's RIASEC families, in some countries is Realistic, Enterprising, Conventional, Social, Investigative, and then Artistic (Gottfredson & Brown, 1978).

In sum, variation in perceptions of abilities, work values, expectancies and barriers have been proposed to account for gender differences in occupational preferences and subsequent job choice. And male and female adolescents may have same pattern compromises, but their reasons for making compromises may differ.

## **2.6 Transformation in Occupational Choice Pattern**

Choice pattern varies across development. Development of work interest, vocational choice, achievement of career success and stability crystallizes from childhood fluidity up to adulthood maturity concurrent with an individual's identity attainment process. "Until about the age of 11, children are in the fantasy stage of career choice, from 11-17, adolescents are in the tentative stage of career development, a transition from the fantasy stage of childhood to the realistic decision making of young adulthood" (Santrock, 2005, p. 448).

Two progressive processes of occupational development are proposed by Gottfredson (1981) – circumscription and compromise. She sees both circumscription and compromise as the development of self concept and occupational preferences and explains the two processes as people’s continuous activities. Circumscription and compromise are two processes by which we narrow our life choices and begin to take some paths in life rather than others; represent processes of self-definition and self-creation (Gottfredson, 2002). Circumscription is the process by which individuals limit their occupational aspirations to a Zone of Acceptable Alternatives (ZAA), involves the progressive elimination of occupations deemed unacceptable. Compromise is the process by which individuals exchange their aspirations for more realistic occupational choices within ZAA, occurs as individuals begin to relinquish their most preferred occupations for less compatible but more accessible ones. Whereas circumscription resembles occupation rejection due to perceived unsuitability, compromise is occupation selection with regard to its accessibility. Hence, occupational decision making is a narrowing process of series of related alternatives progressively. Regarding this Savickas (2005) explained that career choice is a life course where by a person passes through successive approximations until a better fit is attained between worker and work.

Based on their styles of compromise, Armstrong and Crombie (2000) classified adolescents into discrepant and non-discrepant groups; undifferentiated and differentiated (Holland, 1997; cited in Reardon & Lenz, 1999). Non-discrepant (differentiated) adolescents are those who report similar occupations for both their aspirations and expectations (their aspirations are presumably perceived as being their expectations). Such adolescents have a distinct or definite match of personality and occupational

profiles. These non-discrepant students are more likely to be higher achieving, and differed from their discrepant counterparts by being more career-confident and perceiving fewer career barriers (Creed et al., 2010). On the other hand, those who were indicating a change in occupational status were less confident and more conscious or fearful of barriers. Stability in vocational dispositions has clear benefit. If one couldn't predict what kind of work tasks or people he would enjoy, he would be unable to control his future experiences (Gottfredson, 1999).

Adolescents that report highly varied occupations for their aspirations and expectations are undifferentiated. Such adolescents have a confused picture of the self and the world of work. In general, early adolescents are likely to express high status educational and occupational aspirations, regardless of the reality of attainment of those goals. These aspirations are lowered by compromise when individuals do not believe they possess the necessary skills or abilities; realize that the educational or entry-level requirements are beyond their abilities; do not receive support or possess aspirations that are at odds with family and friends or if they perceive significant community or societal barriers to job entry or success (Armstrong & Crombie, 2000; Gottfredson, 1981). Revision of preferences and goals occurs as young people experience the realities of the labor market and the adult work role (Johnson, 2001).

## **2.7. Holland's Theory and Dimensionality of Occupations**

Classification gives research order and simplicity. Classification system allows researchers to work more efficiently with a large set of events or items by providing order; it specifically allows them to explore or describe the similarities and differences

among the items (Gore & Hitch, 2005). In most reviewed vocational personality researches, Holland's *theory of vocational choice and personalities* has been extensively used as a standard and as an applicable unifying frame work for individual differences across occupational choice (e.g. Armstrong et al., 2008; Bullock, Andrews, Braud, & Reardon, 2007; Deng et al., 2007; Gottfredson, 1981; Gottfredson & Brown, 1978; Gottfredson & Lapan, 1997; Holland et al., 1969; Vansickle & Prediger, 1990; Zarrin & Abedi, 2011). Gottfredson (1999) witnessed "a 1980 computer-assisted search of the Social Science Citation Index (SSCI) files implied that by the year of his formal retirement [*i.e.*1980], works of which Holland was the primary author had been cited at least 699 times in English language journals and an additional 26 times in foreign language journals included in the SSCI system" (p. 25). A comprehensive meta-analysis of 'personality and vocational choice' researches showed that Holland's theory has been widely validated in the vocational literature and its generalizability has also been supported with cross-cultural analyses (Barrick et al., 2003).

The theory has heuristic value to visualize person-work environment integration. Holland's unique contribution to vocational psychology is his focused and persistent work to create a structure to explain person-environment interaction (Gottfredson, 1999). Holland's explicit contribution to industrial/organizational world is that he infers the structure of personality from the clustering of vocational interests (Barrick et al., 2003). His theory organizes occupations into six themes in a hexagon (Realistic-Investigative-Artistic-Social-Enterprising-Conventional) of people and work environments, within which all jobs can be classified. The RIASEC taxonomy is widely used by psychologists to assist students with occupational indecision problems. McDaniel and Snell (1999)

indicated the existence of “at least 50 career information delivery systems, almost all of which incorporate the RIASEC taxonomy” (p. 76). “The fact that Holland’s system has been so widely adopted is a testament to its utility and simplicity,” (Gore & Hitch, 2005, p. 389).

The RIASEC hexagon provides a theory-based context for visualizing an occupation’s location and classifying occupations, which are determined from interest and ability scores of job incumbents (Vansickle & Prediger, 1990; Zarrin & Abedi, 2011). In Holland’s hexagonal structure the inter-point distances for the RIASEC types are inversely proportional to the theoretical relationships between them, i.e., adjacent types are most related, alternate types have an intermediate relationship and opposite types are least related (Rounds & Tracey, 1993).

Vocational researchers indicated that work is a major agent of socialization in adolescent development through its provision of the main functions - means of survival, power, social connection, and self determination. Holland’s theory is believed to help people to meet these needs (Bullock et al., 2007; Loughlin & Barling, 1998). Holland (1997) cited in Feldman et al. (2004) noted that the six environments included in his theory foster the development of different competencies and achievements, encourage people to see themselves and the world in different ways, stimulate people to engage in different kinds of activities, and reward people for their display of alternative values and attitudes.

In the early ages children generally judge all occupations as equally positive and favorable but as they incorporate more occupation-relevant self concepts, they begin categorizing them into groups and try to give their own explanation as to why some

occupations are usually judged to be similar and others are not (Gottfredson, 1981); hence, dimensional thinking of occupations becomes common as youngsters develop to adolescence. Gottfredson (1981), for example, has indicated that “the dimensionality studies have all been done with people aged 14 and over” (p. 551).

### **2.7.1. Holland’s Occupational Structure - RIASEC**

Holland et al. (1969) proposed that the inter-relations among the six occupational categories, Realistic- Investigative – Artistic – Social – Enterprising – Conventional (RIASEC), can be represented by a hexagon. In the equilateral hexagon, the dimensions and their orientations are arbitrary; it is the relative relations among the constructs that is important (Rounds & Tracey, 1993). The explanations for each type in the acronym RIASEC are derived from Holland’s (1985) Vocational Preference Inventory (VPI). The six categories in the typology are used to characterize both jobs and personalities.

#### ***Explanations of the RIASEC typologies (occupational environments & personalities)***

*Realistic* - People who generally like to be involved in activities that include practical, ‘hands-on’/physical problems and solutions; or prefer to work with objects, machines, and tools; these are people who may have athletic or mechanical abilities, like to deal with plants, animals, or real world materials or tangibles. This environment/personality prefers action to idea.

*Investigative* – people who generally like to be involved in activities that have to do with ideas and thinking; these are people who like to observe, learn, investigate, analyze, evaluate or solve problems; like to search for factors and figure out problems mentally.

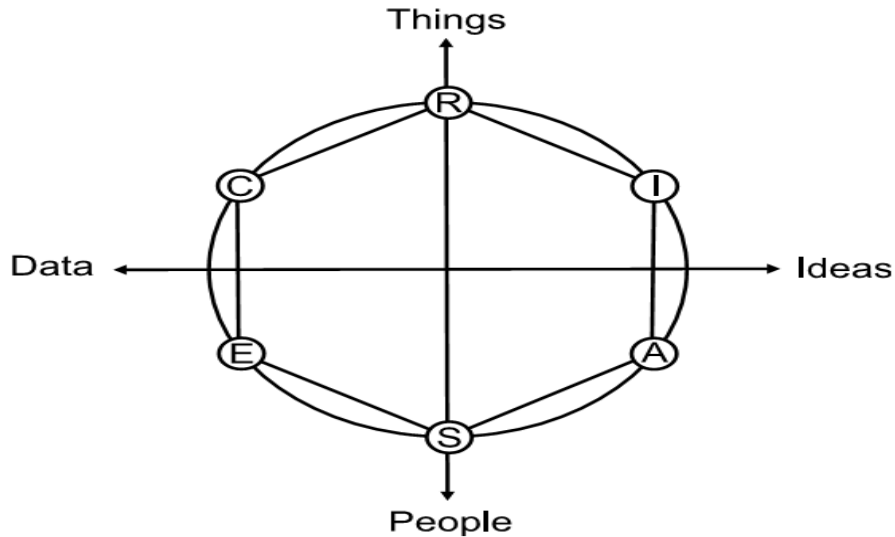
*Artistic* – people who generally value self-expression and relations with others through creative expressions; these are people who have innovative or intuitional abilities, and like to work in unstructured situations using their imagination; like new forms, designs and patterns.

*Social* – people generally with humanistic orientation; like to be involved in activities that assist others and promote learning and personal development; these are people who like to work with people to enlighten, inform, help, train, or cure them; they are skilled with words; prefer to communicate, teach, give advice and service people.

*Enterprising* - people who generally like to be involved in activities that have to do with starting up and carrying out projects; like to work through and with people; influencing, persuading, performing, leading, or making for organizational goals, decision making or economic gain.

*Conventional* – people who generally like to work, to be involved in activities that follow set procedures and routine; like to work with data and details; have clerical or numerical abilities and orientations; follow through on others instructions.

Prediger (1982), cited in Deng et al. (2007), and Vansickle and Prediger (1990) have restructured Holland's RIASEC into two bi-polar hexagonal dimensions - Things/People, Data/Ideas.



Note: R= Realistic, I=Investigative, A=Artistic, S=Social, E=Enterprising, C=Conventional

Figure 2

A Two Bi-polar Representation of Holland's Occupational Space

### 2.7.2. Dimensional Explanations of RIASEC Model

Several proposals have been advanced to account for Holland's occupational field. The most well known is Prediger's (1982) in Deng et al. (2007). Deng et al. (2007) have quoted Prediger's explanation as,

The RIASEC structure is best presented using two bipolar dimensions [Fig.2]. These two dimensions reflect preferences for four work tasks [environments]: things, people, data, and ideas. Things tasks involve non-personal processes, such as producing and repairing. People tasks involve interpersonal processes, such as helping and persuading. Data tasks involve impersonal processes such as recording and organizing. Idea tasks involve intra-personal processes such as creating and discovering (p. 4).

From occupational environment perspective, Prediger's re-presentation further simplifies locating relatively homogeneous occupations with respect to independent work-personality characteristics that are required from the wider world of work. It does this by bisecting four and intersecting two (summarizing the six into four career regions) of Holland's hexagonal occupational personalities and environments.

## **2.8. Labor Market Information and Accessibility of Occupations**

Labor market produces an occupational context that either expands or limits aspirations, expectations and aspiration-expectation discrepancy. Occupational choice and attainment are shaped by labor market conditions of a country (Johnson & Mortimer, 2002). The labor market is the interaction of people competing for jobs and employers competing for workers (NCCRN, 2008). An adolescent who knows little about the world of work cares little about choice. Occupational knowledge and labor market information increases clarity and predictability of choices (Hirschi, 2011). In the early ages, occupational evaluation is restricted to learning from immediate reference groups as job incumbents (e.g. mother, father, and friends). In most cases youngsters will take the group of which they are a member as their reference group adopting the standards of success as demanding criteria (Gottfredson, 1981).

By adolescence, adolescents have found sets of adult social roles that they, their parents and their friends consider acceptable. For Bandura (1997), cited in Lent (2005), development of occupational interest, career choice and success are subject to change and are responsive to environmental conditions because of four primary efficacy informational sources (types of learning experiences) - personal performance accomplishments, vicarious learning, social persuasion, physiological, and affective states.

As age progresses youngsters begin to judge occupations using their internal, unique self as criteria. Personal accomplishments have the potential to exert the greatest influence on self-efficacy (Lent, 2005). For example, an adolescent may realize that an occupation

may be compatible with his self-concept and yet be inaccessible. Occupational accessibility refers to obstacles or opportunities in the social or economic environment that affect one's chances of getting into a certain occupation (Gottfredson, 1981).

Judgment of occupational accessibility could be based on many factors: availability of the job within the surrounding area, ease of getting training for the job, possession of competence the job requires, perception of social prestige of the job by significant others. Notions of accessibility depend on both the information to which individuals are exposed and the information they themselves seek out (Gottfredson, 2002). Hence, the occupational informants one seeks will vary depending on to what others one compares himself with. This will not be simple in situations where there is no clear description of occupations by title, place of employment, employer, competencies required, conditions of reward and advancement, earnings, and payment issues.

In people's attempt to look for informants, they rely on their general understanding of what it means socially and economically to have a particular occupation rather than knowing about job tasks and educational requirements (Gottfredson, 1981). This disturbing generalization holds true for both children and adults even for the more visible occupations such as medicine, law, accounting, and engineering. This, in other words, is the same as saying people are homogeneous in 'whom they would like to be' being unconscious of the nature of tasks and educational requirements awaiting them.

A student shouldn't choose an occupation because he has seen it being joined by many others. He must choose a vocation where he has the intellectual ability, aptitudes, and interest (Ohiwerei & Nwosu, 2009). Implementing a choice requires that adolescents

identify available options, weigh the alternatives, and find means of entry (Gottfredson, 2005). Saks (2005) identifies two sources of job information: formal and informal. "Formal sources involve the use of public intermediaries such as advertisements, employment agencies, and campus placement offices; informal sources are private intermediaries such as friends, relatives, or persons who are already employed in an organization" (p. 159). In the absence of structured system, there will be a tendency for people to rely on informal experiences and relationships as reliable information sources. Work will be the prominent theme of such informal information sharing process. The values and beliefs of others (e.g., peers, parents, teachers) can shape students' occupational aspirations and expectations over time. Family values influence the formation of adolescents' educational and occupational aspirations and expectations (Loughlin & Barling, 1998). The process of transforming a preoccupation into an occupation relies greatly on identifying role models who show a path forward from the family to the community (Savickas, 2002). As to the order of consulted sources of occupational information, Gottfredson (1981) listed parents, friends, and colleagues as primary and library materials, counselors, and unfamiliar employers as secondary sources of occupational information.

Nwagwu (1976) reported similar results. The order of people that adolescents consulted on the planning of their future education and vocation in his research was parents, friends, relatives, and classmates. Teachers were the least consulted. School counselors, too, have little influence on adolescents' choice making although they facilitate the acquisition of occupational knowledge. "While counselors have been found to have considerable impact in facilitating the school to work transition, remarkably few of the

interviewees in this study recalled positive influences of school counselors, although some did gain assistance from them,” (Mortimer et al., 2002, p. 454). Ohiwerei and Nwosu (2009) restated four stages that occupational planners are expected to pass through: Self-knowledge, Opportunities, Decision, and Action, acronymed as SODA. The ‘S’ stage is a phase where the job seeker assesses his interests, strengths, values and abilities. The ‘O’ stage is a phase where he assesses options from different angles. The ‘D’ stage is a phase where he reaches his decisions after discussions with friends, family, professionals, graduates, academics, and a vocational adviser; and the ‘A’ stage is the final phase where job seekers complete the necessary application forms and curriculum vitae and get to interview stage to get the job or study they aim for. Peterson et al. (2002) extends the stages of occupational decision making to five processes: communication, analysis, synthesis, valuing and execution. Savickas (2005) proposes other four different lines of development (*the 4Cs*) adolescents follow: become concerned (become aware) about one’s future as a worker, increase personal control over one’s occupational activities, form conceptions about how to make educational and occupational choices, and acquire the confidence to make and implement these occupational choices. Savickas (2002) also listed out the particular competency each stage develops: “concern generates planning competence; control enhances decisional competence; conception engenders knowledge of self and occupations; and confidence breeds problem-solving competence” (p. 176).

The time when information about job opportunities is provided also matter. Providing too much information at the wrong time, for example, might overwhelm adolescents (Gore & Hitch, 2005). Work contacts that occur earlier in the career can accumulate and

increase the chances of finding quality jobs with better pays than contacts later in the career (Staff et al., 2010). The acquisition of occupational knowledge may be thought of as a constructive process in which an individual continually creates new knowledge units from combining existing knowledge with new information (Peterson et al., 2002). Adolescents who are uncertain of their future occupational pursuits may be unable to develop contacts in particular careers or industries beneficial for career development and long-term income attainments.

