

Research Article

EXPLORING CAREER DECISION MAKING DIFFICULTIES AMONG PAST STUDENTS OF THE KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY IN SEFWI

*JOSEPH OBIRI YEBOAH DUMADU

Department Of Counselling Psychology, University Of Education Winneba, Ghana.

Received 28th April 2023; Accepted 20th May 2023; Published online 30th July 2023

ABSTRACT

The purpose of this study was to explore career decision making difficulties among past students of the Kwame Nkrumah University of Science and Technology in Sefwi. The study employed a phenomenological research design. Six (6) past students of the university who were sampled using the snowball technique, responded to a semi-structured interview guide on one-on-one basis. The data were coded and analyzed using the thematic approach. The study found that participants' (students) environment, as well as their own aspirations and values were the major factors which influenced their career decision making processes. Additionally, the family and societal demands, peer influence as well as the general education, and school counselling on job opportunities available for reading a particular programme also played a critical role in their career decision making. Based on the findings, it was recommended that career choice should be incorporated in the school curriculum so that right from the start at the basic level, students would know what should go into their choice of careers. Also, more career guidance seminars be held for students and their parents at the various institutional levels so as to help the students know the right factors to consider when choosing a career. Again, career consultation services should be made a compulsory thing for every student to do and it should be monitored. Finally, parents should not restrict their wards on their choice of careers, or choose careers for them but allow themselves to look within them and choose a career that is best in their interest.

Keywords: Career counselling, labour marketplace, Career Choice, Career Decision Making, Kwame Nkrumah University

INTRODUCTION

Background to the Study

Selecting a career is one of many important choices students make in determination of their future plans. Therefore, the importance of career choice among University students cannot be underscored. These decisions about a career choice, impacts the students throughout their lives. Again, the decisions made by the individual students always lead to important vocational outcomes in the world of work in the future (Walker and Tracey, 2012). Based on Walker and Tracey's, (2012) statement, goes to suggest that a career could be defined as the schedules and advancement taken by a person throughout a lifetime, specifically related to their occupations. In this regard, the Business Dictionary.com (n.d) noted that a career is often composed of the jobs held, titles earned and work accomplished over a long period of time, rather than just referring to one's position. Career development according to Navin (2009), is both a socially and a psychologically constructed process involving complex engagements among different structures, forces, and systems, all constituting spheres of influence which an individual puts into consideration before making a final decision on which career to pursue. However, Natalie (2006), on the other hand, sees career as the total pattern of one's activities held during a person's life-time. In Ghana, the rapid fluctuation in social, economic and political situations influence the structure of the world of work as well as the career development of individuals. Sometime past, the processes of economic and social welfare were more stable and university students had more opportunities to enter the job market immediately after completion of their programme of study. It seems that they did

not have to worry about their future, or did they encounter the problem of career uncertainty. However, in the past decade now, the political struggle and changes assumed by different political parties has not been favourable to the job market, thereby creating some uncertainties among job seekers. Some few individuals who even have got something doing as a job to earn a living a certain time had to lose those jobs, especially during the era of the collapse of banks and others financial institutions in Ghana (Ghana web, 2015).

These political issues, social problems and unstable economic development are interwoven and have influenced the opportunity structure of the world of work. Hence, resulting in career uncertainty among most university graduates. The phenomenon has become an important issue to graduates who have completed university and are ready to enter the job market. The unavailability of jobs for graduates, has led many students into indecision, during the career planning process. This again, has even led to the formation of associations like "Unemployed Graduates Association". During the four (4) years period of study in the university, the rapid changes of the external environment force students to modify their decision from time to time. In addition, environmental changes also influence the development of students' personal values and interests. These interactions between an individual and the environment continue to play an important role in the process of career development (Ghana web, 2015).

Another aspect of the cultural background related to Ghanaian university students' career uncertainty is due to lack of career counselling in the educational system in Ghana. Career counselling in the school setting has been sacrificed to intellectual development of students. During the period of compulsory education, which is from Kindergarten to the Senior High School level in Ghana, most learners are encouraged to perform well on variety of achievement tests in order to earn admission into a university. The students therefore spend too much time in study and do not have enough opportunities for self-exploration, nor do they have the chance to explore the world

*Corresponding Author: JOSEPH OBIRI YEBOAH DUMADU,

Department Of Counselling Psychology, University Of Education Winneba, Ghana.

of work. These students move to the university or college stage, where career planning courses are popular and suddenly feel uncertain about what they really want to do or what they might be able to do regarding a career. These situations normally increase students' job seekers anxieties, thereby leaving them to making wrong career choices, the unplanned events lead many students to alter their career directions (Ghana web, 2015).

In the light of this, it is observed that students from the Kwame Nkrumah University of Science and Technology, like any other Ghanaian students, are influenced in their choice of career by several factors including personality, cultural values, family background, and economic activities of the country. Furthermore, it is observed that the Ghanaian economy primarily depends on natural resources where majority of the population lives in rural areas and derives their livelihood mainly from these resources. This could influence the choices students make concerning their aspirations and the path they intend to follow to secure desirable careers. Therefore, it is essential to explore the sources of career uncertainty and among these students so that the results would assist up and coming the students to develop appropriate coping strategies in taking career decision. Globally, it is clear that uncertainty affects an individual's career decision making process. Several studies found that career indecision was common among students in colleges and universities especially in Taiwan (Lin, Tien and Xie, 1990).

Statement of the Problem

Most students complete university and still do not have accurate information regarding occupational opportunities to help them make proper career choices, search for jobs and plan their lives. They are often faced with career decision making difficulties and anxieties as they try to make career choices. Liu, Hao and Li (2006) investigated into career decision-making difficulties of college students. They sampled 185 undergraduate students from three universities. The students filled out a questionnaires on Career Decision-Making Difficulties Questionnaire Scale. The results showed level of career decision-making difficulties reported by the participants was much high and such they had difficulties during different phases of career decision-making. Career decision-making difficulties through studies have proven to be a challenge for many young people from different cultures. A study, using the Career Decision Making Difficulties Questionnaire of Gati, Krausz and Osipow (1996) by Mau (2004) investigated cultural dimensions of career decision-making difficulties. The study compared White, African, Hispanic, and Asian American high school and university students in U.S. schools. Results indicated that Asian American students perceived significantly more difficulties in career decision-making than other groups, whereas White American students perceived the fewest difficulties.

In New York, Arthur, Hall and Lawrence, (2015) posit that students have a limited knowledge of occupations and of the narrow range of alternatives available to them. This ignorance leads to unrealistic career aspirations. Omotosho and Nyarko-Sampson (2012) demonstrated in their study that the career aspirations of students were poorly matched with the trends in the labour market. It is reasonable to assert students ability to make the right choice based on their traits, preferences and career objectives is essential for their future life (Fosu and Poku, 2014). Choosing a career is one of the most important decisions people make in life. Many young people usually make this decision during the adolescent period because this is the time they choose their secondary education programmes to conform to their future careers. The process of programme choice at the secondary and tertiary levels of the academic ladder is closely related to one's decision to pursue a specific career. This is considered a very important decision young people make since

career serves as a major avenue through which people offer services to humanity as well as get financial rewards to sustain themselves and their families. Careers also, go a long way to boost the economy of nations hence the need to choose an academic discipline that defines what career young individuals want to pursue.

