

**Effectiveness of Career Guidance and Counselling: A
Study among Higher Education Emirati Female Students
in Northern Emirates**

تأثير الإرشاد والتوجيه المهني: دراسة لطالبات التعليم العالي الإماراتيات في
الإمارات الشمالية

by

SUMAYYA NAJEM JUMAH BAHWAN AL RASBI

**A thesis submitted in fulfilment
of the requirements for the degree of
DOCTOR OF EDUCATION
at**

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ABSTRACT IN ENGLISH

Background: The 21st century has been categorized by globalization, and with continuous changes in the work environment and high demand for new jobs, career guidance and counselling has become an important topic. The education system is giving the new entry students the tools and knowledge to plan for their future, which is one of their primary goals. Career guidance and counselling can give the right direction and tools for students to set their career goals, providing them with a clear understanding of the education and skills that they need to meet their goals and support them in making good career decisions.

Purpose: The purpose of this study was to investigate the influencing factors of higher education students' career choice and to find out the effective career guidance and counselling services that best support undergraduate students in the UAE.

Methods: The researcher employed exploratory sequential mixed methods for this study. The mixed research methods included both qualitative and quantitative methods. These included a student questionnaire, student interviews, career advisor interviews and document analysis.

Results: The main findings of this study indicated that there are two types of career guidance and counselling that have been provided for the students: - individual (face-to-face) sessions and group sessions, which more than 50% of the students like to attend. Also, participant students preferred their parents as the main resource for them in their career major choice with 36% which consider one of factor that effect students' career major choice. Based on the students' and the career advisors' responses, the study additionally found that there are different career guidance services available for the students whenever they need support and guidance.

Implications: Overall, all recommendations indicate the need to increase the awareness of the importance of the role of the career counsellor and students need to refer to their campus career counsellor for any career major issues. It has a beneficial impact on the students within career counselling and guidance activities and the students seek outcomes that are beneficial for their study life and future job because they can practice and improve skills such as: communication skills, leadership skills, time management, critical thinking skills and setting their goals,

ABSTRACT IN ARABIC

المقدمة: تم تصنيف القرن الحادي والعشرين قرن العولمة ومع استمرارية التغييرات في البيئة وارتفاع الطلب على الوظائف الجديدة، أصبح التوجيه والارشاد المهني موضوعاً مهماً. يمنح نظام التعليم الطلاب المستجدين الأدوات والمعرفة المطلوبة للتخطيط لمستقبلهم باعتباره أحد أهدافهم الأساسية. وعلى مدى العقود. يقدم مركز التوجيه والارشاد المهني التوجيه الصائب والأدوات الصحيحة للطلاب لتحديد أهدافهم المهنية وتزويدهم بالمهارات التي يحتاجونها لتحقيق أهدافهم بالإضافة لدعمهم في اتخاذ قراراتهم المهنية الصائبة.

الغرض: الغرض من هذا الدراسة هو دراسة العوامل المؤثرة في الاختيار التخصصي الوظيفي لطلاب التعليم العالي ومعرفة خدمات التوجيه والارشاد المهني التي تدعم طلاب المرحلة الجامعية الأولى في دولة الامارات العربية المتحدة بشكل أفضل.

الطرق: استخدمت الباحثة طرق مختلطة متسلسلة استكشافية لهذه الدراسة، تضمنت طرق البحث كلا من الاساليب النوعية والكمية وتشمل استبيانات الطلاب ومقابلات للطلبة والمستشار المهني بالإضافة الى تحليل المستندات.

النتائج: أوضحت النتائج الرئيسية لهذه الدراسة أن هناك نوعين من التوجيه والارشاد المهني للطلاب وهم الجلسات الفردية (وجها لوجه) والجلسات الجماعية، حيث يرغب أكثر من 50% من الطلاب حضورها. بالإضافة إلى ذلك، هناك عوامل مختلفة تؤثر على اختيار الطلاب، حيث يفضل معظمهم أن يكون أولياء أمورهم هم المرجع الرئيسي لهم بنسبة 36%. بناء على استجابة الطلاب والمستشارين المهنيين، وجدت الدراسة أن هناك خدمات توجيه وارشاد مهني مختلفة متاحة للطلاب ومن هذه الخدمات: جلسات جماعية وجلسات فردية لارشادهم للمسار والاختيار الصحيح بالإضافة الى الاختبار الوظيفي الذي يقيس مدى اهتماماتهم وميولهم لمعرفة التخصص المناسب لمسار دراستهم.

الآثار المترتبة: تشير جميع التوصيات بشكل هام الى الحاجة إلى زيادة الوعي بأهمية دور المستشار المهني وأن الطلاب في حاجة إلى الرجوع الى المستشار المهني في حال مواجهة أي عائق أو مشكلة في الاختيار الصحيح. يقدم برنامج التوجيه والارشاد المهني تأثيرا ايجابيا على اختيار الطالب للتخصص الصحيح، بالإضافة الى ذلك، ان هذا البرنامج له تأثير مفيد على الطلاب في أنشطة التوجيه والارشاد المهني ويسعى الطلاب الى الحصول على نتائج مفيدة لحياتهم الدراسية ووظيفتهم المستقبلية من خلال التدريب المستمر وتحسين المهارات من مثل: مهارات الاتصال، ومهارات القيادة، وإدارة الوقت، ومهارات التفكير النقدي وتحديد اهدافهم لزيادة من انتاجيتهم وانجازاتهم من خلال عملية الاختيار للتخصص.

DEDICATION

This thesis is dedicated to my lovely parents who believe in me and inspire me each day with their love to be able to make a difference in my life and to become a productive and successful person. I am very grateful for their support and encouragement to me.

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TABLE OF CONTENTS

LIST OF FIGURES.....	iv
LIST OF TABLES.....	vi
LIST OF ABBREVIATIONS.....	viii
CHAPTER ONE: INTRODUCTION.....	1
1.1 CONCEPTUAL ANALYSIS & DEFINITIONS OF TERMS.....	5
1.2 Higher Education and Career Guidance and Counselling in UAE	6
1.3 STATEMENT OF PROBLEM	10
1.4 PURPOSE AND QUESTIONS OF THE STUDY.....	12
1.5 RATIONAL OF THE STUDY	13
1.6 Organization of the Research	14
CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW	15
2.1 OVERVIEW	15
2.2 THEORETICAL FRAMEWORK	16
2.2.1 Career Decision Theory	17
2.2.2 Social Cognitive Career Theory	22
2.2.3 Vocational Personalities Theory	27
2.2.4 American School Counsellor Association National Model.....	32
2.3 LITERATURE REVIEW	35
2.3.1 Career Development	35
2.3.2 Career Guidance Process	39
2.3.3 Importance of Career Counsellors	41
2.3.4 Factors Affecting Students' Career Choices	52
2.3.5 Career Guidance and Counselling Internationally	57
CHAPTER THREE: METHODOLOGY.....	64
3.1 Research Approach.....	64
3.1.1 Mixed Method Approach.....	65
3.1.2 Explanatory Sequential Mixed Method Case Study Approach and its Philosophy	70
3.2Methods.....	74
3.2.1 Context, Site, Population and Sampling Selection	75
3.2.2 Data Collection Instruments	77
3.2.2.1 Questionnaire	78

3.2.2.2 Interview	83
3.2.2.3 Document Analysis	86
3.3 Ethical Considerations	88
3.4 Data Analysis Process	89
3.5 Summary	91
CHAPTER FOUR: DATA ANALYSIS AND FINDINGS	92
4.1 Quantitative Results	92
4.1.1. Demographic of the Study	93
4.1.2. Reliability of the Study	94
4.1.3 Tests of Normality of the Study Variables	95
4.1.4 Distribution of Participants' Responses of the Different Categories	96
4.1.5 T-Test Results of Career Guidance and Counselling	119
4.1.6 Descriptive Study of Career Guidance and Counselling	121
4.1.7 Key Finding of Quantitative Data	125
4.2. Qualitative Results	126
4.2.1 Interview Analysis	126
4.2.2 Document Analysis	135
4.2.3 Key Finding of Quantitative Data	139
4.3 Summary of Data Collection Finding	140
CHAPTER FIVE: DISCUSSION, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS	141
5.1 Discussion	141
5.1.1 Types of Career Guidance	141
5.1.2 Factors Influencing Students' Career Choice	143
5.1.3. Effectiveness of Current Available Career Guidance Services	146
5.2 Conclusion	149
5.3 Research Recommendations	151
5.4 Professional Implications	151
5.5 Practical Implications	152
5.6 Limitations	152
REFERENCES	154
APPENDICES	195
Appendix 1: Career Questionnaire for Students (Adopted from Ndung (2008))	195
Appendix 2: Career Questionnaire for Students in Arabic	201

Appendix 3: Interview Questions for Students	207
Appendix 4: Interview Questions for Career Advisors (Adopted from Ndung (2008))	208
Appendix 5: Consent Form	209
Appendix 6: Document Analysis Guide	212
Appendix 7: In-House Workshop Form	213
Appendix 8: Program Choice Consent Form	214
Appendix 9: Ethical Approval from BUiD	216
Appendix 10: Letter from BUiD.....	217
Appendix 11: Approval Letter from Research Site	218
Appendix 12: Workshop Evaluation Form.....	219

LIST OF FIGURES

Figure 1: Career Guidance Development Theories

Figure 2: Personal, contextual, and experiential factors affecting career

Figure 3: Holland's hexagonal model defining the interactions among personality types and associated work environments

Figure 4: Sequential Explanatory Mixed Methods Design

Figure 5: Basic Types of Designs for case studies

Figure 6: Triangulation Design

Figure 7: I understand what a career means

Figure 8: I'm aware of the various careers available in the country

Figure 9: I know the training requirements for various careers

Figure 10: I know my career interests

Figure 11: I know the career that would give optimum satisfaction

Figure 12: I know my career capabilities and limitations

Figure 13: I have made my own career choice

Figure 14: I consulted professionals in my career of choice

Figure 15: I have read & explore the market to make my career choice

Figure 16: I have obtained enough knowledge on my career choice

Figure 17: I chose my career major because it's my parent's choice, my family business, I followed my best friend's choice, and based on my teachers' opinions

Figure 18: Career Guidance and Counselling assist an individual in dealing with career issues

Figure 19: Career Guidance and Counselling assist an individual in dealing with career issues based on major

Figure 20: Career Guidance and Counselling assist student to make educational plan & to access to career information in order to make appropriate career choice

Figure 21: Career Guidance and Counselling make a positive difference in an individual's career choice

Figure 22: I would advise all students with career issues to consult the college counsellor

Figure 23: Career tests and assessments are useful in understanding individual differences, personality, interests, values and abilities

Figure 24: Career guidance and counselling assist students on how to make career major choice basing on their career aspirations

Figure 25: Career guidance and counselling department invite useful speakers on various career issues

LIST OF TABLES

Table 1: Types of career guidance services in Sweden

Table 2: Feature of qualitative and quantitative methods

Table 3: Summary of qualitative and quantitative methods

Table 4: Methods used for research questions of the study

Table 5: Number of participants in each phase

Table 6: Reliability statistics

Table 7: Interview participants per major

Table 8: Demographic results by age

Table 9: Demographic results by major

Table 10: Demographic results by academic year

Table 11: Demographic results by changed major

Table 12: Reliability results of the study

Table 13: Tests of Normality of the study

Table 14: Distribution responses related to status

Table 15: Overall distribution responses

Table 16: Distribution of the career planning

Table 17: Distribution of the career awareness

Table 18: I have consulted a college counsellor on my career choice

Table 19: Statistical analysis of participants' responses to career major choice based on different opinions

Table 20: Distribution of the career role

Table 21: Statistical analysis of participants' responses to perceptions of the role of career guidance and counselling

Table 22: t-test results

Table 23: Comparison analysis by age

Table 24: Comparison analysis by major

Table 25: Comparison analysis by current year

Table 26: Summary of document analysis use for this study

LIST OF ABBREVIATIONS

ASCA: American School Counsellor Association

BUiD: British University in Dubai

CCG: Career Coach Guide

CCLC: Center for Campus Life Culture

CDG: Comprehensive Developmental Guidance

CIS: Computer Information Science

CV: Curriculum Vitae

HCT: Higher College of Technology

HEIs: Higher Education Institutions

MOE: Ministry of Education

MOEST: Ministry of Education, Science and Technology

MOHESR: Ministry of Higher Education and Scientific Research

NCDA: National Career Development Association

NQA: National Qualification Authority

OECD: Organization for Economic Co-operation and Development

PEF: Person-Environment Fit

RIASEC: Realistic, Investigative, Artistic, Social, Enterprising and Conventional.

RRC: Researcher Review Committee

SAGES: Standing Conference of the Association for Guidance in Education Setting

SCCT: Social Cognitive Career Theory

SNU: Seoul National University

SPSS: Statistical Package for the Social Science

TSP: Technical Science Program

UAE: United Arab Emirates

UAEU: United Arab Emirates University

UNESCO: United Nations Educational, Scientific and Cultural Organization

USA: United State of America

ZU: Zayed University

CHAPTER ONE: INTRODUCTION

The 21st century has been categorized by globalization and continuous changes in the work environment and with more flexibility which leads career guidance and counselling to become an important topic (Hughes & Karp 2004). The education system is giving the new entry students the tools and knowledge to plan for their future, which is one of their primary goals. Over the last two decades, education and career guidance and counselling has become more important for students, parents, teachers and career counsellors. A well-planned and high-quality career education is important for students and their parents to help them in understanding the changes in education and in the job market (Vintere & Balode 2016). Career development plays an essential role in helping the labour markets and education systems to meet their goals and objectives. A number of research studies show that new entry students over the world are usually unable to make a career- choice decision (Bandura et al. 2001; Cherian 1991; Forawi, 2014; Issa & Nwalo 2008; Macgregor 2007; McMahon & Watson 2005; Watson et al. 2010). Regardless of the large range of career major choices available for the students, career guidance and counselling are still needed to help the students to choose effectively and this is well-planned in many developed countries (Forawi 2014; Varalakshim & Moly 2009). The development and implementation of career guidance and counselling services has therefore been an important topic of concern in higher education institutions internationally.

Career guidance and counselling has to expanded to students of different academic levels to meet their needs but at the same time it has not be restricted to problem solving but outdated paradigm to prepare the students for making critical career decisions for their study and career development (Educational Commission 2000). Ali and Graham (1996) stated that effective career guidance is

a process which aims to equip individuals with a clearer understanding of themselves and their potential for future career development and it helps individuals to assess their career development needs at various points in their lives, understanding the process of effective choice of a career, clarify their objectives for the future and take appropriate action to implement these objectives. (p.8)

Oye et al. (2012) added that career guidance and counselling are like a process, and techniques are used by career counsellors to help students to cope with their problems either in their career path or in their life, so that the students can become more active and useful in their society.

Furthermore, the possible effects of career guidance and counselling could be understood at three different levels: individual, organizational and societal. At the individual level, possible benefits for students could be through being able to manage their choices of learning and be able to have a career decision. At the organizational level, the possible benefits for the learners could be through identifying and entering learning and training programmes that meet their needs and be able to fit themselves in the right career that matches their requirements. At the societal level, career guidance assists access to learning and work opportunities and enables greater effectiveness in allocating human resources (OECD 2004).

According to Oigo and Kaluyu (2016), one of the challenges of career guidance experts in higher education that this study is focusing on is to find out effective career guidance and counselling services for students, with appropriate career management skills to help the students in their career decision-making. In order to effectively increase the use of the guided curricular pathways, universities and colleges need to renew their concentration on career guidance and counselling programmes that help students to identify and enter the appropriate programme of their interest and goals. Dabula and Makura (2013) agreed that career guidance and counselling programmes should aim to develop students' skills in their study and personal life and implement career education into the curriculum. A number of research studies show that career guidance and counselling in higher education are important to be implemented for students with appropriate career skills to ensure that they are in the right path of their career decision (Ibrahim, et al. 2013; Lairio & Penttinen 2006; Lugulu & Kipkoech 2011). Moreover, Tambuwal (2010) added that guidance means to assist, lead, direct, plan, manage and interact; while counselling can be seen as the process of helping the person in his or her problem to clarify his or her goals. From this, it is decided that guidance is a combination of services while counselling is just one service under guidance (Durojaiye 1974). Commonly, Modo (2008), Okonkwo and Anagbogu (2002), and Okoye et al. (2000) stated that guidance is an interactional relationship designed to lead personal development to effectively include decision-making.

It is very important to emphasize that career guidance theories must reflect the context factors, the specific career guidance policies necessary and the structure required for the labour market

(Sultana & Watts 2008). Many educational experts mentioned that the high rate of unemployment among undergraduates is caused by their own and their parents' mistakes in making career decisions. This issue leads to raising an important question for career guidance and counselling practice in higher education institutions about the students' career choice, which is based on their interests, abilities and passion, and future career opportunities (Loan & Van 2015).

Career guidance and counselling can give the right direction and tools for students to set their career goals, providing them with a clear understanding of the education and skills that they need to meet their goals and support them in making good career decisions (Hughes 2004; Zunker 2006). Several influences have been discussed in different literature that have a direct and indirect impact on students' career choice. In the 1990s, Hershey et al. (1999) stated that career development became more widespread in many developed countries, and in higher education, career guidance and counselling are a very important implication for students' future career and life. On the other hand, Leach and Patall (2013) stated in their study that the low level of undecided students on the career major choice results in low motivation, affecting the students' academic performance and their career major decision. Another study by Khamadi, Bowen & Oladipo (2011) pointed out that low career adolescence levels of students was noted by a lack of preparation for career decision-making, as some of the students selected the career programme/major preferred by their parents rather than selected based on their knowledge of occupations.

One of the most notable student preferences is seeking advice from others in their social, academic and economic circles as opposed to exclusively relying on career counsellors (Niles, Amundson & Neault, 2011). The extent of this influence on the decision-making process exceeds international borders as the individual students look to trends in society to make their decisions. There is a significant possibility of the students making the wrong choices about their career major based on the internal and external environment, as explored in this part. That reality is responsible for the active concern to include career guidance and counselling as part of the learning curriculum to improve the chances of being better prepared for future decision-making (Niles, Amundson & Neault 2011).

The European Commission Council endorsed having high-quality career guidance and counselling to support our students in their career major choice that meets their personality, ambitions and interest, shifting within education or from education to job market and to reduce

the dropout from education due to the wrong career decision (Redecker et al. 2011). Redecker et al. (2011) added that having up-to-date and high-quality career guidance and counselling available for students at an early stage is important to help them understand their own strengths, weaknesses, interests, talents, study options and job market opportunities. The career guidance and counselling services help students by ensuring that they are on the right path and most likely to be engaged to achieve their potential. From there they can move forward to their chosen destinations in their education and in their future work as well.

Additionally, there should be a positive interaction between students' career planning, knowledge of the world of work, career exploration, knowledge of occupations and career decision-making to be truly ready to make their career major choice and this can happen if there is effective intervention, such as career training, availability of career guidance materials, and career counselling services (Sultana & Watts 2008). That is why career advisors and counsellors are called on to contribute in the career decision process to help students to make their decision based on self-assessment and knowledge of the labour market and its needs, and they do not focus only on their personal development, but also on the economic growth of the country and how to be effective in the labour market in creating their professional career (Ajowi & Simatwa 2010; Auni et al. 2014; Kelechi & Ihuoma 2011; Mapfumo & Nkoma 2013; Onyinyeowuamanam 2015; Yuk Yee & Brennan 2004).

Researcher interests in this topic as it related to frequent cases she faced in her workplace. Most of the students keep changing their major after studying the current major around one or two years because they choice the wrong major. This might happen because they might find it's not related to their interests or not matching their personality, or they might figure out that they might not find a prefect job related to their major in the future. Other reason, it might happen because the lack of communication between student and career counsellor.

1.1 CONCEPTUAL ANALYSIS & DEFINITIONS OF TERMS

In this research, researcher used common terms for this study as indicated below:

Career: the interaction of work roles and other life roles over a person's lifespan including both paid and unpaid work in an individual's life. People create career patterns as they make decisions about education, work, family and other life roles.

Career Awareness: the extent to which an individual student perceives the self, the world of careers, and the relationship between self and an appropriate career. A student with a good understanding of these attributes has a high level of career awareness.

Career Decision: the process of pinpointing a career of choice after considering all factors highlighted in career awareness, career guidance and career counselling.

Career Guidance: the process of providing an individual with career information and information about the world of work (information, exploration). This term is used interchangeably with vocational guidance.

Counselling: Actively listening to an individual's story and communicating understanding, respect and empathy; clarifying goals and assisting individuals with the decision-making process. Counselling is a mutual relationship between a counsellor (a professional trained helper) and a client (a consumer of counselling services).

Career Counselling: a largely verbal process in which a counsellor and counselee(s) are in a dynamic and collaborative relationship, focused on identifying and acting on the counselee's goals, in which the counsellor employs a repertoire of diverse techniques and processes, to help bring about self-understanding, understanding of behavioural options available, and informed decision-making in the counselee, who has the responsibility for his or her own actions.

Career Development: the total constellation of economic, sociological, psychological, educational, physical and chance factors that combine to shape one's career.

1.2 HIGHER EDUCATION AND CAREER GUIDANCE AND COUNSELLING IN UAE

Education is one of the top priorities of the United Arab Emirates (UAE). The founding fathers consider it a critical priority to educate the nation. Although the education system is still in its early stages, concerted efforts are being made to fast track the development of quality education in the UAE (Kirk 2010).

It is noticeable that further to the founding fathers' efforts to emphasize the importance of education, it has been also followed by the UAE government as one of the UAE 2021 pearls vision to provide a world-class education to all Emiratis to allow them to develop into well-rounded individuals, enhance their educational attainment, and achieve their true potential, contributing positively to society (UAE Vision 2021).

Since the declaration of the UAE in 1971, higher education has become an important aspect of the country's development strategies. The UAE government established the first federal higher education institution in 1977, which is the UAE University (UAEU) under their mission, which is a "... a research focused, student-centred educational experience, the university develops the intellectual, practical, creative and leadership abilities of the nation's men and women while enhancing cultural, social and economic growth" (see UAEU website, 2017). Later, as the local demand for university education grew, the UAE government established other Higher Education Institutions (HEIs): Zayed University (ZU), and Higher Colleges of Technology (HCT). HCT opened in 1988 and has 16 branches throughout the UAE that provide a high quality of education for their students (Kirk 2012).

In the last two decades, with the increasing demand for education, the UAE government has offered semi-governmental institutions like the American University of Sharjah, Ajman University of Sciences and Technology. Eventually, more private higher education institutions were established, like the British University in Dubai, New York University in Abu Dhabi, American University in Ras Al Khaimah, and other private universities and colleges around the UAE (Kirk 2012; Yoon et al. 2017).

The decision that the Emirati students are making to be part of the changing factors of the UAE and contribute to its vision will always start with their choice of study. This is critically connected to a successful career services that are provided to them in different stages of their

education system in high school and most importantly in their foundation year in higher education.

The development of career guidance and counselling in higher education in the UAE is slow because there are limited training opportunities for counsellors, and the knowledge of this path is new in higher education institutions in the UAE. The lack of availability of the UAE graduate career counsellor education programme and this shortage of counsellors affects the ability to meet the need to increase the guidance and counselling services in higher education institutions in the UAE (Al Darmaki 2004, 2005; Al Darmaki et al. 2012; Cook et al. 2010; Soliman 1991). Career services exist in some private and public universities and colleges to provide consultation to students (Yoon et al. 2017). In the UAE, at the higher education level, education to fill the employment gap has been a significant issue of concern that raises the question of career guidance and counselling services' effectiveness (Yoon et al. 2017). The portfolio of career guidance and counselling services varies, mostly depending on the programme/major size, scope and available resources, like internships. The internships' adoption into the academic curriculum has been supervised by career services staff in the UAE since 2002 (Yoon et al 2017). Several researchers have pointed out that current career guidance and counselling services in the UAE's higher education have grown to include internships, along with choosing the right major, professionalism orientation, career exploration, how to build a CV and cover letters, among other things (Li 2011; Pope 2000; Yoon et al. 2017; Zhou et al. 2016). Adding to that, career guidance and counselling services deliver a different context of services such as one-on-one advising, workshops, career fairs, and online services like career assessment and career exploration software (Li 2011; Pope 2000; Yoon et al. 2017; Zhou et al. 2016). Moreover, most universities and colleges in the UAE have established career centres staffed by specialists in career counselling and guidance, and the aim of these centres are (Ministry of Education 2012):

1. Assisting students to ensure they make the right career decisions and provide them with career assessment;
2. Arranging one-to-one counselling sessions to help students to match their interest with the right major;
3. Providing different workshops, like writing CV, time management, job interview techniques, setting your goals and other useful workshops;
4. Organizing career fairs and different seminars; and
5. Providing different career resources in the centres to be available for the students.

Several studies highlight that there are no established career guidance and counselling training services in the UAE; however, there are indications that the National Qualifications Authority (NQA) is working on one that could benefit private and public colleges and universities (Al Darmaki, 2004, 2005; Al Darmaki & Sayed, 2009). The NQA has stated that career guidance and counselling services in the UAE has been introduced lately into higher education level with an emphasized background in career guidance or counselling and programme management. (Al Darmaki 2004, 2005; Al Darmaki & Sayed 2009; Al Darmaki & Sulaiman 2008).

It is unlikely that students would like to commit to choosing the right career for future labour market demand, due to the absence of clear and detailed career guidance and counselling (Loan & Van 2015). It has been noticed that “

a lack of well-trained teachers, outdated teaching methods, curricula that are neither relevant nor innovative, limited use of technology in the classroom, and little in the way of academic advice or career counselling are contributing to the mismatch between the outputs of the GCC's education system and the needs of the employment market.”
(Arabiangazette.com 2013, p.3)

In the UAE, the career guidance and counselling services have gone through different challenges and struggles in order to achieve their goals and objectives to meet the demand of the higher education institutions to have a trained career counsellor and to be able to help and support the students (Al Darmaki et al. 2012).

Although many studies have been undertaken regarding the importance of career guidance and counselling at higher education level, many literature reviews showed that such services in higher education are limited and they are of insufficient quality and not well-equipped to handle different challenges in order for the students to make their career major choice decision in many countries, and few have been carried out in Arab countries. Also, there are no studies that addressed to evaluate the career guidance and counselling in the UAE or the Gulf region (Al Darmaki et al. 2012; Al Darmaki & Sayed 2009; Al Darmaki & Sulaiman 2008). Therefore, there is a gap and a need for further studies to explore the effect of career guidance and counselling on the readiness of students to make their career major choice decision in the Gulf region, especially in the UAE. With the current development in technology, new career opportunities could be created rapidly, and many new jobs will exist (Casserly 2012).

Cuban et al. (2001) stated that building a strong workforce in any country comes by having a good standard of basic education. When the discussion is about higher education in the UAE, it is a vital to consider the contextual background as the sector has grown dramatically during the past 25 years. The higher education sector in the UAE has grown by offering government universities/colleges and non-government universities/colleges licensed by the Ministry of Higher Education and Scientific Research (MOHESR) (Tanmia 2004). The enrolment for the academic year 2001–2002 reached 37,548 with 70 per cent of them female. Based on the number of students, the expected number of higher education students went up over 2000 – 2005 of the current century with around 37 per cent (NAPO 2002). The number of UAE national graduates from accredited federal and private higher educational institutions in 2004 is different among colleges and universities/colleges by gender. The largest higher education institution is Higher College of Technology (HCT) with 3321 students (male: 1237; female: 2084) as it has 16 campuses around the UAE, then UAE university comes with 2531 students (male: 438; female: 2093). Zayed University comes after them with 379 students only, and 886 students from the private higher education institutions (Tanmia 2004).