This indicates that the degree of uncertainty adolescents have about their occupational future affects the social network they establish to obtain jobs. It is important to locate current services of information such as products, publications, videos, internet resources, friends, family, teachers, co-workers etc (Ohiwerei & Nwosu, 2009). Relative to the 'undermanned' rural setting, urban adolescents have better social connections and peer networks; rural graduate adolescents expressed dissatisfaction with the insufficient emphasis in their school on higher education and a limited awareness of career options (Crockett et al., 2000). "Some minority groups and people living in rural settings may be particularly disadvantaged in the process of occupational choice because of the lack of all types of occupational information," (Brown, 2002, p. 482). A combination of structural influences (e.g. gender, race, ethnicity, and class) or the intersection of these 'identities,' results in unequal opportunity for occupational aspiration fulfillment for rural adolescents (Brooks & Redlin, 2009).

An integrated thinking leads to right choice of an occupation which in turn results in satisfaction and stability at a certain job. Cultivating young learners towards a positive

attribution style which enhances establishment of firm occupational identity is one way of achieving this. An adolescent's vocational identity gives clarity and stability to his or her current and future career goals and sets forth the career direction he or she will pursue (Holland, 1997, cited in Turner & Lapan, 2005).

In summary, career exploration is a process of putting information gathered about self and a number of occupations of interest together. Adolescents' information availing process is influenced by the social setting to which they are a part. It is informative, then, to view occupational development as growth in the capacity to apprehend and organize relevant information about self and jobs than to view it simply as the mere accumulation of disorganized information. Information overload and distorted occupational information can derail the occupational choice process, leading to decision difficulties such as indecision and unrealism (Savickas, 2002). Quality, timing, and relevance of information apprehended are essential. Values-based information, unlike more statistically oriented information, allows decision makers to ascertain not only what workers do but how they feel about what they do (Brown, 2002). It takes little thought for people to rate occupations in any order than to justify as to why they rated a particular occupation that way; rating is less troubling than reasoning. Individuals and institutions that work on career development of adolescents should acquire knowledge of the type of information that is available and how, when, and in what form to provide it. At the heart of providing career development services to adolescents is the recognition of their need to develop more adaptive, resilient, and proactive approaches to their present situations and possible future career selves (Turner & Lapan, 2005). To bridge such gap occupational information to adolescents should incorporate employment projections based on

economic trends, projected industry growth or decline, technological changes, or trends in trade relations. Providing skillful and informed career services to school-age youth can meaningfully assist them in establishing more satisfying, productive and fulfilling adult lives.

## **2.9. The Link between Education and Work**

The nature and level of obtained education is importantly related to subsequent career achievements and to adult socioeconomic status and lifestyle. School curriculum, its contents, mode of delivery, school finance, career guidance and counseling shapes students' effectiveness and efficiency of planning their future. Education is thought to facilitate adolescents' adaptability to dynamic career paths (Johnson & Monserud, 2010). Weak education-work linkage may contribute to inflated aspirations and expectations. If adolescents are not informed adequately about occupations and their respective educational requirements, they often formulate unrealistic occupational aspirations and expectations without adequate knowledge of the demands of the various occupations and the skills necessary to realize their ambitions (Baird et al., 2008). It is one thing to demonstrate interest in a particular occupational field; it is another thing to have confidence in one's ability to successfully undertake the task involved (Ohiwerei & Nwosu, 2009).

Apprenticeship and part-time work programs can help to facilitate the transition from school to work especially when attempt is made to integrate experiences in the workplace and in school. Early jobs can serve as first-hand introductions to employment and thus have the potential to shape work habits, attitudes, and occupational interests (Johnson &

Mortimer, 2002). To facilitate career exploration, countries, for example, the US prepare books. The Dictionary of Occupational Titles (DOT), Department of Labor publications (Employment and Training administration) are comprehensive sources of occupational information assisting job-seekers in locating occupations that are consistent with predefined characteristics including interests, abilities, values, and education (McDaniel & Snell, 1999). Such arrangement facilitates adolescents' integration of the processes self-awareness, career exploration, and job search.

Of course, one limitation of such books is that they cannot remain current as occupations change over time due to technology and market forces. This limitation can be managed by availing the occupational information through both in print and electronic versions. High school and college students are the primary beneficiaries of such information. Adults seeking a job change also utilize the occupational information review systems. In well organized countries, career information delivery systems are frequently found in employment and training agencies, prisons, rehabilitation agencies, and libraries.

However, Ethiopian adolescents face multiple barriers in the transition to the role of a worker, including inadequate academic training, scarcity of vocational guidance and unclear path to the workplace. Ambiguity about how to successfully transform from school to work is reflected in high school students' lack of knowledge about the nature of various careers and the barriers to entry that characterize many professional occupations (e.g. credentials or time to degree) (Baird, et al., 2008). Most adolescents expect to be in professional work; yet, far fewer have concrete plans for meeting those expectations. In addition, many adolescents have misaligned expectations, either underestimating the education necessary for the occupation to which they aspire or overestimating the

qualification required for the job they hope to attain. Education helps adolescents to explore and fit their abilities, skills, and attitudes to compatible occupations. Of course there is individual variation in this translating or matching process. Savickas (2002, 2005) explained that while adolescents with unrealistic self-concepts make unwise choices; those with weak self-efficacy may even avoid making choices.

As under-industrialized nation, the involvement of private employers in influencing the curriculum and apprenticeship programs towards market-oriented skills is minimal or nearly absent in Ethiopia. The government is both the designer of rules and player of the game. In addition, it has an educational system that is not based on an open mobility model; students are tracked to different independent educational destinations. The placement agency (NEAEA) tracks students to a 70/30 allocation based on their school leaving exam results. This tracking could have been effective if school-work transition structures were established in high schools, like Germany, Austria, Switzerland, Japan and the United Kingdom, which track students earlier in their schooling careers, but offer more vocationally concrete programs of study throughout the secondary levels of schooling (Baird et al., 2008). In Germany, for example, the school encourages occupational exploration by providing career information and ‘trial’ apprenticeship placements (Johnson & Mortimer, 2002). Furthermore, institutions of schooling and work shouldn’t reside separately. In the absence of formal structured programs to assist adolescents in school-work transitions and occupational decision making, there could be the will of leaving some space for other subtler and informal mechanisms to fill the gap (Mortimer et al., 2002).

The composition of local labor markets affects young people's occupational and educational plans. For example, the level of occupational gender segregation in a local community affects the occupational plans of young women and men living in that community (Baird et al., 2008). Community norms as expressed in localized class culture or in family patterns may also influence the achievement expectations of young men and women.

Baird et al. (2008) have highlighted five key institutional and cultural forces that have influenced the increase in adolescents' and young adults' aspirations and expectations: cultural changes related to women's status in society, increasing economic inequality, an educational philosophy that stresses higher education for all, weak institutional links between education and work and the effects of community contexts. These forces also influence the school-to-work transition in a society.

In summary, education is crucial for economic power and independence. Appropriate educational preparation is a major gateway to occupational and personal independence. Education creates options, while lack of education closes them; without options, the concept of choice itself has no real meaning. Thus, the decisions individuals make concerning their education, both in terms of level and major areas of study, will be among the most important career decisions they ever make. Further success and survival in the educational programs chosen will be critical to the successful implementation of these career decisions. The Ethiopian education system has to practice the policies it formulated. The education structure should collectively work towards realizing its mission of producing 'job-creating' citizens. Careers do not unfold; they are constructed

(Savickas, 2002). The policy should not self contradict itself by inappropriately allocating occupations to graduates irrespective of their abilities, skills, and interests in the name of ‘equal distribution of resources and power or reducing inequality’ (AAEB, 2011). It is opportunity that is offered equally, but results tend to vary or be unequal.

## CHAPTER THREE

### 3. METHODOLOGY

#### 3.1. Population, Participants and Sampling Technique

Adolescents' occupational aspirations and expectations are shaped by the jobs they see in their communities. Students in government preparatory schools in Addis Ababa are selected purposefully as population of this study because urban adolescents are believed to have relatively better occupational exposure and labor market information than rural adolescents who have fewer opportunities in contemplating career decisions. Compared to the restricted rural economy, urban economies provide more diversified occupational opportunities.

There are 13 government preparatory schools enrolling a total of 33,110 (males = 14,591; females = 18,519) students (AAEB, 2011). Previous data have been collected from four of the preparatory schools to fulfill requirements for two courses and the pilot phase of this research. Analysis revealed that there was no considerable difference in response patterns among the differently located preparatory school adolescents. After observing the relative similarity, it was decided that two schools will do for the final study. Hence, two preparatory schools were selected randomly for this research.

Krejcie and Morgan's (1970) formula was employed to determine sample size.

$$S = \frac{\chi^2 NP (1-P)}{d^2 (N-1) + \chi^2 P (1-P)} ,$$

Where  $S$  = required sample size,  $\chi^2$  = the table value of chi-square for 1 degree of freedom (3.84),  $N$  = the population size (33,110),  $P$  = the population proportion (0.5), and

$d$  = the degree of accuracy expressed as a proportion (.05). Substituting the numbers in the formula,  $S = 380$ .

Considering the non-response rate either to specific items or the whole questionnaire and the number of students in a class, 10.5% of  $S$  (40) was added to the calculated  $S$ . Hence, the total sample size was 420.

To select the 420 participants, first, the sections in both schools (of both grades 11 & 12) were separated into natural and social science groups. Then, one section was picked randomly from each grade level and field of study. A total of 420 questionnaires were distributed to eight sections (four sections in each school).

The response rate was excellent; 416 (99%) students provided complete information on variables under investigation. Only four (male = 1; female = 3) failed to complete the questions correctly and, hence, were discarded from the analysis.

The questionnaire administration protocols employed increased the return rate. The researcher together with a subject teacher, a unit leader, or school counselor, administered the questionnaires to each sampled class. Only few clarification questions were raised by students while completing the questions. Students filled and returned the questionnaire according to their working paces. Completion status was checked in front of each student and few quick students who skipped certain items 'unchecked' in the scale items were reminded immediately and made to complete them soon. The students were pleased to respond both to the written and interview questions because each question was about their future occupational and/or work environment choices.

Even though the questionnaire administration process improved the response rate by resolving the problem encountered during the pilot phase, it deprived participants their

freedom of free responding. An evidence for this deprivation could be the absence of ‘avoidance of career planning at present’ in their written responses. During the pilot phase some students responded ‘I do not know’ or ‘I have no plan of my future career right now’. In the pilot phase, classroom teachers administered the questionnaires. They allow the students to take the questionnaire home and complete it. The return rate during the pilot phase was only 68%.

### **3.2 Instruments**

Questionnaire and interview were used to collect data. The measures of prime importance for this study were the instruments for occupational aspirations, expectations, occupation-related personality measures, occupational informants and occupational prestige judgment self reporting part (in writing & interview). In this part, participants were presented with questions that ask for responses about their occupational aspirations, expectations, occupation-related personalities, occupational informants and occupational prestige judgments.

To identify adolescents’ occupation-related personalities, a RIASEC scale was adapted from Holland (1985) Vocational Preference Inventory (VPI). This measure is meant to assess both personal and occupational identities of a student by measuring his or her general orientation to primarily work with people, data, things, or ideas. Holland (1997), cited in Feldman et al. (2004), has noted that an individual’s personality type may be measured by his or her responses to ability and interest scales. Self assessment, in relation to one’s occupational interest, is the first part of the career planning process (NCCRN, 2008). Holland (1985) used a list of items (5 on average) to produce point

score for each of RIASEC vocational personality types. Hence, reliability scores were not produced and reported. This point score presentation of Holland was adapted into a scale measure consisting of 4 items for each vocational personality type after modifying word or phrase levels into sentence level items and reducing the redundancy. This adaptation was necessitated for the following reason.

Holland himself maintained that by late adolescence most people come to resemble a combination of six vocational personality types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), or Conventional (C) in six parallel work environments (Holland, 1997; cited in Spokane & Cruza-Guet, 2005). The theory argues that most people resemble more than one and in many cases all of the six types to some degree. A person's work personality has components of each of the six types (Gore & Hitch, 2005).

To assess adolescents' occupational aspirations and expectations, two questions (one for each) were framed by the researcher based on review of literature. Previous studies have made comparisons between aspirations and expectations using similarly phrased questions. Researchers (e.g. Armstrong & Crombie, 2000; Beal & Crocket, 2010; Habtegiorgis, 2000; Mello, 2008; Patton & Creed, 2007) assessed future-oriented goals by asking respondents to indicate their preferences or things they would like to have through such expressive questions: 'what ....would you like to ... when you are....?', 'what ... you most probably expect to ....by age .....?', 'list ... you would like to have when you are ....years old'. For the present study, similar questions were framed and used to assess preparatory-level adolescents' occupational aspirations and expectations. "It has been well documented that expressed interests (just asking people what jobs they want) are at least as predictive of later aspirations and employment as are their

inventoried interests. Expressed interests reflect people's priorities for prestige, gender type as well as field of work, whereas interest inventories are designed to tap primarily interests in the field of work" (Gottfredson, 1981, p. 573). A three-year comparative study of expressed and inventoried career choices revealed that expressed choices were usually, and increasingly over time, better predictor of future career behavior (Reardon & Lenz, 1999). Ambition implies hope for success and it is better captured by asking what youth expect to achieve in the future (Baird et al., 2008). "The easiest way to find out a person's vocational interests or goals is to ask. It doesn't require lengthy, expensive, or intellectually advanced methods or measures," (Rojewski, 2005, p. 131).

Relatively same format questions were used to collect both quantitative and qualitative data on occupational choice; i.e. the questions that ask for aspirations and expectations both in writing and interview basically have similar forms with slight changes in wording to elicit aspirations and expectations in adolescents' age lines. At adolescence, some adolescents are shy and lose their voices in social places. Hence, close-ended questionnaire give them a chance to write what would be unsaid in interviews.

To measure occupational prestige, adolescents were requested to give marks from 1 to 9 to occupations that are fairly representative of Holland's RIASEC families. The list was also appropriated to occupations in the fields of study (the six bands) of the National Educational Assessment and Examination Agency (NEAEA) form, a database out of which occupational titles for prospective Ethiopian graduates are filtered. This measure and the RIASEC scale were placed in between the aspiration and expectation exploring questions to play a mediating role for adolescents' aspiration-expectation compromises.

The list of occupational titles and description of work-personality characteristics may help adolescents to narrow their focus of career options to an occupation that really interests them.

In the other part of the questionnaire (part one), participants were requested to fill in forms that ask for their ages, fields of study, gender, and grades (demographic data).

Despite much speculation, little is known about how (the process) adolescents themselves view their circumstances. What kind of people, experiences or activities may have inspired and/or supported adolescents' initial career explorations and successive compromises? Hence, to explore the situation of the phenomenon in adolescents' terms, individual interviews were held with sixteen participants (two from each field of study of both grades 11 and 12). To select the sixteen interviewees, first the participants (of both grades 11 & 12 in both schools) were separated into two based on field of study. Then, school teachers and guidance and counseling officers were requested to pick 8 (4 from grade 12, other 4 from grade 11, male = 2; female = 2, each half from a different field) purposefully using their own criteria of the students' oral communication abilities and occupational knowledge. This procedure was repeated in the second preparatory school and the total number of interviewees was sixteen (eight from each school).

Choosing and pursuing hobbies accelerates reality testing, because hobbies lay midway between play and work (Savickas, 2002). School extracurricular activities also contribute to the development of occupational self-concepts of high school adolescents. Hence, the participants were interviewed about their hobbies, extracurricular participation and other recreational activities that please them as individuals. These firsthand data on

occupational aspirations and expectations are expected to supplement the quantitative data and result in holistic evidence. To collect such data semi-structured interview questions were used as guidelines to elicit adolescents' preferences of occupations under ideal situations, on one hand, and real considerations, on the other.

### **3.3 Procedures of Data Collection**

Although data were accessible from several sources at each collection point including NEAEA, Addis Ababa City Government Administrative Education Bureau, school administrators, parents, teachers and friends, this research collected firsthand data from students themselves.

First, both the English and the translated version [own translation] of the instruments were evaluated by two senior PhD students, two colleague PhD students who have MA in measurement and evaluation and the research advisor.

The evaluators checked relevance of the measures to variables assessed and their comments helped to make modifications of items and avoid redundancy in the scale items by taking a repeated phrase into the stem sentence. Important changes were also made on the translation accuracy from the evaluators' cross checks of forward and backward translations.

Then, quantitative data were collected using the close-ended questions. Cronbach's alpha reliability of each group of the six work-related personality measuring items was checked. Alpha values for all RIASEC types improved with the large sample except for S and C groups which nearly remains the same as the pilot phase. Summary of alpha values for

each of the RIASEC dimensions measuring items for both the pilot and final phases are presented in Table 1.

Table 1

*Reliability Indices for RIASEC Scale Items*

Dimensions	No of Items	Reliability Index ( $\alpha$ )	
		Pilot	Main study
Realistic	4	0.82	0.88
Investigative	4	0.87	0.89
Artistic	4	0.68	0.78
Social	4	0.79	0.78
Enterprising	4	0.74	0.83
Convention	4	0.73	0.72

Finally, individual interviews were held with sixteen selected students that did not respond to the close-ended questions. Same questions were used for both grade levels and all communications were held in Amharic.

### **3.4 Method of Data Analysis**

The raw data were first grouped into two based on grade level and gender of the participants. Then, it was further subdivided into four based on field of study. The research questions, the close-ended and the interview guide questions served as bases to identify the major topics or themes across which the data were organized. The descriptive

statistics frequency, percentage, means and graphs were used to describe data. Chi-square was employed to determine gender difference in occupational aspirations and expectations.