In this regard, Fabea (2012) in a study to find out the factors that influence the career choices of University of Cape Coast students in Ghana, revealed that educational factors, social factors and inherent factors were the best predictors of career choices and uncertainties of the students. Similarly, Maingi (2007) in a study in Kenya, found that 63% of students who joined public Universities in Kenya, through Joint Admissions Board (JAB), were not admitted to pursue degree programmes of their choices. Although, there were career guidance and counselling programmes on-going in Kenyan secondary schools for over two decades before the conduction of Maingi's study.

Career decision-making among university students usually begins before they enter university, or during their beginning year of university study, because they must settle on what academic majors they want to veer into. It is expected that the academic majors that students choose before they enter university should be linked to what they will perform after graduation (Engberg and Gilbert, 2014). That explains why many students run into the reality of career decision-making mostly during the pre- university period, especially in Senior High School. Research in counselling suggests that 50% or more of all university students receive career-related problems (Martin and Carey, 2012). Bridgeland and Bruce (2014) posit that students experience a limited knowledge of occupations and of the narrow range of options available to them. This ignorance leads to unrealistic career aspirations. Omotosho and Nyarko-Sampson (2012) demonstrated in their study that the career dreams of students were poorly matched with the movements in the labour marketplace. Omotosho (2014) maintains that, in taking our careers in a haphazard fashion, we miss more than score. While a few students find career decision-making less cumbersome, many others struggle with career decision-making. Many graduates in Ghana are still unemployed of which graduates of Kwame Nkrumah University of Science and Technology (KNUST) are no exception (Owusu, *et al.*, 2018). The circumstances compel one to ask whether students are given the needed guidance on available careers relating to their programmes of study, and yet they still face these uncertainties. This study, therefore, sought to explore career decision making difficulties among past students of the Kwame Nkrumah University of Science and Technology in Sefwi

Purpose of the Study

The purpose of this study was to explore career decision making difficulties among past students of the Kwame Nkrumah University of Science and Technology in Sefwi and some coping strategies related to these career decision making difficulties.

Objectives of the Study

The study specifically sought to find out:

1. how students experience in their programme of study influence career uncertainties in the Kwame Nkrumah University of Science and Technology
2. sources of past students' career decision making difficulties.

Research Questions

The following research questions were raised to guide the study:

1. How do students experience in their programme of study influence career uncertainties in the Kwame Nkrumah University of Science and Technology?
2. What are the sources of past students' career decision making difficulties?

Significance of the Study

The results of the study would reveal how students experience influence career uncertainties in the Kwame Nkrumah University of Science and Technology. This would provide the universities career counsellors with information about career choices that students are interested in, and that would enable them appropriately direct their career counselling towards these career opportunities to resolve students' uncertainty issues. The findings from the study would also bring to light the source of students' uncertainties. This would also inform career counsellors, and the university management on what may be going wrong or otherwise in making career opportunity information inaccessible to students for them to make appropriate choices in order to avoid any future uncertainty.

Additionally, the results of the study would help in identifying how career uncertainties affect students' career choices in the university. The information from the finding, would inform the university authorities about the need to strengthen their career counselling services to enable students make the appropriate career choices before moving into the job market. Furthermore, the results of the study would reveal the coping strategies students use to overcome their career uncertainties in the university. This would enable the university's authorities to identify the appropriate professionals to collaborate with to provide students with the required support services regarding their career choices. Finally, the results of the study would add to the existing literature for researchers interested in similar studies.

LITERATURE REVIEW

Social Learning Theory of Career Decision Making (SLTCDM)

The researcher adopted the Social Learning Theory of Career Decision Making by John Krumboltz in 1998 to guide the study. Krumboltz (1998) conceptualized the Social Learning Theory of career Decision making into two; a theory which explains the origins of career choice; and two, a Learning Theory of Career Counselling, which explains what career counsellors can do about career related problems. Krumboltz's social learning theory of career decision making was designed to address the reasons behind people's decision to enter, change or direct their interest in an educational programme or occupation. The theory highlighted four factors that seems to influence career decision making path. The factors, according to Krumboltz, include; genetic endowment and special abilities, environmental conditions and events, learning experiences, as well as task approach skills. Essentially, Krumboltz noted that the result of the learners' interaction with these four factors was said to develop in them self-observation generalizations and world-view generalizations, which would turn to make individual learners engage in behaviours that again would lead to entry into a given career occupations. In summary Krumboltz's social learning theory hypothesized that career transitions resulted from an uncountable number of learning experiences, made possible by both deliberate and unintended engagement with the people, institutions and events in each individual's particular environment. By exploring the sources and experience of career uncertainties perceived by students of the Kwame Nkrumah University of Science and Technology in Ghana and some coping strategies related to these career uncertainties, the

researcher thought that it would be more evident how the students, while still acknowledging the role played by inborn and developmental processes, initiated career choices following the model of Krumboltz's social learning theory of career decision making.

Career

Statt (1999) defines 'career' as a "line of work that a person expects to pursue for his or her foreseeable working life, though it might include changes in job or employer" (pp20-21). However, such traditional interpretations of 'career' have been increasingly dismissed as they no longer fit into contemporary patterns of work-related behaviours. Driver (1982) formulated a theory of career patterns which has strongly influenced contemporary definitions of career. He identified four patterns of employment:

1. Transitory-where a person changes employment frequently, without any periods of stability;
2. Steady-state -where the individual selects an occupation early in life and follows it consistently;
3. Linear-where a field is chosen early in life and a plan for upward movement is developed and carried out;
4. Spiral-where the individual develops in each field for a length of time and then moves on to another, related or unrelated area on a cyclical basis. (p.24)

This model recognises the existence of a range of patterns which influence not only one's working life but also one's private life. Drivers' (1982) career patterns provided the inspiration for the more accepted contemporary definitions of the term 'career'. Thus, Arthur, Hall, and Lawrence (1989) define career as "the evolving sequence of a person's work experiences over time" (p.8). Similarly, according to Arnold (1997), career is "a sequence of employment-related positions, roles, activities and experiences encountered by a person" (p.21). This may even include periods of sabbaticals, study leave, phases of unemployment or phases where the individual may not be involved in seeking an occupation.

What is Career Choice?

It is the process of choosing a career path which can involve choices regarding education and training for a given career. It can also be define as the selection of a type of occupation or profession. This is usually influenced by parental guidance, vocational counseling and training, opportunities that exist, the environment and the personality of the individual (Fabea, 2012). As an early vocational theorist Hall (1976) led the way by adding the dimension of personal learning to his definition: "a series of lifelong work-related experience and personal learning's". More recently, career has been referred to as the patterns and sequences of occupations and positions occupied by people across their working lives (Young and Collin, 2000). Others (Arthur, Hall, and Lawrence, 1989) agreed to the definition of career as the evolving sequence of a person's work experiences over time. The focus turned toward the internal, subjective career, a person's perception and self-construction of career. It was the University of Chicago sociologists who used career as a lens for peering at larger social processes known as institutions (Barley, 1989). The sociological approach owes much to the work of Hughes (1937) who theorized career in a broader framework including all life roles and experiences over time. Using the institution as the central level of analysis allowed Hughes to focus on the structural forces that constrain and shape human behaviour, while remaining attuned to how individuals continually create the meaning and norms within those institutions. For Hughes and his students career had simultaneous directions. On the one hand career pointed to those

institutional forms of participation which constituted the objective face of career. While on the other hand, career pointed to the individual's experience of the career unfolding, the subjective face of career.