Tanmia's (2004) report stated the need to update the curriculum to be oriented with the job market. Since the start of the 1990s, the UAE has had rapid changes economically and socially; Tanmia (2004) and Al-Suwaidi (1999) stress the importance to orient the students to be prepared for the job markets and to help them in their career major choices. However, there is still a limited background of support in helping the students in higher education in the career major choices in the UAE and on the procedures that are offered to the students by the career counsellors.

Currently, there is limited available literature on the importance of the career guidance and counselling in the UAE. Many studies carried out by different researchers show that students dropout from higher education or change their programme/major because they do not choose the right programme/major from the beginning and there is a lack proper guidance and counselling with regards to their career (Bardick et al. 2004; Bryant et al. 2005; Cutler et al. 2006; Jones & Larke 2005; Oigo & Kaluyu 2016; Willcockson & Phelps 2004). Kunnen (2013) agreed that the lack of readiness of students in their career major decision-making is due to ineffective career guidance and counselling services, which is demonstrated by regular programme/major changes, retention problems and an increased number of dropouts from the universities and colleges.

The importance of this topic comes from first, the lack of knowledge about higher education students' career development in the UAE. Secondly, a lack of literature which investigates the higher education career guidance and counselling for the higher education students in the UAE. Thirdly, the need to create a UAE career guidance and counselling model through adopting from international models that will associate all the context factors that influences higher education students' career major choice.

1.3 STATEMENT OF PROBLEM

Students experience social, personal and academic problems either at home or in their study life around the world. The problems might include living in distressed families, drugs, truancy, poor discipline and others. These problems affect the students negatively in their education life (Nziramanga 1999; Robinson 1996).

Nziramanga (1999) pointed out that because of the pressures on some of the families, parents tend to have little time to sit with their children to give them the necessary guidance and they assume that the education campus will provide their children with solutions. United Nations Educational, Scientific and Cultural Organization (UNESCO) (2002) highlighted that "African adults have become more concerned with earning money and are less occupied with many traditional practices that formerly contributed to the upbringing of young people" (p. 2).

Gora et al. (1992) added that the increase in students' problems and the current economic situation has lead to an even more critical need to have an effective guidance and counselling services than in the past. Madhuku (2005) agreed with Gora et al. (1992) when she stated that there are an increased number of psychological and socio-economic problems among the students in their learning process and with that increased number of problems, there is a need for career guidance and counselling services.

There are many challenges connected with intellectual and physical development, social activities and other social attitudes during adolescence. Bruce & Cockreham (2004) acknowledged that the adolescence period has always been a challenging period in a person's life. In the adolescence period, students need help in their growth and to understand and accept themselves and others. That help could be accomplished if the higher education institutions provide an effective career guidance and counselling service.

Adolescence is when students start making their own choices especially for their future and they need assistance in making their choices and deciding on careers (Stead 1987). Hamrin and Erickson (1939) and Kochhar (2003) stated in their studies that they observed that students enter higher education institutions with little knowledge about which courses and careers to follow. Generally, career guidance and counselling are a systematic effort to improve the quality of choices and services. Higher education institutions should consider ways to help and assist the students in their career major choices.

On the other hand, many educators think that the students know how to succeed in their life and have the ability to choose for their career path, but in fact, many of the students never learn about attitude and other factors that help them to achieve success. Therefore, educators should provide career guidance and counselling services to their students to lead them to a successful future (Gerler & Herndon 1993). Otwell and Mullis (1997) trust that career guidance and counselling services are important in the education system because it increases the awareness about attitude, behaviours and other factors that are related to successful achievement in their study.

Pope et al. (1998) stated that in Asian countries, students regularly choose their career based on their parent's criteria and they found in their study that Asian students really need help through career guidance and counselling services. Watts and Sultana (2004) stated that career guidance and counselling are well developed in high-income countries, unlike in the Middle East, North Africa and in many developing countries. High-income countries have systematic education systems in place that cater to varying needs of both students and the job market. Higher-income nations possess sufficient resources to protect students from erroneous decision-making as a means of catering to the needs of the labour market (Watts & Sultana 2004). It is important to ensure that graduating students meet the professional requirements of the labour market because it has a direct influence on the performance of the economy in the long-term. Miller and Vetter (1996) stated that in the United Arab Emirates, specialists in career guidance and counselling are few and they are not aware about this field, however, there are career guidance and counselling orientation programmes offered by educational institutions for college freshman year and the college senior year. In these programmes, students are aware with educational options and help them in their decision making. Moreover, these kinds of programmes offer career days where they invite employees from different organizations to offer work opportunities and to recruit potential students for employment after their graduation

Thus, career guidance and counselling services should begin when students enter the school level until they graduate from the higher education level. The present study sought to overview the career guidance and counselling in higher education institutions through a literature review in order to bring this field into perception. Therefore, this study has a twofold purpose: to investigate the influencing factors of higher education students' career major choice and to find out the effective career guidance and counselling services that better support higher education students in the UAE.

1.4 PURPOSE AND QUESTIONS OF THE STUDY

The purpose of this study was to investigate the influencing factors on higher education students' career choices and to find out the effective career guidance and counselling services that best support students in the UAE. The following are the study's main questions:

1. What types of career guidance are provided to higher education students in the UAE?
2. What are the main factors that influence higher education students' career choices as perceived by college students and career counsellors?
3. What are the effective and available career guidance services for new entry students in higher education in the UAE, and how successful are they?

These questions were selected carefully based on the current literature on the career guidance and counselling in higher education institutions in several contexts internationally and a few Arabic countries to find the similarities and differences in order to create an adapted model for career guidance and counselling in the UAE. More discussion of this literature will be covered in the next chapter.

The first question will be focusing on students' needs regarding the career guidance and counselling service and how it could help and prepare them to choose for their career path. Additionally, it will cover the services that are offered by career counsellors to help and students improve academically, foster positive attitudes, develop their skills and decrease the dropout and to find out what is the career guidance and counselling programme they follow for their students.

The second question will be covering the main factors that influence higher education students' career major choices as perceived by higher education students and career counsellors. There are several international factors that impact higher education students' career choices; however,

this study will focus on the most important factors that are related to UAE students in particular, for example: personality, interest, environment, among others.

The third question will be bringing attention to the effective and available career guidance and counselling services for new entry students in higher education in the UAE and measure its success.

1.5 RATIONAL OF THE STUDY

Adolescence is a period of transition in students' life from school level to high education level where undecided students are under stress and they need the support from career counsellor. In the absence of the career counsellor, student keeps changing their major/program after a while of studying because they discovered that it does not meet their interest or fit their personality and this is related to different factors that affect their career major choice, for instance, student after studying around two years in the selected major, student decides to change it because it does not fit her/his personality and the reason of selecting this major because her/his best friend chose it.

There are many challenges connected with intellectual and physical development, social activities and other social attitudes during adolescence. This period considers a challenging period in a person's life. In this period, students need help in their growth and to understand and accept themselves and others. With the absence of career guidance and counselling services, there will be lack of proper career preparation, training, and personality.

While the number of studies on the role of the guidance counsellor continues to increase in the United Arab Emirates, there is limited research and literature available on investigating the influencing factors on higher education students' career choices and the best career guidance and counselling services available for the students.

In light of the understanding gained about undecided students in choosing their major, it should have become apparent that there is an important need for studies to investigate the specific aspects of undecided students and the importance of career guidance and counselling in higher education institutions.

1.6 ORGANIZATION OF THE RESEARCH

This study will be divided into five chapters. Chapter one outlines the background of the study, purpose and aim of the study, research questions and a brief discussion about the questions.

Chapter two includes detailed discussion about the chosen theoretical framework for the study with a review of literature related to the topic. The literature review consists of historical background to the development of career guidance and counselling and the meaning of it. Also, of the career guidance and counselling process which are most available in higher education institutions. The next section will be about the importance and roles of career guidance and counselling in higher education institutions. There is also another section about the factors that affect students' career choices and finally, there will be a review of several bodies of literature about career guidance and counselling internationally.

Chapter three will look at the methodology of this study. The first section will present the research approach of the study and the rationale behind using mixed methods and the sequential explanatory design of this study and its philosophy. The next section will present the method that consists of site and participants' selection. The design of the data collection instruments will be the next section which consists of explaining each instrument used in this study, the pilot study and ethical considerations, and the last section will present the data analysis process of the study.

Chapter four presents and analyzes the data that have been collected from questionnaires, interviews and document analysis.

Chapter five will discuss the findings, followed by conclusions from the research findings and results that will be matched with the literature as well as the methodological approach used in this study. This chapter will conclude with a number of recommendations and discussion of future research.

CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 OVERVIEW

In recent decades, many researchers have found that the primary consideration on career major choice for young students is to assist them in their major choice as it is linked to career choice as well, which means all efforts not only to improve their study experiences but also to prepare them for the world of work (Kramer et al. 1974; Herr & Cramer 1992; Fuqua et al. 1988). The younger years of any individuals are often the most important ones due to the potential impact this period has on their future. Particularly, Forawi's (2014) study investigated Emirati students in grades, suggesting that all intervention efforts should be made available to any particular student at all levels. Laying the right foundation is essential in building a strong-willed and capable professional regardless of their field of study or profession (Hirschi, 2012). Counselling is the ideal and most logical platform for intervention in the lives of younger individuals of the current generation of future leaders and professionals (Hirschi 2012). Failing to engage the target generation at an early stage could result in massive negative consequences as they become underprepared to handle the daily challenges that arise at the workplaces as well as in their personal lives (Hirschi. 2012). It does no one any good if the younger generation comes of age unprepared to handle potential future challenges. The outcomes might lead to end the generation because of unsuccessful transition from one generation to the other by potentially ruining the process of continuity through natural failure.

This chapter presents a detailed discussion of the theoretical framework that was used to conduct this study. The literature review consists of historical background to the development of career guidance and its meaning, the career guidance process, and the importance of career guidance and counselling in higher education institutions and their roles in providing different kind of counselling services, such as face-to face and counselling groups, workshops, and career-test assessments. There is also a section about the factors that affect students' career choice. Finally, there is a review of several bodies of literature about career guidance and counselling internationally.

2.2 THEORETICAL FRAMEWORK

As the aim of this study is to investigate the main factors influencing higher education students' career major choice and find out the best career guidance and counselling support for students in their career major choices in the UAE, these are the selected theories for this study (figure 1).

The need for career theories indicated by Stead and Watson (1999):

Like all psychological theories, career theories provide parameters within which we can understand career behaviour and choice, and from which we can hypothesise about the meaning of such behaviour and choice. Career theory allows us to predict future career behaviour and what may impact on future career choice. It also provides career counsellors with the means to identify, interpret and assist clients in their career goals.
(p.15)

Most career guidance and counselling theories were developed in Europe and the United States in the 1990s. Researchers developed theories that could help adolescents in their career major choices; they try to explain how and why adolescents make their career major choices (Kelechi & Ihuoma 2011). There are many career theories which are helpful in providing a framework for career guidance and counselling and, according to Zunker (2002), many researchers have published different kinds of career development and occupational choice theories. These theories led to research and methods to deliver career guidance and counselling programmes. Career guidance and counselling programmes aim to develop the important skills for educational and career decisions.

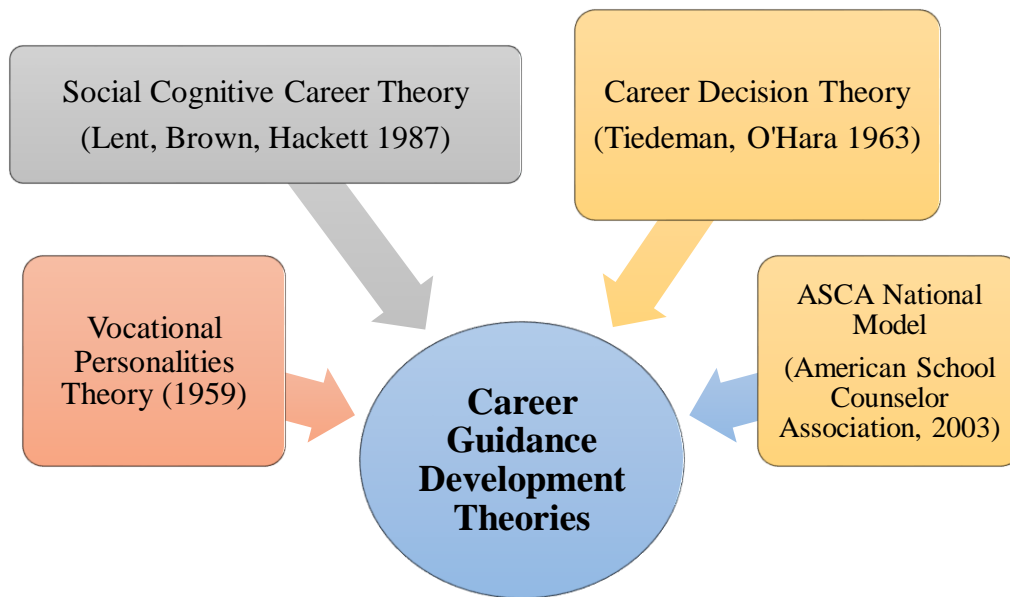


Figure (1): Career Guidance Development Theories

2.2.1 Career Decision Theory

Tiedeman and O'Hara (1963) developed an oriented process approach that focuses specifically on the career decision-making process, which is part of the cognitive differentiation and integration set (Goron & Steele 2015). Tiedeman and O'Hara (1963) applied the processes of anticipation of decisions for professionals in different capacities of professional vocation. The authors found that it comprised several distinct phases for the affected individuals that included exploration, crystallization, choice and clarification development stages (1963). These stages provide an essential framework by which any person can explore and understand the career decision-making theories as applicable to younger generations (Tiedeman & O'Hara 1963; Miller-Tiedeman & Tiedeman 1990; Sharf 2002). According to the career decision-making theory, every individual must undertake each of the stages listed below before making the final choice regarding their career major choice and the expected path of their life as they contribute to the development of society.

1. **Exploration:** The first and often most underappreciated stage for any individual that is objectively reviewing their career major choices is the exploration stage of decision-making. At this stage, students have an unclear concern about their future, they are not yet planning, and there is an absence of negative choices. They engage in an active effort to connect their past experiences and their future ambitions using available professional courses. The exploration stage is the most creative phase of the decision-making theory since the student does not have a clear idea and path of study that would suit them. Intervention in this phase is particularly important as it allows the student to

proceed to the next stage fully aware of the choices available to them and the potential challenges they might face along the way. In this stage, they need help to identify their strengths and interests, and how these relate to academic programmes (Goron & Steele 2015). It is important to understand the potential career path where students can be able to allocate their personal plan with other aspects of their life that are not inherently tied to their professional lives. Often, students who do not explore this stage fully fail to understand that their life as a professional does not exclude other aspects in life such as social activities. Such errors in judgment lead to the development of underprepared professional individuals who have little grasp of the social function they should serve in society (Hirschi, 2012). Students end up becoming functional and competent professionals with no social life, which leads to having a disproportion life and might affect their professional life. Thus, it is vital that students are aware of the exploration stage before moving to the next stage.

2. **Crystallization:** The next stage that students pass under the career guidance and counselling programme is the crystallization stage. This stage represents progress towards an informed choice as students begin to identify some alternatives for their career. This phase of the decision-making process allows students to consider all the possible options at their disposal by mapping out the advantages and disadvantages of particular career major decisions. Taking part in such activities is essential for the student aspiring to be a professional because the information generated and utilized during this phase provides the rationale behind the choice of profession (Hirschi, 2012). If this phase is completed incorrectly, the student will get on a non-fulfilling career path filled with instances of second-guessing. In this stage, students are able to know early the inappropriate decisions as they make normal progress through their planning stage (Goron & Steele 2015). It is important to provide help and support for students at this stage as they test each alternative. This support should focus on providing services as they strike for inclusion in professional fields of interest that they could theoretically follow after making a final decision. The career guidance and counselling option must be devoid of any efforts to inflict external ideas on the student under the programme. If not taken into account, students may end up making mistakes choices based on the external factors, thereby ruining the real value of seeking guidance and counselling services. The ideal outcome requires providing students with an active yet impartial intervention process that is entirely dependent on their chosen course of action (Hirschi,

2012). The successful completion of the second stage paves the way for the third phase of the career decision theory.

3. **Choice:** The third phase of the career decision theory is the choice phase, where an individual under the career guidance and counselling programme undertakes a period of calm having committed to their career of major choice. This stage consists of expressions of satisfaction and relief for having made the commitment to a particular goal. If the students' choice appears to be realistic, then they move on to the next stage in the process. However, if they discover that they did not make a choice based on relevant information about their ability and interests, they might find the choice is not useable. It is essential to undertake the third stage because it provides context for the process that prioritizes it while offering a rational platform for professional decision-making for the stages to follow. Goron and Steele (2015) state that many students enter higher education at the choice stage directly without having negotiated the first two stages. According to the authors, students who enter the third phase without having undergone the previous two phases are likely to make terrible mistakes during the decision-making process for their careers (2015). Students often make decisions without the benefit of having exhausted their options during the exploration and crystallization phases. Therefore, their choices feel imposed, which would explain the lack of enthusiasm for their chosen profession. Any efforts that do not follow the correct path will only result in unexpected outcomes for students, and at the same time ruin any guidance and counselling efforts. Moreover, Tiedeman and O'Haran (1963) stated that while these stages are viewed as progressive, they may be also being regressive. The regressive aspects discussed by the authors (1963) come from the self-destructive tendencies that arise when students undertake the career guidance and counselling programme without having completed the first two stages of the career decision-making theory. (1963). In such instances, students end up making unpredictable decisions about their career as they make commitments to one decision before realizing that their decision lies in a different profession as the process occurs repeatedly. The successful completion of the third phase gives way to the fourth and the final stage in the decision-making stage of this theory, which is clarification.
4. **Clarification:** The clarification stage is possibly the least important stage compared to the three previous ones. This is because it includes activities where the consequences of choice are internalized by the student under the career guidance and counselling programme. The career guidance and counselling professional does not undertake much

effort at this point in their quest to help the individual student to make the right decision for their career. By now, students are likely to have already made their choice, and the ideal intervention effort involves helping them set up wide-ranging support in anticipation of future challenges.

These planning phases lead action stages of induction, reformation and integration as the choice is successfully made by the student and their decision has been integrated into their life. Drawing from Tiedeman and O'Hara (1963), the aforementioned action stages take place during the implementation of the adjustment phase of the career decision. First, induction refers to the initiation of the process of implementing the decision to move to a new job environment. Second, the reformation stage signals adjustment into the new work, whereby an individual becomes assertive and engaged with the rest of the workgroup. Last, the integration phase is characterized by a perceived form of resistance, whereby the existing person base opposes the new forces of change from the recruits (Tiedeman & O'Hara, 1963). The latter comprises and continues to develop a sense of belonging with the rest of the team.

The current body of literature on career decisions presents other theoretical models that explore fundamental questions such as to what extent career choices/decisions are motivated or discouraged by others and which other social factors influence career decision-making. It is worth noting that there is no definitive scholarly agreement with regards to the answers to these questions as the theoretical models are justified based on their explanatory contexts.

The Person-Environment Fit (P:E Fit) career decision theory explains how intrapersonal traits such as personality, values and practices together with the properties of an environment, such as rewards, collective values or traditions, influence vocational and occupational decisions. Roger (1952), a career guidance expert, uses variables such as diversity in intelligence, achievements, and domestic circumstances to explain how people have unique specific sets of skills and specialties that can be used to match them to suitable occupations. It is essential that all ambitious individuals understand that even with their desires and wishes, they have to be intrinsically for a particular career due to their personal factors and traits within their immediate environment. Often, either of those features is unconscious to the individual in question without encouragement by the qualified career guidance and counselling professionals. Therefore, any efforts by the career guidance and counselling professionals should account for the inherent features and traits that an individual might exhibit that might connect them to any particular professional fields, as suggested by the P:E Fit theory (Plant, 2004). In this view, the author explains that the initial interaction between particularity of interest, skills and personality and

a situation or an environment influences a student's career major destination decision. The interaction is a widely studied concept in industrial psychology, as it provides essential information to understand the psyche of individuals and their professional aspirations. The institution can use that information to tailor their internal environment to suit the growing needs of different students in different majors (Patton & McMahon, 2014). Such information is also essential in improving students' satisfaction, which in turn cuts down the rates of intervention recorded for student functionalities. The low turnover rates cut down the transfer from major to major which avoids leaving unhappy students in a given major. These efforts are essential in providing both the higher education institution and students with a stable platform to further their goals or objectives for the long-term productivity, particularly for educational institutions (Patton & McMahon, 2014).

The career decision developmental theory recognizes career choice and development as a five-stage continuous process that includes growth, exploration, establishment, maintenance, and decline. The developmental approach is widely associated with Super (1957), who explains that during psychosocial development, persons progressively develop a sense of self-concept, which he or she can use to match themselves to people who hold positions in their desired occupation. Therefore, in the process of choice and adjustment into an occupation, the development of the sense of self-concept guides career progression along the aforementioned stages.

Law (1981) developed the Community Interaction Career Decision Theory to explain social, cultural and psychological factors that influence career decision-making. His work recognized the value of influence emanating directly from the immediate environment of the student or aspiring professional. The external factors that might arise from these sides of life could force the individual to rethink about their major choices based on dominant circumstances. The option to pursue a particular course of action or profession might draw praise from the immediate environment due to that environment's appreciation for that profession (Law, 1981). The same choice might draw to the immediate environment if the individual made that choice in a different cultural or social setting due to differing cultural values, among other variables that affect the laws of society. Law (1981) stated that it is clear that the immediate residential or occupational community motivates or discourages individuals towards particular career major goals. The social elements of the communities, including partners, friends, family and colleagues among others, are considered the primary points of contact for advice or guidance by individuals who seek to make important career major decisions. Their input to the decision-

making process can either motivate or discourage individuals from pursuing certain career major goals.

Since such individuals are not qualified guidance and counselling professionals, there is a natural possibility for consequential career decision-making. The advice they offer the aspiring professional might not necessarily be grounded on acceptable guidance principles. As such, the boundary of error is substantially higher for such individuals who bend to the pressure forced on them by friends, family members and society. The outcome demonstrates in the form of unhappy students who prefer a different major despite studying in the most popular and needed major in the job market (Law, 1981). Such a situation has a higher probability of the individual setting off undesired outcomes through imperfect decision-making caused by the lack of enthusiasm for their primary functions at the workplace. Guidance and counselling professionals should keep in mind the external factors to help individuals make their ideal career choice for the long-term without bending to pressure. Ultimately, the professional journey is an individual one for the person involved, despite the waves of external pressure that one might encounter. Accordingly, every decision that a professional makes must account for his or her personal feelings before incorporating the views of other individuals on the matter because it is the individual's future that is at stake and not those of the people in their immediate environment, or of society (Patton & McMahon, 2014).

2.2.2 Social Cognitive Career Theory

The Social Cognitive Career Theory (SCCT) was developed primarily by Lent, Brown and Hackett (1994, 1996) to find out about career interests, career choices, and performance processes. Lent, Hackett and Brown (2000) stated that SCCT is, "the process through which people form interests, make choices, and achieve varying levels of success in educational and occupational pursuits" (p. 36). The authors added that this theory focuses on an individual's variables such as outcome expectations, goals and how the characteristics of a student and the environment prepare him or her for a future career (2000).

The SCCT framework was introduced based on Bandura's (1986) social cognitive theory to illustrate the composite relationship between self-efficacy beliefs, personal goals and outcome expectations in the career decision-making process and how past experiences affect future learning and the outcome goals of career choices (Hughey et al. 2009; Sharf 2002). This is a useful theory that works for students in higher education.

Cognitive development for higher education students was first recognized by Perry (1968), who tried to understand how students transform during their undergraduate years. Lent (2005)

views the theory as a balancing model for trait-factors and developmental theories. In addition, this theory focuses on abilities, interests and other variables, and the specific manner of personal and environmental factors that influence career decision-making. It focuses, too, on the importance of learning experiences, the influencing factors and environmental conditions of career decisions (Patton & McMahon 2006).

To practise this theory, the career guidance counsellor needs to understand three factors.

The first factor is self-efficacy, where Bandura's (1997) self-efficacy framework plays an important role in both academic and career decision-making processes (Hughey et al. 2009). As Bandura (1986) states, self-efficacy refers to an individual's belief about his or her ability to "organize and execute courses of action required to attain designated types of performance" (p. 391). The concept of self-efficacy is the focal point of the SCCT, which describes how intrapersonal self-systems control an individual's behaviour in certain circumstances. Self-efficacy is derived from personal performances, indirect experiences and verbal persuading, as well as from psychological and emotional factors. The mental construct plays a role in the regulation of motivation. In this view, Flores and O'Brien (2002) argue that mental construct influences career major choices through regulation of a series of inherent human functions, whereby the decision to take on a task is hugely influenced by the individual perception of the likelihood of success. Gibbons and Shoffner (2004) note that when their self-efficacy is low, people are likely to avoid involvement, and vice versa. Further, where the self-efficacy is significantly higher than one's ability, involvement will possibly result in psychological damage.

The choice of behaviour based on one's self-efficacy can be used to explain career decisions. According to Gibbons and Shoffner (2004), previous personal accomplishments or failures are a significant factor in the choice of careers. Any individual is likely to make decisions based on previous performance in a similar capacity, or information acquired from a third party regarding the execution of various responsibilities. When an individual undertakes a particular activity using a specific platform as his or her foundation and achieves success, the self-efficacy is likely to rise due to the positive experience and the desired results. The same is true in instances where the individual attempted a particular activity and resulted in failure or disappointment, resulting in low self-efficacy levels. Low self-efficacy from previous failures may lead to the inability to grow career-wise, as individuals with a previous history of failure are likely to avoid challenging tasks that would enable them to gain valuable experience and skills (Flores & O'Brien, 2002). The outcome is undesirable in a competitive environment

where individual contributions are essential in achieving the predetermined collective objectives for a given fiscal year or a particular financial period, as an example.

There is an element of correlation between self-efficacy and motivation to excel in certain careers. Navvaro (2007) explains that people with higher perceived personal competency are likely to expend more effort and perseverance than those with lower self-efficacy. Previous correlational studies suggest that the choice of careers among fresh graduates is significantly influenced by their self-efficacy (Navvaro 2007). As such, the ideal intervention by professional career guidance and counselling personnel must account for such factors when said professionals are offering their services. Fresh graduates are at a vulnerable position since they have no prior experience in choosing their careers from among several career major choices. To avoid significantly lowering their self-efficacy, it is essential that they understand the basic principles that should guide their decision-making, as well as the consequences of decisions made at the time (Blustein, 2013). Additionally, career guidance and counselling efforts should understand the impact of the difference in self-efficacy and its direct connection to the performance in a professional capacity. The differences in perceptions of personal strength and weaknesses are responsible for the fundamentally different views of their ability to influence students' careers and lives.

Career major decisions are significantly impacted by self-perceived competencies and shortcomings. According to previous literature, people tend to prioritize occupations that require capabilities that they are able to deliver or can develop if allowed the opportunity and given the support. Flores and O'Brien (2002) opine that individuals tend to avoid occupations that require capabilities they lack and are uncertain over their ability to develop. Personal goals influence career behaviours significantly. Gibbons and Shoffner (2004) state that career-wise, personal goals are the outcome expectations that individuals pursue while engaging in certain activities. Thus, the importance of personal goals in aspiring professionals is essential in developing the necessary motivation to pursue career goals simultaneously. Self-efficacy beliefs and outcome expectations shape interests, goals, and actions and the strategies that are used to pursue success in particular careers (Bandura 1996). Therefore, career counsellors and experts should examine the self-efficacy factor among clients as they rely on it to be able to develop their career path with the required capabilities to success. Bandura (1986) suggested that self-efficacy has a good impact on persons' belief of individual mastery.