The occupations students listed for their aspirations and expectations were categorized and totaled into six occupational groups based on Holland-based RIASEC occupational classification system (e.g. Gottfredson & Brown, 1978; NCCRN, 2008; Shatkin, 2011) indicating their overall orientations to the six occupational themes. Then congruence, differentiation (choice consistency) and commonness of adolescents' occupational aspirations and expectations were presented based on the distribution of the reported occupations across Holland-based RIASEC classification.

To report participants' occupational prestige judgments, first the 1 to 9 marks were scaled and coded; 1 to 3, 4 to 6, and 7 to 9 marks were scaled and coded as 1 (low prestige), 2 (medium prestige) and 3 (high prestige) respectively. Then, the marks given to each occupation of Holland's typologies in the scaled coding were added to get prestige status of occupations separately and as a group.

## CHAPTER FOUR

### 4. RESULTS

In this part, the findings are presented. The presentation used descriptive statistics. Frequencies, percentages, means, standard deviations, and graphs were used to summarize and describe proportions of main variables treated in the study. Chi-square was used to show gender difference in occupational aspirations and expectations. Brief summary of transcribed data from sixteen interviewees were also used to supplement the quantitative results. Details of the qualitative data are presented in the discussion chapter.

Of the 420 participants (male = 142; female = 278), 416 (male = 141; female = 275) completed the questionnaire correctly and the analysis was based on their data. Table 2 presents the participants by their biographic characteristics.

Table 2

*Sample of the Study by the Demographic Variables and their Levels*

Variable	Levels	N
Gender	Male	141
	Female	275
Age of respondents	16 years of age	29
	17 years of age	147
	18 years of age	148
	19 years of age	64
	20 years and over	28
Field of study	Natural science	207
	Social science	209
Grade level	Grade 11	232
	Grade 12	184

#### 4.1. Sources of Occupational Information for Preparatory School Adolescents in Addis Ababa

The sources adolescents listed as their occupational informants were organized and counted. They were summarized and presented in Table 3.

Table 3

##### *Frequency of Sources of Occupational Information*

Source	Frequency	Per cent
Own interest	202	48.6
Family	171	41.1
Elders	121	29.1
Context/ Environment	98	23.6
Friends/relatives	84	20.2
Media	72	17.3
Professionals	44	10.6
Books	29	7.0
The public	24	5.8

**Note:** the sum of the frequencies and the percentages exceed 416 and 100% respectively because most students gave more than one answer for a question

As Table 3 shows, student's own interest and the family (father, mother, brothers, sisters) were the two top successively reported sources of adolescents' occupational information (48.6% and 41.1% respectively). Elders (teachers, experienced adults, well-informed people) were reported as the third source of occupational information (29.1%). Context (international, the existing reality of own country, the student's immediate environment), students' friends or relatives were also consulted as occupational sources by some students (23.6% and 20.2% respectively). The media (mainly TV and radio) and professionals were also mentioned as sources of occupational information (17.3% & 10.6% respectively). Students indicated that they have watched some professionals on TV giving explanations on different issues in addition to those who personally influenced

them. Books and the public were listed as sources of occupational information by few adolescents (7% & 5.8% respectively).

Students have also responded “I” or “myself” as a primary source for the occupations they aspired or expected in the qualitative interviews. This tendency of the adolescents to seemingly rely on themselves in urban environments where there were expectations of literate family and community to act as social reference groups may be partly attributed to the adolescents exposure to external culture. Nwagwu (1976) pointed out the influence of globalization as one factor putting African adolescents’ vocational decisions in dilemma. Hartung et al. (2010) also reported individualist-collectivist cultural influences as possible bases for dilemmas in occupational planning and choice behaviors among individuals. While adolescents with individualistic cultural beliefs place much greater emphasis on their own personal attitudes and goals in making career plans and choices; those with collectivist beliefs are thought to base their occupational plans and choices more on the norms and expectations of their reference groups, such as the family.

#### **4.2. Most Aspired and Expected Occupations**

The occupations adolescents listed for their aspirations and expectations (the two genders combined) were categorized into one of Holland’s six types and presented in Table 4.

Table 4

*Frequency of Aspired and Expected Occupation by Holland Types*

Holland Types	Aspiration	Expectation
Realistic	33 (7.9%)	31 (7.5%)
Investigative	158 (38%)	130 (31.3%)
Artistic	48 (7.2%)	72 (17.3%)
Social	37 (8.9%)	51 (12.3%)
Enterprising	102 (24.5%)	95 (22.8%)
Conventional	38 (9.1%)	37 (8.9%)

As indicated in Table 4, Investigative type occupations were both the most aspired and expected occupations (38% & 31.3% respectively) by students of Addis Ababa government preparatory schools. Enterprising type occupations were also the second most aspired and expected occupations (24.5% & 22.8% respectively).

The clustering of the adolescents' choices to limited professional jobs is consistent with Asuquo and Petters (2009) and Nwagwu's (1976) findings. These researchers found out that African students' career choices reflect the social prestige perceptions of their societies. The preparatory adolescents' focus to limited clusters of occupations may be also attributed to the excessive directives given by the politico-economy of the Ethiopian government. The directions, done mainly with an intention of gaining young political supporters, may develop submissive behavior by stunting their career decision making self-efficacy. Adolescents with high self-efficacy in their occupational decision-making capabilities are more likely to be proactive in their career development by seeking out information about their career options (Cassie & Chen, 2012). The finding also partially agrees with Habtegiorgis's (2000) finding. In his research, Ethiopian high school completed students ranked electrical engineering first. However, medicine was beyond the 6<sup>th</sup> rank.

Many of the natural science tracked interviewees have chosen 'medicine' or 'engineering' for their occupational aspirations and expectations. Many of the social science tracked interviewees have chosen 'law' in their responses to the qualitative questions. When asked 'if they have the competence to achieve their aspirations and expectations', they said that even though they may lack it at present, they will build it in the future when they join colleges and universities'. These higher aspirations and

expectation are consistent with Domina, Conley, & Farkas' (2011) findings. They reported that spontaneous expansion of higher education contributes for unrealistic educational, occupational aspirations and expectations and for a reduced effort in high school.

### 4.3. Occupational Prestige Judgments of Adolescents

The marks adolescents gave to selected occupations (after the 1-9 marks scaled and coded as 1, 2 & 3) were added across each Holland type to result in group mean of three occupations from each type. The group's (the three selected occupations from each of Holland's RIASEC) prestige mean is presented in Table 5 and Figure 3 below. Separate prestige level for each of the eighteen selected occupations is presented later in Table 6.

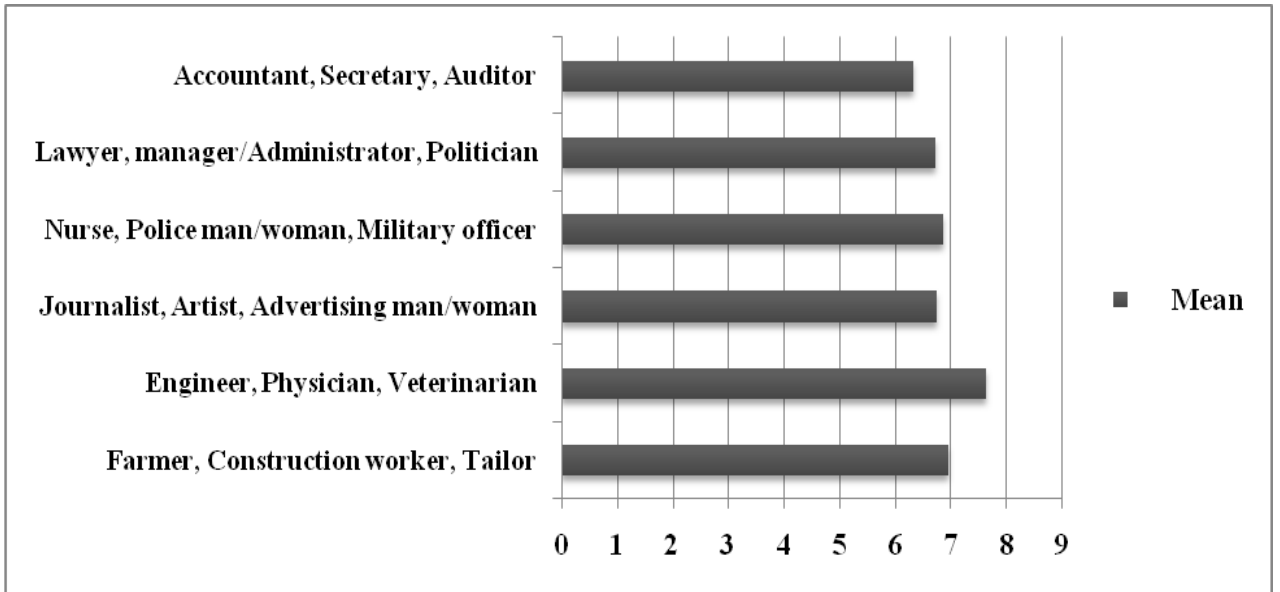
Table 5

*Mean of Prestige Judgment of Three Occupations from RIASEC Each*

Holland Type	Mean	S. D
R	6.94	1.57
I	7.62	1.41
A	6.75	1.64
S	6.86	1.65
E	6.72	1.66
C	6.33	1.69

Note: Minimum = 3 and maximum = 9 for each type

As Table 5 shows, Investigative (I) type occupations were judged as prestigious (Mean = 7.62; SD. = 1.41). Enterprising (E), Artistic (A), Social (S) and Realistic (R) type occupations were given closer prestige levels (ranging from Mean = 6.72; SD=1.66 for E types to Mean = 6.94; SD=1.57 for R types) where as Conventional (C) types were given the least prestige status (Mean = 6.33; SD.. = 1.69) relative to the Investigative (I) group.



*Figure 3*

Prestige Status Given to Three Selected Occupations from Each of Holland’s RIASEC Types

As Figure 3 shows, Investigative (I) type occupations, namely physician, engineering and veterinarian were judged as prestigious by adolescents of Addis Ababa government preparatory schools. Conventional (C) types (accounting, secretary, and auditing) were judged as having lower prestige relative to the Investigative types. Enterprising (lawyer, manager/administrator and politician), Social (nurse, police man/woman, military officer), Artistic (journalist, artist, advertising man/woman) and Realistic (farmer, construction worker and tailor) type occupations came in between. Prestige marks adolescents gave to each of the eighteen selected occupations were also computed and presented in Table 6 below. The three selected occupations from each Holland type were listed in the Realistic – Investigative – Artistic – Social – Enterprising and Conventional (RIASEC) order for easy comparisons.

Table 6  
*Mean of Prestige Statuses of 18 Selected Occupations*

Occupation	Mean
Farmer	2.59
Construction worker	2.29
Tailor	2.06
Engineer	2.63
Physician /Medical Doctor)	2.73
Veterinarian	2.26
Journalist	2.40
Artist	2.23
Advertising man/woman	2.12
Nurse	2.45
Policeman/woman	2.05
Military officer	2.37
Lawyer	2.52
Manager/Administrator	2.27
Political scientist	1.94
Accountant	2.28
Secretary	1.94
Auditor	2.12

Note: Minimum = 1 and maximum = 3 for each type

As indicated in Table 6, of the three Realistic types (farmer, construction worker and tailor), farmer received the highest mark (mean = 2.59). Hence, it is this value that enlarged the group's mean in Table 5. The high prestige mark given to the occupation 'farming' by urban adolescents is difficult to explain. Following the list down, of the three Investigative types (physician, engineering, and veterinarian), veterinarian received the lowest prestige mark (Mean = 2.26). It is the mark given to the occupations 'physician (Mean = 2.73) and engineering (Mean = 2.63)' that enlarged the group's mean in Table 5. Two of the Artistic type occupations (artist and advertising) received closer prestige statuses (Means = 2.23 & 2.12 respectively). Of the three Social type occupations (nurse, police, and military officer), 'police' received the least status. The

prestige marks given to Enterprising type occupations were not also homogenous; the occupation ‘law’ took the highest mark (Mean = 2.52) and political scientist was judged least (Mean = 1.94). Finally, while two of the three Conventional types (accounting and auditing) got closer prestige statuses (Means = 2.28 & 2.12 respectively), secretary is judged as less as a politician (Mean = 1.94).

#### 4.4. Pattern of Adolescents’ Occupational Aspiration-Expectation Compromises

The occupations adolescents mentioned for their aspirations and expectations were categorized into one of Holland types and counted. The differences between their aspirations and expectations were computed and labeled as ‘aspiration-expectation discrepancy’. The result was presented in Table 7 and Figure 4 below.

Table 7

*Frequency of Occupational Aspirations, Expectations, and Aspiration-Expectation Discrepancies by Holland Types*

Holland Types	Aspiration	Expectation	Aspiration-Expectation Discrepancy
Realistic	33	31	2
Investigative	158	130	28
Artistic	48	72	24
Social	37	51	14
Enterprising	102	95	7
Conventional	38	37	1

As indicated in Table 7, the aspiration-expectation discrepancy for two of the six types (Realistic & Conventional) was the narrowest of all. The discrepancy for Enterprising types was narrower than the Social types. These implied that occupations chosen for aspirations by adolescents were also repeated for expectations. For

Investigative type occupations, the aspiration-expectation difference was relatively the widest. The aspiration-expectation difference for Artistic (A) types was wider and negative. As was observed during data classification (categorizing students' aspirations and expectations into Holland types), this was mainly because of some discrepant adolescents' choices; some adolescents choose economics, business and accounting for their aspirations and narrowed these to Artistic type occupations for their expectations. Hence, the relatively higher frequency in the expectation category of the A types was the result of discrepant changes from I, E and C typed occupations to the A group.

Students have also indicated a tendency to stick to an occupation both for their aspirations and expectations in the qualitative interview even in the face of obliging clues to refine their aspirations.

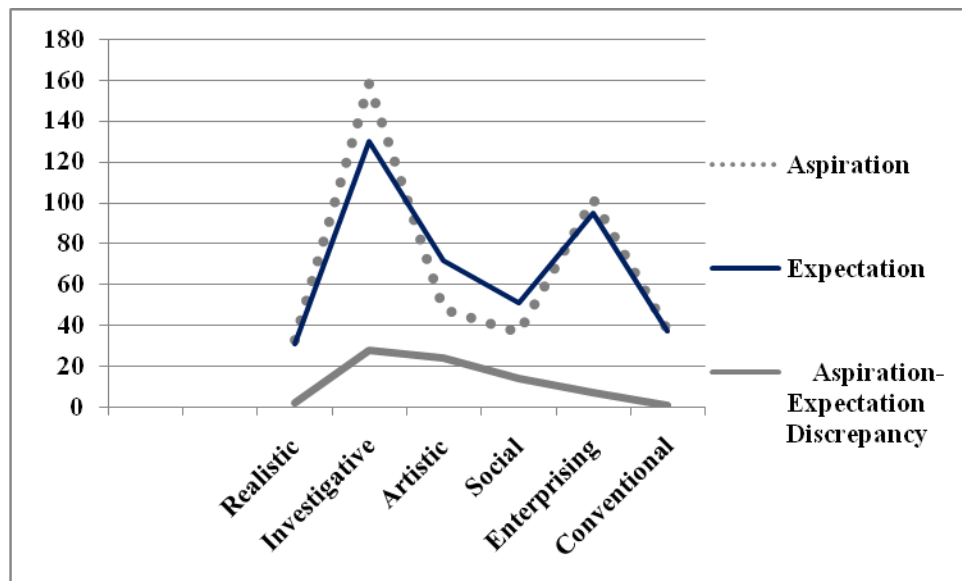


Figure 4

Adolescents' Occupational Aspirations, Expectations and Aspiration-Expectation Differences

Looking at the lightly black-marked, heavy, bottom line against the x-axis in Figure 4, adolescents' aspiration-expectation discrepancies showed widest, wider and wide differences for Investigative, Artistic and Social types respectively. Narrower discrepancy was observed for Enterprising types and the narrowest discrepancy was observed for Realistic and Conventional types.

#### **4.5. Congruence of Adolescents' Occupation-related Personalities to their Occupational Aspirations and Expectations**

The work-related personality of each adolescent was computed by adding the scale ratings of the 24 items across each RIASEC type. There were four items measuring each type in a 5 point likert scale resulting in the computed means shown in Table 8 below. Alike previous computations, occupational aspirations and expectations were merely counted and presented as frequency values.

Table 8

*Mean Values of Occupation-Related Personality, Commonness of Holland Types in Adolescents' Occupational Aspirations and Expectations by RIASEC (N = 416)*

Holland Types	Occupation-Related Personality ( m)	Aspiration ( f)	Expectation (f)
Realistic	15.88	33	31
Investigative	16.79	158	130
Artistic	15.24	48	72
Social	17.26	37	51
Enterprising	14.37	102	95
Conventional	16.13	38	37

Note: m = mean, f = frequency; expected minimum of m = 4, maximum =20

As indicated in the table, there was incongruence between adolescents' work-related personality measured results and their occupational aspirations and expectations (expressed results) particularly in the Social, Realistic, Enterprising and Conventional

types relative to Investigative and Artistic types. Congruence is the alignment between a person and his or her work environment. Bandura (1986), cited in Lent (2005), maintained that both self-efficacy ('I can do this' capabilities) and outcome expectations (imagined consequences of particular courses of action) help to determine a number of important aspects of human behavior, such as the activities that people choose to pursue and the ones they avoid.

In the qualitative interviews, while some students reflect relatively compatible subjects and extracurricular participations to the occupations they aspired and expected, few others mentioned incompatible subjects and activities to the occupations they chose for their aspirations and expectations

#### **4.6. Occupational Aspirations and Expectations Differences across Fields of study and Gender**

Using frequency counts as a summarizing tool similar to previous tables and chi-square as a difference determining statistic, occupational aspirations and expectations difference as a function of gender and field of study were presented successively in four tables below.