Career Decision Making

Decision making can be defined as an act of choice by which an executive selects one particular course of action from among possible alternatives for the attainment of a desired end or as a solution to a specific problem (Attieku, *et al.*, 2006). It involves conscious or unconscious attempt at making a choice out of competing alternatives. It implies selecting from alternative policies, procedures, and programmes. Career decision making is vital as the country is faced with the problem of unemployment which is the result of poverty and other social vices in the country. Lawer (2007) opined that majority of students in the second cycle schools in Ghana are not aware of major occupation groups in Ghana, knowledge of training and qualification necessary for employment in the various occupations, conditions of work, earning and other rewards of occupation, and did not have better understanding of their career interest, aptitudes and abilities mostly because of the unavailability of career selection processes.

Why people choose career

We must decide what manner of man we wish to be and what walking in life will follow and this is most difficult problem in the world. Oladele (2001) Observed that senior high school students need right decision on choice of career as career work should enable them choose a life rather than simply a living, the chosen occupation will globally shape the person and his life style, lead to occupational satisfaction among individual students, to bridge the gap of individual different, that our society may not be run by disgruntled, frustrated and unrealistic individuals. According to Cap low (2000) career choices are made at a time when the student is still remote from the world of work. They are made in terms of school requirement, which may call for quite different abilities and taste from those which will be related to eventual jobs. Career choice has become a complex situation with the advent of information technology, the emergence of industrial uprising and job competition. Today, one has not only to make due career planning but also exhaustive career search before making a career choice so as to adjust with the evolving socio-economic conditions facing the country. Thorough attention given to career decisions and creating of career awareness will lead to the reduction and minimization of unemployment level bedeviling the nation.

How the Experience of Students Influence Career Uncertainties

It can be said that one's confidence in decision-making capabilities comes from having made some successful decisions in the past. Accordingly, Richard, Gaffner, David and Hazler. Richard *et al.*, (2002) observed that students who are undecided about their careers have trouble with decision making. According to Richard (2002), several studies suggest that most students could be termed vocationally immature and not ready to begin career planning process, because the way the students handle initial career decisions may have an effect on the way they would deal with future career decisions. Making a career choice is one of the many significant choices students would make in defining their future plans. This decision is supposed to be the one that would impact them throughout their lives. In this regard, Brown (2002) described the process of making a career choice as one of estimating one's ability and values, estimating the skills and abilities required for success in a given occupation, and estimating the work values that would be satisfied by the various occupational possibility available. The

essence of who the student is would spin around what the student wants to do with their life-long work (Borchert, 2002). Parents, other family members, teachers, the government and the general public as a whole recognize the need for proper career guidance and development. Ferry (2013) in a study, reported that career choices are essential points in every adolescent life. So, it does not matter if they are headed for the world of work or for college, there are factors that affect their career decisions. In most cases, career development, for some people, is a lifelong process of engaging in the work world through making choices among employment opportunities made available to them. In line with Ferry report findings, Bandura, Barbaranelli, Caprara, and Pastorelli (2001) had earlier stated that each individual undertaking the process of career choice is influenced by many experiences, which include the setting in which they live, their personal abilities, as well as their educational attainment. Muraguri (2011), on the other hand stated that an individual's choice of a career is most likely to be influenced by several factors including personal and cultural values, family background, career expectations and career guidance. Some also normally make career decisions based on the path of least struggle—for instance, considering following a career path which is already done or advocated by their family members, parents or following in the footsteps of an elder sibling (Carlos, 2009). Similarly, Kerka (2000) asserted that career choice is influenced by several factors including the individual's personality, interests, self-concept, cultural identity, globalization, socialization, available role models, social support as well as the available resources such as information and financial aid. Several studies show that new students all over the world are usually faced with a dilemma in making a career choice decision in their lives (Issa and Nwalo 2008; Macgregor, 2007; McMahon and Watson, 2005). Salami (1999) in a study about career choice of Nigerian youths, found that many youths made wrong career choices due to ignorance, inexperience, peer pressure, advice from friends, parents and teachers, or as a result of respect associated to certain jobs without adequate vocational guidance and career counselling. Consequently, Herr, Cramer and Niles (2004) argued that the concept of career development involves the person's creation of a career pattern, decision-making style, integration of life roles, values expression, and life-roles self-concepts.

Accordingly, Izumi (2005) noted that in the United States of America, some students choose to go through the Armed Services Vocational Aptitude Battery (ASVAB) test which is administered by the Department of Defense, to predicts one's ability to learn skills for different kinds of work. The ASVAB tests general academic areas such as reading, math, and science, plus technical areas such as mechanical comprehension and electronics information. No items on military topics are included. The test battery is based on extensive research on the efficacy of different types of tests for predicting success in a wide range of careers. Whatever the case may be, students require career guidance in order to make the right career choices. In that regard, McQuerrey (2007) postulated that positive or negative parental influence shapes an individual's career and career choice. Many children grow up overemphasizing the occupations of their parents. If one looked up to their parents and admired their teaching skills that may go a long way to influence how they would pursue a career in education. Parents may also intentionally or unintentionally push a child towards a particular career path, especially in the cases of family-owned businesses, where parents expect their children to take over the company. Other parents too put pressure on their wards to strive for particular high-profile careers, with the feeling that they are encouraging these children to excel. Fisher and Griggs (1995) identified six factors that may affect the career planning and development of students: parental influence, the influence of friends or peers, teachers' influence, ethnic-gender

expectations, high school academic experiences and self-efficacy and negative social events. The college years are usually critical times for career-related decision-making for students.

Consistent with the factors identified by Fisher and Griggs (1995), Bakshi, Gandhi, Shah and Maru (2012) found in a research that adolescents' own aspirations are influenced by their parent's aspirations or expectations. The study was done in India where youth in Mumbai were asked to rate their fathers, and they rated them as having a more or most important influence for reasons ranging from being a source of inspiration, a role model who also provided practical career-related experiences, to coercion. Parental support and encouragement are important factors that have been found to influence career choice of most students. In line with this, Taylor, Harris and Taylor (2004) observed that some children may choose a career that their parents desire simply to please their parents but their interest.