The second factor is the outcome expectations. These are behaviour-specific and are developed in the framework of external support, self-directed consequences or outcomes from other activities (Lent et al. 1996). Lent et al. (1996) stated that while outcome expectation has less

influence on behaviour than self-efficacy beliefs, both still play an important role in an academic and career decision-making process.

The third factor consists of personal goals, as it relates to person's engagement in activities to achieve the outcomes and to help in organizing the academic and career-oriented process (Bandura 1986). Additionally, Patton and McMahon (2006) agree with Bandura (1986) that by establishing goals, everyone will be able to coordinate and maintain their own behaviour. These factors inform students' beliefs about their ability to take part in their own academic and career decision-making process, and to focus on the development of their interests, career performance and future career choices (Hughey et al 2009; Lent & Hackett 1994). Furthermore, Perry (1968) maintains that higher education students engage in a reliable developmental journey called “an intellectual pilgrim's progress” where they get knowledge in different stages of cognitive development that affect them both inside and outside the classroom. Several researchers have applied Perry's (1968) method of career development. For example, Knefelkamp and Slepitzka (1976) applied Perry's (1968) idea to illustrate the cognitive complication as it related to career decision-making. Also, Jones and Newman (1993) explained how Perry's (1968) method can be used to explore students' diversity in making a career major decision. Patton and McMahon (2006) highlighted that SCCT has a range of factors which arbitrate between interests and career major choice. These factors include self-efficacy and outcomes expectation as discussed earlier, and figure (2) presents the diagrammatic SCCT framework. Additionally, the developers of SCCT recognized the importance of learning experiences, as well as the influencing factors and environmental conditions affecting career decisions (Patton & McMahon 2006). They stated that “SCCT focuses on three interlocking segmental processes: how career and academic interests develop; how career choices are made and enacted; and, how performance outcomes are achieved” (p. 83). Overall, the cognitive theories of career development concentrate on the importance of the career major decision-making process dimension.

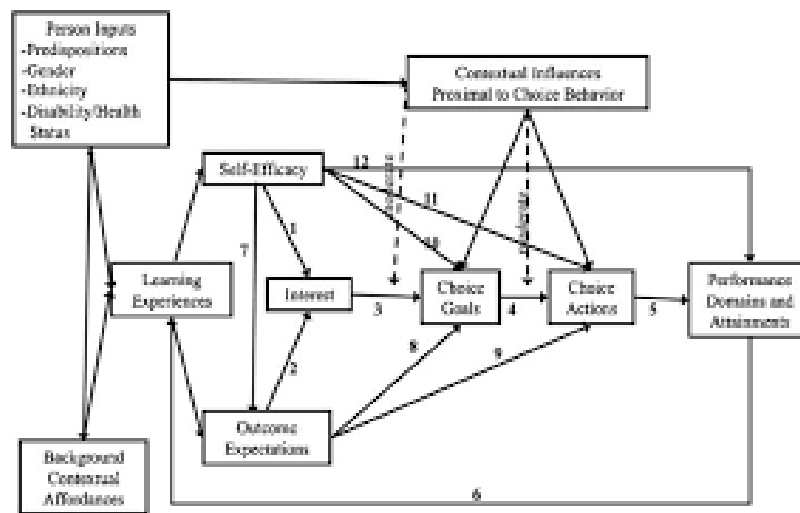


Figure (2): Personal, contextual, and experiential factors affecting career (From Lent, Brown and Hackett, 1994)

Garriott (2012) emphasizes that in addition to the person-cognitive variables such as self-efficacy, interests and goals, there are several contextual variables that significantly influence behaviour. They are the aspects of the individual's environment that influence their access to assistive resources such as role models, which impact success in given careers. The same logic applies to the role of mentors in the performance of professionals at the workplace if such programmes run efficiently. A mentorship programme at the workplace provides professionals with a beneficial support platform that enables them to function within their designated roles (Hirschi, 2012). Such programmes provide the mentee with an opportunity to tap into the huge knowledge of the mentor as a means of marking their progress in a highly competitive market for human resources. Lent et al., (1994) categorizes them as barriers or perceived support factors within an environment that impacts active phases of the career decision-making process. Influential figures such as mentors, family, friends, or spouses can encourage or discourage an individual from pursuing a certain career goal.

According to current research, contextual variables impact learning experiences and in turn career major choice indirectly through personal-cognitive variables such as self-efficacy, interest, or outcome expectations. Moreover, Garriott (2012) added that enhanced learners' experiences may have a positive impact on their perceived competence and in turn higher positive outcome expectations. Alternatively, the perceived competency may foster interests in specific career domains (Lent et al., 1994).

In recent decades, there has been a growing body of literature on the role of contextual factors in influencing career major decisions. According to Garriott (2012), it is necessary to outline the contextual factors to determine which of them may be viable interventions to promote learners' interest at an individual level.

Similarly, the perceptions of support and barriers may have a positive impact on learners' perceived competencies and subsequent career major decisions. The typical student or

professional requires positive reinforcement to help in the growth process in a competitive environment. That positive reinforcement accounts for more if it comes from familiar sources such as family members and friends from the immediate environment. Schultheiss et al. (2001) examine the relationship between parental involvement and career major decision-making. The findings of their study revealed that parental support brings about obvious and indirect influences on their children's career development. Naturally, children are inherently and incessantly looking for parental approval of their accomplishments given that parents are often the standard of measure for performance. The need for improved performance is further highlighted by the involvement of the parents in the guidance and counselling process, which could result in extra motivation for students or professionals to pursue the ideal professional career (Cripps & Zyromski, 2009). Alternatively, the study linked parental involvement and learner's self-efficacy through learning experiences. In this respect, parents' support is indirectly related to increased perceptions of competency, higher outcome expectations, and interests, which are responsible for career goals and decisions.

2.2.3 Vocational Personalities Theory

Holland's (1959) theory was known as Trait and Factor Theory but later became more well-known and has been titled "A Theory of Vocational Personalities and Work Environment". It has been the most popular and influential theory on career choice theory of the last decade (Holland 1997; Weinrach & Srebalus 1990) and might provide the most realistic application for the career counsellor (Brown & Brook 1996). Holland's theory describes individual differences in personality type and focuses on the content of career decision-making (Holland 1997). It helps people categorize their knowledge into a combination of six personality patterns to integrate them with six types of work environment. The six personality types outlined by Holland are: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC). The six personality patterns cover the essential aspects of everyday human interaction regardless of the context of the interaction (Armstrong et al. 2008). The structural setting of society limits the platforms on which one human can interact with fellow professionals, among others.

Holland's theory has been defined as structural-interactive because the connection between personality characteristics and occupational environment, and both people and the work environment, can be categorized and later matched together (Holland, 1997). Holland (1987) stated that when people choose a career, they prefer to choose a job where they can be around others who are like them, and they search for an environment where they can use their skills

and abilities. Such personality traits are likely to dictate an individual's choice of career to the extent that they might forego a suitable career in favour of the profession that offers such traits. The six personality traits identified by Holland cover some of the essential relationship traits experienced by an individual during day-to-day operations (Du Toit & Bruin 2002). The individual is likely to develop some characteristics based on the elements in the immediate environment. The six attributes provide a sustainable platform for the individual to contextualize and rationalize their decisions, while looking to maintain their professional viability (Gottfredson, Jones and Holland, 1993). This theory focuses clearly on personality types as the main concern of career choice development for any typical individual looking for efficient career guidance and counselling services.

According to Spokane (1996), career interests reflect an individual's personality as they are "interests, however, are complex measures that reflect personality as well as preferences, values, self-efficacy and so on. Types, then are complex theoretical groupings based upon personality and interests" (p.40). Holland (1997) stated that people are more productive when there is a connection between their personality type and their career. Those who are able to create such a connection are capable of improving their productivity in direct response to their immediate environment and the presence or absence of such traits. A professional career guidance and counselling expert must recognize the value of such characteristics to any individual seeking assistance (Ali & Graham, 2006). Holland (1997) focused on the six-point hexagon of person and job, as shown in figure (3) and he described the six personality types as following (Gorden & Steele, 2015):

1. **Realistic (R):** The individual with this trait prefers activities that are ordered, systematic; manipulation of objects and tools. Traditionally, individuals under this category were associated with a prestigious role classification in society due to their visible contribution to daily life. Such an individual has inherent abilities that are essential in particular industries or lines of duty. They are at home in sectors that demand their physical and mental involvement in the processes as they pursue the fulfilment of their responsibilities (Smart, Feldman, & Ethington, 2006). In that sense, the individual is likely to pursue careers in functional industries where they enjoy a close relationship with fellow professionals. Some of the jobs these individuals prefer include aircraft controller, electrician and automobile mechanic. They are called "Doers" due to the manual nature of their jobs that require a balance of mental and physical efforts. Individuals under this category might not flourish in the same manner as others in the remaining five categories

devised by Holland. Any efforts that require them to apply skills outside of their element might record dismal performance levels apart from rare cases of multi-talented individuals.

2. **Investigative (I):** The second category of classification identified by Holland is the investigative trait. Individuals under this category prefer activities that are observational, creative, systematic, and investigate in-depth. Such traits are essential in understanding and controlling any possible phenomena that arise at the workplace or in the pursuit of professional goals. Individuals under this category might be capable of performing some of the core responsibilities allocated to the individuals under the previous category. However, these individuals are more inclined towards research to generate credible results that allow them to draw possible assumptions and further future research (Smart, Kenneth, & Corinna, 2006). Such individuals are in some of the more progressive careers where knowledge is constantly changing and requires frequent analysis to update the information in order to meet predetermined objectives. Some of the jobs these individuals prefer include biologist, chemist, physicist and medical technologist. They are called “Thinkers” due to their inclination towards critical thinking and its application in different professional roles.
3. **Artistic (A):** The third group under the Holland’s descriptive framework is the artistic group that includes individuals who prefer activities that manipulate physical or human materials. The individuals in this category are often ostracized from society due to their indifferent approach to life and professional responsibility (Holland, 1997). These individuals often impose their creativity on fellow human beings and the environment, with the end goal of producing a final product that can influence society. Furthermore, individuals under this category are often self-critical of the happenings within their immediate environment as they seek to impose their vision on that environment (Tang, 2009). Due to their inherent characteristics, such individuals are often categorized as strange thanks to the differences between their thought processes and those of other individuals. Some of the jobs these individuals prefer include musician, stage director, writer and interior decorator. They are called “Creators” because they initiate the innovative or creative process and the subsequent means of attaining the attached goals or objectives.
4. **Social (S):** The fourth category involves the social group where the individuals prefer activities that include manipulation of others to train, inform, develop and cure. Individuals under this group have an inherent ability to connect with individuals on a social platform and generate constructive outcomes (Pike, 2006). Social individuals exhibit an inherent ability to develop close bonds with fellow professionals in their line of work. Furthermore, such individuals often take up leadership positions due to their direct connection with

fellow individuals both below and above their place in the organization's hierarchy. These individuals' ability to influence the behaviour of fellow human beings through acceptable means of manipulation gives them an advantage in working in particular industries that require such interventions (Pike, 2006). Some of the jobs or professional roles available for individuals under this category include teacher, counsellor, clinical psychologist and speech therapist. They are called the "Helpers" due to their nature of assisting other individuals in achieving predetermined goals or objectives.

5. **Enterprising (E):** The fifth category in Holland's classification module is the enterprising group that prefers activities that involve the manipulation of others to achieve organizational and economic gain. Individuals under this category are experts at identifying any possible loopholes or gaps in the economy. They are also experts at piecing together any available resources to take advantage of the loopholes they identify, while staying within acceptable rules or regulations. The identified loopholes warrant a careful review of the factors at play and the introduction of mechanisms to improve the outcomes for the people and the economy. Such individuals mainly occupy the economic aspects of human existence where they supervise the use of human resources alongside natural resources to meet commercial objectives of profitability and services delivery. Individuals under this category have a propensity to obsessively pursue goals and objectives with the determination and patience necessary to achieve said objectives at optimal costs and efficiency. They are typically self-motivated and inherently driven towards the predetermined goals for themselves or those set by the organization (Tang, 2009). In the end, such individuals are most valuable in a fixed environment where every factor stays static and susceptible to their manipulation in pursuit of common goals. Some of the jobs referred to this type are business executive, manager, producer and salesperson. They are called "Persuaders", thanks to their ability to coax or cajole both humans and animate objects to behave in a particular manner as a prerequisite to achieving predetermined goals or objectives.
6. **Conventional (C):** The final group in Holland's classification includes individuals who prefer activities that entail manipulation of data, order, and systems. This manipulation involves activities such as keeping records, producing reports and filing materials. Individuals under this category occupy traditional roles within the expansive economy by performing ordinary but essential tasks in an organization. The individuals are more "conventional" due to their propensity to thrive in specific positions that the society does not typically praise or hold in high regard (Lattuca et al. 2010). They perform professional

roles that require a particular degree of professional studies that impart skills that simplify their duties. Some of the jobs referred to this type are banker, business system analyst, bookkeeper and financial analyst. They are called “Organizers” due to their often-indistinct role in the progress of the organization and economy as a whole.

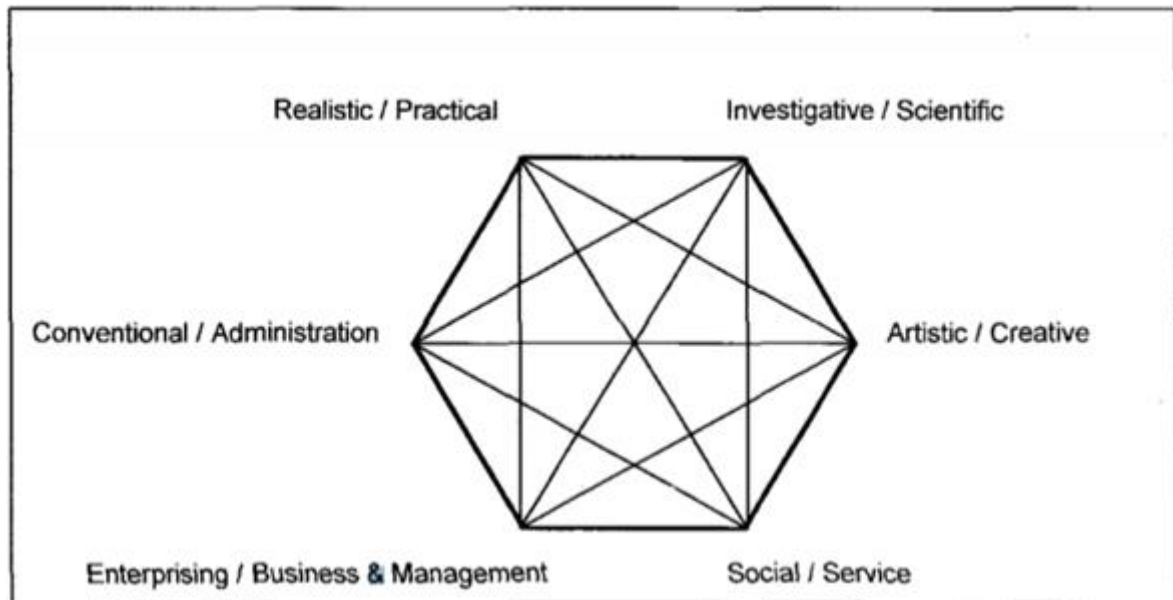


Figure (3): Holland's hexagonal model defining the interactions among personality types and their associated work environments (adapted from sources: Holland, 1985, p.29; Du Toit, Prinsloo, Gevers and Harilall, 1993, p 16).

Career development professionals who use this theory basically assess an individual's interest profiles from three perspectives (Holland 1997):

1. Congruence: the degree fit between personality type and work environment
2. Consistency: the degree of personality types which are close to each other among the hexagonal model.
3. Differentiation: the degree of distinction among different types of personality.

Career development is one of the prerequisites for employee satisfaction. It has a direct influence on employee turnover as the employees make choices based on its absence or presence. An individual will inherently look for an environment that suits their growth needs regardless of their loyalties to the company (Nauta, 2010). Should they fail to find it in one organization, they might shift to the next competitor, or they might resort to unethical conduct (Nauta 2010). The three perspectives listed above provide an essential framework for determining the level of career development expected by the employees. Such information

could prove useful to the organization in keeping its staff members (Nauta, 2010). Another group that could benefit from such information is the guidance and counselling professionals who would gain an insight into career development patterns. That information would be essential in advising students and establishing employees towards fulfilment as a professional in their chosen career. Overall, this theory gives the ability for the person to seek out environments that are aligned with their personality types and engage in activities matching their abilities according to the RIASEC model.

2.2.4 American School Counsellor Association National Model

One of the widely used models is the American Model for School: American School Counsellor Association (ASCA) National Model. It is a framework for school counselling programmes to help students to “develop career awareness, develop employment readiness, acquire career information, identify career goals, acquire knowledge to achieve career goals and apply skills to achieve career goals” (Campbell & Dahir 1997, pp.25-27). Each of the factors listed above is essential in transforming a student into a fully capable and efficient professional in a hyper-competitive labour market. Each equips students with the relevant information and operational framework that enables them to guide their conduct and decision-making in different scenarios at the workplace. Career awareness is particularly important as it maps out the reasonable paths that an individual could follow during their career major choice. It is an essential objective of the ASCA model because it directly affects the student’s decision-making (American School Counsellor Association, 2003). A significant percentage of failures in employment result directly from inefficient efforts, or inability to develop employment readiness in students. The consequence is that the students come off as repeaters of information collected from classrooms or lecture halls rather than being functional employees (American School Counsellor Association, 2003).

Furthermore, the ASCA model is particularly helpful in equipping students with crucial career information (American School Counsellor Association, 2003). Students with access to such information are at an advantage since it centralizes their choices in logic or rationality. The ASCA model aids students in acquiring information regarding the true nature of their career and how best to use their skills set and knowledge within its constraints. Such information is crucial in identifying career goals and the necessary components to achieve them. Every student who graduates from a formal course tailored to meet the specific needs of a particular profession must access career information while setting up their career goals. Furthermore,

students must acquire the skills and knowledge needed to achieve those goals or objectives. In perception of the arguments presented herein, the ASCA model is the ideal model for use in providing career guidance and counselling, particularly for individuals who have recently graduated from professional studies (American School Counsellor Association, 2003). The objectives discussed in this paragraph, as well as the preceding one, are more motivated towards helping students adapt to different professional situations.

The ASCA model invites professional collaboration among career counsellors and cooperation with teachers and administrators to improve students' achievements and outcomes academically and socially, and to prepare them adequately for future careers. The all-round approach is meant to account for all sides of the modern-day workplace responsibilities and expectations. School-based counsellors identify personal beliefs, which have the greatest impact on a majority of students. Ideally, the ASCA model confirms that the students' beliefs and interests are likely to drive their decisions regarding their career. As such, the most effective approach would be to target those characteristics with the aim of using them as a guidance and counselling framework for future circumstances. Teachers and counsellors take an active role in embedding the personal beliefs into the mission and vision statements that form the foundation of career guidance and counselling programmes. Further, the model is a standards-based career guidance and counselling platform that operates on fixed standards that dictate student development into distinguished professionals. In this respect, career counsellors develop standards for the students and utilize the programmes to persistently improve their outcomes towards the desired goal. Therefore, the ASCA model is an ideal tool for shaping modern-day employees who appreciate the complexities of the workplace (American School Counsellor Association, 2003). Furthermore, the ASCA model is likely to help students adapt to the challenges that arise from such circumstances.

The ASCA National Model Focus is a results-based and data-driven approach to counselling students as they transition from a learning environment to an active and competitive labour market. The design of the career guidance and counselling programme takes into consideration student-specific competencies and weaknesses. Career counsellors utilize such factors as focus areas to enable all students to make a smooth transition from higher education into employment (American School Counsellor Association, 2003). Additionally, the model is founded on the Comprehensive Developmental Guidance (CDG) programme model, which enhances focus on the use of data in programme design and implementation, and in decision-making, to enhance

accountability and realization of the intended learning outcomes (American School Counsellor Association, 2003). Career counsellors are responsible for the demonstration of accountability, as a symbol of professionalism observed by their colleagues, namely teachers and administrators. The approach to guidance and counselling does not involve challenging or conflicting attitudes regarding the information passed on by the teachers. Instead, it is more about augmenting that knowledge and adapting it to suit the workplace objectives set by organizations in the career line of choice. The results-based and data-driven approach cuts out all possible wastage of resources and efforts by carving out a clear path that the involved individual must journey upon as they transform from having a theoretical and ideological understanding of the profession to developing a more practical understanding assisted by career guidance and counsellor experts (Patton & McMahon, 2014).

The design of the ASCA model provides developmentally appropriate instruction for learners' academic, psychosocial, and career well-being. The execution of career guidance and counselling activities by counsellors is regular and systematic to deliver a consistent realization of the set achievements and outcomes (American School Counsellor Association, 2003). Although there are short-term immediate needs addressed by the counsellors, the long-term focus of the programs is to provide learners with experiences that enable them to effectively transition from higher education into career life. All efforts directed towards such outcomes will likely prevent career dissatisfaction and the development of unethical practices leading to failed careers and regret (American School Counsellor Association, 2003).

2.3 LITERATURE REVIEW

The education that students receive should make them aware of their individual personalities and prepare them for their future occupations. This could be done through career guidance and counselling services (Hughey & Hughey 1999; Mapfumo et al. 2002). Developing a career is a process, not just a destination. For most students, career development is a lifelong process from choosing the study programme to be engaging in the work world (Lazarus & Chinwe 2012). Magnifico (2007) and Troung (2011) added that career education is continuing to change in order to meet the latest job market needs. Regardless of career guidance and counselling services limitations in higher education, many countries around the world are still convinced of the importance of career guidance and counselling for students of all ages (Lairio & Penttinen 2006; Leung 2008; Watts & Sultana 2004). Many literatures show that when career guidance and counselling are inclusive, it has a positive impact on students (Folsom et al. 2005). Moreover, career guidance and counselling can expand the effectiveness of education programmes by identifying learning needs and helping students in their career decision-making, helping them in breaking through their personal limitations and giving them support in their transition to the labour market (ILO 2006; Kunnen 2013; Sun & Yuen 2012; Sultana & Watts 2008).

2.3.1 Career Development

In order to identify what career development is, it is important first to define the meaning of career. According to the National Career Development Association (NCDA), a career is the work and leisure in which a person is involved his or her entire life (Sears 1982), while Gysbers and More (1981) add that a career consists of different roles, places and situations that one encounters in a lifetime. Raynor and Entin (1982) go further, to say that a career is a combination of phenomenological and behavioural conceptions and it reflects the social and self-perception context of the person in regards to their past, present experiences and future plans. Although the traditional term of career is associated with paid employment, in today's dynamic world of work, a career is an ongoing process of learning and development (Zaidi & Iqbal 2011). When the career sense is integrated with life experiences such as education, family, work and life, then it relates directly to a person's career major choice and how to build their career (Hansen & Keierleber 1978). Super (1976) defined career as:

The course of events which constitutes a life; the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total positions occupied by a person from adolescence through retirement, of which occupation is only one; includes work-related roles such as those of student, employee and pensioner together with complementary vocational, familial, and civic roles. Careers exist only as people pursue them; they are person-centered. It is this last notion of careers, 'they exist only as people pursue them' which summarizes much of the rationale for career guidance. (p.4)

Therefore, the career development meaning becomes more boarder and complex as one pursues the perfect universal definition of a career in the modern-day context (Peavy, 1993). Angles (1994) in Zunker (2002) defined career development as “the total constellation of psychological, sociological, educational, physical, economic and chance factors that combine to influence the nature and significance of work in the total lifespan of any given individual” (p. 2).

The history of career development in education starts in the past century, where at the end of the 19th century and in the early years of the 20th century the first vocational guidance services appeared in the United State of America (USA) and in Europe (Brewer 1942; Heginbotham 1951; Keller & Viteles 1937). Drapela (1979) added that formal guidance services in third world countries are a more recent development and still very limited in nature.

In the 1900s, Hiebert et al. (1998) linked the vocational guidance initiatives with the English curriculum. The great influences of vocational sorting for individuals came in the early 1940s. In the 1950s the personal guidance and counselling for developmental approach was developed and moved forward to educational institutions in the 1970s. In the 21st century, career planning became more complex and developed, where career guidance and counselling programmes started helping students to choose the right career path (Hiebert et al. 1998; Hiebert 2002, 2003). Several studies support having career education guidance and counselling at an early stage to help students get more information and skills related to their academic work and future plans, as well as make career decisions (Bardick et al. 2004; Hiebert 2002, 2003; Hiebert et al. 1998; Magnusson & Berens 2002). Any intervention pushed to help individuals in making decisions regarding their career major choice must acknowledge the value of guidance and counselling as one of the possible and reasonable options available.

Adegun and Aremu (2013) added that early learning about different career options could help students to have a better understanding about job types they would like to have in the future. Early intervention could be a critical resistance against challenges that arise from facing career problems later in life. Individuals subjected to early intervention will have the benefit of forethought in their decision-making process as they measure their skills, knowledge and workplace responsibilities (Dik, Duffy, & Eldridge, 2009). As part of a vocational guidance and counselling programme, career development is assisting students, individually, to recognize and learn skills which point them towards planning and choosing a career and being effective in managing their own career (Kelechi & Ihuoma 2011). Dik et al. (2009) pointed out that it could be essential in determining the best means of intervening in the career of an individual or equipping the qualified guidance and counselling professional with pertinent knowledge. Information obtained from the intervention efforts during the early stages could help in justifying some of the mismatches between self-efficacy and real-time requirements.

Brown and Brooks (1996) stated that career development is a lifelong process of preparing to choose, making choices and engaging with the study life by selecting the best career major opportunities throughout almost the entire life span. Thus, career development does not refer to a particular change in one's life at a specific time of employment. Instead, it is a lengthy list of changes that one encounters as they interact with all the factors in the immediate work environment. The individual is likely to change in the capacity or work, in their proficiency in the line of jobs and/or the position in the hierarchy of the organization, such that they will deviate from the initial position where they began their career. Callahan and Garner (1997) agreed with the Brown and Brooks study (1996) that concluded career development to be an ongoing process that requires individuals to be involved in ongoing assessments, analysis and synthesis of the workplace information. The term of career development as used in the title of the National Career Development Association (NCDA) broadened and developed to include psychological, sociological, educational, physical and educational factors to shape individual career behaviour, to enhance a person's career development and increase his or her ability to make effective career major decisions (Sears 1982, Spokane 1991, Kelechi & Ihuoma, 2011). The NCDA recommended that career development activities help students in developing their work habits in a positive way such as following directions, setting goals, identifying interests and developing the ability to make informed decisions (Kelechi & Ihuona 2011). The NCDA also stated that "helping individuals increase self-understanding of their abilities, interests, values, and goals is a vital foundation of the career development process" (p.2). Schneider and Stevenson (1999) agreed that career development is a vital aspect of adolescent life where

career guidance and counselling programmes help students to set their career goals and give them an understanding of the skills, knowledge, and education needed to meet their goals. Typically, students are likely to exhibit idealistic thoughts about their immediate future and their long-term ability to stay aware about the competitive market. They are unlikely to be aware of the changes they might face in their active careers. The career guidance and counselling efforts must target students' core beliefs with the aim of changing the current state of mind they exhibit as they prepare to enter the real job market (Sharf, 2016). Additionally, career guidance and counselling is essential for helping students develop their ability to adapt to a changing and competitive job market.