##### **4.6.1. Gender Differences in Occupational Aspirations**

Chi-square was employed to determine significance of frequency differences in occupational aspirations between male and female adolescents. The result was presented in Table 9 below.

Table 9

*Occupational Aspiration (Categorized into Holland's RIASEC) by Gender*

Gender	Occupational Aspiration						$\chi^2$	df	p
	R	I	A	S	E	C			
Female	9	92	31	32	79	32	44.91	5	0.000
Male	24	66	17	5	23	6			

As Table 9 shows, the occupational aspiration difference between male and female adolescents was significant; ( $\chi^2 (5) = 44.91, p = 0.000$ ). Previous studies reported mixed results about gender difference in occupational aspirations. While this result agrees with many previous studies (e.g., Creed et al, 2010; Deng et al., 2007; Eccles et al., 1993; Gottfredson, 1981; Jozefowicz et al., 1993; Patton & Creed, 2007), it contradicts with some others (e.g., Beal & Crockett, 2010; Habtegiorgis, 2000).

**4.6.2. Gender Difference in Occupational Expectations**

Similar to section 4.6.1, chi-square was employed to show occupational expectation difference of male and female adolescents. The result was presented in Table 10 below.

Table 10

*Occupational Expectation (Grouped into RIASEC) as a Function of Gender*

Gender	Occupational Expectation						$\chi^2$	df	p
	R	I	A	S	E	C			
Female	9	79	55	35	67	30	28.74	5	0.000
Male	22	51	17	16	28	7			

Similar to Table 9, here too, adolescents' occupational expectations-difference by gender reaches significant level, ( $\chi^2 (5) = 28.74, p = 0.000$ ). This result agrees with Creed et al. (2010) and Gottfredson and Lapan (1997) findings.

#### 4.6.3. Fields of Study Difference in Occupational Aspirations

Chi-square was also employed to determine occupational aspirations difference between social and natural science streamed adolescents. The result was presented in Table 11.

Table 11

*Occupational Aspirations (Classified into Holland's RIASEC) by Fields of Study (NS = 207; SS = 209)*

Field of study	Occupational Aspiration						$\chi^2$	df	p
	R	I	A	S	E	C			
Social science (SS)	15	13	33	11	100	37	251.64	5	0.000
Natural science (NS)	18	145	15	26	2	1			

The  $\chi^2$  value here was significant, ( $\chi^2 (5) = 251.64, p = 0.000$ ). While social science students clustered around E type occupations, natural science students clustered around I type occupations. Such focuses of students to only few occupations were reported by previous African researchers (e.g. Nwagwu, 1976).

#### 4.6.4. Fields of Study Difference in Occupational Expectations

Similar to section 4.6.3, chi-square was employed to show difference in occupational expectations between social and natural science streamed adolescents. The result was presented in Table 12 below.

Table 12

*Occupational Expectations (Categorized into Holland Types) by Fields of Study (NS = 207; SS = 209)*

Field of study	Occupational Expectation						$\chi^2$	df	p
	R	I	A	S	E	C			
Social science (SS)	14	9	52	12	88	34	220.33	5	0.000
Natural science (NS)	17	121	20	39	7	3			

In Table 12 again, it should not be the significance level that deserved attention; it is the clear ‘grouping’ of the natural science students to one category (I type, to be specific) and the social science students mainly to E and A type occupations. Such clustering of students to limited occupations was also reported by previous researchers (e.g. Baird et al., 2008; Johnson & Mortimer, 2002; Mortimer et al., 2002).

## CHAPTER FIVE

### 5. DISCUSSION

In this part, the quantitative and qualitative results presented in the previous chapter are discussed in detail. Consistency or inconsistency of the obtained results with previous research is also presented.

#### **5.1 Sources of Occupational Information for Preparatory School Adolescents in Addis Ababa**

Student's own interest, family and elders were the three top successively reported sources of occupational information for government preparatory school adolescents of Addis Ababa (48.6%, 41.1% & 29.1% respectively). This finding agrees with previous research. Turner and Lapan (2005) elaborated that work readiness skills, such as goal setting, decision making, scheduling, budgeting, leading, nurturing and communicating, are made to develop and transfer to the workplace within family, neighborhoods and classroom environments. They found out that parents' perceived aspirations for their adolescent children have medium to large associations with the adolescents' educational aspirations and small but significant associations with the adolescents' occupational aspirations. For Johnson and Mortimer (2002) family's influence on young children's occupational development lies along two dimensions: providing opportunities (for example, educational, financial, informational), and through socialization (for example, parenting practices and parent-child relations).

The adolescents' tendency to rely on themselves in urban environment where there were expectations of more literate parents to influence choice was repeated in their responses

to the qualitative interviews. Seven of the sixteen interviewees told that their occupational decision emanated from themselves. Such decisions, if done consciously, indicates self confidence and determination; a sense that one's personal destiny is controlled by oneself rather than others.

Though it seemed for the adolescents that they are self-reliant, independent, motivated intrinsically, and controlling their own destinies, in practice, they could be replicating and reproducing occupations and judgments that confirm the prevailing societal and political directions. People have the tendency to expect what they observe (Hogarth, 1980). As probable evidence to this pretension, the adolescents' claimed 'self reliance' and 'independence' was not, for example, paralleled with an occupational conscience that indicates prediction and job creation. No student mentioned in his or her written or oral responses a different occupation that does not exist today but may be created in the future as a result of societal demands. Regarding adolescents' focused ambitions to the present and their obscured future visions, Achter and Lubinski (2005) stated that much time and money are often wasted trying to prepare youth for careers which they or their parents desire today but not tomorrow, and for which too often the young people have no ability.

Some adolescents (23.6%) mentioned the environment or context as source of occupational information. They reported that the immediate environment, the county's or the wider world's situation served as bases for their occupational choices. Several respondents mentioned the influence of teachers and other elders in the written questions, but none mentioned teachers in the qualitative interviews. Very few students mentioned extracurricular involvement that matches their occupational aspirations and expectations. Friends in schools and universities were also perceived as having positive influences in

the written responses on occupational choice, but only few students re-mentioned them in the qualitative interviews. Work readiness skills are also developed through adolescents' friendships and peer group interactions (Turner & Lapan, 2005).

No interviewee mentioned part time work that is closer in any way to occupation he or she mentioned as an aspiration or expectation. Part time work, in addition to serving as place of learning work ethic, helps adolescents to narrow down their choices by teaching what they did not want to do and want to do. The falling apart indicates the lack of connections between adolescents' present actions and the selves they hope to become (aspirations and expectations).

In this study, informal sources of occupational information - friends/relatives, the family, persons who were already employed (elders) were used more than formal sources - advertisements, employment agencies, placement offices. This may indicate inadequacy or absence of formal structures to assist adolescents in the process of occupational choice. When there is lack of formal alternatives, or their structuring is inadequate, the adolescents may shift to the informal means and relationships. This result is consistent with previous researchers' contentions. Peterson et al. (2002), for example, explained that learning about occupations within closely connected family and community groups may be more meaningful and relevant than learning individually from print or other media typically available in career centers. Family values influence the formation of adolescents' educational and occupational aspirations and expectations (Loughlin and Barling, 1998). Those adolescents whose parents are illiterate might have relied on others (teachers and other experienced elders, media, affordances of the environment) or might have been forced to rely on themselves. Regarding such external reliance,

Savickas (2002) indicated that the process of transforming a preoccupation into an occupation relies greatly on identifying role models who show a path forward from home to the community.

## **5.2. Most Aspired and Expected Occupations**

The preparatory school students in the study context aspired for a narrow band of occupations, with nearly two thirds of them aspiring for the two RIASEC categories, Investigative and Enterprising types. Expectations (excepting the Investigative type) were relatively spread, with students largely expecting occupations in the three groups (E type, 22.8%; A type, 17.3% and S type, 12.3% respectively). The income potential and social prestige of occupations seemed to have influenced the adolescents' aspirations and expectations. African researchers reported findings that are consistent with these results.

Asuquo and Petters (2009), and Nwagwu (1976) found out that African students' vocational aspirations showed an obsessional preference to scarce professional jobs like a doctor, engineer, university lecturer, lawyer, agriculture officer and top civil servant regardless of reality to achieve those occupations. The researchers further explained that African adolescents' choices reflect more the prestige and income perceptions of their societies.

In the previous section, adolescents reported that most of them relied on themselves for their occupational choices. On the other hand, in their response to the qualitative interviews, they reported that societal problems have inspired their occupational aspirations and expectations. Some of their qualitative responses were translated by the

researcher and presented below (Here after in all discussions, question are *italicized* and answers are not, and the question-answer presentations are arranged as paragraphs).

Student 2 (female, social science, grade 11)

*Thinking everything as equally accessible and possible, tell me occupation you would like to have when you finish your education?* I want to be a lawyer. *Why do you particularly aspire this occupation?* It is my childhood desire to be a lawyer; I also think that the public deserves justice.

Student 3 (male, natural science, grade 11)

*Aspirations at adolescence, for most adolescents, are limitless. What occupation would you like to have after completing your education?* Doctor. *Why do you particularly aspire this profession?* I want to serve the people, the sick, in particular.

Student 9 (male, natural science, grade 11)

*Seeing seemingly limitless options before you, what would you like to become when you complete your education?* Technology-related occupations, such as ICT; after serving government organizations for some years, I am planning to establish own business. *Why are you particularly attracted to tech-related occupations?* The lack of technologists in our country, there are no sufficient software engineers in our country, for example.

Student 10 (female, Natural science, grade 11)

*If you were completely free to choose, what occupation (s) would you aspire to have when you finish your education?* I want to be an astrophysicist. *Why do you particularly aspire 'astrophysics'?* Because there is shortage of professionals in this field in our country although the geographical feature of our country is high land. *Any consulted people for your choice?* It is by myself. I aspired it by myself observing the county's context.

Student 11 (male, social science, grade 11)

*Adolescence knows no limitations for most adolescents. Thinking everything as equally possible and accessible, tell me occupation you would like to have when you complete your education?* Lawyer. *Why?* From civic and ethical education I have learned that people deserve justice.

Student 15 (female, Natural science, grade 12)

*If you were completely free to choose, what occupation (s) would you aspire to have when you complete your education?* Nurse. *Why do you particularly aspire 'nursing'?* To get cure for HIV/AIDS. I think it is the job of nurses to experiment and get the cure.

Comparisons of the adolescents' reliance on themselves for occupational choices and their clustering to scarce professional jobs with the aforementioned reasons indicate conflict of interests ; it creates conflict of reconciling 'concern for others' with their desire for 'prestige and financial prosperity.' Although the students reasoned out that it was 'very important' to have 'a job that gives them an opportunity to be directly helpful to others' and 'a job that is worthwhile to society', extrinsic job values seemed to have motivated their choice more than intrinsic ones. Hartung et al. (2010) associate such dilemma to individuals' attribution of occupational planning and choice behavior either to individualist or collectivist cultural orientations. While collectivist culture oriented adolescents endorse work values that promote connecting with and contributing to the good of others and deemphasize work values centered on self-interest and personal gain, individualists emphasize the vice versa.

This dilemma, in turn, could be the reason for the incongruence resulted in Table 8. When people look for external rewards (advancement opportunities, good deal of money, high prestige a job offers), they may lose a job that interests them and for which they are capable of performing best and getting holistic satisfaction.

In general, as it were reflected in their responses to both the quantitative and qualitative measures and in 'congruence between work-related personality and occupational aspirations and expectations' section (Table 8), the adolescents are ambitious. They considered no limitations or obstacles in their career paths; they anticipated open doors to every aspired or expected occupation. Regarding such ambitious aspirations, Johnson and Monserud (2010) explained that educational and occupational aspirations have risen dramatically in the past few decades, perhaps unrealistically so, outpacing the

availability of professional jobs in the occupational structure, as well as actual college enrollments. Part of the qualitative responses from three interviewees, I think, strengthens such ambitiousness and obscured vision of possible obstacles for the future.

Student 8 (male, social science, grade 12)

*What occupation would you like to have when you finish your education? Economist. What alternative occupation(s) have you planned if you missed your first choice? I am pleased to take any jobs, I can be part of a youth's organization and work as stone setter, become a teacher or a journalist, for example.*

Student 10 (female, Natural science, grade 11)

*If you were completely free to choose, what occupation (s) would you aspire to have when you finish your education? I want to be an astrophysicist. If, due to different limitations, you miss your aspired field, what other alternative have you planned? I have no the fear of losing my choice.*

Student 11 (male, social science, grade 11)

*Adolescence knows no limitations for most adolescents. Thinking everything as equally possible and accessible, tell me occupation you would like to have when you complete your education? Lawyer. Though there is the tendency to think without limitations at adolescence for most adolescents, different factors may bring limitations. Taking those obstacles into consideration, what other occupation (s) have you planned as a long term occupation? My feeling at present is as if I have experienced many of the challenges that adolescents face, and I am awaited by good fortunes now.*

Another possible evidence for the adolescents' conflicting and unrealistic aspirations/expectations was their reluctance to consider low status jobs that require high school education or some college training and/or education. The absence of lower prestige occupations such as school teacher, sales man/woman, carpenter, military/protective services etc. in their responses may indicate their low perception for such available and accessible jobs. The adolescents also did not mention occupations that are in categories requiring less than a high school general education and offering low prestige such as homemaker, child care, waiter, machine operator, laborer etc. This, in turn, runs

counter to governments' (both at national and regional levels) main objective of provision of job opportunities for the youth in small scale micro-enterprises either individually or organized. MoE (2010) promises to address "main challenges through strengthening of capacity for knowledge creation [*production*], in particular in the domain of science and technology, by expanding access to TVET and to higher education without sacrificing quality" (p. 8). Because of the adolescents' perception of over qualification, they are unwilling to take low status jobs. This, in turn, may contribute for the educated unemployed in Ethiopia (Teshome, 1981). In periods of more limited employment opportunity, the realization of scarce professional jobs is less likely as many young people are likely to take whatever jobs are available to them (Johnson & Monserud, 2010).

The students' restriction to only few but high prestige occupations may also be attributed to adolescents' lack of adequate and accurate occupational information. Supporting this, Baird et al. (2008) reported that if adolescents are not informed adequately about occupations and their respective educational requirements, they often formulate unrealistic occupational aspirations and expectations without accurate knowledge of the demands of the various aspirations and the skills necessary to realize their ambitions.

### **5.3. Occupational Prestige Judgment of Adolescents**

In preparatory school students' occupational prestige judgments, Investigative types (physician and engineering, in particular) stood out above the others both in the group and separate computations. Enterprising, Artistic, Social and Realistic type occupations were given closer prestige statuses; the mean difference between these closely judged

groups, the maximum (R types, M= 6.94; SD=1.57) and the minimum (E types, M= 6.72; SD=1.66) was only 0.22. Of all groups, Conventional (C) types were given the least prestige status.

The prestige statuses given to Investigative and Conventional categories were consistent with previous findings; whereas, the prestige status given to Realistic (R) type occupations contradicted with those previous findings. Realistic (R) and Conventional (C) occupations have the lowest prestige level and Investigative types have the highest prestige level (Deng et al., 2007). While Investigative work (science and medicine) is the field with the highest prestige, Realistic (manual & technical) and Conventional (clerical & accounting) have lower prestige status (Gottfredson, 1981).

The occupations judged as prestigious in the quantitative measures were also reiterated in the qualitative interviews. Adolescents' judgments about work anticipate the features of their later jobs (Johnson & Monserud, 2010). The list included physician and engineering for natural science students; law for social science students.

Student 2 (female, social science, grade 11)

*Thinking everything as equally accessible and possible, tell me the occupation you would like to have when you finish your education?* I want to be a lawyer.

Student 3 (male, natural science, grade 11)

*Aspirations at adolescence, for most adolescents, are limitless. What occupation would you like to have after completing your education?* Doctor.

Student 5 (female, natural science, grade 12)

*What is your aspired occupation?* Doctor.

Student 11 (male, social science, grade 11)

*Adolescence knows no limitations for most adolescents. Thinking everything as equally possible and accessible, tell me occupation you would like to have when you complete your education?* Lawyer.

Student 13 (male, natural science, grade 12)

*What occupation would you like to have as your aspiration?* Doctor.

Student 16 (male, social science, grade 12)

*What occupation would you like to have for your aspiration?* Lawyer.

The relatively higher prestige status given to R types in the group and ‘farming’ in the separate computations by urban adolescents was difficult to explain. To complicate it more, no student mentioned the occupation ‘farmer’ or a related field both for aspirations and expectations in the qualitative interviews. Only few students mentioned it in their response for the close ended questionnaire.

#### **5.4. Pattern of Adolescents’ Occupational Aspiration-Expectation Compromise**

In this section, it was intended to examine students’ pattern of stability or change in choice behavior inherent in their high school experiences. For Realistic (R) and Convention (C) categories, the aspiration-expectation difference was the least. This implied that occupations chosen for aspirations were also repeated for expectations. According to Armstrong and Crombie (2000), adolescents that mentioned similar occupation for their aspirations and expectations are ‘differentiated’ or ‘non-discrepant’.

The students’ tendencies to choose one occupation for both their aspirations and expectations were also reflected in their responses to the qualitative interviews, even in the face of forcing clues to refine their aspirations.