Factors Influencing Career Choices Among Students

In one's life, making a career selection is one of the many critical choices one would have to make to determine their future. The decision they make, is supposed to impact them throughout their lives. Brown (2002) described this process of career choice, as one of estimating one's ability and values, estimating the skills and abilities required for success in a given vocation, and estimating the work values that will be satisfied by the various occupational alternatives available. Essentially, who the student is would rotate around what the student wants to do with their life-long occupation (Borchert, 2002). Parents, teachers, the society and the government as a whole recognize the need for proper career guidance and development. Several studies show that new students all over the world are usually faced with a dilemma in making a career decision in their lives (Issa and Nwalo 2008; Macgregor 2007; McMahon and Watson 2005). In a study of career choice of Nigerian youths, Salami (1999) found that the youth made wrong career choices due to ignorance, inexperience, peer pressure, advice from friends, aspirations from parents and teachers, as well as prestige attached to certain jobs among others, without adequate vocational guidance and career counseling.

Muraguri, (2011) reported that an individual's choice of career is likely to be influenced by several factors including personal and cultural values, family background, career expectations and career guidance. Some also make career decisions by taking the paths which are likely to attract least resistance during their search for job. For example, succeeding a career path by a parent or following in the footsteps of elder siblings (Carlos, 2009). In the opinion of Kerka (2000), career choice is influenced by multiple factors including personality, interests, self-concept, cultural identity, globalization, socialization, role model, social support and available resources such as information and financial gains.

In line with Muraguri, (2011) and Kerka (2000) reports, Mtemeri (2017) in a study in Zimbabwe investigated the factors that influence the choice of career pathways among high school students in Midlands Province of Zimbabwe. A survey design which was mainly quantitative in nature was used in the study. A self-designed questionnaire was used in collecting data from the participants. One thousand and ten high school students and 20 career guidance teachers participated in the study. The Statistical Package for Social Sciences version 19 calculated the percentages that were used to analyze the data. The study revealed that family members, both nuclear and extended, had an influence on students' choice of careers. The study further revealed that the influence of mothers and fathers was rated highly as compared to other family members. Furthermore, the study also shown that schools have an impact on

high school students' choice of careers as well as career guidance, especially school career days, was identified as having a positive impact on students' choice of careers. The geographical location of schools also influences students in their choices of careers. Additionally, it was also observed that peers had an influence on students' choices of careers through peer advice and encouragement. However, gender did not influence the students' choice of careers as the influence of gender on career choice was lowly rated (Mtemeri, 2017). Mtemeri (2017) made several recommendations based on the findings of the study. Among which were the training of parents, peers and teachers to enhance students' choice of careers. Also, it was recommended that only trained career guidance teachers be allowed to teach career guidance. Lastly, the study recommended that, a career guidance model be put in place to always assist in helping students choose suitable careers.

Similarly, Njeri (2013) in a Compassion International Kenya sponsored study, sought to investigate the factors that influence career choice among 293 undergraduate students in all the public universities in the Kenya. According to Njeri, the management of Compassion International Kenya has keenly observed that there is lack of diversified careers among sponsored students and that forms the statement of the problem. The study specifically sought to investigate family factors, role of peers, role models and the role of gender in influencing career choice among the students. Njeri adopted a cross-sectional survey design for the study. The population of the study comprised of 295 participants who included 293 students sponsored by Compassion International and two members of staff who run the sponsorship programme. Therefore, a census sampling technique was used to include all the 293 students to respond to a self-administered questionnaire. This was mailed to the participants of the study and a date was set when the participants responded. However, the two members of staff were interviewed. The researcher obtained a response rate of 97%. Data analysis was based on the research questions designed at the beginning of the research. The collected data were inspected and edited to ascertain their accuracy, completeness and uniformity. Data were analyzed using statistical package for social sciences to obtain descriptive and inferential statistics used to determine the factors that influence career choice among Compassion International sponsored students in Kenya universities. The results of the study were compared with literature review to establish the factors that influence career choice among the students. According to the findings of the study, all the independent variables investigated had influence on the students' career choice. However, it was revealed that role models had the greatest influence with an average mean score of 3.1. Peer and gender factors on the other hand had an equal influence on the choice of career with an average mean score of 2.3. Again, the results indicated that family factors have the least influence on career choice with an average mean score of 1.86. Based on the findings, the researcher therefore recommends that the Ministry of Education, universities and Non-governmental organizations map out a strategy for career information exposure and effective dissemination to students. Also, further research to be done in areas such as factors that lead to career change among undergraduate students in Kenya and factors that limit female students from pursuing technical careers such as science, mathematics, technology as well as engineering.

METHODOLOGY

The study employed the qualitative research approach and phenomenology research design to explore the source and experience of career uncertainties perceived by past students of the Kwame Nkrumah University of Science and Technology and the coping strategies related to these career uncertainties. In qualitative

research, there is always an interaction between the researcher and the researched in the socio-cultural context of the participants of the study (Kusi, 2012). It was appropriate to employ a qualitative approach for this study because the study explore career decision making difficulties among past students of the Kwame Nkrumah University of Science and Technology in Sefwi and some coping strategies related to these career decision making difficulties.

Findings to the study were arrived at through the exploration of participants' experiences using interviews but not by statistical procedures and quantification. Bryman (2008) and Creswell (2012) suggested that in qualitative study, participants are expected to give detailed rather than general information on the features of the specific phenomenon under investigation. This current study therefore, sought to use the qualitative approach, in order to have a detailed account of the experiences and opinions of the students from the students' own perspective. The sample size for the study was made up of 6 past graduates of the Kwame Nkrumah University of Science and Technology in Kumasi. Snowball sampling technique was used to select the participants. A semi-structured interview guide was used to gather data. The interview data was transcribed based on the code for each interview. Thematic contents were formulated based on the research questions

RESULTS AND DISCUSSION

Research question one: How do students experience in their programme of study influence career uncertainties in the Kwame Nkrumah University of Science and Technology?

To answer research question one (1), the data collected during the one-on-one interviews with the interviewees were used. Three themes that emerged from the data, thus environment, personal abilities and cultural values, and family background, were used for the analysis.

Environmental Influence and Experience

Regarding the environment as an influence of career decision making difficulties factor, the participants' responded this way. One of the participants stated that:

The environment in which I reside has really had an influence on me since I could not get people to mentor or guide me on my career (Kwame).

Another student indicated that:

I had a conflicting influence from micro and macro environment. For example, I use to observe, listen and copy the elderly in the community (e.g. parents) hoping to grow to become like them (Ama).

One also stated this

My experience with the people I lived with in my community and the work they do, influenced my passion for my current job, since my current job was not what I intended to do, the love and the enthusiasm for my current job has drastically reduced (Kojo).

The responses from the participants showed that the environment is influential to their career decision making. As shown by the responses from the interview to have influence their decision, were micro environment, thus the immediate family and the macro environment, which is also the community or the general society. The elderly in the

community were also identified as role models who have also influenced the decision of the participants.

Personal abilities and cultural values

The students' own aspirations and values was also another sub-theme that emerged from the interview discussion with the participants. The participants noted that, what they aspire to be and what their ability can allow them is one of the factors that determine their career decision. The following are the verbatim response of the participants. One of them stated that:

My abilities supported my education because of early exposure and this influenced my career decision processes (Kwaku).

Another one remarked:

My personal and cultural values had positive influence on my career since they were principles that guided me on choice (Kwabena).

Also, one mentioned that:

My personal abilities enabled me to add value to what I had learnt at the university. It influenced my career decisionmaking process because it has by helped me choose the career that suits my interests and skills (Kwasi).