The career development process demands that people experience a continuous stream of individual change as they interact with various factors in their chosen profession. The absence of such changes could signify a static career for the individual, which is typical of particular jobs where room for development is minimal. Career development ensures that an individual faces different instances of decision-making so that they can correct their career major choices from previous cases (Niles, Amundson & Neault 2011). Career development is particularly relevant to students who experiences changes in their career as they move further away from their graduation. The competitive job market might not accommodate a fresh graduate to enjoy a positive career development nor may it permit other professionals to engage in the same. The most common mistake committed by new graduates as well as experienced employees is resigning their career development path to their employers or other third parties (Brown, 2006). This mistake allows the company to take advantage of their employees because they are not under any obligation to offer such a platform.

The typical need for successful career development stops on the needs of the organization as well as its ability to provide individual employees with the necessary platform. Career development is mostly dependent on the ability of the active firm and its organizational culture. Unfortunately, students who emerge from the completion of school curriculum might not appreciate the value of such programmes (Brown, 2006). In these cases, it is up to the company and its existent workforce to develop the appropriate and comprehensive coverage of the career development process for all employees (Blustein, 2013). The interventions confirm the role of the career guidance and counselling expert in directing the affairs of all employees. Furthermore, experts could help students contextualize their own role in their career development without expressly relying on the company. Students are capable of making the right choices for their career by directly dictating their career path and holding the company accountable for providing them with room for growth (Baruch, 2006). In the end, the career

development process is an essential phase for students and professionals as it allows them to dictate their desired growth.

2.3.2 Career Guidance Process

The theoretical models advanced by Holland and other scholars are extensively applied in career guidance and counselling by experts to structure the personalities of individuals, the systems of interests, and attitudes towards career success. In this view, historically, the experts bridge the deficit between career interests and capabilities or competencies to enable individuals not only to deliver satisfactorily in their occupations but also to draw intrinsic motivation that enables individuals to continually set and meet career targets (Parsons, 1909). The lack of a clear definition of the undertakings necessary to achieve success could be a recipe for failure at a later date. The typical individual requires the introduction of a precise mechanism to ensure that they are capable of meeting the target outcomes for their objectives (Plant, 2004). Alternatively, career guidance and counselling aim to permeate any individual with professional values that will enable them to excel in their professional collaboration and cooperation. The career guidance and counselling process also investigates into exploring the motivation that drives the professional and the fresh graduate in their quest to meet their predetermined objectives.

Career guidance and counselling are responsible for the introduction of different components and processes in educational institutions (Makinde 1984). Such changes could protect the new graduates from obvious disadvantages that could arise from the complicated and competitive work environment found in most industries. The components or processes available in higher education institutions include:

1. **Awareness of work:** The process of building a positive attitude by generating an understanding of the value of work. The comprehension of the value of work is essential in situating the roles and objectives applicable regardless of the situation. The challenges that arise from the transmission of theoretical principles taught in lecture halls to actual practices in real life transcend multiple disciplines (Patton & McMahon, 2014). The transition from theory to practice is considered a pitfall in multi-disciplinary fields. In this view, career guidance and counselling are necessary to bridge the gap between knowledge and its application in a real-life context. Parsons (1909) emphasizes that the process prepares students for the common challenges they might face in the workplace such as conflicts with their colleagues. Therefore, the awareness of the

dynamics of work responsibilities is necessary before transitioning from higher education institutions to the labour market.

2. **Orientation:** Orientation is an equally important stage of the career guidance and counselling process because it provides the roadmap for the future career the individual hopes to pursue. It involves the process of providing the information to individuals about their career major choice, which could provide valuable insight into understanding the opportunities they may encounter and the limitations they may face during their career. Often, new graduates and young professionals make career major choices based on information provided in higher education institutions and other learning institutions (Flores & O'Brien, 2002). Often such information relays the message about the awareness of the workplace and the responsibilities expected of one individual. Rarely does such information provide sufficient contextual understanding of the challenges and benefits that an individual might encounter during a typical day at work. Flores and O'Brien (2002) note that career guidance and counselling are necessary to balance young enthusiasts with the realities of the labour market. Such information could be essential in altering the decision-making thought process to suit the individual instead of placing them in a complicated labour market that is unlikely to satisfy their career growth needs. At this point, for individuals with low self-efficacy, it is essential that career counsellors assist students to discover the aesthetic qualities that would boost their self-confidence as they begin their professional life. Such levels of intervention would help a professional to anticipate specific outcomes at the workplace and formulate the right response on their part to such events (Flores & O'Brien, 2002). Alternatively, for individuals with self-efficacy that exceeds their ability, a career counsellor is essential to enable them to gain a realistic sense of their competencies so that they do not suffer psychological obstructions from future failures.
3. **Exploration:** The third phase of the career guidance and counselling process entails an essential interpersonal stage known as the exploration phase. A typical individual requires both internal and external catalysts to help them understand their inner self on a beneficial scale. Certainly, an individual's true self and nature only becomes obvious in particular instances or scenarios at the workplace as they pursue the fulfilment of their duties. Therefore, each student must incessantly engage in an exploration procedure to enlighten themselves about their true nature and the impact on their performance (Schultheiss et al., 2001). The Person-Environment career decision theory emphasizes the need for students to choose the suitable career major that cultivates their

personality, beliefs, and values through reward mechanisms, consistent values or beliefs, or occupational roles that inspire motivation and dedication. In this view, career guidance and counselling are necessary to educate individuals on the available occupations, requirements, and compatibility with their personality, beliefs or values. Schultheiss et al. (2001) explain that career failures are often a result of persistent non-satisfactory interaction between the work environments and an individual. Therefore, career guidance and counselling are an important part of contextualizing workplace requirements and job satisfaction.

4. **Preparation and Placement:** The immediate phase after exploration is the preparation and placement stage, which focuses on anticipating an individual's career progress and effecting the correct preparation undertakings. A newly graduated individual is yet to become a professional because he or she only possesses the necessary theoretical knowledge accompanied by the occasional exposure to practical application through internship programmes (Pike, 2006). The preparation and placement phase is essential in situating an individual within the body of responsibilities that is expected of them by cross-referencing it with the information disseminated during their learning activities. This is the process where career counsellors involve the individuals to help them understand the requirements of their chosen career major. Career guidance and counselling are essential to bridge the gap between school knowledge and vocational responsibilities as it enables individuals to identify and direct their competencies towards the pursuit of career goals. Career guidance and counselling are essential for ensuring that the transition from higher education to everyday work environment is based on decision-making and logical thinking processes that will protect the professionals as well as the organization that employs their expertise (Pike, 2006).

2.3.3 Importance of Career Counsellors

The number of undergraduate students increased with more students' enrolment in higher education institutions after 1900 (Moly, 2007). Moly (2007) pointed out that this increase was due to an improvement in industrial and economic conditions brought about by natural changes such as innovation and competitiveness. The changes included a shift in the needs of the modern workplace as it dictated the type of professionals it required of the graduating groups from different learning institutions. Accidentally, the large numbers of students enrolling in higher education institutions in pursuit of acquiring the necessary knowledge to operate in different industries presented a problem for facilitators and learning institutions across the

world (Moly, 2007). The increase of students in classes made it difficult for teachers to manage and guide students, creating a huge demand for personal services for higher education students as they tried for excellence in the competitive labour markets (Moly 2007). At the present time, almost all higher education universities and colleges offer career guidance and counselling services to provide guidance to students with almost all aspects of their professional requirements. Wen (2009) and Guo (2009) stated that the significance of career guidance and counselling in colleges and universities comes from two perspectives, namely the need of students and the development of colleges and universities. Either approach must be in tandem with the other to ensure that all the stakeholders receive their dues while maintaining consistent performance at the workplace in the long-term. For students, career guidance and counselling help them to set their personal goals by trying to overcome any misunderstanding and deciding on the right career path. For colleges and universities, career guidance and counselling can improve employment rates for their graduates and increase the reputation of their institutions (Li & Ye 2001).

Career guidance and counselling services are vital tools in human development, especially in adolescent stages where people experience rapid growth and change physically, socially, morally and intellectually (Eliaman et al. 2015). At that stage, it is crucial to provide students with the support structures needed to ensure they mature into the desired professionals the education system intended. It is easier and much more logical to engage students in the active management of changes at this phase than it is at a later phase of their lives. The logic behind this approach is to ensure students' growth takes the desired development path, to avoid any later changes they might make to it when adapting to their professional roles (Eliaman et al. 2015). Career guidance and counselling services help students by ensuring that they are on the right path and most likely to be engaged to achieve their potential. From there they can move forward to their chosen destinations in their education and also in their future work. Consistent with Makinde (1984) and Patterson (1977), guidance refers to a panel of all educational areas of activities and services to help and support students to understand themselves and to be able to adapt to high education life. The ultimate goal for career guidance and counselling is to ensure that students are ready for the complex life of professionals in their career major choice as they face challenges in meeting their responsibilities.

Participation in career guidance and counselling activities provides students with the important knowledge, skills, and awareness of the world of the work (Abubaker 2001). Moreover, Tambuwal (2010) added that guidance means to assist, lead, direct, plan, manage and interact; while counselling can be seen as the process of helping the person in his or her problem to

clarify his or her goals. From this, it is decided that guidance is a combination of services while counselling is just one service under guidance (Durojaiye 1974). Commonly, Modo (2008), Okonkwo and Anagbogu (2002), and Okoye et al. (2000) stated that guidance is an interactional relationship designed to lead the individual's personal development effectively in their decision-making. They added that it helps the counselee to adjust properly to family, peers, and society and to be able to get the help from career counsellors when needed (Modo 2008; Okonkwo & Anagbogu 2002; Okoye et al. 2000). The Organization for Economic Co-operation and Development (OECD) reviewed the policies of career information, career counselling and guidance and they discovered that career guidance and counselling services assist individuals at any age through their education path, training, and career major choice and to be able to manage their careers (Carthy 2012). When career guidance and counselling services are missing, the student's adaption will be difficult, and it will lead to low performance, a loss of direction, misbehaviour, and potentially, the dropping out of school (Eliamani et al. 2013). The negative consequences listed above are likely to signify an overall waste of resources used to educate the individual up until the point where they drop out or give up on their careers. The presence of career guidance and counselling is the best alternative to ensure that students can adapt to the constant changes at the workplace driven by creativity and innovation by competing firms or businesses. The outcomes might not be universal, but logic demands that career guidance and counselling services must be part of the curriculum as a prerequisite to a successful transition to the workplace for the student (Carthy, 2012).

Career guidance and counselling is not a new approach to intervention where human behaviour is in a controlled setting. It goes back to the early development of career guidance and counselling services which started in Europe, the United States of America in the 1990s, and other developed countries (Odhiambo 2014; Varalakshmi & Moly 2009). In the early 1970s, career guidance and counselling gained consideration in Western countries when the world experienced an economic crisis. The focus of the approach in guidance and intervention is to ensure that the transfer from occupational skills to develop personal knowledge includes not only vocational skills but also decision-making, self-understanding and a working attitude (Herr & Cramer 1996). Each of those traits is essential for any professional to adjust their conduct and performance to meet the objectives set out in the workplace. Bark (2003) identified that career guidance and counselling are the supporting structures made available by qualified and trained persons to students to help them in managing their lives, as well as developing and making their own decisions. The transition from school level to higher education level could be difficult for many students and leave them with unanswered questions when it comes to

choosing their career path. Mistakes committed during this phase of their lives are likely to have longstanding consequences for their career, job satisfaction, physical and psychological discomfort and their overall quality of life (Bark, 2003).

Therefore, career guidance and counselling are essential to students' success and achievements. Ibu and Maliki (2010) highlighted that with the increasing complications in society, technology development, economy and industry, new generations will find it difficult to adjust themselves to the new world of work. In anticipation of such changes in the dynamics of the workplace, there will be an unprecedented need for career guidance and counselling services to protect the incoming generation of professionals from failure and dissatisfaction with their career major choice. The main goal of career guidance and counselling is to see and explore the possibility for each individual to find out their capabilities in a work setting, as well as how to improve their abilities in areas that might be lacking or inefficient (Kelechi & Ihuoma 2011). Braddock (2001) added that the main goal of career guidance and counselling in the education system is to improve students academically, foster positive attitudes, develop their skills and decrease the dropouts. Each of these goals is in line with the changing economic factors that require highly qualified and efficient professionals to meet economic obligations cutting across several financial years or face the prospects of another economic crisis. Stokes' (1986) study added that the counsellors' roles are to direct students towards certain goals and link with the academic skills needed to achieve their goals, as well as raise awareness in students with regards to their career major choice to help them to avoid any barriers. A study by Basham (2011) confirmed that career counsellors provide information, organize careers expos and offer career guidance and counselling services for students to help them in making career decisions and to ensure they transition into the working world successfully. The universal message outlined in each of the aforementioned studies is that career guidance and counselling focus on preparing and helping students to select the right career major which is coming from higher learning and professional studies and to be ready for the transition into the working world. The intervention focuses on modifying an individual's behaviour and thinking process to suit their characteristics and the workplace obligations depending on the changes in the competitive labour market in today's world.

The introduction of guidance and counselling services in the learning setup is a precursor for improved professional and academic growth as it credits the system with a support structure in their pursuit of professional excellence. The importance of the support structure is more apparent in a changing world where one career might not be the same for an extended period, and the new generation of professionals must understand this fact (Owino & Odera, 2014). The

extensive influence of technology among other economic factors could severely change common practices in a profession, which must be factored in during decision-making about a career choice.

There are many career guidance and counselling centres for students with adequate resources and access to use career information independently, all aimed at giving students the chance to make their own decisions as a start. In many developing countries, in higher education, career guidance and counselling is very important and highly needed due to its perceived implications for students' future life (UNESCO 2002). UNESCO (2002) indicates that career guidance and counselling area process which empowers individuals to obtain the skills and knowledge they need to make choices and decisions about their futures. More importantly, it is the fact that this process allows the individual to access and manage the growth and development of their professional career with limited possibility of failure. In past research, one of the most important methods highlighted as a way to help students increase their potential knowledge, enhanced their career plans and develop self-awareness is by having career guidance and counselling programmes (Loos 2008; Osborn & Reardon 2006). Loos (2008) and Osborn & Reardon (2006) stated that such programmes will increase students' awareness of their career decision-making skills as well as their interests. Varalakshmi and Moly (2009) added that the aim of such programmes is to assist and advise students for their future educational and career major choices and help them to recognize their strengths and weaknesses by offering different sessions about self-awareness, decision-making skills, planning skills and personal development. Owino and Odera (2014) stated that career guidance and counselling services might be individual- or group-based at the education level.

Individual counselling is to facilitate face-to-face counselling where this approach is more suited to helping the individuals as compared to group counselling. On the other hand, group guidance involves effective discussion about the impact of the information and how to adjust the problem for a much larger group of individuals (Okoth 2002; Owino & Odera 2014). The Ministry of Education, Sciences and Technology (MOEST) (2004) added that career guidance and counselling programmes manage all guidance and counselling services and activities including individual and group guidance and counselling, as well as peer counselling. Owino and Odera (2014) clarified that nothing impacts the outcome of counselling sessions more than the helper's attitude, regardless of whether it is positive or negative.

Moreover, career guidance and counselling are much more than mere face-to-face interaction between the counsellor and students needing such intervention, and the Standing Conference of the Association for Guidance in Education Setting (SAGES) has recognized eleven activities

of career guidance and counselling. The extensive list consists of activities including teaching, enabling, advocating, networking, giving feedback, managing and innovation, and informing students about the current and future opportunities of the career market (Loan & Van 2015). Moreover, the Ministry of Education of Singapore indicated that the main goals of career guidance counselling services are (p. 1):

1. Fostering students' self-awareness and self-directedness, as well as skills to determine workable goals, and to learn consistently in order to add value to their future workplace;
2. Assisting students to explore and make decisions based on valid information towards their education and career-oriented direction;
3. Instilling in their minds the value of utility for all sorts of careers and how all these contribute towards the smooth and healthy functioning of the society; and
4. Equipping students with the skills and means by which they may be able to positively engage their parents and other career influencers.

As stated by Watts and Fretwell (2002), career guidance and counselling services have been defined as services to assist students of any age and at any point through their study life by helping them in their educational and work-related career in managing their choices, and the authors included three elements to the services, including career information, career counselling and career education. Career counsellors' tasks and duties in effective career guidance and counselling services consist of career information guidance, personal development workshops, job applications, and job interview training. Counsellors also help students to prepare their cover letters and curricula vitae, as well as ready them for job interviews and group discussions (Moly 2007; Rott & Gavin-Kramar 2006). Also, Loan and Van (2015) stated that the aim of counsellors' duties is to hold one-on-one or small group interviews that focus on career issues such as careers in education. The role of a career counsellor is not limited to educational processes only but is also focused on the social and economic development components and encourages the students to learn more about the world of employment. This phase is particularly important because it determines the interaction that a student has with the immediate environment and their ability to comprehend the shifting definition of their responsibilities in the workplace. It is an essential phase because it determines that employee's ability to adapt to the challenges while simultaneously looking after their career interests (Loan & Van 2015). The possibility of pursuing only the organization's goals and objectives are significant given that it is often the sole objective of the organizations that are fixated on achieving abnormal profit margins while marginalizing their

competitors. The guidance offers the typical employee a tool to determine their future and wrestles control of their development from profit-driven organizations that might not have its employees' best interest at heart in pursuit of organizational goals and objectives (Loan & Van 2015). Loan and Van (2015) added that the main aim of career guidance and counselling is to help students in making their career major decision based on their interests, abilities and passion, and future career opportunities. Oye et al (2012) pointed out that the role of career guidance counsellors in every education institution are (p.29):

- Taking charge of establishing guidance and counselling programmes and the subsequent activities involved in meeting the objectives of the programme as well as evaluating its efficiency.
- Helping to disseminate career information to the students. The role is crucial to developing and cultivating a rapport for the student for future instances of intervention to protect the student from possible exploitation.
- Playing a major role in the identification of the guidance needs of the students. The career guidance and counselling experts have to take an active and deliberate role in mapping out the needs of the students and the relating career choices. Such information will provide the foundation for intervention efforts to protect the individuals while preparing them for their lives as professionals (Oye et al. 2012).
- Assisting parents in relating students' interest, attitudes and abilities to current and future educational and occupational opportunities and requirements. Often parents are the sources of undue pressure during the decision-making phase of choosing careers. Parents often impose their will on the students which leads to highly dissatisfied professionals who prefer a different line of work, and this leads to inherent mistakes (Oye et al., 2012). The efforts by career guidance and counselling professionals must also include efforts to reach parents to increase awareness of their role in the decision-making process of the students; and
- Providing career guidance and counselling services to students regarding their educational, vocational and personal social concerns.

Career counsellors work individually or with other counsellors to meet students' developmental needs by focusing on their academic, career and personal development. Career counsellors must try to expose their students to career development in order to help them prepare and choose the right path for their academic and career lives, as their decision plays an important role in establishing their career paths and creating opportunities (Korir 2012).

Biswalo (1996), Herr and Crammer (1992) and Varalakshmi and Moy (2009) agree with Korrir (2012) that career counsellors help students in their study choices and employment opportunities.

Every student wants to be recognized with a good professional position, and this can only happen through effective guidance and counselling on their career major choice (Oye et al. 2012). Any misstep or error committed while helping such individuals could result in a challenging career for the individual as they struggle to adjust. The reality of such an impact on an individual further elevates the role of career guidance and counselling in protecting individuals from undesirable career trajectories. The importance of choosing a programme/major is a vital part for every new entry student in higher education, as it contributes to their future success; it is a difficult decision for many of them to choose the best programme and think about their future career (Korrir 2012). This was stated by Korrir (2012), who said some students know exactly what programme/major to study while others need assistance. There are a large number of programmes/majors available which can confuse students who then find themselves switching between programmes/majors. In order to increase students' achievement in their education and career goals, career counsellors have to be aware about the factors that might influence students' career major choice and what is the best process in making their career major decision (Mtemeri & Zirima 2013).

This can be accomplished by doing a self-assessment with students related to their major subject of the study and giving them access to information about the world of work to find out the requirements (Biswalo 1996; Herr & Carmmer 1992; Varalakshmi & Moly 2009).

UNESCO (1998) stated that career guidance and counselling essentially consists of four elements:

- I. Helping students to gain self-awareness in different areas such as values, interests, and personality style. This element is more important to students than any other stakeholder as it allows them to relate to their actions and ensuing aftermath of their choice.
- II. Giving students more knowledge about jobs by connecting them to different resources. This element is important in projecting industry trends and practices, and in helping students gain the ability to make conscious and flexible decisions about their chosen professions. It is arguably one of the most critical elements, based on the possible repercussions it could have on their future careers.
- III. Involving students in the decision-making process to help them choose a career path that will be suitable to their interests, values and personality style. This element is also essential because not incorporating it into the situation would amount to imposing the

will of other people on students, which is inadvisable for individuals who are capable of making their own decisions. Students must be part of the process to ensure that the final decision is factored on how they feel and what they prefer rather than on externally imposed assumptions. This element is the key to satisfaction with career major choices and sustainability in the long term.

- IV. Assisting students to be active leaders for their career path and becoming lifelong learners in professional development. This last element is essential in empowering the individual to be an active leader of his or her career as opposed to bowing to external pressure to make unfortunate decisions. Individuals who are in charge of their careers are capable of making independent choices based on their logic and understanding of the dominant circumstances at work. Additionally, this element is also responsible for instilling a learning mentality in the student who will undoubtedly come into possession of new information that the school syllabus might not have covered adequately, or in the face of new developments in the profession.

Changes in the world of work mean that career guidance and counselling services have to meet new kinds of requirements. Lazarus and Chinwe (2011) pointed out that career development permits career counsellors to facilitate each student individually to identify and learn their skills so he or she can be more effective and capable in choosing their programme/major and in planning for their career path. Students need more assistance with academic and career path decisions through help received from the career counsellors (Wintermute 2004). Hiebert's study (2003) indicates that students want more information with regards to job requirements needed to work in particular fields to help them with their higher education programme/major selection. Magnusson and Bernes' study (2002) agreed with Hiebert's study (2003) that students thought more information about work experience programmes would be helpful for them for their career path. Other researchers pointed out in their findings that students need strong support in their career management, decision-making and tasks, more so than knowing about their personality (McMahon & Watson 2005). Therefore, the main goal of career guidance and counselling services is to ensure that each individual student can see and explore his or her unlimited educational benefits (Eyo et al 2011; Lazarus 2011).

Doman, J. et al. (2006) agreed with Eyo et al. (2011) and Lazarus (2011). In their study, they reflected that career counsellors are the best and the most preferred source in supporting students in their educational planning needs. This can be accomplished by doing a self-assessment with students related to their programme/major choices and personalities, by

accessing information regarding requirements in various fields, and by giving them advance training in preparation for future careers (Biswalo 1996; Varalakshmi & Moly 2009). Amani and Sima (2015) agreed with Biswalo (1996) and Varalakshmi and Moly (2009) in their study, that in higher education, career counsellors need to help students make long-term plans which consist of career plans and choices of fields of study, and that students need to receive advance training to help them in joining the world of work.

Moreover, other researchers such as Odeck (1999), Ipaye (1995) and Makinde (1981), added that the main important services of career guidance and counselling are:

- a. Educational guidance and counselling which assists students in their study life choices and in their curriculum. Such efforts must reflect the needs of the students in an education setting as they gain more knowledge about their chosen profession. It is essential for the long-term stability of the economy and the quality of life for the professional for them to be accomplished.
- b. Vocational guidance and counselling which assists each student individually to choose and be ready for an occupation. The wide array of employment opportunities in different professions warrants the introduction of a pensive intervention mechanism to protect students from overexposure or underexposure to career opportunities or possibilities.
- c. Social guidance and counselling which assists each student individually to behave in appropriate ways while they are dealing with other members of their society. The typical organization exists as part of an expansive and interconnected society as globalization and other factors interlink different parts of the world. Career guidance and counselling could help an individual in situating the worldview and ethics in the day-to-day interactions with other members of society. A typical professional or student must understand the ethical frameworks necessary in their interactions with fellow employees, senior management, and the society at large.

According to studies by both Mvungin (2009) and Mbilinyi (2012), the education system in Tanzania did not provide proper career guidance and counselling to the majority of students. The analysis of their studies showed that the majority of students receive general information orientation about social welfare and university policies once they join the university, and that little information is given to them with regards to career guidance and counselling and the requisite courses. The practices could help explain the challenges that arose in the Tanzanian economy in recent years as the students struggle to adapt to the complex and unstable

employment industry. In these studies, the authors viewed that career guidance and counselling services should cover the knowledge of prospective careers and world of work preparations (Mvungin 2009; Mbilinyi 2012). The absence of such intervention methods leaves students at a disadvantage, particularly in careers with massive industrial shifts or competitiveness on an international platform.

Contrary to popular beliefs or understandings, career guidance and counselling are not limited to providing information and guidance for students' decisions; it also helps them to develop their personalities and essential skills for the long-term as a vital component of human capital. Its importance surfaces through involvement in searching for a job, education and training, and to be able to adapt to changing in the latest job market and requirements (Gazier 1999; Loan & Van 2015). Presently, in different higher education institutions, career counsellors offer student development courses and seminars which cover different topics about goals setting, job searching and career exploration activities for incoming students who would like to use the advising services (Doyle, J.W 2001). Their efforts will likely increase the ability of graduating students to adapt to the challenges of the workplace and perform consistently, regardless of the prevailing circumstances. Such wholesale approaches to training students could also market higher education institutions as an ideal learning destination for future successful professionals. The positive outcomes associated with career guidance and counselling should warrant its unquestioned introduction in learning institutions across any forward-thinking educational system.

Litoiu and Oproiu (2012) pointed out that based on theoretical points, career guidance and counselling policies are developed along three paths:

- a. Lifelong guidance, complementary to lifelong learning. This guidance policy offers the recipient lifelong exposure to career guidance and counselling services that will exponentially improve the quality of life that the individual enjoys. The efforts are more concerted towards day-to-day life occurrences and how to cope with extreme changes in one's personal life;
- b. A professional model, more open, providing a wide range of interventions. The professional intervention is more involved with a wide array of activities directly connected to the ability of an individual to function as part of a professional body. The career guidance and counselling policies under this category are particularly beneficial when pursuing professional satisfaction and competence. The wide range of intervention mechanisms is reflective of the variety of instances that might require intervention to sustain or improve the quality of life enjoyed by an individual.

- c. The active role of the individual, as a part involved in career guidance and counselling services. The active individual is the most important part of the career guidance and counselling process because everything else depends on the active individual and his or her willingness to submit to the career guidance and counselling process. The active individual must possess the mental and physical capability to immerse themselves in the activities recommended by the career guidance and counselling expert. Under that condition, he or she is capable of learning and making changes to his or her conduct with the end goal of being a productive member of society.

2.3.4 Factors Affecting Students' Career Choices

A student's career major choice does not subscribe to one source of information or advice on the grounds of making the right choice. The individual student is likely making a decision based on internal factors such as their philosophical views, religious beliefs and personal aspirations. However, the most significant source of influence comes from the external environment consisting of factors out of the control of the individual. One of the most notable student preferences is seeking advice from others in their social, academic and economic circles as opposed to exclusively relying on career counsellors (Niles, Amundson & Neault 2011). The extent of this influence on the decision-making process exceeds international borders as the individual students look to trends in society to make their decisions. There is a significant possibility of the students making the wrong choices about their career major based on the internal and external environment as explored in this part. That reality is responsible for the active concern of the inclusion of career guidance and counselling as part of the learning curriculum to improve the chances of being better prepared for future decision-making (Niles, Amundson, & Neault, 2011).