Student 2 (female, social science, grade 11)

*Thinking everything as equally accessible and possible, tell me the occupation you would like to have when you finish your education?* I want to be a lawyer. *What other alternative have you planned if, due to different limitations you missed the aspired occupation?* I will join private colleges and achieve my aspiration [study law].

Student 5 (female, natural science, grade 12)

*What is your aspired occupation?* Doctor. *What other occupation would you have as an alternative if you fail to achieve your first choice?* Of course, I am confident in getting my primary choice.

Student 7 (female, social science, grade 12)

*If you were completely free to choose, what occupation would you aspire to have when you finish education?* Accounting. *Things do not always go as we plan them to be; what other alternatives do you have as future choices if your aspiration fails to come true?* Marketing.

Student 15 (female, Natural science, grade 12)

*If you were completely free to choose, what occupation (s) would you aspire to have when you complete your education?* Nurse. *If, due to different limitations, you miss your aspired field, what other alternative do you have as long term employment?* I have no the fear of losing my choice.

Despite the adolescents' reluctance to compromise in most cases, limited attempts were observed for Investigative, artistic and social types. The relatively widest discrepancy for Investigative types could be due to adolescents' naïve modesty; after choosing medical doctor for their aspirations, they mentioned nursing, health officer and other health related fields for their expectations being incognizant of the different skills and abilities these occupations require. This gross perception could be the influence of preparatory school adolescents' generalization of all health-related occupations as 'medicine'. NEAEA's presentation of those occupations in one 'band' (band 3) as 'medicine and health' group might have also aggravated the adolescents' generalized perception.

In sum, the fact that adolescents make choices may not mean it is 'right'. Such choice may be ambitiously unrealistic due to many factors. Because of external pressure, ignorance, unemployment anxiety, or inaction on their part, adolescents may commit themselves to a choice before they really know the options accessible to them (Gottfredson, 2005). It may also be resulted from an absence of well-crystallized thought of self and future trends. An individual whose vocational self-concept is unrealistic is likely to make unwise choices (Savickas, 2002). African students are unrealistic in the areas of their hopes (*aspirations*) and expectations for entry into certain occupations in their societies (Asuquo & Petters, 2009; Nwagwu, 1976). Or it may also be due to lack

of appropriate occupational information. If adolescents are not informed adequately about occupations and their respective educational requirements, they often formulate unrealistic occupational aspirations and expectations regardless of the knowledge, skills and abilities necessary to realize their ambitions (Baird et al., 2008).

### **5.5. Congruence of Adolescents' Occupation-related Personalities with their Occupational Aspirations and Expectations**

Congruence, from vocational psychology's perspective, is the link between a person's characteristics and job demands. The underlying basis of considering congruence in this study was that human behavior is a function of the intersection between individual's personality and environment. The status of congruence or incongruence in this study was the researcher's judgment made by comparing occupation-personality measured results with frequency of corresponding expressed type of occupation. High work-related personality measured result for a certain Holland type was expected to be followed by expression of more similar 'personality' occupations for aspirations or expectations.

As indicated in Table 8, incongruence was observed between students' occupation-related personalities and their expressed aspirations and expectations, particularly for Realistic, Social, Enterprising and Conventional types. This reported misalignment could be due to poor decision making process rather than a dysfunctional occupational thinking among adolescents. The adolescents might have self knowledge, for example, but they may be unable to translate and connect that self-knowledge into a manageable list of occupational alternatives. Whenever the adolescents are unable to connect their educational expectations to their occupational aspirations, they are likely to end up in "fractured transitions" (Yates et al., 2010, p. 531). Fractured transitions are likely to end

up with inappropriate allocation of jobs to incumbents that in turn lead to a social system that lacks social cohesion. At high school, if the adolescents are clear of their internal states (their unique abilities, interests and values), structuring the external world and encouraging them to look for their fits should be the task of structural systems. Adolescents' planning and choices about education, occupation and family should take place within structured setting that is supportive and caring (Mortimer et al., 2002; Turner & Lapan, 2005).

It would also be premature to attribute this preparatory level adolescents' incongruence to Feldman et al.'s (2004) finding. Feldman et al. (2004), after their two point (entry and end of 4 year college education) measured study, concluded that students with certain dominant personality types involved in incongruent work environments changed in terms of abilities and interests and had similar levels of engagement, satisfaction and discontent to those personality-work environment compatible students. Such socialization effects (sociological perspective) of workplaces are better researched and concluded for working adults.

Furthermore, unrealistic occupational decision making could result from many factors. Some of such contributing factors could be external pressure, lack of occupational information, unemployment anxiety, or inaction by adolescents themselves (Gottfredson, 2005; Ohiwerei & Nwosu, 2009). The match between what young people desire and the conditions of their future work will be weaker when job opportunities are more constrained (Johnson & Monserud, 2010).

The incongruence between work-related personality and occupational choice for aspirations and expectations was also reflected in the students' responses to the interview questions.

Student 12 (female, social science, grade 11)

*What occupation would you like to have as your aspiration? Nursing. Why? It is the occupation I grew up desiring although most of us, as little children, used to aspire 'to be a doctor'. Do you think you fulfill the requirements of 'nursing'? Friends say that I get annoyed with little things. Despite this, I insisted that I will become a nurse by improving this behavior through time. What subjects are you good at in school? Civic and ethical education*

Student 14 (female, Social science, grade 12)

*What occupation (s) would you aspire to have when you complete your education? Theatrical art Why? Because I have the interest. What subjects are you good at? Economics and business*

Student 16 (male, social science, grade 12)

*What occupation would you like to have for your aspiration? Lawyer. Why? I feel I have the interest. Who inspired your choice? It is my own interest. Tell me subjects you like most? I like history, English, civic, and ethical education beginning from grade 9. Is it the interest or the mark that is high in these subjects? I mean .... the subjects are suitable to me and I also have the interest.*

Students also reflected incongruent interest in their choice of environments for their free time activities and hobbies in their responses to the qualitative interviews. This misalignment also runs counter to Savickas (2002) ideals. He explained that roles played in real-life activities such as hobbies, classes, clubs, part-time work and entry jobs reflect that adolescents are practicing their occupational self concepts, as indicators that foretell that their occupational plans are realistic.

Student 6 (Male, Natural science, grade 12)

*If you were completely free to choose, what occupation (s) would you aspire to have when you finish your education? I want to be a computer technician. In which extracurricular activities do you participate in school? Library club. Why not the ICT club; I have heard the presence of the club here? Yes. Many students joined it. Um. .... I do n't think it functions well. What things/activities please you as pass time or recreation? Watching films. In what activities do you help your family? I am living with my aunt and I do activities she wants me to. I do farm activities when I go to the countryside during summer.*

Student 8 (male, social science, grade 12)

*What occupation would you like to have when you finish your education?* Economist. *Which school clubs are you part of?* The Mini-media, environment protection and anti-AIDS clubs. *What activities do you do when you are free?* I enjoy playing football. *How do you help family at home?* By doing different activities; just by doing the common 'men's tasks'.

Student 15 (female, Natural science, grade 12)

*If you were completely free to choose, what occupation (s) would you aspire to have when you complete your education?* Nurse. *If, due to different limitations, you miss your aspired field, what other alternative do you have as long term employment?* I have no the fear of losing my choice. *In what extracurricular activities do you participate in school?* None. I have no desire to come to club activities after school time. *What things/activities please you as pass time or recreation?* Watching films and reading fiction.

Finally, an alternative explanation for the incongruence could be also forwarded. The students' closer mean scores for each Holland type may emanate from their adolescence intentions to be an all rounded person or multi-potential individual (Johnson & Mortimer, 2002) early in their lives and enter the labor force directly following graduation by meeting or exceeding the minimum requirements of many job vacancies; trying out various work situations before 'settling down' rather than particularly focusing on one thing early in the life span. Aspiring to one and a singular focus on educational attainment may delay serious vocational thinking and planning (Johnson & Monserud, 2010). However, such early attempts to gain different abilities and interests that may be fostered by incongruent work environments run counter to the restrictive and inflexible NEAEA's placement. Cognizant of this desire of the students, NEAEA could have made the rigid 70/30 placement a bit flexible. As educational trajectories diverge, opportunities for higher education and occupational attainment become greater (Johnson & Mortimer, 2002).

## **5.6. Gender Difference in Occupational Aspirations**

The RIASEC distribution of male and female preparatory school adolescents showed different proportions for boys and girls (Table 8). Boys focused their aspirations more on Investigative (I), Enterprising (E) and Realistic (R) areas. They aspired less for Social and Conventional types. Girls had relatively broader aspirations that spread unevenly across the Investigative, Enterprising, Social, Conventional, and Artistic areas. They aspired more for Investigative and Enterprising type occupations and aspired less for Realistic types. Their aspirations for Artistic, Social and Conventional types were closer.

While this result shows complete and partial consistency with many previous findings, it contradicts with some others. Jozefowicz et al. (1993), for example, found out that males and females differ significantly in their aspirations to science/math-related occupations (mainly I type) and human service jobs (mainly S type). A chi-square analysis by Creed et al. (2010) also reported the following differing result for males and females. Boys were more likely to aspire for I and R types, and less likely to aspire for A, E and S types; girls were more likely to aspire for I, A and S types, and less likely to aspire for R types. Realistic (R) occupations are preferred by men whereas Social (S) occupations are preferred by women; Investigative (I) occupations are preferred by both genders (Deng et al., 2007). Gottfredson (1981) judged Realistic work as masculine and Conventional tasks as feminine.

However, Habtegiorgis (2000) reported that there was no significant difference between boys and girls in ranking the Investigative type occupation, electrical engineering, as first. Beal and Crockett (2010) in their longitudinal study also found no significant gender difference in any future-oriented cognition.

## **5.7. Gender Difference in Occupational Expectations**

Holland-based classification of the students' expectations into RIASEC types showed varying proportions for males and females (Table 10). Males focused their expectations on Investigative, Enterprising and Realistic categories. They expected less proportion of C and A type occupations. Girls, on the other hand, similar to their aspirations, have unevenly spread expectations across the Investigative, Enterprising, Artistic, Social, and Conventional groups. They expected more I, E and A type occupations, and less R type occupations. Their expectations of S and C type occupations were closer. This result is consistent with Creed et al.'s (2010) research. They found out that males were more likely to expect for E and R types, and less likely to expect S and C type occupations; females, on the other hand, were more likely to expect for A and S types, and less likely to expect for R type occupations. For Gottfredson and Lapan (1997), Realistic type occupations were characterized as highly masculine, Conventional tasks as highly feminine, with Investigative, Artistic and Enterprising tasks as being less gender typed.

The relatively spread aspirations and expectation of female students may be attributed to the Ethiopian civil service's formalized procedures of recruiting, hiring and assigning jobs that favors women. The government has strong initiatives to push girls and young women toward the more male dominated science and business worlds. For Johnson and Mortimer (2002), women's increasing labor force participation and contribution to family income, has been identified as a possible potential factor to alter the historically gendered nature of vocational socialization. Deng et al. (2007), Gottfredson (1981), Gottfredson and Lapan (1997) stated that Investigative occupations are characterized as gender-

neutral on average. In this study, Investigative type occupations were also the most aspired, expected, and most prestigiously judged occupations by both genders.

### **5.8. Fields of Study Difference in Occupational Aspirations**

As indicated in Table 11, while nearly half (47.8%) of social science students clustered around E type occupations, nearly three quarters (70%) of natural science students focused on I type fields. The aspiration difference was significant. The significant difference between the natural and social sciences tracked students should not be reported as a major finding because the NEAEA already places students to the two different streams disproportionately. The ‘science and technology favoring’ 70/30 placement encouraged adolescents to join natural science fields. Despite the government’s desire to enhance students’ upward technological advancement starting from small scale micro enterprises, the adolescents aspired straight for highly professional type occupations. Similar observations were reported in other Africa countries. African students’ vocational aspirations showed an obsessional preference to scarce professional jobs like a doctor, engineer, university lecturer, lawyer, agriculture officer and top civil servant regardless of reality to achieve those occupations (Asuquo & Petters, 2009; Nwagwu, 1976).

The focus of the social science students on E and C type occupations could be attributed to the socio-economy of the setting they live. There are more manufacturing industries and service type jobs in Addis Ababa than in other towns and rural areas of Ethiopia.

### **5.9. Fields of Study Difference in Occupational Expectations**

Alike the aspiration, the occupational expectations difference between social science and natural science students was significant. But, the distribution of the natural science students to Investigative, and social sciences to E type fields were lowered by few numbers. Some natural science students who chose physician for their aspirations narrowed it to other health-oriented and service occupations (e.g. nursing, midwifery, health officer). Such choices of Addis Ababa's adolescents partially agree with occupational choices of other African countries. After conducting an occupational choice studies in Nigeria and Ghana, Nwagwu (1976) found out that most male students aspire to be doctors, engineers, agriculture and veterinary officers and senior civil servants while over one third of the females wanted to be nurses.

Evaluated as a whole, aspirations and expectations of preparatory school adolescents in Addis Ababa (with the two genders and fields of studies combined) reflected ambition. They were as ambitious as what most of us used to aspire as little children. Such ambitiousness is shared by adolescents in other parts of the world. Baird et al. (2008), for example, regretted and reported that these days American teenagers (compared to the 1970s) aspire and expect occupations that fail to reflect the social structures of their societies; they also make choices without considering potential career paths or seeking appropriate job or occupational information (Johnson & Mortimer, 2002; Mortimer et al., 2002). Adolescents' occupational aspirations exceed what is available in the labor market and their job values reflect strong desires for work rewards beyond what can realistically be fulfilled (Johnson, 2001). Armstrong and Crombie (2000), Gottfredson (1981), Asuquo and Petters (2009) and Nwagwu (1976) also contended that early adolescents

were likely to express high status educational and occupational aspirations regardless of the reality of attainment of those goals. This inflated aspiration without being realistic should concern governments. There is an overall concern that rising overall aspirations and increasing desires for secure and valued work mean that many young people may not form aspirations that reflect the realities of the labor market they are about to enter (Yates et al., 2011).

The adolescents' inflated ambition may obscure their potential to anticipate or recognize possible obstacles faced in the process of career exploration. The preparatory level adolescents might have thought choice-making as a one-way street. It seemed that their interests were the prime movers behind their occupational choices. However, as people strive to choose suitable work environments, environments also influence the choice process. Environments have an important influence on what students learn during their collegiate careers (Feldman et al., 2004). Occupational choice (and job stability) is a two-way street that is conditioned, in part, by the environment's receptivity to the individual and judgments about his ability to meet (and to continue meeting) training and occupational requirements; educational and occupational choices are often, but not always, linked to people's interests (Lent, 2005). The ambition and restriction without being clear about achievement plans might also be due to lack or absence of accurate occupational information. The lack of basic occupational information has disastrous effects on adolescents' occupational aspirations, chances and opportunities, for example, by restricting their zones of acceptable alternatives' (Gottfredson, 1981) or 'locking them in' to only few alternatives that do not match their personalities (Nwagwu, 1976; Rojewski & Kim, 2003). More youth are aspiring to positions without an understanding of how to get to them; their aspirations are also increasingly detached from past grades and curriculum track (Johnson & Monserud, 2010).

## CHAPTER SIX

### 6. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Summary

Just as problem definition is an important first step in issue resolution, identifying adolescents' occupational aspirations and expectations is a prerequisite in educational planning and development. As many preparatory level adolescents in Ethiopia may postpone serious consideration of work, this dissertation was titled 'occupational aspirations, expectations and occupational prestige judgment of preparatory school adolescents'. Titled as such, it was designed to answer the following research questions:

- What are the most aspired, expected and most prestigious occupations of preparatory school adolescents in Addis Ababa?
- How congruent are adolescents' occupation-related personalities to their occupational aspirations and expectations?
- What is the pattern of preparatory school adolescents' aspiration-expectation compromises?
- How are gender and field of study differences manifested in adolescents' occupational aspirations and expectations?
- What are the sources of occupational information to adolescents in Addis Ababa?

To answer these questions 420 students were randomly selected and sixteen other participants were picked from two government preparatory schools in Addis Ababa. A self-report questionnaire and semi-structured interview were employed to obtain data from the selected participants. The descriptive statistics frequency, percentage, means,

standard deviations and chi-square were used to analyze data. Results of the analysis were:

- Investigative and Enterprising types were both the most aspired and expected occupations for natural and social sciences students respectively. Investigative type occupations were also judged as prestigious by both natural and social science students.
- Work-related personalities of adolescents were found to be incongruent with their occupational aspirations and expectations for Social, Realistic, Enterprising and Conventional types. Relatively better alignments were found for Investigative and Artistic types.
- Excepting the limited compromises made in the Investigative, Artistic and Social types, adolescents' occupational expectations were generally nearly as high as their occupational aspirations.
- All occupational aspirations, expectations differences as functions of gender, fields of study were significant. Males aspired and expected more for Investigative, Enterprising and Realistic types, and they aspired and expected less for Conventional type occupations. Females aspired and expected more for Investigative, Enterprising and Social types, and they aspired and expected less for Realistic type occupations.
- The adolescent's own interest, family, and elders were the three successively reported top sources of occupational information for government preparatory school adolescents of Addis Ababa.

## **6.2. Conclusions**

The restriction of both boys and girls to very few scarce professional jobs, particularly, natural science students' obsession to be a physician or an engineer with scant introspection of their own resources, limitations and environmental affordances makes the accuracy of the adolescents' occupational perception questionable. The students may not have enough information about all of their options when they make choices. Hence, the results implied that the RIASEC taxonomy, concurrent with its use to classify adolescents into occupational personalities, should be used to assist them in expanding their restricted occupational aspirations, expectations and add their occupational knowledge so that they can overcome confusion and indecisiveness and, in due course, make wise and realistic choices in the face of some inevitable social and environmental ambiguities.