One further stated that:

My life experience has allowed me to gain insight into my career decision making process. The experience made me understand better about what my interest and the things that motivate me (Kwame).

Again, one of them commented:

My personal and cultural values, the programme in the university I offered all influenced my career decision making. They motivated my goals which helped established my priorities in life and guided my career decision making process (Ama).

Family background

From the analysis of the data, it was realized that one of the main themes which emerged from how the students' experiences influence their career uncertainties, was the students' family background. For instance, a student commented this way:

My life experience has sharpened my career decision making processes in the sense that my family was given early exposure to books. The student added that: Story telling exposed me to number of careers to choose when growing (Kwame).

One also remarked that:

My family members were educated and demonstrated the need to be educated in societies. This made me developed interest in education. My mother was a teacher and she was always teaching me, while my father was a nurse, and was always looking so nice in his uniform. So, all these things inspired me to work hard to become like them (Ama).

Another again stated that:

My parents and siblings played a major role in my career decision by advising and motivating me on career decision I should make. In fact, my father always telling me that he wants me to become a bank manager, so that can be controlling all the money in the bank, and that actually gave me the inspiration to venture into studying Business programmes (Kwaku).

One also commented that:

My family background has affected me adversely since they could not afford me to pursue certain programmes at the university (Kwabena).

Finally, another stated this:

Reading and bedside story telling helped in the identification of future career (Kwasi).

From the comments, it was clear that, certain career decisions the students make, is sharpened by factors like the micro and the macro environment, the students' own personal abilities and cultural values, such as their early exposure to education, their interest, and their family background, which is influenced by educated family members, storytelling, already existing career by some family members. It was also noted that some of the participants went into certain careers or took certain career decisions because they were from poor family backgrounds and the families could not afford to let them pursue programmes that could lead them to careers, they were interested in.

Research question two: What are the sources of past students' career decision making difficulties?

To answer research question two (2), the data collected during the interviews with the students were used. According to the respondents, some of the sources of their career uncertainties included the institutions that they attended, guidance services provided in schools, societal and family demands, the labour market, were the things that featured as the sources.

Institutions attended

From the analysis of the data, it was realized that one of the main themes which emerged from how the students' experiences influence their career uncertainties, was the institutions that they attended. For instance, a student commented this way:

The secondary school I attended did not have any technical programme I aspired to read and as result, was compelled to offer programme I did not want. This supported my career decision uncertainty (Ama).

One remarked this way:

Friends had little opportunity to influence my career decision uncertainty at the basic and secondary levels of my education (Kojo).

Societal and family demands

On the theme Societal and family demands as sources of past students' career decision making difficulties, the participants' responded this way.

One of the participants stated that:

The society and parents' demands, to my opinion, were sources of my career decision uncertainties. The parents' demands were at times in conflict with my expectation. The Society was also lacking the enabling environment for one to explore his or her talents and expectations (Kwame).

Again, another mentioned that:

The family is the immediate source of one's career guidance. They are supposed to give the requisite guidance and support to the child. Unfortunately for me, my parents were semi-literate and could not guide me on my career (Kwasi).

Guidance services provided in schools

Regarding guidance services provided in schools, as sources of past students' career decision making difficulties, one of the participants stated that:

Another also mentioned that:

I felt at ease to use my hands (skills) and my family expected me to be bookish. The school counselling is a source of career decision uncertainty because school counselling give counsel limited to the scope of the school. Students are not expose to programmes and courses not mounted in the school (Kwabena).

On the issue of the effectiveness of the school counseling unit, one stated that:

The school counselling unites were ineffective and could not offer me enough information pertaining to my career. I was left to make any choice of my own without in-depth knowledge of my choice (Kwame).

On student added that:

The general education process also contributed to my career decision uncertainties. The general education did not provide opportunity for me to explore the various career opportunities. There were so many courses I studied which did not have any correlation with my career (Ama).

Another also remarked that:

Most of my friends were illiterate and semi-literate who could not mentor me or guide me on my career decision (Kojo).

Finally, another commented this way:

Our family expectation, labor market and learning environment are sometimes other factors that affect our career decision (Kwaku).

On the issue of the sources of students' uncertainty, the participants' responses from the interview revealed that family and societal demands were key factors which brings about students' uncertainties. It was also pointed out that the general education is a factor. The general education does not provide opportunity for students to explore the various career opportunities. Again, it also came to light that the kind of guidance and counseling services provided in schools is not helpful enough for students. Also, friends, family expectation, the labour market and that of the learning environment were all factors responsible for most career uncertainties.

Summary of Findings

Regarding how the students' experience influences their career uncertainties, it was revealed that the micro environment, thus the immediate family and the macro environment, which is also the community or the general society were very influential to the students' career decision making and eventually their career uncertainties. Again, it was pointed out that the students' own aspirations and values were also other factors which influence career decision making processes. Also, it was realized that the students' family background was one of the experiences which influence their career uncertainties.

Furthermore, the participants stated that the society/community (macro environment) and family (micro environment) demands were strongly the factors which influence their career decision making, when their views were sought on the perceived factors influencing their career choice. According to the participants, these factors restricted their career decision making, and they are usually compelled to accept what the environment offered. The participants responses also showed that pressure from their peers, friends, and the general society, played a major role in their career decision uncertainties, because these people are always expecting participants to choose a particular career. These expectations went further to influence most participants choice of programme to be read in school. Also, regarding the coping strategies students use to overcome career uncertainties, the participants mentioned reading or learning about the uncertainty as the best option to deal with uncertainties.

CONCLUSION

The study concluded that the participants' (students) environment, as well as their own aspirations and values were the major factors which influence their career decision making processes. Additionally, the family and societal demands, peer influence as well as the general education, and school counseling on job opportunities available for reading a particular programme also played a critical role in their career decision making. Past students' career interests are capable of developing along any direction conditioned by circumstances. These circumstances could be education, family influence, gender, occupational aspirations of the individual, peer influence, and many others. They derive satisfaction from identifying themselves with some groups by which they mean to attain their status in life. The process of identifying themselves is enhanced or thwarted by the individual's ability to overcome any intervening obstacles on the way. If the obstacles are insurmountable to the individual, their self-concept changes and they tend to form a new pattern of interest which is more compatible with their aptitudes.

Recommendation

Based on the findings and conclusions drawn from the study, below are some recommendations made to some key stakeholders such as parents, students and counsellors, educational institutions for consideration.

1. Educational institutions should ensure that career choice is incorporated in the school curriculum so that right from the start at the Basic level, students would know what should go into their choice of careers.
2. Also, the Ghana Education Service should ensure that more career guidance seminars be held for students and their parents at the various institution levels so as to help the students know the right factors to consider when choosing a career.

3. The university should also introduce career consultation services and make it compulsory for every student to do and it should be monitored. This would enable most students who would not have looked for help in career choice to seek for help because it is compulsory.
4. Parents should not restrict their wards on their choice of careers, or choose careers for them but allow them to look within them and choose a career that is best in their interest. For parents, to get this information, educational counsellors on career choice can educate parents through the mass media on the importance of allowing their wards to choose their own careers.