Numerous studies have been examined in the Western and Eastern parts of the world which found different factors that affect students' career major choice and influence their academic success by leading them to drop out from higher education (Bean 1980; Bean & Metzner 1985; Ferry et al. 2000; Jansen & Bruinsma 2005; Tinto 2012; Van den Berg & Hofman 2005). Several studies found that the primary factors for students include parents, friends, peers and teachers (Alextich & Page 1997; Bardick et al 20014; Magnusson & Bernes 2002). Alextich and Page (1997) maintain that students believe their teachers provide them with more helpful advice compared to the career counsellors, and most reports show parents as students' primary resource. Also, the students report that career guidance and counselling services are not adapted

to their needs in making career decisions (Bardick et al. 2004; Gibbons et al. 2006; Mahnusoon & Bernes 2002). On the other hand, Amani and Sima (2015) discovered in their content analysis that there are some factors that affect students' career major choices, which include a lack of professional counsellors, unclear implementation of career guidance and counselling services policies and a lack of students' awareness about counsellor's roles.

The factors listed above confirm the often underutilized and underappreciated role of career guidance and counselling services. Underestimating the value of career guidance and counselling is responsible for a lack of professional counsellors and uncertain implementation of career guidance and counselling service policies, as well as a lack of student awareness about career counsellors and their programmes/majors. The lack of awareness of the role of career counsellors in the professional future of the students could be responsible for the inadequate number of career counsellors and career guidance and counselling programmes attached to most higher learning institutions. Furthermore, it could also be responsible for the limited or unsatisfactory implementation of any career guidance and counselling services policies used in other institutions because it is necessarily a foreign concept to that learning facility. In the end, most of the students that complete their curriculum in such institutions are unaware of the importance of career guidance and counselling services to their careers. Such conditions would help explain why some students made unsuitable career major choices that do not reflect their true interests or chose careers that are too energetic for their capacity (Sharf, 2016). In the end, students who face such conditions are mostly unsatisfied or make catastrophic mistakes.

One of the most influential entities in a student's life is the parents or guardians charged with his or her welfare until they are of legal age. Parents provide that unexplored platform for directing the lives of their daughter or son, which opens up the possibility of erroneous decision-making (Sharf, 2016). Parents have no trained experience in providing advice about the career path for their children regardless of their current path. Some studies indicate that parents are unsure about how to help their children with career development as they do not have a background knowledge about the career options available, thus they are incapable of providing a reliable platform for decision-making for their children. Students are often left to make a choice based on other external factors discussed in this part, which could explain some of the illogical decisions they make. Such choices are often a cause for regret for both the student and his or her parent. The involvement of career guidance and counselling services could be beneficial in such circumstances in order to prevent future suffering or frustration with the chosen career (Cripps & Zyromski, 2009).

Another educational expert in Vu Tuan Anh's study (2014) stated that the reason for having a high proportion of unemployed undergraduates is the mistakes – theirs and their parents' – in making career major decisions. Often, students are under immense pressure to follow in the footsteps of their parents, such that the son of a doctor should become a physician. In the end, this situation results in strained relationships and/or poor career growth and low job satisfaction for the students. Such cases get even worse in instances where the parent(s) also made a mistake and committed their entire life to an unsuitable career and, in turn, imposes the same on their son or daughter. In other cases, parents delegate such duties to individuals they feel will have a better communication with their children, specifically their career guidance counsellor. The targeted individual will have a better view about the needs of the job market, but this becomes a challenge where qualified personnel are few, even at school (Bardick et al., 2005). In the end, in all of these situations, students end up making career major decisions without the proper intervention or advice from qualified professionals.

Additionally, Salami (1999) found in his study that young students made a mistake in their career major choice due to their ignorance and inexperience. Others made grave mistakes about their careers and their future based on advice from close friends, associates, peers, and their social circles. Such claims are similar to those expressed through Sax's study (1994), which examined factors that influence career major choice during college years, and how these factors differ between male and female students. He found that men appear to draw inspiration from financial concerns, while women were concerned more with the social good of their career major choice (Sax 1994). The difference in gender would provide contextual information regarding the society's division of labour based on gender (Sax, 1994). The prevailing circumstances in the world of work indicate this is no longer the case as gender equality has become a mainstream topic for discussion. Such misunderstandings could factor into the decision-making process for the student who might drop their preferred career in favour of a more aesthetic choice.

Another social factor that influences decision-making is age, where individuals from particular age-groups are likely to choose specific types of jobs (Blustein, 2013). The youth in the current age are likely to choose technology-based or trending jobs as they seek to keep at equivalence with changes in society. However, such choices could be disadvantageous to the student should there be a trend change or if numerous other factors exist that could affect employer needs. Perry's study (2006) agreed with Salami's study (1999) and Sax's study (1994) that young students draw influence from their life context and personal attitudes in their career major choice. In that sense, it is important to gain career guidance and counselling services to students

of a particular youth group to prevent them from making illogical career major choices driven by their age, which could become a source of suffering and growth frustration.

Other studies have separately investigated the influence of youth career major choice and most of them found that the main factor influencing their choices is their parents, especially their mother (Bojuwoye & Mbanjwa 2006; Hairston 2000; Knowles 1998; Mau & Bikos 2000; Mickelson & Velasco 1998; Wims 1994; Wilson & Wilson 1992). These studies found that mothers play an important role in influencing the occupational aspirations of their children, and therefore, their career major choices and development. Similar studies found that family, especially the mother, plays a vital role in a child's career decision (Guerra & Braungart-Rieker 1999; Mickelson & Velasco 1998; Otto 2000). Additionally, other family variables that could influence the career inspirations include a parent's occupation, and family size (Downey 1995; Marjoribanks 1997; Singh et al. 1995; Trice 1991). Most adolescents are influenced by their parents' aspirations, especially if their parents have a high educational degree (Boatwright et al. 1992). Similarly, Kniveton (2004) concluded that family could provide guidance directly or indirectly and influence their children in their career major choices.

Furthermore, in the many studies that have been conducted in Western countries other variables that influence students' career major choice and occupational goals, include the family and their education level (Crockett & Bingham 2000), past experiences (Jones & Larke 2005), personal factors like personality types (Cutler et al. 2006) and social economic status (Wilson & Wilson 1992). Each of those factors directly impedes or directs an individual to make particular decisions with a view to making the best of the situation. For instance, the family and education level could lead one to make a choice to pursue a career that fits into the family business and their level of education. While that choice carries sentimental value, it is an imperfect way of making a decision about one's future. An individual might also rely on previous experiences to decide about their future, which often turns out to be a logical approach (Cripps & Zyromski, 2009). However, there is a slight chance that the past might not accurately predict the future, which leaves open the possibility of getting stuck in a wrong career that becomes obsolete over time.

Researchers indicated that students with personal or academic problems can find that those problems affect their personal life, study level and career major choice. Hayden (1997) highlighted that there are a variety of stress factors that affect students including family breakdown, special educational needs, disability and abuse, to name a few, and there may also be no family member at home in paid work. Furthermore, other researchers indicated that there

are different factors that might affect students' career major choice. Below are the common factors that affect students' career major choices at the higher education level:

1. **Personality:** Allport (1937) defined personality as a set of psychophysical systems that determine someone's unique environment, whereas Robbins (2001) propounds a personality definition as "the sum total of ways in which an individual reacts and interacts with others" (p.29). Nevertheless, there are often theories that assess the personality and its traits, and one of them is 'RIASEC' as propounded by Holland (1985). Holland (1987) claimed that the career choice is an expression of personality characteristics. From the students' perspective, Edwards and Quinter (2011) reported that 70% of the students are impacted by their personal interest when making a career major choice. Udoudoh (2012) added that 79.2% of the students are influenced by personality trait and career choice, and that 65.2% think that personality traits can lead to a perfect career major choice. Additionally, Kabir and Sajib (2014) stated that only a few studies have considered personality traits as the best students' career preferences, where the majority of the students have selected Holland's 'RIASEC' model to assess their personality.
2. **Interest in Field:** Career interest is the second factor that affects students' career major choice. Interest may be considered as an activity in which a student engages for his or her own benefit or enjoyment without looking for an external reward (Holland 1987). Interest in the field is particularly important for the student in instances where the challenges they face at work are demoralizing. Interest in the field could serve as one of the platforms for drawing motivation to continue operation regardless of the notable challenges.
3. **Aptitude and Intellectual Ability:** Intellectual ability is one of the elements of self-efficacy that significantly influences the choice of a career. Garriott (2012) explains that it is personal ability that makes individuals prioritize certain occupations as they have foundational knowledge of their responsibilities. Thus, they may require minimal support to succeed if allowed an opportunity.
4. **Environment:** The impact of environment in career decisions is emphasized by the Person-Environment Fit (P:E Fit) Theory. In this view, the interaction between an individual's skills and abilities within a supportive situation or environment is a major consideration in career major choice. The ideal choices would involve factoring the

contents of the immediate environment and the short-term and as well as the long-term effect on an individual.

5. **Family business:** Family endowment may influence career major decision under particular circumstances. Firstly, in a case whereby an individual has low self-efficacy, the availability of a family business offers an easier option from the mainstream occupations. Secondly, in cases (societies) whereby the management of a family business is an institutionalized tradition, career major choices may be impacted by the obligation to the family to manage the business.
6. **External Factors** External influences that impact career major choices are categorized as contextual factors by current career planning literature. They include factors such parental/family/friends' support or involvement, and the availability of mentors or other supportive resources that may encourage or discourage individuals from pursuing certain careers.

The most important of these external factors are past experiences (Jones & Larke 2005), the influence of reference group (Bryant et al. 2005), personal factors like personality types (Cutler et al. 2006), and variety in a profession (Willcockson & Phelps 2004). However, other researchers highlighted different factors such as job market needs, major difficulty, and others which they think affect students' career choice.

Overall, understanding career development theories can help career counsellors in helping their students, especially in the latter's first year. Therefore, career counsellors should build a good relationship with each student individually and be prepared to expect students to change in their career decision directions. Consequently, students will keep in touch with their career counsellors, so they can help and support with needed information and guidance for their career path and support them by helping them identify their strengths and weaknesses through self-assessments (Hughey et al. 2009).

2.3.5 Career Guidance and Counselling Internationally

Students in every country face challenges when deciding on their career path. Through education and changes in the labour market, students need to know more about their country's economic growth and changes at the local and national levels that influence jobs. The crucial difference between career guidance and counselling systems in different countries can be related to economic, political, social and cultural factors, to education and training systems and

to organizational structures (Watts 1999). The following section explores career guidance and counselling in different countries and regions around the world.

Pope et al. (1998) stated that in Asian countries, students regularly choose their career based on their parent's criteria and they found in their study that Asian students really need help through career guidance and counselling services. Watts and Sultana (2004) stated that career guidance and counselling are well developed in high-income countries, unlike in the Middle East, North Africa and in many developing countries. High-income countries have systematic education systems in place that cater to varying needs of both students and the job market. Higher-income nations possess sufficient resources to protect students from erroneous decision-making as a means of catering to the needs of the labour market (Watts & Sultana 2004). It is important to ensure that graduating students meet the professional requirements of the labour market because it has a direct influence on the performance of the economy in the long-term. In many developed countries like the USA and Finland, well developed career guidance and counselling services exist throughout the entire education system. In their higher education institutions, such countries have career guidance and counselling centres which enable students to access information and resources such as books, journals and videos related to different careers and career tests (Varalakshmi & Moly 2009; UNESCO 2002).

In Canada, Hartman (1999) states that career counsellors facilitate and provide help and support for their students and families outside if they need it, while in Botswana, they provide individuals with career guidance and counselling services based on value, respect and dignity, and provide them with evaluation services through questionnaires, interviews, and observations (UNESCO 2000). A study carried out by Chirese (2006) in Zimbabwe stated that the effective career guidance and counselling services components provided include policy statement, services planning, peer counselling and services evaluation. A close combination of those factors will likely result in the desired level of career guidance and counselling performance in the countries discussed above. Alternatively, successful implementation of career guidance and counselling services could use policy statements, service planning and services evaluation as core features before investing in other services, and results would still be within a reasonable range (Chirese 2006, UNESCO 2000).

A comparative study of career guidance and counselling services was conducted in Shanghai, Hong Kong and Edinburgh by Zhang (1998), who discovered that there were different ways of career guidance and counselling development based on the social and political context of each city. Hong Kong was behind the other two cities in having an absence of comprehensive policy and guideline to their services. Zhang mentioned in his conclusion of the study that

Career guidance still uses the old traditional methods. Very few studies have been done to explore career guidance theories and model or test out school career guidance practice in the context of Hong Kong. It is doubtful whether the traditional methods of career guidance can be used effectively in the 1990s. (p. 39)

With economic changes and shifts in education policies, the role of career guidance and counselling services becomes more important as it has shifted from a traditional information role to a developmental role (Li 2007). Nevertheless, Leung (1999, 2000) claimed that even while career guidance and counselling services in Hong Kong become more vital with large-scale programmes, they still face a problem with the career counsellors themselves. The career counsellors are often full-time teachers with little time for career counselling programmes and an inability to follow up with students. Additionally, there are no up-to-date resources, information booklets or career assessments, and career guidance and counselling rooms are limited (Leung 1999, 2000). With the paradigm shifting, Li's study (2007) showed that they have integrated and allocated roles as career counsellors and educators. Career counsellors today focus only on their own roles, which led to developing the career guidance and counselling services at all education levels in Hong Kong.

Career counselling in Korea, as compared with other countries in Asia, is fairly new but at the same time is a fast-growing development. Even beyond the higher education context, the need for career guidance and counselling services is rapidly increasing the demand in secondary school level to educate and train teachers to be aware about it and to help the students in their career major choices (Leong & Pope 2002). The Center for Campus Life and Culture in Seoul National University (SNU) has a strong history and reputation as both a counselling and research centre. The centre suggests how psychological services could serve and help students and understand their needs (Goh & Lee 2003). Further studies from different Korean researchers demonstrate a commitment to having a better understanding of helping and delivering career guidance and counselling services to Koreans students (ex: Jang 1999; Jang 2001; Kwon 1996; Yoo 1997; Yoo & Lee 2000; Yoo & Yoo 2000). Additionally, Kim (1995) noted that career education was introduced in 1964 under the term 'career guidance' but was at that time unfamiliar to the public. He also noted that there were around two hundred articles between 1990 and 1998 focused on career guidance and counselling services issues in Korea. While most of the studies looked at career decision-making and the career development process in Korea, there were a few that looked at the concept of university career guidance and

counselling centres and a few addressing a cross-culture experience in transferring concepts of career guidance and counselling centres developed in the United States for use in the Korean context (Kim 2001; Kim & Kim 1996; Lee 1997; Lee 2001).

The career guidance and counselling system in Sweden is primarily organized in two ways: in either local guidance services at the department level or at a central comprehensive services centre. Their career guidance and counselling centres offer individual counselling support and provide different information about job vacancies and internships and provide help about career major choices and job applications (Swedish Council for Higher Education 2015). Moreover, they provide five types of guidance services: guidance in compulsory school, upper secondary and adult education; municipal guidance and information centres; academic guidance services at higher education institutions; guidance from the public employment services; and information through nationally funded web services. Each one of these types is targeting specific groups and clients with different activities and responsibilities, as shown in the table below:

Table 1: Types of career guidance services in Sweden

Type of Guidance Service	Activities	Clients/Target Groups	Responsibilities & Administrative Control
Guidance in compulsory school, upper secondary school and adult education	Helping individuals with awareness of their own capacity and potential, creating personal goals, support in choosing the next level of education	Pupils in compulsory and secondary school, students in municipal adult education	-Ministry of Education and Research -Swedish National Agency for Education -Swedish School Inspectorate
Municipal guidance and information centres	Guidance about studies as well working life, Swedish for immigrants	Adults	-Municipal authorities
Academic guidance services at higher education institutions	-guidance at a central level -guidance in the departments -career centres	Students and prospective students	-Ministry of Education and Research -Swedish Higher Education Authority

Guidance from the Public Employment Service, 418 employment offices in Sweden	Guidance to increase the clients' self-awareness and knowledge of the labour market	Jobseekers, clients in transition. Special focus on vulnerable groups	-Ministry of Employment -Public Employment Service, head office
Information through nationally funded web services	Information on education and working life, tool for self-guidance	The public	www.utbildningsinfo.se www.studera.nu www.arbetsformedlingen.se

In China, career guidance and counselling theories have been mainly adopted from Europe and the United States since 1990 (Sun & Yuen 2012). Sun and Yuen (2012) stated that Tsinghua University in China started the work in this field, introducing the first vocational guidance committee in 1923 to increase the need of career guidance and counselling services in higher education. Over the years, many career guidance and counselling centres have been established in universities and colleges with useful experiences where effective career planning is implemented to extend the employment guidance and counselling more in the direction of career planning (Bian 2008; Li 2002; Ma 2009; Sun & Yuen 2012; Wu 2008). Such changes could provide contextual reasons behind the recent growth spurt in China driven by technology at its core. The notable improvements are a direct result of efficient distribution of human resources to their rightful professions, which optimizes their use in improving various portions of the economy. Countries that fall below the spectrum could utilize such strategies to directly influence their education system resulting in desirable outcomes for the economy and the society as a whole (Bian 2008; Li 2002; Ma 2009; Sun & Yuen 2012; Wu 2008).

In Romania, according to a U.S Library Congress study, the Ministry of Education established the Information and Vocational Counseling Centers in the 1990s for teachers, parents and students at the pre-university education level cooperating with the Ministry of Labor and Social Protection. Nowadays, a few of these centres are implementing different activities to support students and graduates (Bachman 1989). Litoiu and Oproiu (2012) stated that Romanian students start planning for their specialization area as early as the eighth grade and are able to make their career major decisions when their family has a strong influence on career orientation.

In Finland, career guidance and counselling services were established in all universities and colleges between 1994 and 1995, with a main focus related to students' career major choices. They also offer information for the students on how to choose their major to ensure that it will help in their future career (Lairio & Penttinen 2006).

Career guidance and counselling services in Baltic countries are shared between the education and labour sectors, as they start from the primary school level and go through to the higher education level to ensure the development of students' career management skills. It also helps them to be aware of their interests and abilities, and to select the right direction of their education path (Vintere & Balode 2016). Vintere and Balode (2016) stated that career guidance and counselling services in these countries are measured through three different kinds, including career education, career counselling and career information. Each of the three facets of counselling targets a particular aspect of an individual's existence and his or her relation to the economic performance of the countries in the Baltic region. The need for conformity to the three services is higher in these countries since they are the blueprint for future implementations and improvements that could affect the economy in the long-term (Vintere & Balode 2016).

Rosenberg et al. (2009) found that in South Africa few teachers had been trained in life orientation and the content of careers in order to be ready to help learners, while other teachers already have knowledge and experience about this. Also, in the same study by Rosenberg et al. (2009), it was found that 60% of students did not receive any information about career guidance and counselling services. In such a case, students in South Africa do not have a clear sense about their career major choice because they don't receive any career guidance and counselling services while they study (Maree 2011). Adejimiola and Olufunmilayo (2009) demonstrated that Nigerian students choose their career major based on trial and error or on advice from uninformed relatives.

In Kenya, a formal career guidance and counselling programme was introduced in the early 1960s during the first Guidance and Career Conference, which was held in 1963 to uncover the importance of career major choices for students in higher education institutions (Klionzo 1984; Oketch & Ngumba 1999). Career guidance and counselling in the Kenyan education system was officially recognized in 1970 and the Ministry of Education (MOE) established a Guidance and Counseling Unit. The responsibility of this unit is dealing with educational and vocational guidance, as well as psychological counselling (Ministry of Education, Science and Technology, 2005). Through the development of the economy, industry and education, the

education system in Kenya developed and there is more focus on career guidance and counselling services and addressing students' needs. Gachathi (1975) stated in his study that there was a need to increase the educational and career guidance and counselling in schools, universities and colleges. He added that in early 1975, career guidance and counselling in Kenya developed to the best academic and professional levels, but that there was no evaluation to measure its effectiveness. According to Ogodha (2000) and Wambu and Fisher (2015), there are no career guidance and counselling services in the Kenyan education system, which has created a lot of college and university dropouts affecting students' skills, as they are not aware about the job market needs. Therefore, the government of Kenya insisted on implementing career guidance and counselling programmes in all levels of the country's education system to address students' academic careers and personal needs (Wambu & Fisher 2015).

Furthermore, in several European countries like Austria, Belgium, Cyprus, Greece, Poland and Romania, career counsellors lack a common legal framework and most career counsellors highlighted the absence of effective training and tools in their field to support them in delivering high-quality services (Watts & Sultana 2004).

In Gilgit-Baltistan in Pakistan, there was little attention to students' educational and career guidance and counselling services in the past as there was a lack of awareness among students, teachers and parents, and there were no resources to help them. However, with the growth of education and more choices of educational institutions and careers, the role of career guidance and counselling is becoming more important in shaping students' futures (Khan et al 2012).

CHAPTER THREE: METHODOLOGY

Research methodology is a structure of clear rules and process which on which research is based, in order to claim knowledge (Nachmias & Nachmias, 1996). This chapter presents the rationale for using a mixed method approach to study the effectiveness of career counselling and guidance for the higher education students of a selected federal higher education institution in the United Arab Emirates. In order to answer the research questions, it is necessary to understand the career guidance and counselling services and the factors that affects students through using a mixed method design.

The first section will present the research approach of the study and the rationale behind using the explanatory sequential mixed method design of this study and its philosophy. The next section will present the method of selecting the site and participants. The design of the data collection instruments will be in the next section which consists of explaining each instrument used in this study, together with the ethical considerations of the study, and the last section will present the data analysis process of the study.

3.1 Research Approach

Huysamen (1987) stated that research design is “a preconceived plan according to which data are to be collected and analyzed to investigate research hypotheses” (p.1). Borg and Gall (1989) added that research design “refers to all the procedures selected by a researcher for studying a particular set of questions or hypothesis” (p.321). Therefore, research design is a logical model that guides the researcher in collecting and analyzing the data (Nachmias & Nachmias 1996). A research design is a plan of study and it can be either qualitative or quantitative or both, depending on the nature of the research problem and questions (Oppenheim 1996; Orodho 2003; McMillan & Schumacher 1993). Yin (2009) and Bryman and Bell (2007) stress that research design provides an overall structure of research investigation from the framework phase to the collecting and analyzing data phase. The main purpose of the research design is to help avoid any situation where the evidence doesn’t match with the research problem and questions (Miller & Lessard 2001; Yin 2009).

Creswell (2009) and Collis and Hussey (2003) believe that research methodology is the overall structure of the design process for conducting any research, from the theoretical framework phase to the collection and analysis data phase. Therefore, it could be inferred that the research

philosophy is an important part of the research methodology, concerned with the way in which the research will be viewed in the world (Sanunders et al. 2009; Yin 2009). Hence, this research philosophy will help in clarifying which research design will work and which will not, to identify the knowledge that is needed in the research (Easterby-Smith et al. 2003).

In this study to find out the most effective career guidance and counselling services to students in the higher education level in the United Arab Emirates, a mixed methodological approach is thought appropriate to follow in this study. Creswell (2012) defines the mixed method research design as a “procedure for collecting, analyzing and ‘mixing’ both quantitative and qualitative methods in a single study or series of studies to understand a research problem” (p. 535). Punch (2009) agrees with Creswell (2012) that mixed methods research is “empirical research that involves the collection and analysis of both qualitative and quantitative data where they are mixed or combined in some way” (p. 288). Generally, when conducting a mixed method study and using both qualitative and quantitative methods, it provides a better understanding of the research problem, rather than using one type which is not enough to address the problem of the research or answer it (Creswell, 2012). When one type is not enough to address the research problem and research questions, more data is needed to extend and explain by using the other type.

Research design can be categorized into three basic categories: qualitative, quantitative and mixed methods research (Cohen et al. 2007; Creswell 2008; Gliner et al. 2009; Kothari 2010).

3.1.1 Mixed Method Approach

This study attempted to investigate the main factors that influence higher education students' career major choice; therefore, mixed methods research approach is found to be the best to use. Creswell and Plano (2007) define mixed methods as:

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. (p. 5)

This study follows a single mixed method research design which is defined by Creswell (2012) as a “procedure for collecting, analyzing and ‘mixing’ both quantitative and qualitative methods in a single study or series of studies to understand a research problem” (p. 535). Punch (2009) agrees that mixed methods research is “empirical research that involves the collection and analysis of both qualitative and quantitative data where they are mixed or combined in some way” (p. 288). The reason for using this method was to help in providing a clear understanding of the research problem and allows for more in-depth investigation of the career guidance and counselling programme, while using one type sometimes is not enough to address the problem of the research or answer it (Creswell, 2012). Johnson and Christensen (2012) agree that mixed methods approach helps in improving the quality of the research by combining the qualitative and quantitative methods. Combining qualitative and quantitative methods will allow this study to representation and generalization of quantitative data findings from the questionnaire and rich context nature of qualitative data findings from doing interviews with participants and career advisors, and document analysis of the career guidance and counselling programme (Greene & Caracelli, 2003). Most of the researchers agreed that mixed method is the most appropriate for obtaining attitudinal information for research questions about values, ideas, feeling, opinions, behaviour and experiences (David & Sutton 2004; Gray 2004; Pratt & Loizos 2003; Neuman 2000; Oppenheim 1996; Robson 1995; McMillan & Schumacher 1993; Babbies 1992; Dooley 1990; Kerlinger 1986; Dean et al. 1982). Mixed method is the best method to use for this study to gather information that reflects the opinion of many participants from different majors and levels. Moreover, several studies in the field of education use the mixed methods and most of them agreed that this method is a useful tool for educational fact finding (Kerlinger 1986; Cohen & Manion 1989; Gray 2004; McMillan & Schumacher 1993; Borg & Gall 1989; Pine 1975). The table below summarizes the features of qualitative and quantitative methods.

Table 2: Features of qualitative and quantitative methods

	Qualitative Research	Quantitative Research
Type of Knowledge	Subjective	Objective
Aim	Exploratory and observational	Generalizable and testing
Characteristics	- Contextual portrayal	- Independent and dependent variables
Sampling	Purposeful	Random
Data Collection	Semi-structured or unstructured	Structured
Nature of data	- Narratives, quotations, descriptions.	- Number, Statistics
Analysis	Thematic	Statistical

Additionally, Miles and Huberman (1994) summarized the qualitative and quantitative as shown in the table below:

Table 3: Summary of qualitative and quantitative methods. Adapted from: Miles and Huberman (1994, p. 40).

Qualitative	Quantitative
The aim is a complete, detailed description.	The aim is to classify features, count them, and construct statistical models in an attempt to explain what is observed.
Researcher may only know roughly in advance what he/she is looking for.	Researcher knows clearly in advance what he/she is looking for.
Recommended during earlier phases of research projects.	Recommended during latter phases of research projects.

The design emerges as the study unfolds.	All aspects of the study are carefully designed before data is collected.
Researcher is the data gathering instrument.	Researcher uses tools, such as questionnaires or equipment to collect numerical data.
Data is in the form of words, pictures or objects.	Data is in the form of numbers and statistics.
Subjective – individual’s interpretation of events is important, e.g., uses participant observation, in-depth interviews etc.	Objective: seeks precise measurement & analysis of target concepts, e.g., uses surveys, questionnaires etc.
Qualitative data is more 'rich', time consuming, and less able to be generalized.	Quantitative data is more efficient, able to test hypotheses, but may miss contextual detail.
Researcher tends to become subjectively immersed in the subject matter.	Researcher tends to remain objectively separated from the subject matter.