This study focused on early occupational planning of preparatory school adolescents using simulated or anticipation method. A different pattern of responses to the constructs explored could have been resulted, for example, if the group is followed in a longitudinal study or if the present result is compared to working adults. The fact that adolescents report their occupational aspirations and expectation when they are asked to may not reflect their planfulness. What could be a possible evidence is the quality of the process report; their possession of relevant abilities and skills to occupations aspired, level of practicing these abilities and skills in their daily lives, the status of being up to date with educational, occupational and labor market information, and ability to compromise present choice with existing reality or context. A longitudinal research is the way to capture these developmental processes. Put otherwise, will the adolescents progress as

they thought they would when they were in preparatory school in the context of work balanced with other life goals, such as marriage, family and children, for example? Will the pattern be similar for the two genders? Do their aspirations and expectations reflect some awareness of career and family life connections? Hence, there still remain important gaps to be addressed in the future; in addition to periodic re-assessments of the issue raised, research that is designed to handle the aforementioned considerations needs to be conducted. Furthermore, alternative indices to measure person-job congruence in Ethiopian context needs to be developed.

### **6.3. Recommendations**

Students' predominantly aspired and expected occupations mainly clustered around few science-oriented fields. This could be the influence of the 70/30 academic placement rather than adolescents' active role in analyzing market demands and their occupational development. Although such proportioning may contribute to increasingly technological society, it may also miss some individual talents in other areas. Hence, a 'curricular flexibility' converging adolescents' 'unique individuality' and 'structure's requirements' should be initiated.

Beginning in high school, adolescents should learn to combine and alternate school and work. One way of doing this could be designing a program in which students spend some days in occupations they are interested in. Students get to see how the skills and theories learned in school relate to the workplace before they make choices of fields of study. Currently, neither primary nor secondary sources give such a realistic view of the field of study students want to enter.

Students do not have easily accessible occupational and labor market information. This research revealed that adolescents had little interaction with guidance counselors or any other formal sources of educational and occupational information. Hence, more systematic effort is needed to provide vocational information and actual experiences to adolescents in high and preparatory schools, particularly with respect to vocational guidance and counseling, occupational preference inventories, and occupational reference networks.

Although this research revealed an encouraging beginning in females' joining of occupations that were traditionally unwelcoming to them such as engineering, law, medicine, there still exists actual difference in Realistic type occupations. This last difference does not parallel with the government's promises of women's rights and equal employment opportunity which have been discussed with pride and strength for a long time. Hence, further actions that go beyond words are required to close the gender gap in job values particularly for Realistic type occupations.

#### **6.4. Implications to Educational Planning and Career Counseling**

The immediate contribution of this research is providing educators and practitioners with initial ideas to explore indecision difficulties faced by adolescents in the area of future oriented goals, in general, and in occupational aspirations and expectations, in particular.

Educational planners at national or regional level should revise curricula in such a way that it saves adolescents from wrongly investing their potentials, time and money. One of the ways to achieve this is through creating career socialization and exposure program that captures adolescents' creativity and talents by facilitating early exploration. Addis

Ababa City Government can practice this by ‘initiating exposure to world of work through parents’ networks’ program. Such initiative evidence that schools and employers are working together to promote youths’ exposure to “real” work settings and adults are mentoring and guiding adolescents’ vocational explorations for a common good.

Counselors can support adolescents on how manageable and achievable career goals are set and refined and on personal resources allocated to them. They also monitor progress (ongoing behavior), appraise achievement status, and assist in setting standards for achieving each stage.

Counselors are not the absolute people in resolving indecision problems encountered by adolescents. They, together with parents and significant others, may provide discordant information. Hence, experiencing hierarchically arranged stages and acting as the last person to resolve the discordances rests on the shoulders of the adolescents themselves. Furthermore, career interventions may need to attend to family and community rather than simply attending personal goals and values

Finally, this research provides only starting ideas and tools to assess future oriented goals. Developing original scale type measures to assess adolescents’ and young adults’ goal setting, management, adjustment, and goal achievement constructs remains to be a task of future researchers.

## References

- የትምህርት ጥራት ወርደል ብቻ ሳይሆን አሁንም እየወረደ ነው። ዕንቁ፣ ቅፅ 6፣ ቁጥር 103፣ ጥቅምት 2006ዓ.ም።
- ትምህርት ሚኒስቴር (ግንቦት 1999 ዓ.ም) አገር አቀፍ የቴክኒክና ሙያ ትምህርትና ስልጠና እስተራቴጅ (የተጨማሪ የማስፈጸሚያ ሰነድ) ። አዲስ አበባ፣ ት.መ.ማ.ማ.ድ.።
- ሐዲስ አለማየሁ (1940 ዓ.ም). የትምህርትና የተማሪ ቤት ትርጉም። አዲስ አበባ፣ አርት-ስቲክ ማተሚያ ቤት።
- AAEB (2011, December). *Education statistics annual abstract*. AAEB: Professional printing press.
- Achter, J., & Lubinski, D. (2005). Blending promise with passion: Best practices for counseling intellectually talented youth. In Brown, S., & Lent, R. (Eds., pp. 600-623). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Amdissa Teshome (2008). A review of education policy, strategies and programs. In Taye Assefa (Ed.). *Digest of Ethiopia's national policies, strategies and programs*. Addis Ababa: Eclipse.
- Armstrong, P., & Crombie, G. (2000). Compromises in adolescents' occupational aspirations and expectations from grades 8 to 10. *Journal of Vocational Behavior*, 56, 82-98. Accessed on 26<sup>th</sup> December 2010 from <http://www.idealibrary.com>
- Armstrong, P., Day, S., McVay, J., & Rounds, J. (2008). Holland's RIASEC model as an integrative framework for individual differences. *Journal of Counseling Psychology*, 55, 1-18. Accessed on 14<sup>th</sup> May 2011 from [www.netfiles.uiuc.edu](http://www.netfiles.uiuc.edu)

- Asuquo, P., & Petters, J. (2009). The awareness of occupational and labor market information among in-school youths in Calabar, Nigeria. *Journal of Social Sciences*, 20, 211-216. Accessed on 7<sup>th</sup> February 2011 from <http://www.krepublishers.com>
- Baird, C., Burge, S., & Reynolds, J. (2008). Absurdly ambitious? Teenagers' expectations for the future and the realities of social structure. *Sociology Compass*, 2, 944-962. Accessed on 26<sup>th</sup> December 2010 from <http://www.pepperinstitute.org>
- Barrick, M., Mount, M., & Gupta, R. (2003). Meta-analysis of the relationship between the five-factor model of personality and Holland's occupational types. *Personnel Psychology*, 56, 45-75. Accessed on 8<sup>th</sup> February 2013 from <http://www.uiowa.edu>
- Beal, S. (2011, August). The development of future orientation: Underpinnings and related constructs. Unpublished dissertation. Theses, dissertations and student research: Department of Psychology at the University of Nebraska. Accessed on 21<sup>st</sup> June from <http://digitalcommons.unl.edu>
- Beal, S., & Crockett, L. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Journal of Developmental Psychology*, 46, 258-265. Accessed 26<sup>th</sup> December 2010 from <http://digitalcommons.unl.edu>
- Betz, N. (2005). Women's career development. In Brown, S. & Lent, R. (Eds., pp. 253-277). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.

- Bigler, R., Averhart, C., & Liben, L. (2003). Race and the workforce: Occupational status, aspirations, and stereotyping among African American children. *Developmental Psychology*, 39, 572–580. Accessed on 12<sup>th</sup> November 2010 from <http://www.utexas.edu>
- Brooks, T., & Redlin, M. (2009). Occupational aspirations, rural to urban migration, and intersectionality: A comparison of white, black, and hispanic male and female group chances for leaving rural counties. *Southern Rural Sociology*, 24, 130–152. Accessed on 21<sup>st</sup> June 2012 from [www.ag.auburn.edu](http://www.ag.auburn.edu)
- Brown, D. (2002). The role of work values and cultural values in occupational choice, satisfaction, and success. In Brown, D & associates (Eds.). *Career choice and development* (4<sup>th</sup> ed., pp. 465-509). San Francisco: Jossey-Bass.
- Bullock, E., Andrews, L., Braud, J., & Reardon, R. (September 28, 2007). Holland's theory in an international context: Applicability of RIASEC structure and assessments. Technical Report, 50. Accessed on 2<sup>nd</sup> April 2011 from <http://www.Career.fsu.edu>
- Cassie, D., & Chen, C. (2012). The gender mediated impact of a career development intervention. *Australian Journal of Career Development*, 1, 1-13. Accessed on 3<sup>rd</sup> February 2015 from <http://www.acd.sagepub.com>
- Creed, P. & Hood, M. (2014). The Development and Initial Validation of a Scale to Assess Career Goal Discrepancies. *Journal of Career Assessment*, 1-10. Accessed on 3<sup>rd</sup> February 2015 from <http://www.jca.sagepub.com>
- Creed, P., Yin, W.O., & Hood, M. (2010). Career decision-making, career barriers and occupational aspirations in Chinese adolescents. *Australian Journal of Career*

*Development*, 26, 1-27. Accessed on 21<sup>st</sup> June 2012 from <http://www.griffith.edu.au>

Crockett, L., Shanahan, M., & Jackson-Newsom, J. (2000). Rural Youth: Ecological and life course perspectives. In Montemayor, R., Gerald R., Adams, G., & Gullotta, T.(Eds., pp. 43–74) *Adolescent Diversity in Ethnic, Economic, and Cultural Contexts: Advances in Adolescent Development*. Thousand Oaks, CA: Sage Publications. Accessed on 7<sup>th</sup> February 2011 from <http://digitalcommons.unl.edu>

Deng, C.P., Armstrong, P., & Rounds, J. (2007). The fit of Holland's RIASEC to US occupations. *Journal of Vocational Behavior*, 71, 1-22. Accessed on 3<sup>rd</sup> April 2011 from [www.elsevier.com](http://www.elsevier.com)

Domenico, D., & Jones, K. (2006). Career aspirations of women in the 20<sup>th</sup> century. *Journal of Career and Technical Education*, 22, 1-7. Accessed on 14<sup>th</sup> May 2011 from <http://scholar.lib.vt.edu>

Domina,T., Conley, A., & Farkas, G. (2011). The link between educational expectations and effort in the college-for-all era. *Sociology of Education*, 84, 93–112. Accessed on 3<sup>rd</sup> February 2015 from <http://www.soe.sagepub.com>

Eccles, J., Jozefowicz, D., Barber, B., & Belansky, E. (August, 1993). Understanding females' occupational and educational choices. Unpublished paper presented at the annual meeting of the American Psychological Association: Toronto, Canada. Accessed on 26<sup>th</sup> December 2010 from <http://www.rcgd.isr.umich>

Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.

Feldman, K., Smart, J., & Ethington, C. (2004). What do college students have to lose? Exploring the outcomes of differences in person-environment Fits. *The Journal of*

*Higher Education*, 75, 528-555. Accessed 15<sup>th</sup> February 2013 from <http://muse.jhu.edu>

Feliciano, C., & Rumbaut, R. (2005). Gendered paths: Educational and occupational expectations and outcomes among adult children of immigrants. *Ethnic and Racial Studies*, 28, 1087-1118. Accessed on 26<sup>th</sup> December 2010 from [www.uci.edu](http://www.uci.edu)

Finlay, A., Wray-Lake, L., Warren, M. & Maggs, J. (2014). Anticipating their Future: Adolescent values for the future predict adult behaviors. *International Journal of Behavioral Development*, 1-9. Accessed on 3<sup>rd</sup> February 2015 from <http://www.ijbd.sagepub.com>

Gore, P., & Hitch, J. (2005). Occupational classification and sources of occupational information. In Brown S., & Lent, R. (Eds., pp. 382-413). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.

Gottfredson, G. (1999). John L. Holland's contributions to vocational psychology: A review and evaluation. *Journal of Vocational Behavior* 55, 15-40. Accessed on 1<sup>st</sup> February 2013 from <http://www.idealibrary.com>

Gottfredson, L. (1981). Circumscription and compromise: A developmental theory of occupational aspirations [Monograph]. *Journal of Counseling Psychology*, 28, 545-579. Accessed on 29<sup>th</sup> June 2012 from <http://www.udel.edu>

Gottfredson, L. (2002). Gottfredson's Theory of circumscription, compromise, and self-creation. In Brown, D., & associates (Eds.). *Career choice and development* (4<sup>th</sup> ed., pp. 85-148). San Francisco: Jossey-Bass.

- Gottfredson, L. (2005). Applying Gottfredson's theory of circumscription and compromise in career guidance and counseling. In Brown, S., & Lent, R. (Eds., pp. 71-100). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Gottfredson, L., & Brown, V. (1978). Holland's codes for the 1960 and 1970 censuses: Detailed occupational titles. *Journal Supplement Abstract Service (JSAS) Catalog of Selected Documents in Psychology*, 8, 22. (Ms. No.1660). Accessed on 28<sup>th</sup> June 2012 from <http://www.udel.edu>
- Gottfredson, L., & Lapan, R. (1997). Assessing gender-based circumscription of occupational aspirations. *Journal of Career Assessment*, 5, 419-441. Accessed on 27<sup>th</sup> June 2012 from [www.udel.edu](http://www.udel.edu)
- Habtegiorgis Berhane (2000). Some social goals of Ethiopian adolescents: An aspirational perspective. *Eastern Africa Social Science Research Review (EASSRR)*, 16, 23-35
- Hansen, J. (2005). Assessment of interests. In Brown, S., & Lent, R. (Eds., pp. 281-304). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Hartung, P., Fouad, N., Leong, F., and Hardin, E. (2010). Individualism-collectivism: Links to occupational plans and work values. *Journal of Career Assessment*, 18, 34-45. Accessed on 3<sup>rd</sup> February 2015 from <http://www.jca.sagepub.com>

- Hirschi, A. (2010). Vocational Interests and Career Goals: Development and Relations to Personality in Middle Adolescence. *Journal of Career Assessment*, 18, 223-238. Accessed on 3<sup>rd</sup> February 2015 from <http://www.jca.sagepub.com>
- Hirschi, A. (2011). Career-choice readiness in adolescence: Developmental trajectories and individual differences. Unpublished manuscript. Accessed on 28<sup>th</sup> June 2012 from [www.andreashirschi.com](http://www.andreashirschi.com)
- Hogarth, R. (1980). *Judgment and choice: The psychology of decision*. New York: John Wiley & Sons
- Holland, J. (1985). Vocational Preference Inventory manual. *An excerpt published by the North Carolina state occupational Information.16, 1-3*. Accessed on 15<sup>th</sup> April 2011 from [www.brunswick.com](http://www.brunswick.com)
- Holland, J., Whitney, D., Cole, N., & Richards, J. (April, 1969). An empirical occupational classification derived from a theory of personality and intended for practice and research. *American College Testing Program (ACT) Research Report*, 29. Accessed on 14 April 2011 from <http://www.act.org>
- Johnson, M. & Mortimer, J. (2002). Career choice and development from a sociological perspective. In D. Brown & associates (Eds.). *Career choice and development* (4<sup>th</sup> ed., pp. 37- 81). San Francisco: Jossey-Bass.
- Johnson, M. (2001). Change in job values during the transition to adulthood. *Journal of work and occupations*, 28, 315-345. Accessed on June 30, 2014 from <http://www.wox.sagepub.com>

- Johnson, M., & Monserud, M. (2010). Judgments about work and the features of young adults' jobs. *Journal of work and occupations, 37*, 194 –224. Accessed on June 30, 2014 from <http://www.wox.sagepub.com>
- Jozefowicz, D., Barber, B., & Eccles, J. (March, 1993). Adolescent work- related values and beliefs: Gender differences and relation to occupational aspirations. Unpublished paper presented at the biennial meeting of the society for research on child development: New Orleans, Louisiana. Accessed on 26<sup>th</sup> December 2010 from <http://www.rcgd.isr.umich>
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and psychological measurement, 30*, 607-610.
- Lauer, R. (1998). *Social Problems and the Quality of Life* (7<sup>th</sup> ed.). Boston: McGraw Hill
- Lent, R. (2005). A social cognitive view of career development and counseling. In Brown, S., & Lent, R. (Eds., pp. 101-127). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Lent, R., Paixao, M., da Silva, J., & Leitao, L. (2010). Predicting occupational interests and choice aspirations in Portuguese high school students: A test of social cognitive career theory. *Journal of Vocational Behavior, 76*, 244-251. Accessed on 7<sup>th</sup> February 2011 from <http://www.elsevier.com>
- Loughlin, C., & Barling, J. (1998). Teenagers' part-time employment and their work-related attitudes and aspirations. *Journal of Organizational Behavior, 19*, 197-207. Accessed on 7<sup>th</sup> February 2011 from [www.queensu.ca](http://www.queensu.ca)