REFERENCES

- Adebowale, T.A. (2011). Perceived availability of Guidance and Counselling Services among tertiary institution students in selected South West Universities in Nigeria. *Ife Psycholgia*, 19(1):361-374.
- Armstrong-Stassen, M. (1997). The effect of repeated management downsizing and surplus designation on remaining managers: An exploratory study. *Anxiety, Stress, and Coping*, 10, 377-384.
- Arthur, F. (1992). Organizational values, work experiences, and satisfactions among Australian psychologists. *International Journal of Organizational Analysis*, 11(2), 123-135.
- Arthur, S. A., Hall, D. & Lawrence, D. (2015). *Innovation in Education*. London: Macmillan.
- Arudo, Y. S. (2008). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Bandura, A., Barbaranelli, C., Caprara, G.V. and Pastorelli, C. (2001), Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72 (1) 187-206.
- Baskshi D. & Gandhi, V. (2012). On the path to college: Three critical tasks facing America's disadvantaged. *Research in Higher Education*, 42(2), 119-149. <http://doi.org/10.1023/A:1026520002362>
- Borchart, Q. (2002). *The Case for College and Career Pathways: A Research Summary*. Columbia, MD. Retrieved from <http://nc3t.com/wp-content/uploads/2014/08/Case-for-Pathways-A-Research-Summary.pdf>
- Borchert, D. L. (2002). Socio demographic moderators of middle school transition effects on academic achievement. *Journal of Early Adolescence*
- Brown, D. (2002). The role of work and cultural values in occupational choice, satisfaction, and success: A theoretical statement. *Journal of Counseling and Development*, 80: 48-56.
- Bryman, A. (2008). *Social research methods*. Oxford: Oxford University Press, Inc.
- Bullocks, A., Lusky, M., Hayes, N., Makinde, D. & Alao, W. (2015). *Career-Ready Students: A Goal of Comprehensive School Counseling Programs*. *The Career Development Quarterly*, 61, 283-288. doi: 10.1002/j.2161-0045.2013.00057.x
- Carlos (2009). *Factors Involved in the Choice of Dentistry as an occupation by Pernambuco Dental Students in Brazil*, unpublished Ph.D Thesis, Brazil. Chance Clutter B.A, (1995). *The effects of parental influence on their children's career choices* Fort Hays State University.
- Carter, S. (1940). *Today's teens*. Peonia: Class Bannet Co Inc.
- Chen, C.P. (1997). Career projection: narrative in context. *Journal of Vocational Education & Training*, 49 (2), 311-326.
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research (4th ed.)*. Boston: Pearson Education.
- Dandy, J. and Nettelbeck, T. (2002). A cross-cultural study of parents' academic standards and educational aspirations for their children. *Educational Psychology*, 22(5) 621-627.

- Daniels, L. M., Stewart, T. L., Stupnisky, R. H., Perry, R. P., & LoVerso, T. (2011). Relieving career anxiety and indecision: the role of undergraduate students' perceived control and faculty affiliations. *Social Psychology of Education*, 14(3), 409-426.
- Dekker, G. & Schaufeli, L. (1995). Perceived social status and learning experiences in Social Cognitive Career Theory. *Journal of Vocational Behavior*, 80(2), 351-361. <http://doi.org/10.1016/j.jvb.2011.10.001>
- Dordrecht, Netherlands: Springer. Gall, M., Gall, J. & Borg, W. (2007). *Educational research: An introduction* (8th ed.). New York: Pearson Education.
- Dryler, S. K. (1998). *Career development reports: A new initiative in student career perceptions*. Belmont, CA: Wadsworth Publishing Company.
- Duodu, F. (2000). *Designing effective instruction: Applications of instructional design*. Accra: Wilson & Sons.
- Esters, Q. (2007). Career-choice readiness in adolescence: Developmental trajectories and individual differences. *Journal of Vocational Behavior*, 79(2), 340-348.
- Everitt, B. S. & Skrondal, A. (2010). *The Cambridge Dictionary of Statistics*, Cambridge University Press.
- Fabea, I. B. (2012). Factors that influence the career choices of university of Cape Coast students. Unpublished Masters' Thesis submitted to the Faculty of Education, University of Cape Coast, Ghana.
- Farrar, M. (2009). Implications for an Aging Workforce. *Journal of Education for Business*. <http://doi.org/10.3200/JOEB.82.1.50-55>
- Ferry, N. M. (2006). Factors Influencing Career Choices of Adolescents and Young Adults in Rural Pennsylvania. *Journal of Extension* 44(3): 3RIB7:1-6.
- Fisher, C. & Geiggs K. (1995). The graduate attributes we have overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development*. <http://doi.org/10.1080/07294360802444347>
- Fortner, T. (2004). *Redefining the Goal: The True Path to Career Readiness in the 21st Century*. Create Space Independent Publishing Platform.
- Fosu, S. A. & Poku, k. (2014). Mothers' and Adolescents' Perception of AIDS Vulnerability. *International Journal of Behavioural Development*, Vol. 27, (4) pp 347-354.
- Fouad, E., Johnson, K., Breen, D.J., & Drew, D.L. (2006). Who Sees the School Counselor for College Information? A National Study. *Professional School Counseling*, 12(4), 280-291.
- Gaffner, David, C, Hazler, Richard J. (2002). Factors related to indecisiveness and career indecision in undecided college students. *Journal of college student Development*. <http://www.findarticles.com/p/articles/miqa3752/is200205/ain9078714/pg>.
- Gati, H. & Vertsberger, V. (2016). Student Future Outlook and Counseling Quality in a Rural Minority High School. *The High School Journal*, p. 27-41. doi: 10.1353/hsj.2004.0017.
- Gati, H., Johnson, W., Rochkind, R. P. & Ott, A. (2011). Using the Career Decision Making System to Enhance STEM Opportunities for Secondary Students. *Career Planning and Adult Development Journal*, Summer 2013, 116-126.
- Gati, I., & Tal, S. (2008). Decision-making models and career guidance. In J. A. Athanasou, & R. van Esbroeck (Eds.), *International handbook of career guidance* (pp. 157-185).
- Gati, P. & Asher, C. (2001). *Strengths-Based School Counseling: Promoting Student Development and Achievement*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gati, P. Kruasz, R & Osipow, D. (1996). *Social Learning Theory*. Englewood Cliffs, N.J. Prentice – Hall.
- Gavarella, N. & Omodei, A. (1991). Defining and measuring college and career readiness: A validation framework. *Educational Measurement: Issues and Practice*, 32(4), 16-27. <http://doi.org/10.1111/emip.12016>
- Germeijs, J., Herr, E., Cramer, L. & Niles, Q. (2006). Preparation for the school-to-work transition: the views of high school students. *Journal of Vocational Behavior*, 61, 202-216.
- Gordon, V. N., & Steele, G. E. (2015). *The undecided college student: An academic and career advising challenge*. Springfield, IL: Charles C Thomas Publisher.
- Gostein, S. (2000). Social cognitive influences on Mexican Americans' career choices across Holland's themes. *Journal of Vocational Behavior*, 76(2), 198-210. <http://doi.org/10.1016/j.jvb.2009.11.002>
- Gostein, T. (2003). *Attitudes to flexible working and family life*. New York: Joseph Rowntree Foundation Policy Press.
- Guichard, J., & Dumora, B. (2008). A constructivist approach to ethically grounded vocational development interventions for young people. In J. A. Athanasou, & R. van Esbroeck (Eds.), *International handbook of career guidance* (pp. 187-208). Dordrecht, Netherlands: Springer.
- Harriot, Q. (2001). Relationships among career thoughts, vocational identity, and calling: Implications for practice. *Career Development Quarterly*, 61(3), 240-248. <http://doi.org/10.1002/j.2161-0045.2013.00052.x>
- Heaney, K. L., Isreal H. & House, k. (1994). Precursors of learning experiences in Social Cognitive Career Theory. *Journal of Vocational Behavior*, 71(3), 319-339. <http://doi.org/10.1016/j.jvb.2007.08.002>
- Herr, E.L., Cramer, S.H. & Niles, S.G. (2004). *Career guidance and counselling through the lifespan: Systematic approaches* (6th ed). Boston, MA: Pearson.
- Hewitt, J. (2010). Factors influencing career choice. Cited from www.ehow.com on 7/12/2019.
- Hijazi, R., Feller, Q., Russell, S. & Whichard, F. (2005). The Role of Parental Influences on Young Adolescents' Career Development. *Journal of Career Assessment*, 16(2), 198-217. <http://doi.org/10.1177/1069072707313206>
- Hocon, H. (2012). Enrollment, persistence and graduation of in-state students at a public research university: Does high school matter? *Research in Higher Education*, 49(8), 776- 793. <http://doi.org/10.1007/s11162-008-9105-8>
- Homer, M. S. (2001, January). Factors influencing persistence among African American upperclassmen in psychology. Paper Presented at the Annual Meeting of the American Education Research Association, Chicago, IL.
- Ipaye, T. (1986). *Guidance and counselling practices*. Ile-Ife: University of Ife Press.
- Issa, A. O. and K. Nwalo (2008). Factors affecting the career choice of undergraduates in Nigerian library and information science schools. *African Journal of Library, Archives and Information Science*. From <http://findarticles.com/p/articles>.
- Izumi, H. (2005). College-readiness is not one-size-fits-all. *Current Issues in Education*, 16(1).
- Jamali, D., Lonborg, G. L. & Bowen, I. E. (2015). Aligning School Counseling, The Changing Workplace, and Career Development Assumptions. *Professional School Counseling*, 6(4), 262-271.
- Johnson, M. (2004). An investigation of the willingness of managerial employees to accept an expatriate assignment. *Journal of Organizational Behaviour*, 17, 267-284.
- Jordaan, Y., Smithard, C., & Burger, E. (2009). Comparing levels of career indecision among selected honours degree students at the University of Pretoria. *Meditari Accountancy Research*, 17(2), 85-100.