Different researchers in their research into career guidance and counselling programmes and student career major choices have chosen the mixed methods design, such as Strods’(2013) study about the correlation between career guidance practitioners’ previous education and student career major choice. Awinsong et al.’s (2015) study investigated students’ perception of the role of counsellors in their choice of career by using mixed methods design, and other career guidance and counselling-related studies have used mixed methods design, such as: Chireshe (2006), Chireshe & Mapfumo (2005), Coker & Schrader (2004), Kangai et al. (2011), Loop (1997), Navin (1989), Owino & Odera (2014), and Sink & MacDonald (1998). Stower (2003) noted that after reviewing several articles related to career guidance and counselling, he discovered that more than half of them had used the mixed method design. He added that this design is suitable for assisting career counsellors in their services to provide more high-quality services for their students with high outstanding quality and knowledge (Stower 2003). The

following paragraphs describe both qualitative and quantitative and their rationale for the use in the current study.

Qualitative research is a subjective approach as the best way to gain in-depth understanding of the topic under study and get closer knowledge of a phenomenon or individuals (Creswell 2012). In other words, Denzin and Lincoln (2005) stated that:

Qualitative research is situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world into a series of representations, including field notes, interviews, conversations, photographs, recording, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world, this means that qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.” (p.3)

Glesne (2011) added that using qualitative methods guides the researcher to have more realistic data for the study and it relies on peoples' behaviours, beliefs, knowledge and perceptions to analyze a certain event. Further explanation by Denzin and Lincoln (2000) is that qualitative research places “emphasis on the qualities of entities and on processes and meaning that are not experimentally examined or measured in terms of quantity, amount, intensity or frequency” (p.8). They added that qualitative research conducts in a natural setting and involves the picture of phenomenon of interest (Denzin & Lincoln 2000).

According to Smith et al. (1979), qualitative research services the traditional, the experimental, or the positivist methods to able to identify the problem. Although this approach brings out data on participants' experiences, emotions and beliefs, it is considered as time-consuming and expensive at the same time (Makore-Rukuni 2001), but in this current study, there will be no cost for the researcher as she is doing it at her workplace.

In contrast, quantitative research is an objective approach in terms of using numerical, experimental, descriptive, correlation and statistics to measure the phenomena under investigation (McMillan & Schumacher 1993). Moreover, Trochim and Land (1982) defined quantitative research design as the

glue that holds the research project together. A design is used to structure the research, to show how all of the major parts of the research project – the samples or groups, measures, treatments or programs, and methods of assignment – work together to try to address the central research questions.” (p.1)

Antonakis (2004) pointed out that “the quantitative is used when the phenomenon under study needs to be measured, when hypotheses need to be tested, when generalizations are required to be made of the measures, and when generalizations need to be made that are beyond chance occurrences” (p.54). Generally, quantitative research is more concerned with testing theory, measuring, numbers, and analysis using statistical techniques (Creswell 2012; Smith et al. 1979). Generally, this approach is the best for this study because the researcher is using a questionnaire design that is a descriptive for a large number of the population where the researcher can collect data from several participants, setting a time and then compare the findings (Makore-Rukuni 2001).

3.1.2 Explanatory Sequential Mixed Method Case Study Approach and its Philosophy

This study uses the explanatory sequential mixed methods design as one good type of mixed methods design proposed by Creswell (2012), and it is also called the two-phase model, as figure (4) shows, which will use quantitative approach as a predominant method and the quantitative approach as a nested method. This research design model is the most relevant and appropriate to answer the research questions because this type of method captures the best quantitative and qualitative data, to obtain quantitative results in the first phase and then elaborate on these findings through an in-depth qualitative in the second phase (Creswell 2012). The reason of using this model in this study is that the quantitative results provided a big picture of the research problem and more analysis could be collected through qualitative data to get the general picture (Creswell & Plano Clark 2011). Moreover, this design achieves the best of qualitative and quantitative data by obtaining quantitative results from a population in the first phase, then elaborates the finding through in-depth qualitative exploration in the second phase (Creswell 2008). Hanson et al. (2005) pointed out that this model is basically used when research topic and theory are available but not complete. Additionally, Kelle (2006) added the many advantages of using this model:

1. It is useful for explaining quantitative and qualitative findings;
2. It can clarify incomprehensible statistical findings because sometimes it is difficult to understand the meaning of statistical findings without local knowledge; and
3. It is useful because the quantitative phase can increase the validity of the qualitative results through providing a sampling frame and selected criteria for the qualitative study.

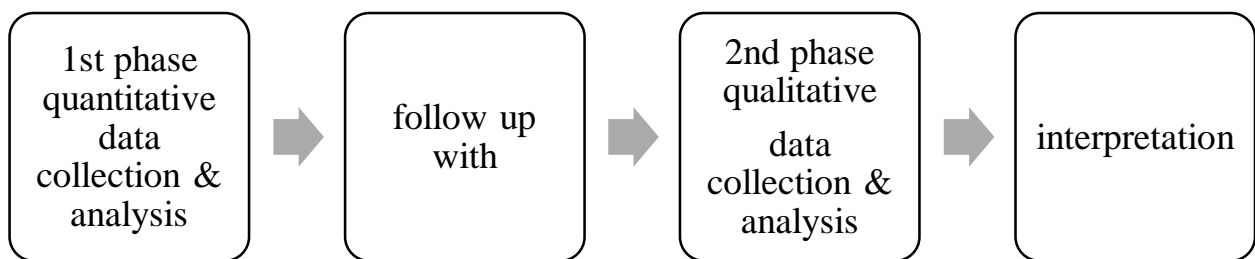


Figure (4): Sequential Explanatory Mixed Methods Design

Additionally, the reason behind using the mixed methods is that using the qualitative research provides the chance to collect in detail information about phenomena or individuals including the coding of the data, where the quantitative research permits collection of the data from a large sample size with better generalization from the results to explain and predict in order to get better understanding from the results (Creswell 2012; Gay 1996). Therefore, the research methods which will be conducted in this study are qualitative data obtained through interviews, and document analysis, whereas the quantitative data will come from open-ended questionnaires.

The philosophical basis of mixed methods research is pragmatism, which inspires the research problem and looks for all approaches available to understand it. Many mixed methods researchers point out that there are strong associations with mixed methodology and pragmatism (Bazeley 2003; Greene & Caracelli 1997; Maxcy 2003; Tashakkori & Teddlie 2003; Johnson & Onwuegbuzie 2004). Pragmatism is an American methodological approach founded by William James (1842, 1910), John Dewey (1859, 1952), Charles Sanders Pierce (1839, 1914) and Herbert Mead (1863-1931). The beginning of pragmatism can be found in Pierce's writing (1878, 1905), James's writing (1907) and Dewey's writing (1917, 1920, 1922, 1925, 1929, 1938), and it was reformed by Rescher (2000) and Rorty (1999, 2000). In academic literature, pragmatism is defined as to "relieve and benefit the condition of man – to make mankind happier by enabling them to cope more successfully with the physical environment

and with each other” (Rorty, 1991, p.27). The main concern for a pragmatist is to find out ‘what works’ and what are the solutions of problems (Patton 1990, Creswell 2003). Even though Johnson and Gray (2010) stated that these writers advocate different forms of pragmatism, Johnson and Onwuegbuzie (2004) planned a version of pragmatism that they consider is appropriate philosophy for mixed methods research. Pragmatism has been recognized in the mixed methods research literature by different researchers, such as: Howe (1988), Tashakkori and Teddlie (1998), Patton (2002), Maxcy (2003), Johnson and Onwuegbuzie (2004), Morgan (2007), Denscombe (2008), Scott and Briggs (2009), Johnson and Gray (2010), and Creswell and Plano Clark (2011), as the appropriate paradigm for conducting mixed methods research. Additionally, Greene and Caracelli (2003) indicate that pragmatism has strong associations with the mixed methods research and could be considered as a link between paradigm, philosophy and methodology, although it is considered as a new methodology key in philosophical and methodological foundation standard since the 1990s (Tashakkori 2009). Johnson and Onwuegbuzie (2004) sum up the philosophy of mixed methods researchers in the following statement:

“We agree with others in the mixed methods research movement that consideration and discussion of pragmatism by research methodologists and empirical researchers will be productive because it offers an immediate and useful middle position philosophically and methodologically; it offers a practical and outcome-orientated method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt; and it offers a method for selecting methodological mixes that can help researchers better answer many of their research questions.” (p. 17)

Patton (2002) expresses that a pragmatic approach is promoting methodology to enable researchers to increase the flexibility and adaptability of their method. He stated that:

“My pragmatic stance aims to supersede one-sided paradigm allegiance by increasing the concrete and practical methodological options available to researchers and evaluators. Such pragmatism means judging the quality of a study by its intended purposes, available resources, procedures followed, and results obtained, all within a particular context and for a specific audience.” (p. 71)

The case study approach focuses on understanding the meaning of participants’ perspective and it widely used and useful tool for the explanatory stage and the development of structured tools in survey and experiments (Rowley 2002; Schwandt 2000). Yin (1994) defined case study

as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and context are not clearly evident” (p.13). He added the need to acknowledge the importance of context when studying a case study (Yin 1994); whereas Klsenke (2008) confirmed that the case study method is an important approach to use because the context is the reason for its selection as the method of choice. Typically, the use of the case study goes beyond the range of source of evidence like documents, interviews, survey and others. Creswell (2013) claimed that:

The “case study method” explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information... and reports a case description and case themes. (p. 97)

According to Yin (1994), “a how or why question is being asked about a contemporary set of events over which the investigator has little or no control” (p.9). There are four types of designs of case study presented by Yin (2003) as in figure (5). A single case study will be used in this investigation study based on the research purpose, questions and theoretical context. This type of case study design is the best choice as it produces extra and better theory and gets a deeper understanding of the subject (Dyer & Wilkins 1991; Gerring 2004).

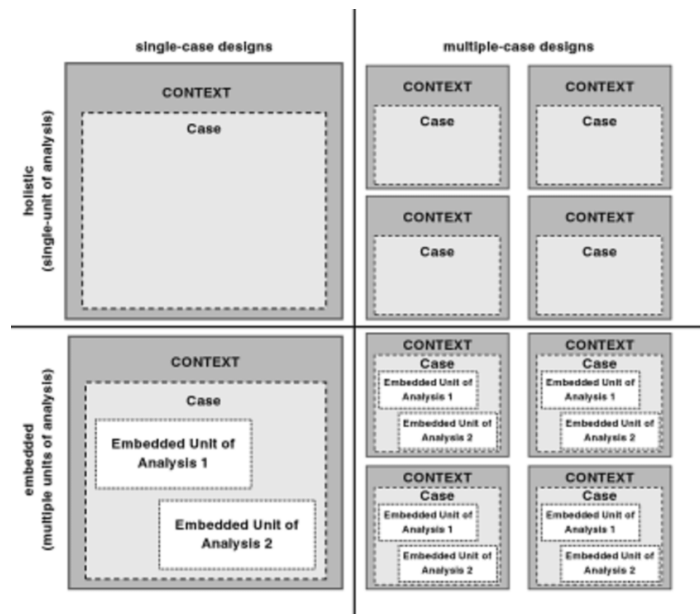


Figure (5): Basic types of designs for case studies (From Yin, 2003, p.40)

To conduct this study, the researcher selected the quantitative approach through using a questionnaire in order to measure the frequency of opinions and collect data. Then the researcher analyzed it to discern the responses from the questions to test these results later, and

to build a relationship between results and literature review (Creswell 2012). The quantitative approach followed up with using a qualitative approach which provides the chance to collect detailed information about phenomena or individuals (Creswell 2012). Interviews conducted face-to-face and in depth allow the researcher to control the questions and give the chance to collect useful information and data from the participants in addition to documents analysis.

3.2 Methods

Several methods are presented in this section. These section starts with information about the site and sampling selection who engaged in this study, that help in the investigation and understanding the phenomenon, to be able to decide on the type of data collection that will be followed in order to answer the research questions. Then the second section includes the data collection instruments of the study, which are: questionnaire, interview and document analysis. The section concluded by ethical considerations and the data analysis process. In order to be able to answer the research questions, each question use the following approach, instrument and analysis as shown in the table below:

Table 4: Methods used for research questions of the study

Questions	Approach	Instrument	Participant	Analysis
What are the types of career guidance provided to undergraduate students in the UAE?	Qualitative	Interview	12 students & career advisors	Thematical
	Qualitative	Document Analysis	2 career advisors	Protocol
	Quantitative	Questionnaire	200 students	SPSS
What are the main factors influencing higher education student career choices as perceived by college students and career counsellors?	Qualitative	Interview	12 students & career advisors	Thematical
	Qualitative	Document Analysis	2 career advisors	Protocol
	Quantitative	Questionnaire	200 students	SPSS

What are the effectiveness of currently available career guidance services for new entry students in higher education in the UAE, and how successful are they?	Qualitative	Interview	12 students & career advisors	Thematical
	Qualitative	Document Analysis	2 career advisors	Protocol
	Quantitative	Questionnaire	200 students	SPSS

3.2.1 Context, Site, Population and Sampling Selection

Since the declaration of the United Arab Emirates (UAE) in 1971, higher education has become an important aspect of the country's development strategies. Later, as the local demand for university education grew, the UAE government established other Higher Education Institutions (HEIs) which now consist of UAEU, Zayed University (ZU), and the Higher Colleges of Technology (HCT). The first step was to know the site and sample selection to meet the criteria of the case (Stake 1995). Merriam (2009) added: "sites that could be visited ... events or activities that could be observed, people that could be interviewed, and documents that could be read" (p.81). In particular, the present study's focus is on career guidance and counselling phenomenon as indicated by Frankel (2015) that the indication of the phenomenon is consider the first step of the research.

The study was conducted in one of the HEIs in northern UAE as the main case for this study for several reasons. First, this site was chosen because it is one of the HEIs and is workplace of the researcher, so she can directly access the participants and easily get the approval to conduct this research without losing time for data collection. Second, this institution has recently started to implement the career guidance and counselling programme, so it was a good site to find out the best model to apply and there is a good percentage of the students from different programmes/majors who face different problems due to the absence of career advice at the beginning. It has been conducted especially in the UAE as there is a lack of study about this topic.

Sampling is a process to select the suitable size of population of a representative part of a population to determine characteristics of the whole population (Kombo & Tromp 2006). Cardwell (1999) states that population is "a group of people who are the focus of a researcher study and to which the results would apply" (p.179), while Best and Khan (1993) define

population as a “group of individuals that have one or more characteristic in common that are of interest to the researcher” (p. 13). Since this study uses a mixed method research approach, convenience sampling is the best type to be used here (Fraenkel et al. 2015).

In this type of sampling, convenience sampling is a type of non-random sampling where participants of the target population have the same certain criteria to participate for the purpose of the study and easily accessible to the researcher (Mugenda & Mugenda, 2003). The justification of using this convenient sampling is to obtain information from the participants voluntarily and to answer the question of the study from different aspects of needs from different programmes.

Accordingly, in this study, the participants were proposed to be higher education students and career advisors from one of the HEIs in the UAE. The number of proposed participants will be an appropriate number for this study since the main purpose was to get rich information to get the whole image and to help in building a model for career guidance and counselling for the higher education level. Convenience sampling used by researchers involves in selecting groups that happen to be available and are willing to participate in the research at the suitable time for the researcher (Mugenda & Mugenda, 2003).

The site selection is one of the HEIs in northern UAE because it was appropriate for the main concern of this study and it was convenient for the researcher to access this institution to get rich information about the topic. Based on the sampling methods, the participants selected for this study are:

1. Higher education students;
2. Participants from the last year of the Foundation programme and the first year from each different programme (Business Administration, Education, Engineering, Computer Information Sciences, and Applied Communication) because in these levels, the participants start thinking about their career major choice.

When selecting the participants for any study, it is important to determine the size of the sample that is needed for the study. To avoid sampling error, the researcher needs to select as large a sample as possible from the population (Creswell 2008). Moreover, Merriam (2009) states that “the size of the sample within the case is determined by a number of factors relevant to the study’s purpose” (p.82). Patton (2002) agrees that sample size should be “based on expected reasonable coverage of the phenomenon given the purpose of the study” (p.246).

Sample size could be as large as the researcher can obtain within a reasonable time and effort and it is recommended to have around hundred participants (Fraenkel & Wallen 2009).

Even that population number of Emirati students in higher education institutions is around thirty thousand students, this study researcher targeted the questionnaire to around two hundred students, ten students and two career advisors were selected for the interview. Two participants from each programme, from the same group, were interviewed to gain further understanding of the topic and clarify more information. Later, two interviews were conducted with career advisors and they were interviewed based on the students' answers, as shown below in table (5).

Table (5): Number of participants in each phase

Phase	Method	Number of Participants
One	Questionnaire	Around 200 students
Two	Interview	12 students
Three	Interview	2 career advisors
Four	Document Analysis	2 career advisors

3.2.2 Data Collection Instruments

After the development of the research question, data needs to be collected and this could be used through quantitative or qualitative methods or both them. The qualitative approach is used to get information about phenomena or individuals including the coding of the data, whereas the quantitative approach is employed to collect numerical data from a large sample size to explain and predict in order to get better understanding from the results (Creswell 2012; Gay 1996). Therefore, the research methods which were used in this study are qualitative techniques through interviews and document analysis whereas the quantitative approach was used for the questionnaire.

Moreover, the triangulation design was one of the mixed methods conducted in this study. Creswell (2012) defines triangulation as a “process of corroborating evidence from different individuals (e.g. a principal and a student), type of data (e.g. observational fieldnotes and interviews) in descriptions and themes in qualitative research” (p.259). It is considered as a

powerful way to display simultaneous validity especially in qualitative research (Cohen et al. 2000). The purpose of this design was to collect together all the strengths and weaknesses of both methods: qualitative (in-depth, details, small sample size) and quantitative (generalization, trends, large sample). Generally, this type of design is used when the researcher wants to compare and contrast straight the results of quantitative statistics with qualitative findings. (Creswell 2006). When there is agreement with more than one method, for instance the results from the questionnaire survey match up with the findings from the interviews, the researcher can have feel confidence in the outcomes (Cohen et al. 2000).

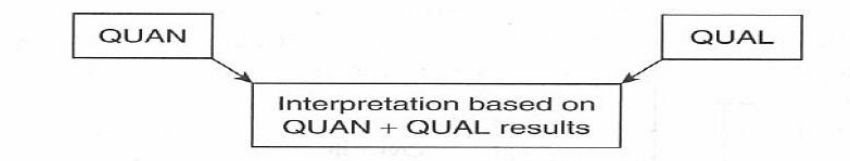


Figure 6: Triangulation design

3.2.2.1 Questionnaire

A questionnaire is a researcher tool in which respondents are asked to respond to similar questions in order to obtain statistically useful information about the study (Gray 2004). McMillan and Schumacher (1993) define a questionnaire as “relatively economical, has standardized questions, can ensure anonymity, and questions can be written for specific purposes” (p. 238). Questionnaires are useful for collecting data over a large sample size and to study groups, to facilitate their responses (Hinds 200).

Creswell (2012) and Cohen et al. (2007) state that the questionnaire technique is commonly used to collect data where the researcher uses a structured or semi-structured which is a set of questions, mostly close-ended. The questionnaire helps the researcher to investigate their opinions and perspectives (Creswell 2012; Cohen et al. 2007). The layout of the questionnaire is important: to look easy and interesting for the participants and avoid unclear questions. At the same time, the researcher needs to include a brief purpose for doing this questionnaire, so the participants are aware about it and feel involved in it (Cohen et al. 2007).

Additionally, the questionnaire is an instrument with some limitations. Firstly, it does not give the participants a chance to express their feeling in depth, where the answer is the final answer and there is no more clarification. Secondly is the possibility of inclusion of ambiguous items

requires properly constructed and clear questions in the questionnaire to enable the respondents to overcome any difficulty in answering the questions (Nachmias & Nachmias 1996; Gall et al. 1996). Another limitation is that if the researcher uses mail for the questionnaire, it might not be answered by all the participants or some of them might leave it incomplete it (Nachmias & Nachmias 1996), therefore, in this study, the researcher used handouts for the questionnaires.

This study attempted to investigate the main factors that are influencing higher education students' career major choice. Therefore, to conduct this research, the researcher selected a questionnaire technique (Appendix 1) in order to measure the frequency of opinions, collect data, to generalize the results from the sample and to build a relationship between results and the literature review (Creswell 2012). In this study, the researcher used close-ended questions which are quick and straightforward to code (Bailey 1994), highly structured (Oppenheim 1992) and directly focus on the topic (Wilson & Mclean 1994). McMillan and Schumacher (1993) agreed that it is best to use close-ended questions with a large number of participants.

The researcher used handouts for the questionnaire and visited different classes of different programmes/majors because the researcher wanted to guarantee that all participants understand the questions, complete the questionnaire without missing any questions and to help the participants to overcome any difficulties with questions (Cohen et al. 2007). Before visiting classes, the researcher informed the faculty about the visit and gained permission to take around 15 to 30 minutes either at the beginning or the end of the class to ensure that the researcher would not disturb the class. In each visit, the researcher explained the purpose of this study to the participants, what the researcher wants to find out from this study, and told them that their answers are private, confidential and kept the identity of the respondents undisclosed. The researcher took a week to finish the questionnaire with all participants.

Furthermore, the researcher used rating scale questions which are widely used in research because they are more reliable. In this type of question, the participants point out their opinions by selecting one selection from the scale (Cohen et al. 2007). Tuckman (1994) stated that the likely-type scale is used to "register the extent of agreement or disagreement with a particular statement of attitude, belief or judgment" (p.197). The advantage of this is to give the participants a chance to have more flexibility in answering the questions. The likely-type scale categories in this study are strongly disagree/disagree/uncertain/agree/strongly agree.

In this study, the questionnaire consists of forty-six close-ended and rating scale questions and the questionnaire layout is divided into five parts. The first part concerns demographic

information which consists of seven close-ended questions about their age, gender, major, which year they are currently in and if this is their first major or not. The second part is about the status and role of career guidance and counselling and consists of nine questions where the participants answer either yes or no; the third part about career awareness consists of ten likely-type scale questions, and the same with the fourth part which is about career planning and consists of ten likely-type scale questions. The last part also consists of ten likely-type scale questions about their perception of the role of career guidance and counselling. The researcher adopted the questionnaire from Ndung (2008) and modified it related to the research topic and needs. The questionnaire measured the students' needs from the career guidance and counselling and what types of services they require from them and it will help the researcher to get students' opinions about the factors that are influencing their career major choices.

The researcher used the Statistical Package for the Social Science program (SPSS) to analyze the collected data. In this study, one hundred and fifty-seven participants from different majors responded to the questionnaire after the pilot study was carried out.

- Pilot Study:

A pilot study was run with a small group of students who were chosen randomly to answer the questionnaire to be used for the actual participants; also to ensure that all questions were understood by the students and to avoid loss of content validity from misunderstanding, to have rich and useful data and to check that all the questions are clear and easy to answer. Pilot testing is an important step for improvement of the questionnaire and to increase the efficiency of the study. Bell (2007) stated that "it is only when a group similar to your main population completes your questionnaire and provides feedback that you know for sure that all is well" (p.232). The purpose of the pilot study is to (Bell 1989; Cardwell 1999; David & Sutton 2004; Oppenheim 1996; Pratt & Loizos 2003; Saunders et al. 1997;):

1. Eliminate some ambiguous items;
2. Establish if there were problems in administering the questionnaire;
3. Test data collection instructions;
4. Establish the feasibility of the study;
5. Anticipate and amend any logical and procedural difficulties regarding the study; and

6. Allow a preliminary data analysis to establish whether there would be difficulties in the main data analysis and to ensure that the collected data answer the researcher's questions.

Bell (1989) added that pilot study helps to have a perfect instrument for the participants. The pilot study was carried out with a group similar to the final sample (David & Sutton 2004; Oppenheim 1996; Saunders et al. 1997). The problems resulting from the pilot study were:

1. The researcher needed to explain some of the questions to the participants as they could not get their meaning.
2. Some of the questions were using high-level language which was difficult for the participants who are in the Foundation programme.

Therefore, based on the participants' responses and feedback, the questionnaire questions were adjusted to ensure more meaningful and rich data would be gathered (Bell 2007). Also, the researcher had to translate the questionnaire into the Arabic language (Appendix 2) to avoid any misunderstanding from the participants and for them to be able to answer the questionnaire, as Gay (1987) explained: that "besides time constraints, a major reason more larger-scale studies are not conducted is lack of available subjects" (p.90).

Reliability and validity are two significant terms to consider in any investigating procedure (Johnson & Christensen, 2008). Creswell (2012) states that these two terms "are bound together in complex ways. These two terms sometime overlap and at other times are mutually exclusive" (p.159). Joppe (2000) defines reliability as "...the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable". Jary and Jary (1995) define validity as ".... the extent to which a measure, indicator or method of data collection possesses the quality of being sound or true as far as can be judged. ...in the social sciences generally, the relationship between indicators and measures and the underlying concepts they are taken to measure is often contested" (p 714). In general, validity refers to the measure of an instrument while reliability refers to a measure of consistency (Creswell, 2012). These two terms are an important consideration in the research, and they were considered in this study.

In the quantitative approach, participants completed the questionnaire accurately and honestly in order to ensure validity (Belson 1986). Hudson and Miller (1997) suggest that maximizing the responders' rate for the questionnaire will increase the reliability and that could be through

different strategies. Tuckman (1994) claimed that the following aspects might influence the validity of the questionnaire (p.216):

1. To what extent might questions influence respondents to show themselves in a good light?
2. To what extent might a question influence respondents to be unduly helpful by attempting to anticipate what researchers want to hear or find out?
3. To what extent might question be asking for information about respondents that they are not certain, and perhaps not likely, to know about themselves?

Questionnaire has been adopted from Ndung's thesis (2008) who studies the role of career guidance and counselling in career awareness and planning among public secondary school students in Kenya. Some of the question has been changed based on this study's needs.

To test the reliability and validity in this study, the research used Cronbach's test. The researcher used two types, which are content and construct.

Cronbach is the most commonly used test to determine the internal consistency of an instrument. In this study, the Cronbach alpha is .714 which is indicated to be a reliability of tools to collect data of the effectiveness of career guidance and counselling in higher education as show in table (6):

Table 6: Reliability statistics

Reliability Statistics	
Cronbach's Alpha	No of items
.714	46

Moreover, content validity looks at whether the instrument covers all the content related to the variable that it is designed to measure or not, where the construct validity checks the degree to which the questionnaire variables measure the same characteristic. In this study, the researcher measured the validity of the questionnaire by involving a team of expert consisting of two of university faculty members.

3.2.2.2 Interview

The interview is an important and flexible tool for data collection and a useful way to understand others and to find out their perceptions (Punch 2011). Interview is a process where the research gets the participant engaged in a conversation focused on specific questions related to the research (DeMarrais 2004). The main purpose of the interview is to obtain more information from the selected participants. Patton (2002) stated that:

“We interview people to find out from them those things we cannot directly observe. We cannot observe feelings, thoughts, and intentions. We cannot observe behaviours that took place at some previous points in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things. The purpose of interviewing then is to allow us to enter into the other person’s perspective.” (p. 340-341)

In the interview technique, the researcher asked open-ended questions to allow the participants to express their opinions (Creswell 2008; Punch 2011). The rationale of using interview is to allow the researcher to get more sufficient data through giving the participants the space to express their opinions and thoughts which cannot be gathered through other tools. In this study, the researcher used this technique to get further understanding of the research topic and to clarify some parts based on the responses from the questionnaire. The researcher used one type of interview which is an un-structured interview where all respondents receive the same questions in the same order to allow frequency of related information and data (Creswell 2008). Creswell (2012) stated that the use of qualitative interview provides the chance to collect detailed information about a phenomenon or individuals. The advantage of using in-depth interviews allows the researcher to control the line of questions and it gives a chance to have rich useful information, when the researcher has a limited ability to observe the participants. However, the disadvantages of using interviews is it will result in limited information, based on the participants’ point of view and their perspective which sometimes might ignore important data (Creswell, 2012), which could be balanced by using a mixed method approach to cover the disadvantages of only using the interview method (Creswell 2008). Generally, interview is not so easy to elicit good answers from the participants. Stake (1995) agreed that each interviewee has his/her own style in answering the questions based on their experiences and knowledge.