- Materu, P. (2007, August). Higher education quality assurance in Sub-Saharan Africa: Status, challenges, opportunities, and promising practices. Unpublished World Bank Report, Report No. 124. U.S.A: Washington D.C.
- McDaniel, M., & Snell, A. (1999). Holland's theory and occupational information. *Journal of Vocational Behavior*, 55, 74–85. Accessed on 1<sup>st</sup> February 2013 from <http://www.idealibrary.com>
- Mello, Z. (2008). Gender variation in developmental trajectories of educational and occupational expectations and attainment from adolescence to adulthood. *Developmental Psychology*, 44, 1069–1080. Accessed on 22<sup>nd</sup> June 2012 from <http://www.uccs.edu>
- Miller, P. (2002). *Theories of developmental psychology* (4<sup>th</sup> ed.). New York: Worth Publishers.
- MoE (2002). The quality and effectiveness of teacher education in Ethiopia: National framework for teacher education system overhaul. (Part II). A document of unpublished report of study findings with recommendations for action
- MoE (2010). Education Sector Development Program IV (ESDP – IV). Program action plan (2010/11-2014/5). MoE: Addis Ababa.
- Mortimer, J., Zimmer-Gembeck, M., Holmes, M., & Shanahan, M. (2002). The process of occupational decision making: Patterns during the transition to adulthood. *Journal of Vocational Behavior*, 61, 439–465. Accessed on 17<sup>th</sup> June 2012 from [www.idealibrary.com](http://www.idealibrary.com)
- MoYS (2005, December). National youth policy implementation manual. Addis Ababa: Alpha Printers

- Muchinsky, P. (2001). *Psychology applied to work: An introduction to industrial and organizational psychology* (7<sup>th</sup> ed.). Belmont: Wadsworth
- NCCRN, North Carolina Career Resource Network (2008). Career choices in North Carolina: User's guide, 2007-2008. Accessed on 29<sup>th</sup> June 2012 from <http://www.ncsoicc.org>
- Nwagwu, N. (1976). The vocational aspirations and expectations of African students. *Journal of Vocational Education & Training*, 28, 111-115. Accessed on 13<sup>th</sup> April 2010 from <http://www.informaworld.com>
- Ohiwerei, F., & Nwosu, B. (2009). Vocational choices among secondary school students: Issues and strategies in Nigeria. *Asian Journal of Business Management*, 1, 1-5. Accessed on 22<sup>nd</sup> June 2012 from [www.maxwellsci.com](http://www.maxwellsci.com)
- Patton, W., & Creed, P. (2007). Occupational aspirations and expectations of Australian adolescents. *Australian Journal of Career Development*, 16, 46-59. Accessed on 26<sup>th</sup> December 2010 from <http://www.eprints.qut.edu.au>
- Peterson, G., Sampson, J., Lenz, J., & Reardon, R. (2002). A cognitive information processing approach to career problem solving and decision making. In D. Brown & associates (Eds.). *Career choice and development* (4<sup>th</sup> ed., pp. 312-369). San Francisco: Jossey-Bass.
- Ramnunan, K. (2001, August 11). The occupational aspirations and expectations of students majoring in jazz studies at the University of North Texas. Unpublished dissertation at the University of North Texas. Accessed on 27<sup>th</sup> June from <http://www.jazz.digital.library.unt.edu>

- Reardon, R., & Lenz, J. (1999). Holland's theory and career assessment. *Journal of Vocational Behavior*, 55, 102–113. Accessed on 7<sup>th</sup> February 2011 from <http://www.idealibrary.com>
- Rojewski, J. (2005). Occupational aspirations: Constructs, meanings and application. In Brown, S., & Lent, R. (Eds., pp. 131-154). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Rojewski, J., & Kim, H. (2003). Career choice patterns and behavior of work-bound youth during early adolescence. *Journal of Career Development*, 30, 89-108. Accessed on 28<sup>th</sup> June 2012 from <http://www.chixdecariere.com>
- Rounds, J., & Tracey, T. (1993). Prediger's dimensional representation of Holland's RIASEC circumplex. *Journal of Applied Psychology*, 78, 875-890. Accessed on 2<sup>nd</sup> July 2012 from <http://www.netfiles.uiuc.edu>
- Saks, A. (2005). Job search success: A review and integration of the predictors, behaviors, and outcomes. In Brown, S., & Lent, R. (Eds., pp. 155-179). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Santrock, J. (2005). *Adolescence* (10<sup>th</sup> ed.). Boston: McGraw-Hill
- Savickas, M. (2002). Career construction: A developmental theory of vocational behavior. In Brown, D., & associates (Eds.). *Career choice and development* (4<sup>th</sup> ed., pp. 149-205). San Francisco: Jossey-Bass.
- Savickas, M. (2005). The theory and practice of career construction. In Brown, S., & Lent, R. (Eds., pp. 42-70). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.

- Schaefer, V., & Meece, J. (2009, April). Facing an uncertain future: Aspirations and achievement of rural youth. Unpublished paper presented at the annual meeting of the American educational research association. Accessed on 7<sup>th</sup> February 2011 from <http://www.nrcres.org>
- Schoon, I. (2001). Teenage job aspirations and career attainment in adulthood: A 17- year follow up study of teenagers who aspired to become scientists, health professionals, or engineers. *International Journal of Behavioral Development*, 25, 124-132. Accessed on 3<sup>rd</sup> February 2015 from <http://www.tandf.co.uk>
- Shatkin, L. (2011). STEM Careers Inventory: Administrator's guide. JIST Works: Indianapolis. Accessed on 8<sup>th</sup> February 2013 from <http://www.jist.com>
- Spokane, A., & Cruza-Guet, M. (2005). Holland's Theory of vocational personalities in work environments. In Brown, S., & Lent, R. (Eds., pp. 24-41). *Career development and counseling: Putting theory and research to work*. New Jersey: John Wiley & Sons.
- Staff, J., Harris, A., Sabates, R., & Briddell, L. (2010). Uncertainty in early occupational aspirations: Role exploration or aimlessness? *Social Forces*, 89, 1-26. Accessed on 26<sup>th</sup> December 2010 from <http://www.princeton.edu>
- Stragleman, T., & Warren, T. (2008). *Work and Society*. London: Routledge
- Teshome Mulat (1981). Educated unemployment in Africa: Directions of research. *The Ethiopian Journal of Education*, 9, 21-35.
- Turner, S. & Lapan, R. (2005). Promoting Career Development and Aspirations in School-Age Youth. In Brown, S., & Lent, R. (Eds., pp. 417-440). *Career*

*development and counseling: Putting theory and research to work.* New Jersey: John Wiley & Sons.

Vansickle, T., & Prediger, D. (December, 1990). Mapping occupations: A longitudinal study based on vocational interests. *American College Testing Program (ACT) Research Report Series, 90-11*. Accessed on 27<sup>th</sup> June 2012 from <http://www.act.org>

Vondracek, F., Silbereisen, R., Reitzle, M., Wiesner, M. (1999). Vocational Preferences of Early Adolescents: Their Development in Social Context. *Journal of Adolescent Research, 14*, 267-288. Accessed on 3<sup>rd</sup> February 2015 from <http://www.jar.sagepub.com>

Yates, S., Harris, A., Sabates, R., & Staff, J., (2011). Early occupational aspirations and fractured transitions: A study of entry into 'NEET' status in the UK. *Journal of Social Policy, 40*, 513–534. Accessed on 05 July, 2014 from <http://journals.cambridge.org>

Zarrin S., & Abedi, M.( 2011). Reliability and correlation of interest inventories: Strong Interest Inventory (SII) and Self-Directed Search (SDS). *International Journal of Psychology and Counselin,g 3*,111-116. Accessed on 27<sup>th</sup> June 2012 from <http://www.academicjournals.org>

## **Appendix A**

### **Interview Guide Questions**

#### **I. Occupational Aspiration**

1. Thinking everything as equally accessible and possible, tell me occupations you would like to have when you finish your education.
2. How did you come to identify those occupations?
3. Tell me your hobbies, activities or recreation places you prefer?

#### **II. Occupational Expectations**

1. We have talked about your ambitions. Now let us take real-life situations into consideration. From the then available occupations, which ones do you really expect to have as your life time jobs?
2. How do you reach at such a decision, then? Some students, as part of their planning activities, talk to other people. Have you done that, consulted guidance counselors or people of that sort?
3. Tell me your skills? In which extracurricular high school activities have you participated/you prefer to participate?

## Appendix B

### Questionnaire (English version)

#### General Instruction

This questionnaire is designed to collect data on occupational aspirations, expectations occupation-related personalities and occupation prestige judgments of preparatory school adolescents in Addis Ababa.

Candidness in responding to each question improves quality of research results. The results serve as bases for formulating practical recommendations that enable relevant institutions to establish a system that helps students to match their abilities, knowledge and skills with a compatible occupational environment.

#### I. Occupational Aspiration

1. People have ideas and goals about what they expect or think is most likely for their future lives. Each person possesses a unique set of self-beliefs, values and capabilities, and the ideal occupation complements these qualities. *Consider the area of your future occupation. If you were completely free to choose any, what occupation would you desire most to have when you finish your education?* \_\_\_\_\_

#### II. Occupational Expectation

1. Job-self compatibility brings both financial reward and life satisfaction. However, the jobs we want may be different from the jobs that are available to us; hence, sometimes we are not able to get what we want most. *Considering real-life situations, what occupation you actually expect as your lifetime career?* \_\_\_\_\_
2. The first task in successfully selecting and developing an occupation is to become familiar with the information that tells about the opportunities available. *What were your sources of information about the nature and accessibility of the occupation you expected?* \_\_\_\_\_  
\_\_\_\_\_

**III.** A list of statements describing people’s desired work-environment characteristics is presented below. Indicate the extent to which the description matches your character and work environment choice by placing a check mark (✓) on one of the phrases: ‘fits me best’, ‘almost fits me’, ‘fits me on average’, ‘rarely fits me’, or ‘never fits me’.

No.	After completing my education and/or training, I would like to choose a self-job compatible work environment that:	fits me best	almost fits me	fits me on average	rarely fits me	never fits me
1	appreciates self-expression and the freedom to do things my own way					
2	prefers interacting with people, teaching, helping and healing others					
3	initiates starting up and carrying out new projects					
4	requires understanding physical theories and doing complex calculations					
5	prefers practical, hands-on problems and solutions					
6	likes work that is precise and detail-oriented					
7	likes to work with forms, designs and patterns					
8	can do a lot of paper work in short time and keep accurate records					
9	loves nature and straight forward approach					
10	prefers work that involves critical thinking and abstract ideas					
11	is good at persuading others and making decisions					
12	prefers to work with concrete data and details that lead to clear results					
13	likes to work with plants, animals, tools, or machinery, rather than doing an office job					
14	involves myself in starting a business or keeping it running					
15	would much rather work with people than with machines or data					
16	enjoys doing research and experiment					
17	prefers an unstructured work environment and the freedom to do things on my own					
18	likes listening to, understanding, promote learning and personal development of others					
19	enjoy dealing with real world activities such as gardening, athletics and being outdoor					
20	likes to have jobs that are high paying and in high demand but require a lot of education					
21	prefers settings where work can be done without following a clear set of rules					
22	likes giving voluntary service and helping people with problems					
23	is comfortable taking risks for profit					
24	prefers precise standards and guidelines to follow					

**Thank You!**

Appendix C

Questionnaire (Amharic Version)

አዲስ አበባ ዩኒቨርሲቲ  
በትምህርትና ሥነሰራ ጥናት ኮሌጅ  
የሳይኮሎጂ ትምህርት ቤት

በመሰናዶ ተማሪዎች የሚሞላ መጠይቅ

ሥም መጻፍ አያስፈልግም

አጠቃላይ ዓላማ፦

የዚህ መጠይቅ አላማ የመሰናዶ ተማሪዎችን የየግል የሙያ ምኞት፣ ምርጫና ምዘናን መለየት የሚያስችል መረጃ መስብስብ ነው።

ከአጠቃላይ መረጃ ጥንቅቅ በኋላ ተማሪዎች ወደመረጧቸው የሙያ መስኮች መግባት የሚያስችሏቸውን ብቃቶች መያዛቸውንና ብቃቶቻቸው ከየሙያወቹ ባህሪያት ጋር መዛመዳቸውን ማረጋገጥ የሚያሥችል ሥልጣት እንዴት መቀየስ አንደሚቻል ጥናቱ ተግባራዊ አቅጣጫ ይጠቁማል። ይህ አላማ ዕውን እንዲሆን ከዚህ ቀጥሎ ባምሥት አጫጭር ትዕዛዞች ሥር ለቀረቡት መጥይቆች በትዕዛዛቸው መሰረት የግል መልሥዎን እንዲሰጡ በአክብሮት ይጠየቃሉ።

ክፍል አንድ፦ አጠቃላይ መረጃ

1. እርስዎን የሚመለከት መረጃ በያዘው ሳጥን ፊትለፊት የ  $\sqrt{\phantom{x}}$  ምልክት ያስቀምጡ ወይም መልስ ይጻፉ።

ፆታ፦  ወንድ  ሴት

የትምህርት ዘርፍ፦  ማህበራዊ ሳይንስ  ተፈጥሮ ሳይንስ

ዕድሜ፦

የክፍል ደረጃ፦

ክፍል ሁለት፦ የሙያ ምኞት፣ ምርጫ እና ምዘናን የሚገልፅ መረጃ መስጠት

የሙያ ምኞት

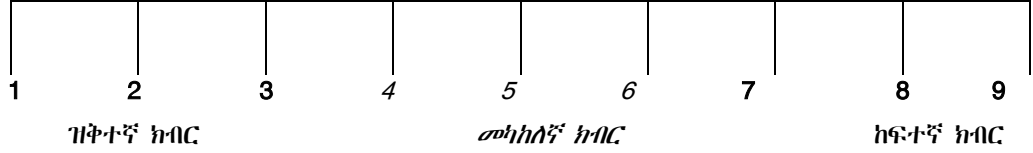
2. እያንዳንዳችን በተፈጥሮ የተቸረንና በተምሮ የምናገኘው ልዩ ችሎታ አለን ። ምኞት ከሙያ ጋር ባንድ ሲሰምር ይህን ችሎታ ምሉዕ ዕንድናደርግ ይረዳናል። ሁሉም ነገር የተሟላበት ሁኔታን በማሰብና በጎ ምኞት እንደሚሆነ ባለሙሉ ተሥፋ በመሆን ትምህርትዎን እንደጨረሱ መሆን የሚመኙትን ሙያ ይጥቀሱ። \_\_\_\_\_

3. ቀጥሎ ለሰዎች በተለያዩ መጠን አማራጭ ሊሆኑ የሚችሉ ባህሪ-ተዛማጅ የሥራ-ቦታ ምርጫ ገለጻዎች ተዘርዘረዋል። ገለጻዎቹ ክርስታዎ የወደፊት የሥራ ላይ ባህሪና የሥራ-ቦታ ምርጫ ጋር ያላቸዉን የስምምነት ልክ 'እጅግ በጣም ይስማማኛል'፣ 'በጣም ይስማማኛል'፣ 'በመጠኑ ይስማማኛል'፣ 'አልፎ አልፎ ይስማማኛል'፣ ወይም 'በጭራሽ አይስማማኝም' ከሚሉት አማራጮች በአንዱ ሥር ብቻ የ '✓' ምልክት በማስቀመጥ መልስ ይስጡ።

ተራ ቁ.		እጅግ በጣም ይስማማኛል	በጣም ይስማማኛል	በመጠኑ ይስማማኛል	አልፎ አልፎ ይስማማኛል	በጭራሽ አይስማማኝም
	እኔ ትምህርቴን ወይም ስልጠናዎን እንደጨረስኩ ከባህሪ ጋር እንዲሥማማ አድርጌ የምመርጠዉ የሥራ ቦታ፦					
1	ራስን መግለፅ የሚያበረታታና ነገሮችን በራስ መንገድ የመስራት ነፃነትን የሚሰጥ					
2	ከሰዎች ጋር ለመነጋገር፣ ሌሎችን ማስተማር፣ መርዳትና መታደግ የሚቻልበት					
3	አዳዲስ ፕሮጀክቶችን ለመጀመር የሚያነሳሳና ለመተግበርም የሚያመች					
4	ንድፈ-ሀሳቦችን መረዳትና ዉስብስብ ቀመሮችን መጠቀም የሚያሥችል					
5	ለችግሮች በተግባር መፍትሔ የሚሰጥበት					
6	ዘርዘር ያለና ግልፅ አሰራርን የሚከተል					
7	መልክ የመስጠት፣ ቅርፅ የማዉጣትና ፈርጅ የማሲያዝ ጥበብን የሚጠይቅ					
8	ፎርሞችንና ቅጻዎችን ባጭር ጊዜ መሙላትን፣ መዘግብት በትክክል መጠበቅን የሚጠይቅ					
9	እዉን እና ቀጥተኛ አሰራር የሚወደድበት					
10	ጥልቅ አሥተሳሰብንና ረቂቅ ሀሳቦችን ለመጠቀም የሚያመች					
11	ሌሎችን የማሳመንና ዉሳኔዎችን የማሳለፍ ብቃትን የሚጠይቅ					
12	ዘርዘርና ተጨባጭ መረጃን በመጠቀም ግልፅ ዉጤት ላይ መድረስን ግድ የሚል					
13	ከቢሮ ስራ ይልቅ ከፅዕዎች፣ ከአንስሳት፣ ከመሣሪያዎችና ከማሽኖች ጋር መስራትን የሚጠይቅ					
14	ሀብት-አፍላቂ ስራዎችን በግል መወጠንና ማሳደግን የሚያበረታታ					
15	ከማሽኖች ወይም ከግሉዝ መረጃዎች ይልቅ ከሰዎች ጋር አብዝቶ መስራት የሚዘዎተርበት					
16	ምርምርና ሙከራ ማድረግ የሚፈለግበት					
17	አለማደራጀትንና ነገሮችን በራስ መንገድ የመስራት ነፃነትን የሚፈቅድ					
18	ማዳመጥ፣ መረዳት የሚዘዎተርበት፣ የሌሎችን መማርና ማደግ መሻት የሚበረታታበት					
19	ገሀድ ዓለም-ተኮር ተግባራት፦ እንደ አትክልት መንከባከብ፣ ሥፖርት መስራትና ቤት ዉጭ የሚሰሩ ሥራዎች ማዘዉተርን የሚሻ					
20	ክፍያዉም ተፈላጊነቱም ከፍተኛ የሆነ ግን የላቀ የትምህርት ደረጃ የሚጠይቅ					
21	አስገዳጅ ደንቦችን ማይከተሉ ሥራን መከዎን የሚቻልበት					
22	የቦሳ አድራሳት አገልግሎት መስጠትና ችግረኛ ሰዎችን መርዳት የሚቻልበት					
23	ለትርፍ/ለገንዘብ/ ሲባል መስዋዕት የሚከፈልበት					
24	ሥራን ለመስራት መመሪያዎችንና ሥራዓተ-ደንቦችን መከተል ግድ የሚል					