- Kankam, G., & Onivehu, A. O. (2000). Principles of guidance and counselling. Accra: K'N' A.B. Ltd.
- Kaplan, H. B. (1996). Perspectives on psychosocial stress. In H. B. Kaplan (Ed.), Psychosocial stress (pp. 3–28). San Diego CA: Academic Press.
- Kelly, V. & Lee. D. S. (2002). College knowledge: a critical component of college and career readiness. *New Directions for Youth Development*, 2010(127), 75–85. <http://doi.org/10.1002/yd>
- Kerka, S. (2000). Career development, gender, race and class. Eric Clearing house on adult career and vocational education Columbus. ED 421641.
- Kleiman, F., Martin, D. & Carey, S., Maluwa-Banda, L. (2004). *Developing and Managing Your School Guidance Program* (5th ed.). Alexandria, VA: American Counseling Association.
- Koriir, G. (2012). Definition of College and Career Readiness. Retrieved from www.epiconline.org
- Krumboltz, J.D. (1998). Counsellor actions needed for the new career perspective. *British Journal of Guidance and Counselling*, 26(4):559-564.
- Ladany, Y., Martin, L., Kargbo, D.M., Wilhelm, R.G., Martin. K. F. & Carey, W. (2007). Connecticut Professional School Counselors: College and Career Counseling Services and Smaller Ratios Benefit Students. *American School Counseling Association*, 16(2), 117-124.
- Lansescu, Y. (2009). Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice, and Performance. *Journal of Vocational Behavior*, 45(1), 79–122. <http://doi.org/10.1006/jvbe.1994.1027>
- Lazarus, R. S. (1991). Psychological stress in the workplace: Handbook on job stress [Special issue]. *Journal of Social Behavior and Personality*, 6(7), 1–13.
- Lessor N. (2005). Developing counseling psychology in Chinese communities in Asia: Indigenous, multicultural, and cross-cultural considerations. Manuscript submitted for publication.
- Levine, D. (2014). *Even you can learn statistics and analytics: An easy to understand guide to statistics and analytics*, (3rd Ed). Pearson FT Press.
- Lin, W., Tien, E. & Xie, R. (1990). *Counselling in Schools: A Survey of the Views of School Staff and Pupils in Northern Ireland*. Belfast: National Society for the Prevention of Cruelty to Children.
- Liu, W., Hao, L. & Li, T. (2006). Behaviour Therapy and Models of Man. *American Psychologist*, Vol. 29, pp859-869.
- Lustiny, K., McKay, A., Bright, K. & Pryor, G., Maze. B. (2016). The Experiences of the Rural School Counselor. *Professional School Counseling*, 3(3), 197-208.
- Macgregor, J. (2007). *The College and Career Readiness and Success Organizer*. Washington DC. Retrieved from http://www.ccrscenter.org/sites/default/files/College and Career Readiness and Success Organizer Brief_FINAL.pdf
- Macmahom, F. & Watson, W. (2015). *Preparing High School Students for Successful Transitions to Postsecondary Education and Employment*. Issue Brief. National High School Centre, August.
- Maingi, F. (2007). Multiculturalism,' In Bayne, R. Horton, I. and Bimrose, J. (Eds) *New Directions in Counselling*. London: Routledge
- Mak, A. S., & Mueller, J. (2000). Job insecurity, coping resources and personality dispositions in occupational strain. *Work & Stress*, 14, 312–328.
- Mantler, J., Matejicek, A., Matheson, K & Anisman, H. (2005). Coping with employment uncertainty: A comparison of employed and unemployed workers. *Journal of Occupational Health Psychology*, 10 (3): 200–209.
- Matheson, H, & Arisman, D. G. (2003). *College Readiness Begins in Middle School*. ACT Policy Report. American College Testing ACT Inc; 33pp. 2001.
- Mau, Q. (2004). *Social Foundations of Thought and Action: A Social Cognition Theory*. Englewood Cliffs, N.J. Prentice – Hall.
- McKay, E., Bright. H. & Pryor, V. (2005). *Status of Education in Rural American*. Washington, DC: National Center for Education Statistics.
- McQuerry, L. (2007). *High School Career Academies: A 40-Year Proven Model for Improving College and Career Readiness*. American Youth Policy Forum.
- Mohr, G. B. (2000). The changing significance of different stressors after the announcement of bankruptcy: A longitudinal investigation with special emphasis on job insecurity. *Journal of Organizational Behavior*, 21, 337–359.
- Morgan, H. & Ness, P. Y. (2003). A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. *Journal of Adolescence*, 34(1)
- Mtemeri, J. (2019). Family influence on career trajectories among high school students in Midlands Province, Zimbabwe. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 9(1), 24–35.
- Muraguri, J. M. (2011). Factors influencing degree choices among female undergraduate students at the University of Nairobi: A case study of the 2010/2011 Cohort. Unpublished MA research project, University of Nairobi.
- Mylonas, T., Foster, S., Young, D. J. & Hermann, W. L. (2012). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557–68. <http://doi.org/10.1037/a0033446>
- Natalie, M. (2006). Factors influencing career choice among high school students in Tanzania. *Journal of Dental Education*, 64 (6) 423-429.
- Navin, D. S. (2009). *Effects of dating and parental attachment on career exploration*. USA: University of New Hampshire.
- Neapolitan, L. R. (1992). College and career readiness: same or different? *Educational Leadership*, 69(7), 28–34.
- Njeri, M.B. (2013). Factors influencing career choices among undergraduate students in public universities in Kenya: A case of Compassion International sponsored students. MA dissertation, University of Nairobi, Nairobi, Kenya.
- Nota, W. (2007). School Counselors' Perceptions of Competency in Career Counseling. *The Professional Counselor*, 4(5), 481-496. doi:10.15241/lwm.4.5.481.
- Olando, C. (2010). *Counselling needs of adults*. Lagos: Joy Press Ltd.
- Olive, M. (2003). Contemporary trends in student selection of medical specialties: The potential impact on general surgery. *Archives of Surgery*, 137(3), 259-267.
- Omotosho, J. L., Wiredu, M. & Otuei, D. (2015). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance*, 13(1), 47–66. <http://doi.org/10.1007/s10775-012-9237-4>
- Omotosho, K. L., & Nyarko-Sampson, L. (2012). Professional Issues in Counselling,' In Palmer, S. and McMahan, G. (Eds.). *Handbook of Counselling*. (2nd Ed.). London and New York: Routledge.
- Osipow, S. H. (2003). *Theories of career development*. New York: Prentice Hall.