The researcher selected eight participants from different programmes/majors who were already answering the questionnaire, to get in-depth information. In the first stage of the interviews, the researcher selected random participants from the same group from different programmes/majors who answered the questionnaire and sent them an email to set up a meeting, and then in the meeting, the researcher gave a brief description of the study and the reason for conducting the interview and she told them that it was voluntary. Later, after they agreed to do it, the researcher set up a schedule for the interview with an appropriate time and chose the conference room so they would feel more relaxed and without being disturbed, since the interviews were held at the workplace of the researcher. The questions of the interview were developed depending on the participants' answers (Appendix 3). Later, it was followed up with one interview with the career advisor and the interview questions were based on the participants' answers (Appendix 4). Each interview took between 15 to 30 minutes and it was conducted in the English language.

The researcher explained the reason for the study to the participants and what the researcher would get from it. Moreover, the researcher made it clear to the participants that it is voluntary to be part of this study and they have the right to refuse to participate as well as to withdraw from the study at any point and they had the right to be anonymous. The participants were coded using numbers from 1 to 8 as is shown in table (7). The participants filled in a consent form that explained the study and their rights before participating in this study (Appendix 5). Moreover, as part of the consent form, all the interviews were recorded to guarantee that all the information would be available and later the interview was transcribed by the researcher.

The questions that were asked to the students were to find out:

1. If they are attending any career orientation sessions;
2. If these sessions are beneficial for them and do they get more knowledge about it;
3. If they attend any sessions by outside professionals;
4. If they are planning for their career/major;
5. If they face any problems or questions, who do they get the help and advice from; and
6. Who influences them in their career major decision;
7. If they did any type of career programme or assessments; and
8. If these assessments are useful for them in their planning stage.

Regarding the career advisors' questions, the interview consisted of:

1. If the career advisor has sufficient training and qualifications for career counselling;
2. What they do as career counselling;
3. Types of career orientation sessions and key information provided to students;
4. The way to motivate students to attend career orientation sessions;
5. If the career advisor works with professionals/experts on the outside regarding students' career choices;
6. Factors that affect students' choice in their program/career;
7. If the career advisor works closely with parents and teachers on students' career issues;
8. Barriers that they face to pursuing students' career choice;
9. And lastly, if the career advisor would like to add any additional comments.

Table 7: Interview participants per major

Participants	Major
Student 1	Foundation
Student 2	Foundation
Student 3	Applied Communication
Student 4	Computer Information Science
Student 5	Computer Information Science
Student 6	Business Administration
Student 7	Engineering
Student 8	Foundation

All scholars have recognized the importance of trustworthiness and reliability when it comes to qualitative data collecting and analysing since it takes a subjective approach as it is subject to the researcher's interpretation (Creswell 2009; Kvale and Brinkmann, 2009; Stake 1995; Lincoln & Guba, 2000). Creswell (2013) pointed out that he tends to use the concept validation

instead of historical words like trustworthiness which is used by most of the qualitative researchers. According to Merriam (2009), trustworthiness [validation] deals with “how research finds match reality?” (p. 213), however, she refers to reliability as “the extent to which research findings can be replicated” (p. 220) and will it yield the same results. Creswell (2013) further explains that “reliability can be enhanced if the researcher obtains detailed field notes by employing a good quality tape for recoding and transcribing the tape. Also, the tape needs to be transcribed to indicate the trivial but often crucial pauses and overlaps” (p. 253).

In qualitative procedure, to ensure the validity in the interview technique, it has to be measured to compare it with another measure that is valid. At the same time, the most useful way to achieve validity is to minimize the amount of bias as much as possible which includes the attitude and opinions of the participants, and for the researcher to seek out the answers that are needed for the study (Cohen et al. 2000). Reliability is important and requires each participant to understand the questions of the interview and receive the same format of questions to have a highly structured interview (Cohen et al. 2000; Scheurich 1995; Silverman 1993). Oppenheim (1992) states that wording is a more important factor in the interview questions than factual questions.

3.2.2.3 Document Analysis

Document analysis is another instrument that was used in this study. Documents are a valuable source and provide rich information to help the researcher to understand the central phenomena in qualitative studies (Creswell 2012; Denzin & Lincoln 2005; Yin 2005). The documents that could be examined include policy documents, rules and regulations, websites, press releases, reports, personal notes, letters, and meeting minutes. According to Merriam (1998), document review has stability of information as one of the advantages. It has been examined by Merriam (1998) as an “objective sources of data compared to other forms. Documentary data are particularly good sources for qualitative case studies because they can ground an investigation in the context of the problem being investigated.” (p.41) In qualitative study, documents present a good source for the researcher because they give the words and language of the career advisors’ views (Creswell 2012).

In this study, the document analysis explored the relevant researcher's questions and the career advisor interview questions, following some guidelines (Appendix 6). This method measures:

- Types of career guidance and counselling services that are available for the new entry students and programmes offered in higher education institutions in the UAE.
- Additional training for career advisors and programme development that should take place.

The reason for using this method is have more knowledge about career advisor duties as they might mention everything in the interview and it will be a good source of evidence, as well as, it will emerge from the interviews data analysis through using the document analysis guide. The researcher got the following documents from the career counsellors and the objective of each will be explained, and why career counsellors use them.

The first document that was used for analysis is the career coach guide online which consists of self-exploration, life skills (goal setting, time management, communication skills, leadership skills, teamwork, conflict, and others) and the job search process and there are different assessments/questionnaires for the students that they answer to be able to know what programme/major fit their ability and characters.

The second document is the in-house workshop form (Appendix 7) which completed by the presenter who would like to present any workshop for the students, in cooperation with the career counsellor. This form consists of:

- Workshop title;
- Workshop description;
- Workshop goals;
- Target audience;
- Date/time of the workshop;
- Length of the workshop;
- Language of the workshop; and
- Number of participants.

The third form called programme choice consult form (Appendix 8) which is used by the career counsellor for the students who are not sure about which programme/major to study, and it consists of:

- General information about the students (name, ID, contact number)
- Who am I?, where the students do a small test;
- Programmes that are available in the institution;
- Recommended choice;
- Career advisor notes; and
- Signature of the student and the student careers specialist

The protocol that is used to analyze the three different documents which are presented in chapter 4.

3.3 Ethical Considerations

Ethics is considered to be an important issue that the researcher has to take into consideration throughout the study. Johnson and Christensen (2008) define ethics as “the principles and guidelines that help us upload the things we value” (p.101). The researcher followed the ethical process of the higher education institution by keeping the data private, confidential and keeping the identity of the respondents undisclosed. This is to make the participants feel more relaxed about their rights. Furthermore, the researcher informed the participants that this data would be used for educational purposes and the anonymity of the participants will be secured and numbered (Creswell, 2012). All the questionnaire data and the interview transcripts will be kept in a safe cabinet for a period of time.

The researcher made sure to obtain permission before collecting the data for this study. The best way to get permission was through getting the ethical approval from BUiD research committee first (Appendix 9), then issuing a letter and informing the site of the research about the purpose of the study (Appendix 10), the amount of the time that the researcher needs the participants, and the time for collecting data, and how this data will be used (Creswell 2008). Firstly, a permission letter was sent to one of the higher education institutions of the research site from the British University in Dubai (BUiD) to allow the researcher to conduct the research (Appendix 10). Later, the researcher would need to receive the approval from the Researcher Review Committee (RRC) to conduct the research (Appendix 11).

When the researcher started collecting data from the participants, the researcher explained the reason for this study and what the researcher wants to get out of it. In the questionnaire technique, the researcher explained to the participants every question in the questionnaire.

Also, the researcher informed them that their answers would be confidential where the participants can answer without writing their names for privacy and where the participants can therefore feel comfortable to answer the questions honestly.

In the interview, the researcher informed the participants that their answers will be confidential, and they could feel free if they did not want to mention their name. Before each interview, the researcher identified to the participants the reason for this study and asked them to sign the consent form (Appendix 5). The consent form included that participation in this study was voluntary; that participants could withdraw from the study without penalty; and that the interview will be recorded. The consent form is an ethical requirement that permits the participants to choose to participate in the research or not after they are provided with full information about the benefits and risks of participation (Urombo 2000; Makore-Rukuni 2001) and they have the right to withdraw from the study at any time, should they wish (Cardwell 1999; Tuckman 1994). The researcher due to her knowledge and experiences in dealing with high education students services was able to facilitate the interviews of the participants.

During the interview, if the participant did not feel comfortable to answer any questions, they had the right to decline the question or end the interview without penalty, and the interview will be recorded. Moreover, the researcher identified the participants by name; they can sign without mentioning their names, they will remain anonymous and the researcher will use coding numbers, as Babbie (1992) confirmed, that “a respondent’s anonymity is guaranteed when the researcher cannot identify a given response with a given respondent” (p. 467).

For the document analysis, the researcher uses these documents without showing the name of the institutions for confidentiality reasons, and there are some documents that could be shared as appendices in the study and some that could not, to maintain confidentiality.

3.4 Data Analysis Process

Marshall and Rossman (1999) describe data analysis as “the process of bringing order, structure and meaning to the mass of collected data.” (p.150) There are differences between qualitative data analysis and quantitative data analysis. Qualitative research (interview, document analysis etc.) uses common patterns such as in concepts, terms within the responses to construct a framework to critically analyze it in order to achieve research aims and objectives; while

quantitative research involves critical analysis of figures and numbers and attempts to find the rationale behind the main findings.

Kreuger and Neuman (2006) provided an outline of differences and similarities between qualitative and quantitative analysis of data. They summarize the similarities between them as follows (p.367):

- Inference - the use of reasoning to reach a conclusion based on evidence;
- A public method or process - revealing their study design in some way;
- Comparison as a central process – identification of patterns or aspects that are similar or different; and
- Striving to avoid errors, false conclusions and misleading inferences.

On other hand, Kreuger and Neuman (2006) stated that the core differences between qualitative and quantitative data analysis are (p.434):

- Qualitative data analysis is less standardized with the wide variety in approaches to qualitative research matched by the many approaches to data analysis, while quantitative researchers choose from a specialized, standard set of data analysis techniques;
- The results of qualitative data analysis guide subsequent data collection, and analysis is thus a less-distinct final stage of the research process than quantitative analysis, where data analysis does not begin until all data have been collected and condensed into numbers;
- Qualitative researchers create new concepts and theory by blending together empirical and abstract concepts, while quantitative researchers manipulate numbers in order to test a hypothesis with variable constructs; and
- Qualitative data analysis is in the form of words, which are relatively imprecise, diffuse and context based, but quantitative researchers use the language of statistical relationships in analysis.

In this study, quantitative data analysis followed statistical analysis through using SPSS to break down the data into parts to answer the research questions and analyze each part of the questionnaire in detail, as stated by Trochim (2006) that “descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of

virtually every quantitative analysis data” (p.1), where the qualitative data analysis will transcript the data that has been recorded through the interview by converting audiotape into text data and then analyze the data. There are two ways to analyze the audiotape, either by hand or computer (Creswell 2008). In this study, the research used the hand analysis which means the researcher reads the data, marks it by hand and divides it into parts to explain the results in detail. Document analysis was analysis based on the career counsellors’ interview and how it is linked to their work, through using descriptive analysis.

Generally, the summary plan of this study followed these steps in data collection:

1. Get approval from the research site;
2. Distribute the questionnaire to the participant students;
3. Analyze the data of the respondents through using SPSS;
4. Eight participants from the students sign the consent form for the interview;
5. Eight interviews are conducted with participants without mentioning their names;
6. After that, the researcher creates interview questions based on the eight participants’ answers for the career counsellor;
7. Creation of the consent form for the career counsellor to sign with details about the study;
8. Interview the career counsellor and later transcribe their interview sessions and analyze them; and
9. Documents are collected from career counsellor for analysis and to connect with their interview responses.

3.5 Summary

The purpose of the study was to determine the effectiveness of career counselling and guidance among higher education students of a selected federal higher education institution in the United Arab Emirates. This chapter described the research methodologies used and the design of the study, including the rationale for using the mixed method approach. The site and sampling were described along with data collection instruments, pilot study, ethical considerations, reliability and validity; and the last part was about the data collection analysis. The findings from the data analysis are presented in the next chapter.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

This study investigated the influencing factors of higher education students' career choice and to find out the effective career guidance services that best support undergraduate students in one of the federal higher education institutions in the UAE. The findings in this section will help to give a good explanation to answer the research questions, which are:

1. What are the types of career guidance provided to higher education students in the UAE?
2. What are the main factors that influence higher education students' career choices as perceived by college students and career counsellors?
3. What are the effective and available career guidance services for new entry students in higher education in the UAE, and how successful are they?

The methodological approach and overall strategies that were utilized to conduct the current research are outlined in the previous chapter. Thus, this chapter presents how the collected data of the study were fully analyzed and presented.

The data were collected through using mixed methods of research: a quantitative approach through receiving responses from the questionnaire and a qualitative approach through receiving responses from the open and closed questions of the interview and from document analysis. In this chapter, the result of both methods will be discussed individually, and the discussion of the result will be included in the next chapter.

4.1 Quantitative Results

Quantitative data analysis is a powerful research tool and it is often connected with large-scale research (Cohen et al. 2000). The researcher entered the questionnaire data into the SPSS program to analyze the data and to get statistical results.

4.1.1. Demographic of the Study

Table (8) presents the demographic results regarding the ages of participating students. The majority were aged 21-23 (49%) followed by age 17-20 (42.7%) and the fewest were those aged 24 and above (8.3%).

Table (8): Demographic Results by Age

Age group	Frequency	Percentage
17 – 20	67	42.7%
21 – 23	77	49.0%
24 and above	13	8.3%

Table (9) presents the demographic results regarding the major of participating students. The majority were major Computer Information Sciences (43.3%) followed by major Applied Communication (15.3%) followed by major Business Administration (14.6%) followed by major Engineering (13.4%), followed by major Foundation (6.4%), and the fewest were the major Education (4.5%) and Technical Science Program (2.5%).

Table (9): Demographic Results by Major

Major	Frequency	Percentage
Foundation	10	6.4%
Education	7	4.5%
Applied Communication	24	15.3%
Computer Information Sciences	68	43.3%
Engineering	21	13.4%
Business Admin.	23	14.6%
Technical Science Program	4	2.5%

Table (10) presents the demographic results regarding the current year of participating students. The majority were year three (31.2%) followed by year four (27.4%), followed by year one (24.8%), and the fewest were year two students (16.6%).

Table (10): Demographic Results by Academic Year

Academic year	Frequency	Percentage
Year One	39	24.8%
Year Two	26	16.6%
Year Three	49	31.2%
Year Four	43	27.4%

Table (11) presents the demographic results regarding the first major of participating students. The majority were yes (93.6%) and the fewest were no (6.4%).

Table (11): Demographic Results by changed major

Changed major	Frequency	Percentage
Yes	147	93.6%
No	10	6.4%

4.1.2. Reliability of the Study

Reliability of the student survey instrument was checked using SPSS. The reliability score using Cronbach's alpha was found to be 0.9 for both parts of the survey instrument, which indicates a very high reliability. The scores of Cronbach's alpha on observed values and on the standardized items were found to be equal, which indicates that the instrument has high internal consistency (Bhattacharjee, 2012; Mat Roni, 2014).

The overall Cronbach reliability of the questionnaire of the study is considered high (0.871) indicating that the questionnaire is reliable. Additionally, the reliability of sub-categories of the questionnaire were considered acceptable as well: awareness (0.726), planning (0.656) and role (0.736) shown as perception in the below table.

Table (12): Reliability result of the study

Statement	Cronbach's Alpha	N of Items
Overall	0.871	45
Awareness	0.726	17
Planning	0.656	16
Perceptions	0.736	16

4.1.3 Tests of Normality of the Study Variables

Before running the descriptive statistics, Normality tests were computed for the study variables. According to Byrne (2013), normality in the data is evident if the Shapiro-Wilk test or Kolmogorov-Smirnova is higher than 0.7. As shown in table (13), all variables were significance at alpha level 0.05.

Table (13): Tests of Normality of the study

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Overall	.059	157	.002	.989	157	.281
Status	.179	157	.000	.882	157	.000
Awareness	.058	157	.002	.976	157	.007
Planning	.098	157	.001	.965	157	.001
Roles	.117	157	.000	.966	157	.001

4.1.4 Distribution of Participants' Responses of the Different Categories

The following table (14) shows the distribution of items related to the Status part, indicated that the following questions: Is career guidance and counselling offered in your college? And did you find enough time for career guidance and counselling? had the highest (96.8% and 84.7%) respectfully. Other items showed high percentages, between 77.1% to 71.3%, with only one item showing 54%, which is the question: Has career guidance and counselling helped you choose the right career? This means that the majority of participating students positively agreed to the influencing factors of their career choice and guidance services that better support them in the federal higher education institutions in the UAE.

Table (14): Distribution Responses related to Status

Questions	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Is career guidance and counselling offered in your college?	152	96.8%	5	3.2%
Did you find enough time for career guidance and counselling?	133	84.7%	24	15.3%
Have you consulted the college counsellor on making career choice issues?	86	54.8%	71	45.2%
Did you attend group career guidance and counselling sessions?	112	71.3%	45	28.7%
Have you read or watched video about making career choice?	117	74.5%	40	25.5%
Have you had speakers on making career choice?	121	77.1%	36	22.9%

Have you benefited from career guidance and counselling programme?	120	76.4%	37	23.6%
Has career guidance and counselling helped you choose the right career?	113	72.0%	44	28.0%
Overall	954	76.0%	302	24.0%

Table (15) shows the percentage of the questionnaire overall responses. The highest responses were given for both strongly agree (29.3%) and agree (38.5%). This means that the majority of participating students positively strongly agreed and agreed that to the influencing factors of their career choice and guidance services that better support them in the federal higher education institutions in the UAE.

Table (15): Overall Distribution Responses

Question	Strongly agree		Agree		Uncertain		Disagree		Strongly disagree	
	#	%	#	%	#	%	#	%	#	%
Overall	1379	29.3%	1814	38.5%	861	18.3%	420	8.9%	235	5.0%

Sections below present distributions of each of the questionnaire categories: career awareness, career planning and career role. Table (16) presents the distribution of the first category (career awareness). The questions from 17 to 26 exhibited 29.2% for the strongly agree and 39.8% for the agree responses, indicating that the majority of the participants perceived the career awareness category positivity. The distribution of detailed percentage per item will follow the table.

Table (16): Distribution of the career awareness

Items	Strongly agree		Agree		Uncertain		Disagree		Strongly disagree	
	#	%	#	%	#	%	#	%	#	%
17: I understand what a career means	57	36.3%	71	45.2%	25	15.9%	4	2.5%	0	0.0%
18: I'm aware of the various careers available in the country	33	21.0%	64	40.8%	46	29.3%	13	8.3%	1	0.6%
19: I know the training requirements for various careers	35	22.3%	49	31.2%	46	29.3%	19	12.1%	8	5.1%
20: I know the various working conditions for various careers	35	22.3%	49	31.2%	42	26.8%	26	16.6%	5	3.2%
21: I know my abilities in terms of career involvement	46	29.3%	73	46.5%	29	18.5%	8	5.1%	1	0.6%
22: I know my career interests	54	34.4%	57	36.3%	35	22.3%	9	5.7%	2	1.3%

23: I know the career that would give optimum satisfaction	49	31.2%	75	47.8%	23	14.6%	6	3.8%	4	2.5%
24: I have some experience through volunteering/work placement in my career choice	45	28.7%	53	33.8%	43	27.4%	10	6.4%	6	3.8%
25: I know the career environment in which I can work best	50	31.8%	66	42.0%	28	17.8%	11	7.0%	2	1.3%
26: I know my career capabilities and limitations	54	34.4%	68	43.3%	26	16.6%	6	3.8%	3	1.9%
Overall	458	29.2%	625	39.8%	343	21.8%	112	7.1%	32	2.0%

On the career awareness, a response of strongly agree and agree showed a high level of awareness, where the low level of awareness was presented by disagree and strongly disagree. Based on the following statements to which the participants responded, all of them with more than 50% agree about their knowledge about career awareness and how it is important to know about it; 45% of the participants agree that they understand the meaning of career and 36% also strongly agree, whereas only 3% of them disagree, as shown in figure (7)

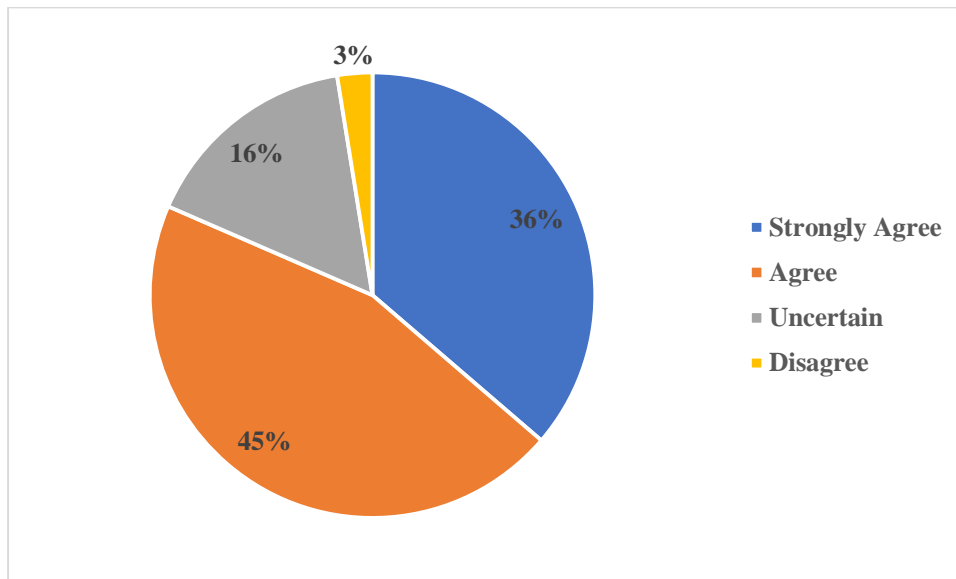


Figure 7: I understand what a career means

This question sought to know the level of students' awareness of careers available in the country. From the figure below, it shows that 41% of the participants agree that they know about the available careers, with 21% of them strongly agree. On the other hand, only 9% of them disagree and strongly disagree about it because they might not have awareness about the role of career counsellor and the services that they provide.

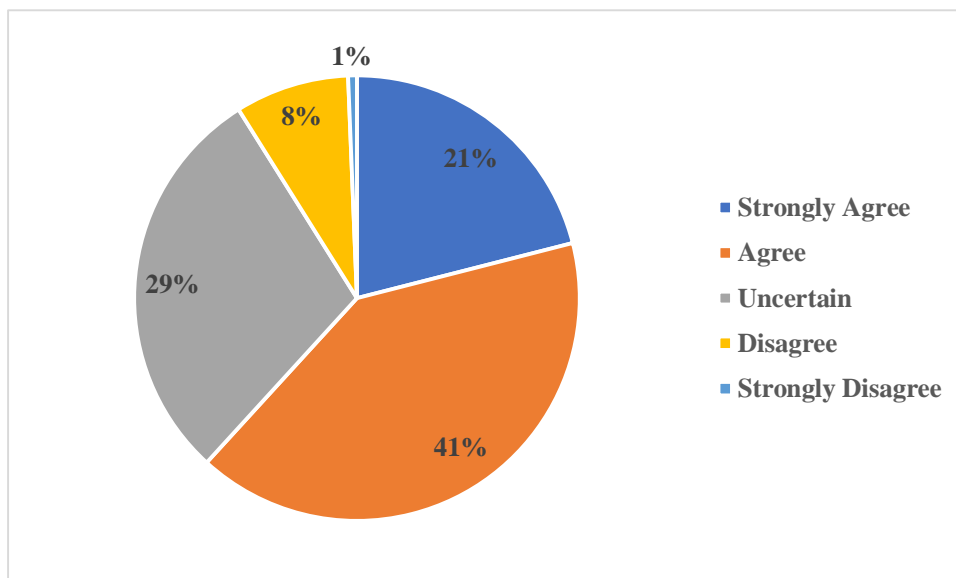


Figure 8: I'm aware of the various careers available in the county

Moreover, 53% of the participants agree and strongly agree that they know about the training and skills requirements for various majors and careers whereas only 17% of them disagree and strongly disagree about it, figure 9.

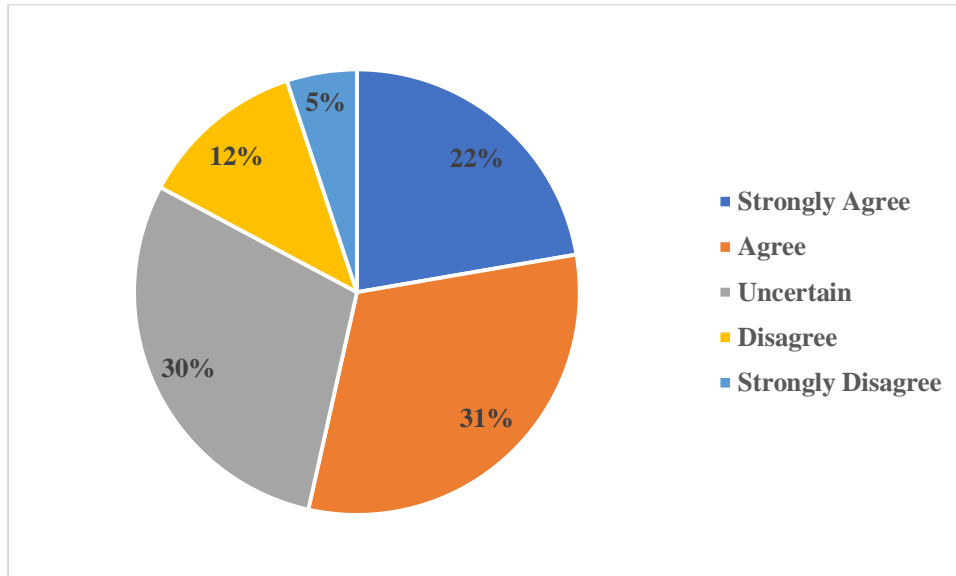


Figure 9: I know the training requirements for various careers

This question asked whether participants were aware of their career interests. The results show that 35% of the participants strongly agree and 36% agree that they know their career interest, while a minor percentage of them are do not know about their career interest with 7%, figure (10)

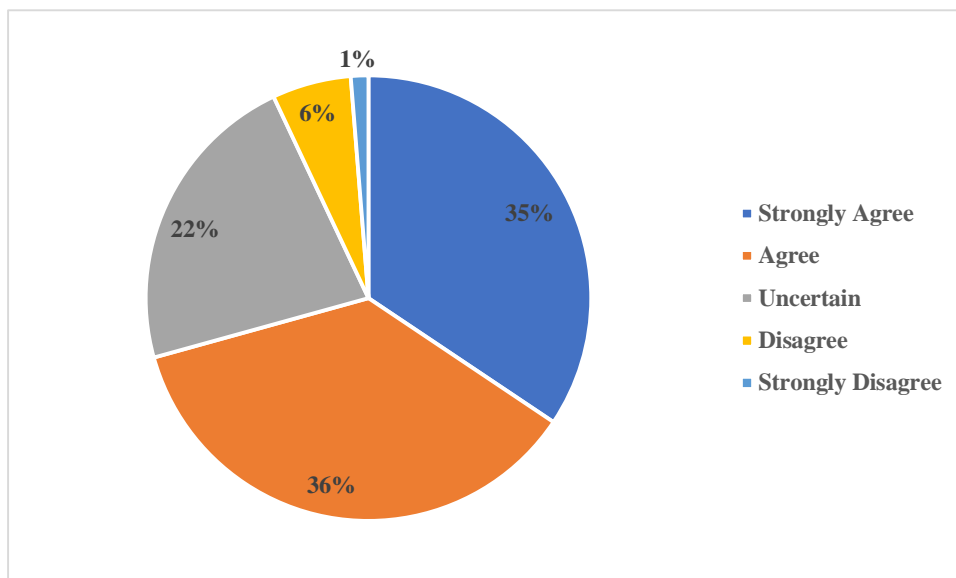


Figure 10: I know my career interests

Additionally, 79% of the participants agree and strongly agree that the career would give them optimum satisfaction, whereas only 4% of them disagree and 2% of them strongly disagree, as shown in figure 11.