**የሙያ ክብር ምዘና**

4. ቀጥሎ የሙያዎች ዝርዝር ቀርቧል። ለእያንዳንዱ ሙያ ያለውን የክብር ልክ ከ 1-9 አንዱን በመክበብ ያሳዩ።



	ሙያ	ለሙያው የሚሰጥ የክብር ልክ ወ.ጤት (occupation's Prestige mark)								
		1	2	3	4	5	6	7	8	9
1	ገበሬ (Farmer)	1	2	3	4	5	6	7	8	9
2	መሀንዲስ (Engineer)	1	2	3	4	5	6	7	8	9
3	ጋዜጠኛ (Journalist)	1	2	3	4	5	6	7	8	9
4	ነርስ (Nurse)	1	2	3	4	5	6	7	8	9
5	የህግ ባለሙያ (Lawyer)	1	2	3	4	5	6	7	8	9
6	የሂሳብ ሰራተኛ (Accountant)	1	2	3	4	5	6	7	8	9
7	የግንባታ ሰራተኛ (Construction worker)	1	2	3	4	5	6	7	8	9
8	ሀኪም (Physician /Medical Doctor)	1	2	3	4	5	6	7	8	9
9	አርቲስት (Artist)	1	2	3	4	5	6	7	8	9
10	ፖሊስ (Policeman/woman)	1	2	3	4	5	6	7	8	9
11	አስተዳዳሪ (Manager/Administrator)	1	2	3	4	5	6	7	8	9
12	ፀሀፊ (Secretary)	1	2	3	4	5	6	7	8	9
13	የልብስ ሥፊት ባለሙያ (Tailor)	1	2	3	4	5	6	7	8	9
14	የዕንሰሳት ሀኪም (veterinarian)	1	2	3	4	5	6	7	8	9
15	የማስታወቂያ ሰራተኛ ባለሙያ (Advertising man/woman)	1	2	3	4	5	6	7	8	9
16	የጦር መኮንን (Military officer)	1	2	3	4	5	6	7	8	9
17	ፖለቲከኛ (Political scientist)	1	2	3	4	5	6	7	8	9
18	ሂሳብ ተቆጣጣሪ (Auditor)	1	2	3	4	5	6	7	8	9

**የሙያ ምርጫን መግለፅ**

5. ችሎታ ከሙያ ምርጫ ጋር ሲዋሀድ ገንዘብ ብቻ ሳይሆን የህይወት እርካታንም ያስገኛል። ነገር ግን ከምንመኘው ሁሉ በትክክል የምንሆነው አንዱን ነው። የኢትዮጵያን ነባራዊ ሁኔታ ከወዲሁ በሚገባ በማጤን እስከ ዕድሜዎ መጨረሻ መሰራት የሚመርጡትን ሙያ ይጥቀሱ።

5.1. በሙያ ምርጫ ሂደት የመጀመሪያው ተግባር የሙያውን ምንነትና ተገኝነት የሚመለከት መረጃ ማሰባሰብ ነው። ለሙያ ምርጫዎ መነሻ ወይም ዓጋሻ የሚሆን ሀሳብ ከነማን/ከየት እንዳገኙ ይዘርዝሩ?

አመሰግናለሁ!

## Appendix D

### Transcribed Data for the Sixteen Interviewees (Translated version)

#### **Student 1 (male, social science, grade 11)**

*What occupation would you like to have after completing your education? Accounting. What competencies do you think the profession 'accounting' require from those who would like to be an accountant? To be clever in social science fields. What do you think are the main tasks of accountants? .. eh. I do not know.... I think they work in banks. I like Math that is why I aspire to be an accountant. Who or what are your bases for your aspiration? My own interest. What please you as recreation activities or hobbies? Dance. Any skill(s) that you are good at? None. In what activities do you help family? I do some family tasks, cleaning the house, for example. In which extracurricular activities do you Participate in the school? ICT club.*

#### **Student 2 (female, social science, grade 11)**

*Thinking everything as equally accessible and possible, tell me the occupation you would like to have when you finish your education? I want to be a lawyer. Why do you particularly aspire this occupation? It is my childhood desire to be a lawyer; I also think that the public deserves justice. Could you tell me subject you like most? I like civic and ethical education, and geography. What other alternative have you planned if, due to different limitations you missed the aspired occupation? I will join private colleges and achieve my aspiration [study law]. What extracurricular activities are you participating? The theater club. Some students, as part of their planning activities, talk to other people to make choice? How was your choice made? Basically the desire is mine, also my father is a counsel.*

#### **Student 3 (male, natural science, grade 11)**

*Aspirations at adolescence, for most adolescents, are limitless. What occupation would you like to have after completing your education? Doctor. Why do you particularly aspire this profession? I want to serve the people, especially the sick. What competencies do you think the profession requires from those who would like to become medical doctors? I think it requires competency in biology and chemistry. What sources of occupational information served you as basis for your choice? It is my own interest. What please you as recreation or hobby? Taking walks and playing pool. In what extracurricular activities do you participate? The Red Cross and Mini-media. If your aspiration fails to come true, due to different limitations, what other alternatives have you planned? Other occupations which are health-oriented*

#### **Student 4 (female, natural science, grade 11)**

*What occupation would you like to have as an aspiration when you finish your education? My primary choice is to become a journalist even though it is unrelated to my field of study; my second choice is nursing. Why do you particularly want to become a journalist? I think I have the desire, particularly to become an english news reader. I am good at english' I also like biology. who most influenced you in the occupational choice? Only my own internal interest. What pleases you a free time activity or hobby? I am a dancer; I go to dance trainings. I also watch clips of dance songs on TV. In what activities are you cleverer than the other members of your family at home? I have no special skills, I am good at keeping the house clean. In which extracurricular activities do you participate? I am member of the ICT club. I am also planning to join the Mini media club. What other occupation would you chose as an alternative if your aspiration fails to come true? Hostess.*

**Student 5 (female, natural science, grade 12)**

*What is your aspired occupation?* Doctor. *Why do you particularly aspire to become a doctor?* Because it gives personal satisfaction to cure people. *Which subjects do you think you are clever?* Biology, chemistry. I am also good at English. *Have you talked to other people in the choice process?* The desire originated from me after my observation of professionals both in person and in films. *What pleases you as free time activity or hobby?* Reading books and watching films. *What extracurricular activities do you participate?* The environmental protection, girls' and library clubs. *What other occupation would you have as an alternative if you fail to achieve your first choice?* Of course, I am confident in getting my primary choice; if, due to uncontrollable reason, I failed to have it, I will become an engineer. *What skills do you think you are good at in helping the family at home?* Mainly my duties at home are to do education-related activities. I think, I am also good at resolving conflicts at home, also with friends.

**Student 6 (Male, Natural science, grade 12)**

*If you were completely free to choose, what occupation (s) would you aspire to have when you finish your education?* I want to be a computer technician. *Why do you particularly aspire to be a 'computer technician'?* Because I am good at Math and Biology. I am not good at Physics. I do not want to join engineering but I can join medicine if I want to. *Some students consult others; their parents, friends, or may get the inspiration from observation of professionals on media. How was the choice made on your part?* Only by myself; I have not consulted anyone and no influences from others. *In which extracurricular activities do you participate in school?* Library club. *Why not the ICT club; I have heard the presence of the club here?* Yes. Many students joined it. Um. .... I do n't think it functions well. *What things/activities please you as pass time or recreation?* Watching films. *In what activities do you help your family?* I am living with my aunt and I do activities she wants me to. I do farm activities when I go to the countryside during the summer.

**Student 7 (female, social science, grade 12)**

*If you were completely free to choose, what occupation would you aspire to have when you finish your education?* Accounting. *What subjects are you good at school?* I like economics, history and geography. *What activities do you enjoy doing as free time hobbies?* I enjoy watching films and reading books. *Which clubs are you a member of in the school?* None. *What do you do at home?* I do 'women's activities' such as cooking. *Things do not always go as we plan them to be; what other alternatives do you have as future choices if your aspiration fails to come true?* Marketing. *Could you tell me the source(s) of occupational information for your choice?* My own interest.

**Student 8 (male, social science, grade 12)**

*What occupation would you like to have when you finish your education?* Economist. *Why?* For the job opportunity it offers; economists can be employed in companies. *Have you consulted any people in your choice?* The choice, primarily, is my own; as additional source I am inspired by an economist (..... I have forgotten his name) who gives explanation on current situation of a country's economy. *Which school clubs are you part of?* The Mini-media, environment protection and anti-AIDS clubs. *What activities do you do when you are free?* I enjoy playing football. *How do you help family at home?* By doing different activities; just by doing the common 'men's tasks'. *What alternative occupation(s) have you planned if you missed your first choice?* I am pleased to take any jobs, I can be part of a youth's organization and work as stone setter, become a teacher or a journalist, for example.

**Student 9 (male, natural science, grade 11)**

*Seeing seemingly limitless options before you, what would you like to become when you complete your education?* Technology-related occupations, such as ICT; after serving government organizations for some years, I am planning to establish own business. *Why are you particularly attracted to tech-related occupations?* The lack of technologists in our country, there are no sufficient software engineers in our country, for example. *Do you practice activities that serve as a bridge to your aspiration?* Yes. I enjoy doing ICT-related activities in my free time. *What pleases you as hobbies or recreation?* Watching football games, films, using the internet and reading text books. *Which extracurricular activities do you like participating?* At present, none; in grades 9 and 10, I was an active member of 'sport' club. I got a certificate for my active participation. *Any other occupation you think of joining in case you missed your aspired one?* I will learn health education in private institutions by working my own private ICT-related jobs by day.

**Student 10 (female, Natural science, grade 11)**

*If you were completely free to choose, what occupation (s) would you aspire to have when you finish your education?* I want to be an astrophysicist. *Why do you particularly aspire 'astrophysics'?* Because there is shortage of professionals this field in our country although the geographical feature of our country is high land. *Any consulted people for your choice?* It is by myself. I aspired it by myself observing the county's context. *Do you think you have had the necessary competencies to achieve your desire?* I think I have. I will also learn. *If, due to different limitations, you miss your aspired field, what other alternative have you planned?* I have no the fear of losing my choice. If, due to uncontrollable reasons, I missed it, I will shift to studying health science. *In what extracurricular activities do you participate in school?* None. I have no both the time and desire to participate. *What things/activities please you as pass time or recreation?* Watching football games on TV.

**Student 11 (male, social science, grade 11)**

*Adolescence knows no limitations for most adolescents. Thinking everything as equally possible and accessible, tell me occupation you would like to have when you complete your education?* Lawyer. *Why?* From civic and ethical education, I have learned that people deserve justice. *What competencies that relate to your aspiration you think you have?* Although I have n't had it right now, I will build it later after joining a university. *What subjects do you like most?* History, civic and ethical education and economics. *Were there any specific experiences or people that you think led you to be interested in becoming a lawyer?* My uncle's friends are lawyers. I and they meet in my uncle's house in weekends. I heard them talking about their profession. Their discussions inspired me to choose the occupation. *What do you enjoy as a free time activity?* Playing football and watching films. *Which clubs are you a member of?* Civic and ethics club. *Though there is the tendency to think without limitations at adolescence for most adolescents, different factors may bring limitations. Taking those obstacles into consideration, what other occupation (s) have you planned as a long term occupation?* My feeling at present is as if I have experienced many of the challenges that adolescents face and, hence, I am awaited by good fortunes. Despite this confidence of mine, I am thinking of 'being a painter as an alternative. I am good at drawings. I often do it on blackboard. I am also thinking of accounting as another alternative.

**Student 12 (female, social science, grade 11)**

*What occupation would you like to have as your aspiration?* Nursing. *Why?* It is the occupation I grew up desiring although most of us, as little children, used to aspire ‘to be a doctor’. *How did you know about the occupation?* Basically the interest emanates from myself; my mother also encourages my interest. *Do you think you fulfill the requirements of ‘nursing’?* Friends say that I get annoyed with little things. Despite this, I insisted that I will become a nurse by improving this behavior through time. *What qualities do you think ‘nursing’ requires from those who would like to be a nurse?* Patience, readiness to care patients and to know subjects related to nursing well. *What subjects are you good at in school?* Civic and ethical education, even though it is unrelated to my aspiration. *What pleases you as free time activity?* Reading fiction. *What do you do at home?* Every ‘women’s task’. *If things failed to go according to your plan and you missed your most aspired occupation, do you have plan of joining other occupation as long term career?* Yes. I will study law because I like civic and ethical education.

**Student 13 (male, natural science, grade 12)**

*What occupation would you like to have as your aspiration?* Doctor. *Why?* I want our country’s present status in health related issues to move ahead and become closer to the developed nations. *What competencies do you think the profession needs from those would-to-be physicians?* Competence, persistence, and determination. *What subjects are you good at?* In grades 9 and 10, I liked history. At the end of grade 10, I joined natural science because I want to take advantage of the 70/30 field placement of the government. Currently I like biology and chemistry, I think, they are related. *What do you do in your free time?* Go to church, play with friends. *Who inspired your choice?* Friends encouraged me to join the natural science stream. I also decided to join it. *What clubs are you a member of?* ICT club. *What do you do at home?* I help my mother in doing house work. *Do you have an alternative choice if you fail to achieve your aspired occupation?* Yes. I will be a church worker.

**Student 14 (female, Social science, grade 12)**

*What occupation (s) would you aspire to have when you complete your education?* Theatrical art. *Why?* Because I have the interest. *Some students consult others; their parents, friends, or may get the inspiration from other people on the media. Have you consulted people of that sort?* Not at all. It is my childhood desire. I grew up aspiring it beginning from the lower grades. *What have you done so far to achieve your aspiration?* I have joined the social science stream; I also participate in art-related issues in our ‘kebele’. *In which extracurricular activities do you participate in the school?* Red-cross club, I have also taken a peer-to- peer training and I am training other girls now. *What things/activities please you as pass time or recreation?* Reading different books, mostly non academic, and watching films. *In what activities do you help your family?* I and my little sister are living with my grandmother. I care for her as she is mostly feeling sickness. I also help my sister in her studies. *Art is a wide area; what particular art do you aspire?* Actress. *It is acceptable for youngsters like you to aspire without limitations during adolescence; however, different things may put limitations on your limitless aspirations. Considering those limitations, what other alternatives have you planned?* Model, if this fails management. *What subjects are you good at?* Economics and business

**Student 15 (female, Natural science, grade 12)**

*If you were completely free to choose, what occupation (s) would you aspire to have when you complete your education?* Nurse. *Why do you particularly aspire 'nursing'?* To get the cure for HIV/AIDS. I think it is the job of nurses to experiment and get the cure. *What competencies do you think lead to the profession 'nursing'?* To be patient. *And education wise?* To be a clever student in Biology and Chemistry. I am planning to be clever in these subjects. *What are the bases of your choice?* It is my own interest. *If, due to different limitations, you miss your aspired field, what other alternative do you have as long term employment?* I have no the fear of losing my choice. *In what extracurricular activities do you participate in school?* None. I have no desire to come to club activities after school time. *What things/activities please you as pass time or recreation?* Watching films and reading fiction. *Any practical skills you are good at or activities you do cleverly at home or outside?* None. At home I correct the house furniture and clean it

**Student 16 (male, social science, grade 12)**

*What occupation would you like to have for your aspiration?* Lawyer. *Why?* I feel I have the interest. *Who inspired your choice?* It is my own interest. *What do you expect from lawyers?* Giving justice for the needy. *Tell me subjects you like most?* I like history, English, civic and ethical education beginning from grade 9. *Is the interest or the mark that is high in these subjects?* I mean .... the subjects are suitable to me and I also have the interest. *What pleases you as a free time activity?* Playing football and going to mosque. *Which clubs do you participate?* None. *What do you do at home?* I live alone. My parents live in the countryside. I labor to survive. *Is the job you are doing relate to your aspiration?* Not at all. *What occupation do you chose as life time career if your aspiration fails to materialize?* Human resource management. *Do you think you fulfill the requirements of would-to-be lawyers?* I am patient, a good listener. I also resolve issues with friend patiently. Friends encouraged this behavior of mine. I think law requires this.

**DECLARATION**

I, the undersigned, declare that this dissertation is my original work, has not been presented for a degree in any other University, and all the sources used have been duly acknowledged.

Name: Setegn Arasaw

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

This doctoral dissertation has been presented for examination with my approval as a university advisor.

Habtamu Wondimu (Professor)

\_\_\_\_\_

\_\_\_\_\_

Advisor

Signature

Date