- Otu, D. (2015). Social cognitive career theory and the prediction of interests and choice goals in the computing disciplines. *Journal of Vocational Behavior*, 73(1), 52–62. <http://doi.org/10.1016/j.jvb.2008.01.002>
- Ouder, D., Massaglia, G., Papenfuss, S., Mason, K. L. & McMahon, D. (2010). *Counseling and College Counseling in America's High Schools*. Alexandria, VA: National Association for College Admission Counseling.
- Owusu, G. M. Y., Essel-Anderson, A., Teddy OsseiKwakye, T. O., Bekoe, R. A & Ofori, C. G. (2018). Factors influencing career choice of tertiary students in Ghana: A comparison of science and business majors. *Education + Training*, 60(9), 992-1008.
- Patterson, P. R. (2003). African Americans: Diverse people, diverse career needs. *Journal of Career Development*, 19(4), 265-279.
- Perte, K. & Patroc. L. (2012). Happiness as a Motivator: Positive Affect Predicts Primary Control Striving for Career and Educational Goals. *Personality and Social Psychology Bulletin*. <http://doi.org/10.1177/0146167212444906>
- Rowland, W. (2004). *Accountability for College and Career Readiness: Developing a New Paradigm*. *Education Policy Analysis Archives*, 22(86), 38. <http://doi.org/10.14507/epaa.v22n86.2014>
- Salami, T. A. (1999). Dysfunctional mentoring relationships and outcomes. *Journal of Management*, 24, 449-467.
- Salawi, Q. M. & Bagudo, W. (2000). *Getting ready for college, careers, and the common core*. San Francisco: Jossey-Bass.
- Sanders, N. K. (2003). *Sociological methods*. New York: McGraw-Hill.
- Schadl, Sheppard & Chen (2017). Career certainty: Differences between career certain and uncertain Engineering students. *American Society for Engineering Education, National Center for Engineering Pathways to Innovation, USA*.
- Shen, L. & Li, F. (2015). The relationship between self-concept and career awareness amongst students. *Asian Social Science*, 9(1), 193–197. <http://doi.org/10.5539/ass.v9n1p193>
- Simpson, B. (2002). Why not engineering? The process of career choice amongst South African female students. *International Journal of Engineering Education*, 16, 470-475.
- Slanten, P. Y. & Baskin, K. (2013). Relational Influences in Career Development: A Qualitative Inquiry. *The Counseling Psychologist*, 29(2), 216–241. <http://doi.org/10.1177/0011000001292003>
- Smith, R. H. (2000) Assimilative and contrastive emotional reactions to upward and downward social comparisons. In J. Suls L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp.173 -200). New York: Plenum
- Sverke, T., Hellgren, W. & Naswall, F. (2002). *Creating College Opportunity: School Counselors and Their Influence on Postsecondary Enrollment*. *Research in Higher Education*, 54(7), 781-804. doi: 10.1007/s11162-013- 9297-4.
- Taylor, B. (2011). *The work of the counsellor*. New Jersey: Prentice-Hall Inc., Englewood Cliffs.
- Taylor, J., Harris, M. & Taylor, S. (2004). Parents have their say about their college age children's career decisions. *National Association of Colleges and Employers Journal*, 64(2):15.
- Taylor, W. (2003). *Handbook of Guidance and Counseling*. Ado – Ekiti Publisher Hope books.
- Taylor, W. (2007). Who can fix the "middle-skills" gap? *Harvard Business Review*. Retrieved from http://doingwhatmatters.cccco.edu/Portals/6/docs/hbrtraining_reprint_12_24_12.pdf
- Tien, H. S., C. Lin and S. Chen. 2005. A grounded analysis of career uncertainty perceived by college students in Taiwan. *Career Development Quarterly* 54(2): 162–174.
- Turner, M. (2002). *Organizational entry: Recruitment, selection, orientation and socialization of newcomers*. MA: Addison-Wesley.
- Vanderstoep, S. W., & Johnston, D. D. (2009). *Research methods for everyday life: Blending qualitative and quantitative approaches*. San Francisco: John Wiley & Sons, Inc.
- Walker, T & Tracey, T. J. G. (2012). The role of future time perspective in career decision-making. *Journal of Vocational Behavior* 81(2):150–158
- Waters, K. & Moore, W. (2002). *Expanding the School Counselor Repertoire through STEM Focused Career Development*. *The Career Development Quarterly*, 60, 25-35. doi: 10.1002/j.2161-0045.2012.00003.x
- Wilson, F. & Wilson, G. L. (1992). *College and Career Ready: Helping All Students Succeed Beyond High School*. University of California Curriculum Integration UCCI Institute, 5. Retrieved from <http://books.google.com/books?id=FvXsnDe7IEgC>
- Yeboah, D. (2019). Current Status of Reproductive Behaviour in Africa. *European Journal of Human Reproduction and Embryology*, Vol. 5 (1) pp1-20.