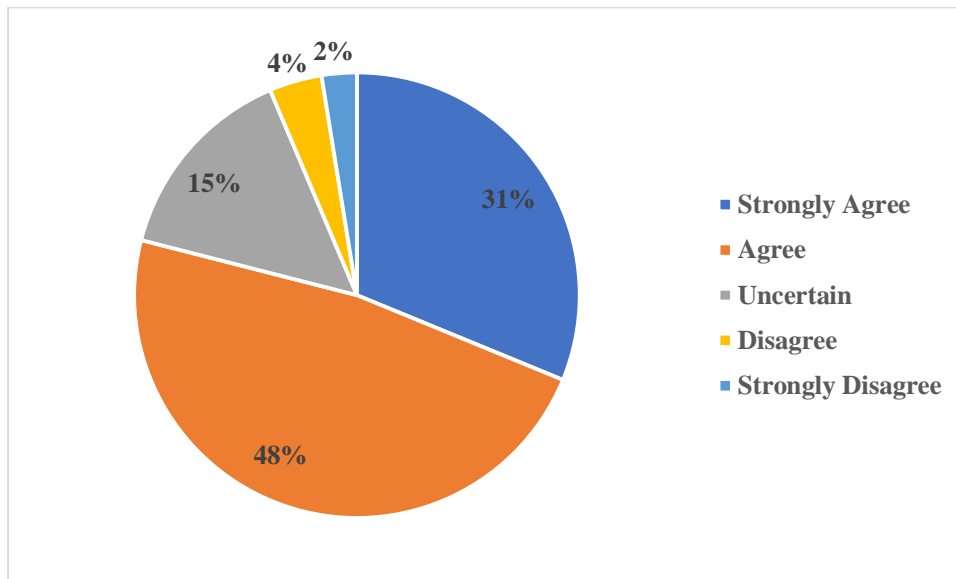


Figure 11: I know the career that would give optimum satisfaction

From the following statement, 'I know my career capabilities and limitations', the result shows that the participants know about their ability, skills and their limitations, where 77% of them agree and strongly agree that they know, while only 6% of them disagree and strongly disagree as shown in figure 12.

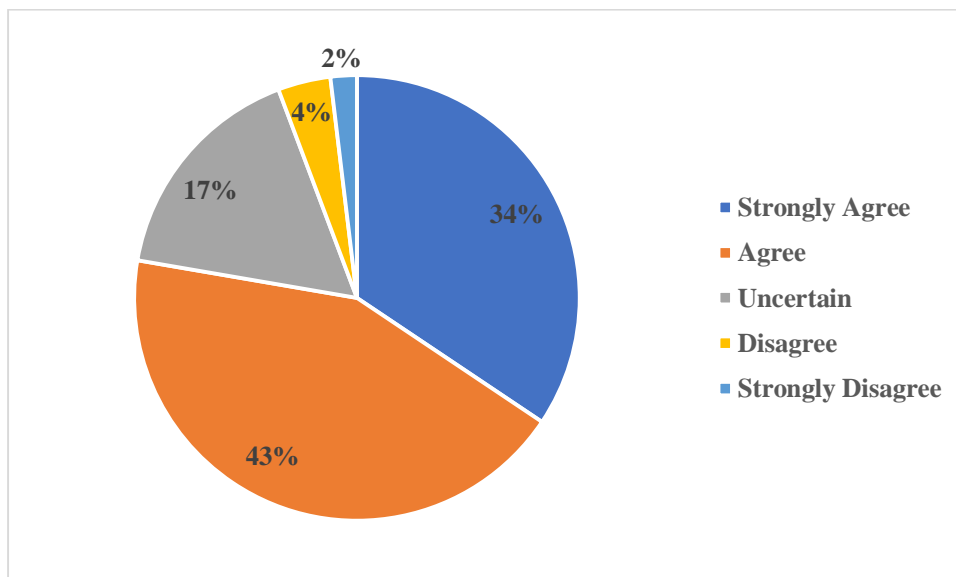


Figure 12: I know my career capabilities and limitations

Overall, a majority of the participants agree and strongly agree with the following statements, which means that they have a high level of career awareness.

- I understand what a career means;
- I am aware of the various careers available in the country;

- I know the training requirements for various careers;
- I know the various working conditions for various careers;
- I know my abilities in terms of career involvement;
- I know my career interest;
- I know the career that would give me optimum satisfaction;
- I have some experience through volunteering/work placement in my career of choice;
- I know the career environment in which I can work best; and
- I know my career capabilities and limitations.

To summarize this part, based on the participants' responses, out of all of them, over 50% agree about their knowledge about career awareness and how it is important to know about it, and know about their career capabilities, interests, abilities and limitations.

Table (17) presents the distribution of the second category (career planning). The questions from 27 to 36 exhibited 26.3% for the strongly agree and 27.6% for the agree responses indicating that the majority of the participants perceived the career planning category with positivity. The distribution of detailed percentage per time will follow the table.

Table (17): Distribution of the career planning

Items	Strongly agree		Agree		Uncertain		Disagree		Strongly disagree	
	#	%	#	%	#	%	#	%	#	%
27: I have made my own career choice	87	55.4%	47	29.9%	16	10.2%	4	2.5%	3	1.9%
28: I chose my major based on my future career experience	49	31.2%	50	31.8%	31	19.7%	19	12.1%	7	4.5%
29: I have consulted professionals in my career of choice	47	29.9%	48	30.6%	32	20.4%	28	17.8%	2	1.3%

30: I have read and explored the market to make my career choice	41	26.1%	59	37.6%	34	21.7%	20	12.7%	3	1.9%
31: I have consulted a college counsellor on my career choice	50	31.8%	46	29.3%	24	15.3%	30	19.1%	7	4.5%
32: I have obtained enough knowledge on my career choice	43	27.4%	64	40.8%	33	21.0%	12	7.6%	5	3.2%
33: I chose my career major because it's my parents' choice	25	15.9%	33	21.0%	22	14.0%	40	25.5%	37	23.6%
34: I chose my career major because of my family business	21	13.4%	29	18.5%	20	12.7%	43	27.4%	44	28.0%
35: I chose my career major because I followed my best friends' choice	26	16.6%	26	16.6%	19	12.1%	39	24.8%	47	29.9%
36: I chose my career major based on my teachers' opinions	23	14.6%	31	19.7%	27	17.2%	37	23.6%	39	24.8%
Overall	412	26.3%	433	27.6%	258	16.4%	272	17.3%	194	12.4%

The figure (13) below illustrates the questions that sought to find out if participants chose their major on their own, who they consulted, and whether they explored about their career choice/planning in their response. It showed that 55% of the participants strongly agree that they made their own career choice and 30% of them agree, whereas only 5% disagree and strongly disagree about it.

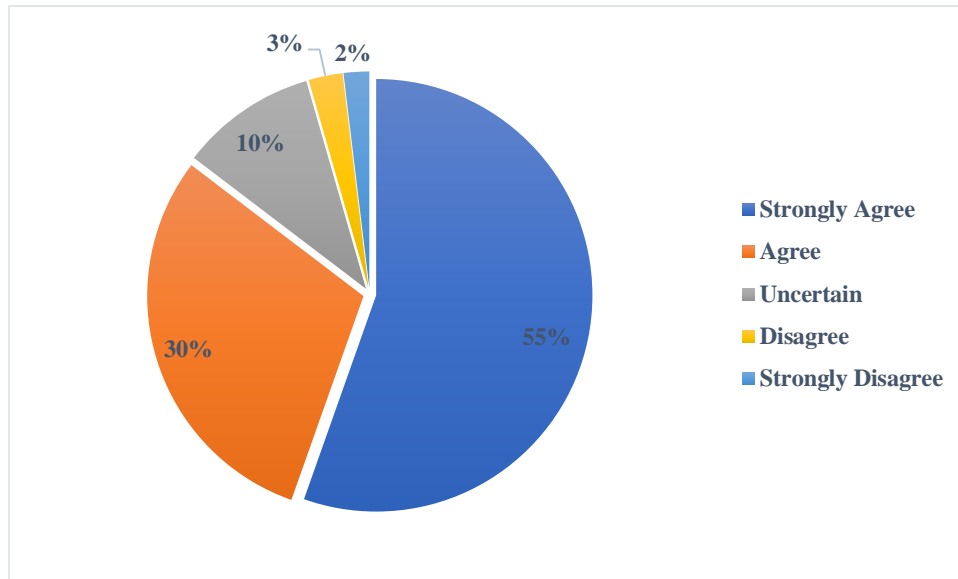


Figure 13: I have made my own career choice

The result in the pie chart figure (14) shows that the participants had consulted professionals for their career major choice. 30% of the participants strongly agree to getting feedback and consulting professionals in their career choice and 31% of them agree, however, it was found that 19% of the participants disagree and strongly disagree about consulting the professionals. This is supported in figure (15), that 63% of responded agree and strongly agree regarding the reading about and exploring the market by the participants to be able to make their career major choice (figure 15), whereas only 2% of them strongly disagree and 15% of them in total disagree that they have read or explored the market to get know about their career major choice.

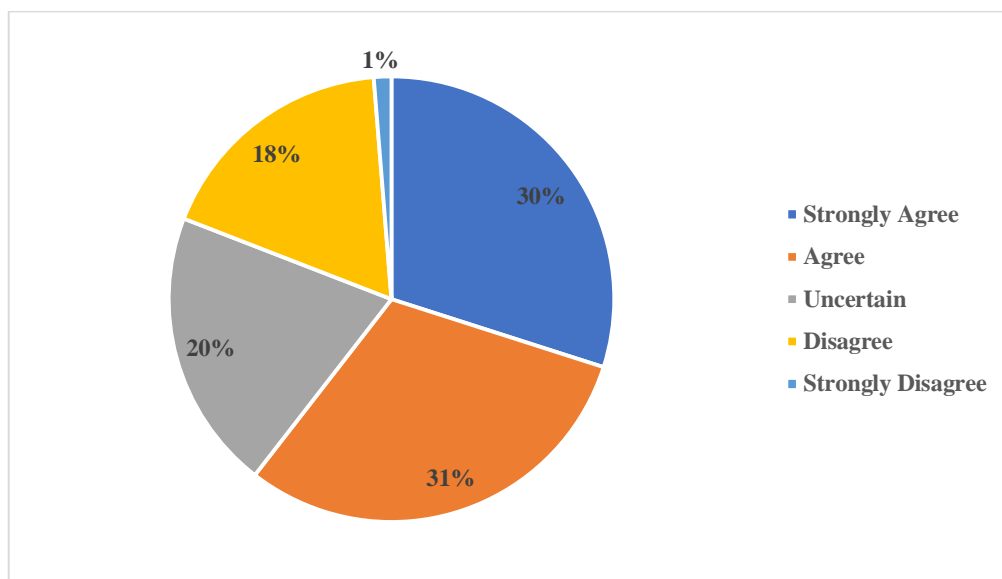


Figure 14: I consulted professionals in my career of choice

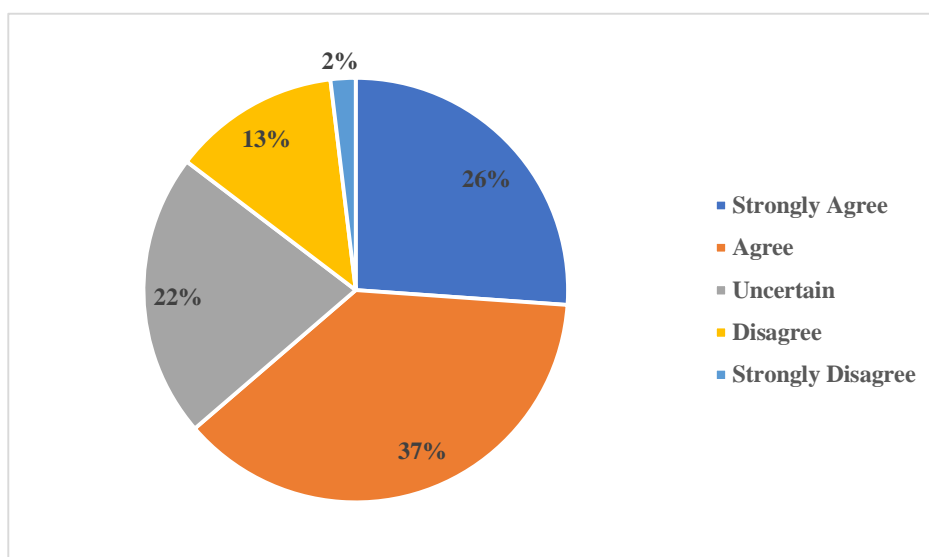


Figure 15: I have read and explored the market to make my career choice

The table below demonstrates that 31.8% of the participants strongly agreed that they have consulted their campus career counsellor on their career major choice and 29.3% of them agree, however, only 4.5% of them strongly disagree and 19.1% of them disagree. That supported the responded of 68% agree and strongly agree that they have obtain enough knowledge about their career major choice as shown in figure 16, where 11% of the participants are disagree and strongly disagree that they have no knowledge about their career major choice.

Table 18: I have consulted a college counsellor on my career choice

	Frequency	Percent
Strongly Agree	50	31.8
Agree	46	29.3
Uncertain	24	15.3
Disagree	30	19.1
Strongly Disagree	7	4.5
Total	157	100.0

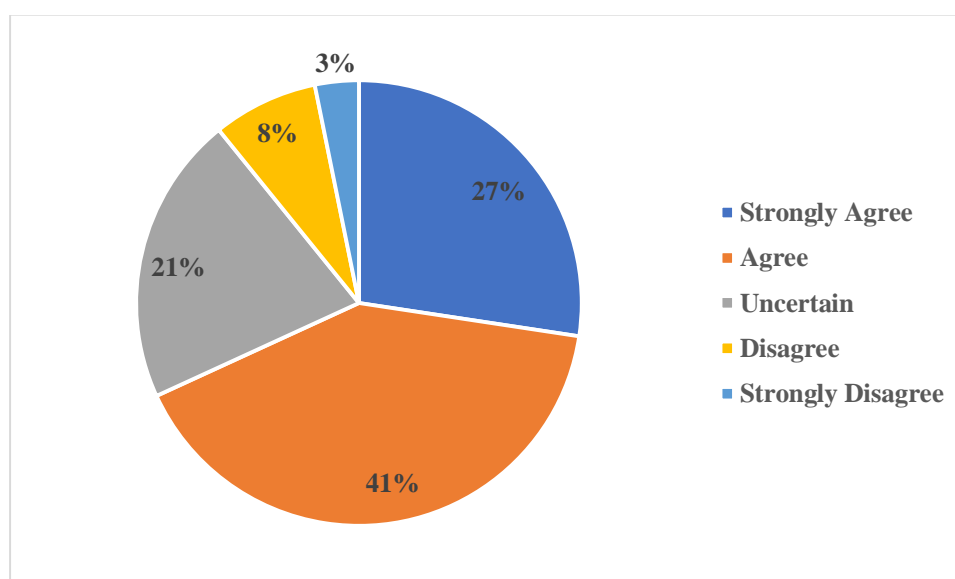


Figure 16: I have obtained enough knowledge on my career choice

Additionally, through the career planning questions, the participants responded to their career major choice based on parents' choice, family business, best friend and teacher's opinion. The pie charts below illustrate that 37% of the participants (16% strongly agree, 21% agree) are willing to take their parents' choice for their career major choice where 25% of them disagree and 24% strongly disagree about letting their parents make their career major choice. Moreover, family business is another factor which caused the students to choose the wrong career major. It showed that 32% of the participants (19% agree, 13% strongly agree) chose their career major based on their family business where

they can guarantee their future job. Some of the students chose their career major based on their close best friends' choice. The below pie chart shows that 33% of the participants (16% strongly agree, 17% agree) follow their close best friends' opinion, whereas 55% of them strongly disagree and disagree about following their close best friends' opinion. Another factor is the teacher. 35% of the participants (15% strongly agree, 20% agree) are interested to follow their teachers' opinion to choose their career major, whereas 25% strongly disagree and 23% disagree and are not interested to follow their teachers' opinion.

Overall, most of the participants, with 55% strongly disagree and disagree, are not interested in making their career major choice based on their family business and their close best friends' choice, and 49% of them strongly disagree and disagree about their career major choice being chosen based on their parents' choice and their teachers' choice, as shown below in figure (17).

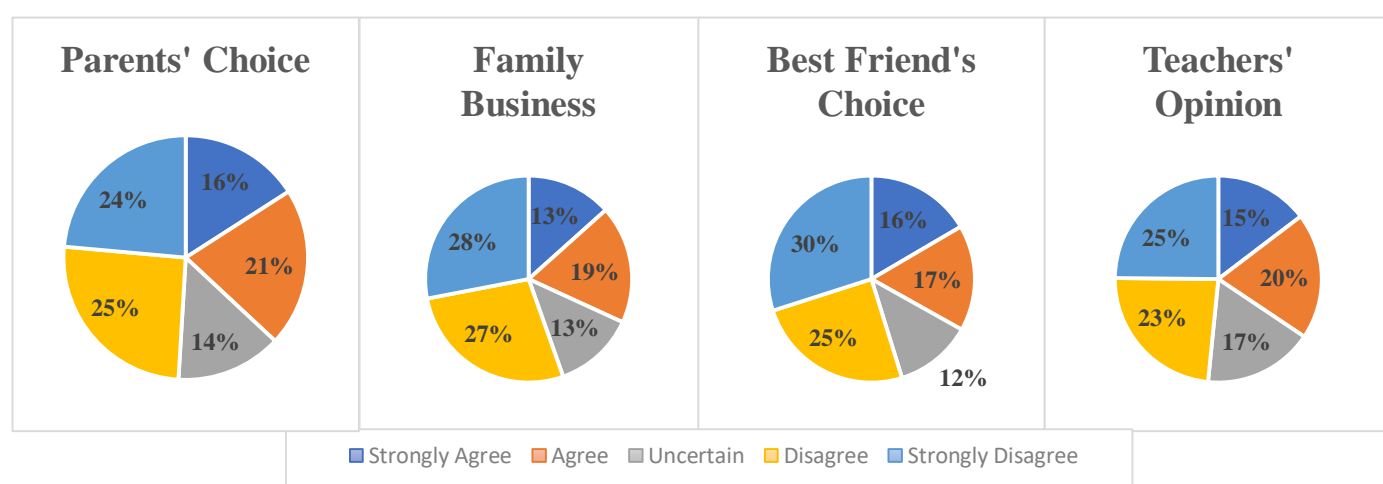


Figure 17: I chose my career major because it's my parents' choice, or my family business. I followed my best friend's choice, and based on my teachers' opinions

The finding in table (19) supported the results above, that the participants were willing to follow others' opinion in their career major choice. For example, parent's choice got (mean = 3.1), family business (mean = 3.3), best friends' opinion (mean = 3.3), and teachers' opinion (mean = 3.2). All the means were above 2.5 which shows that the participants are significant with others' opinions for their career major choice.

Table 19: Statistical Analysis of participants' responses to career major choice based on different opinions

Statement	N	Minimum	Maximum	Mean	Std. Deviation
I chose my career major because it's my parents' choice	157	1.00	5.00	3.1975	1.42072
I chose my career major because of my family business	157	1.00	5.00	3.3822	1.40756
I chose my career major because I followed my best friends' choice	157	1.00	5.00	3.3503	1.47138
I chose my career major based on my teachers' opinions	157	1.00	5.00	3.2420	1.40238

To conclude this part, based on the participants' responses, more than 50% agree about:

- Made their own major choice;
- Consulted professionals for their career choice;
- Read and explored the market to make their career choice;
- Obtained enough knowledge about their career major choice; and
- Choose their career major based on different opinions, such as parents, family business, best friend's choice and teachers' opinion.

Table (20) presents the distribution of the second category (career role). The questions from 37 to 46 exhibited 32.4% for the strongly agree and 48.2% for the agree responses, which indicated that the majority of the participants perceived the career role category positively. The distribution details percentage per item will follow the table.

Table (20): Distribution of the career role

Items	Strongly agree		Agree		Uncertain		Disagree		Strongly disagree	
	#	%	#	%	#	%	#	%	#	%
37: Career guidance and counselling assist an individual in dealing with career issues	49	31.2%	80	51.0%	25	15.9%	3	1.9%	0	0.0%
38: Career guidance and counselling assist students to access career information in order to make appropriate career choices	46	29.3%	88	56.1%	18	11.5%	5	3.2%	0	0.0%
39: Career guidance and counselling assist students on how to make major choices basing on their career aspirations	49	31.2%	80	51.0%	27	17.2%	1	0.6%	0	0.0%
40: Career guidance department invites useful speakers on various career issues	37	23.6%	74	47.1%	38	24.2%	7	4.5%	1	0.6%
41: Career tests and assessments are useful in understanding individual differences,	42	26.8%	76	48.4%	35	22.3%	2	1.3%	2	1.3%

personality, interests, values and abilities										
42: Career guidance and counselling assists in students' work placement	50	31.8%	80	51.0%	23	14.6%	4	2.5%	0	0.0%
43: All students should consult career counsellors when making career decisions	54	34.4%	66	42.0%	30	19.1%	4	2.5%	3	1.9%
44: Career guidance and counselling make a positive difference in an individual's career choice	54	34.4%	77	49.0%	23	14.6%	3	1.9%	0	0.0%
45: Career guidance and counselling assist students to make educational plans	60	38.2%	75	47.8%	20	12.7%	2	1.3%	0	0.0%
46: I would advise all students with career issues to consult the college counsellor	68	43.3%	60	38.2%	21	13.4%	5	3.2%	3	1.9%
Overall	509	32.4%	756	48.2%	260	16.6%	36	2.3%	9	0.6%

Table (21) summarizes the result of the ten statements using the rating scale. The pie chart below, figure (18), demonstrates the participants' opinions about the ability of career guidance and counselling services in assisting each person in dealing with career issues. 82% of participants gave strongly agree and agree about the career guidance and counselling whereas only 2% of them disagree. Moreover, 56 of them who responded are studying CIS programme. In Business

Administration programme and Applied Communication programme, 20 of the students from each programme agreed about the assistance of career counselling and guidance services as shown in figure (19). On other hand, only 3 students responded that they disagree about this assisting and they are from different programmes, which are CIS, TSP and Business Administration.

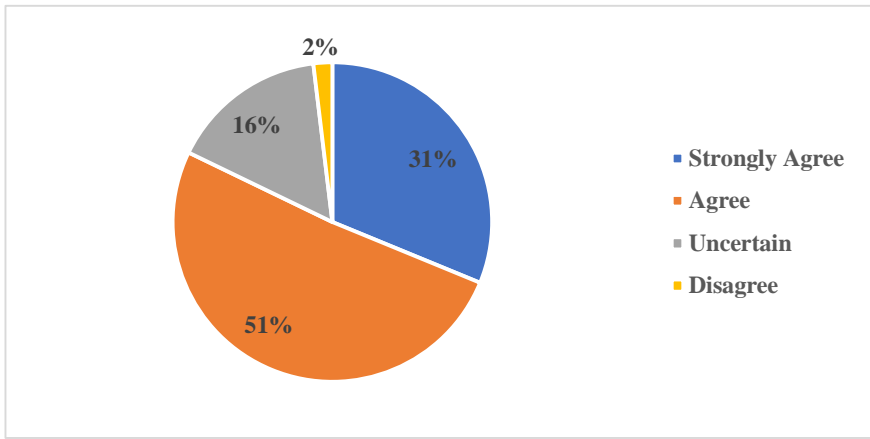


Figure 18: Career Guidance and Counselling assist an individual in dealing with career issues

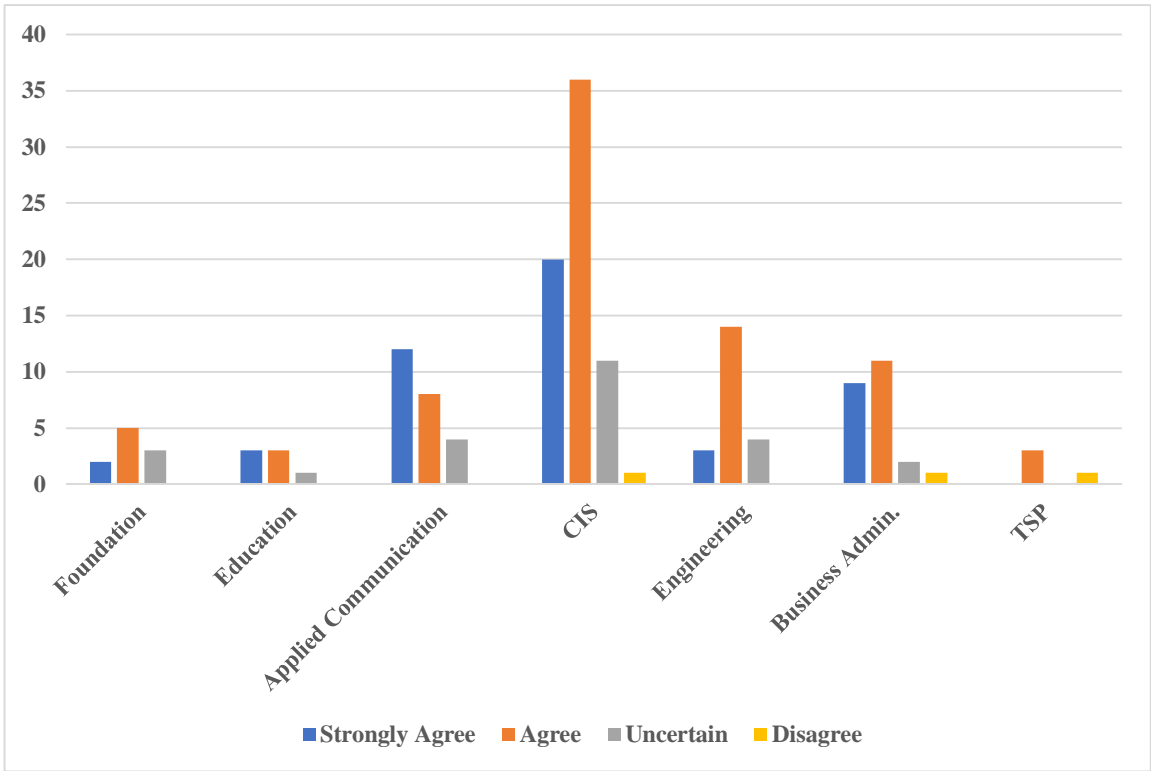


Figure 19: Career Guidance and Counselling assist an individual in dealing with career issues based on major

The statement that got the highest percentage with around 85% of strongly agree and agree is statement nine – career guidance and counselling assist students to make an educational plan – and it had the majority of the participants agree with 47.8% and 38.2% strongly agree, whereas only 1.3% of the participants disagree about this statement. Moreover, the same with statement two – career guidance and counselling assist students to access career information in order to make appropriate career choice – 56.1% of students responded with agree and 29.3% of them responded with strongly agree, whereas only 3.2% of them disagree about this statement, as shown in the below chart.

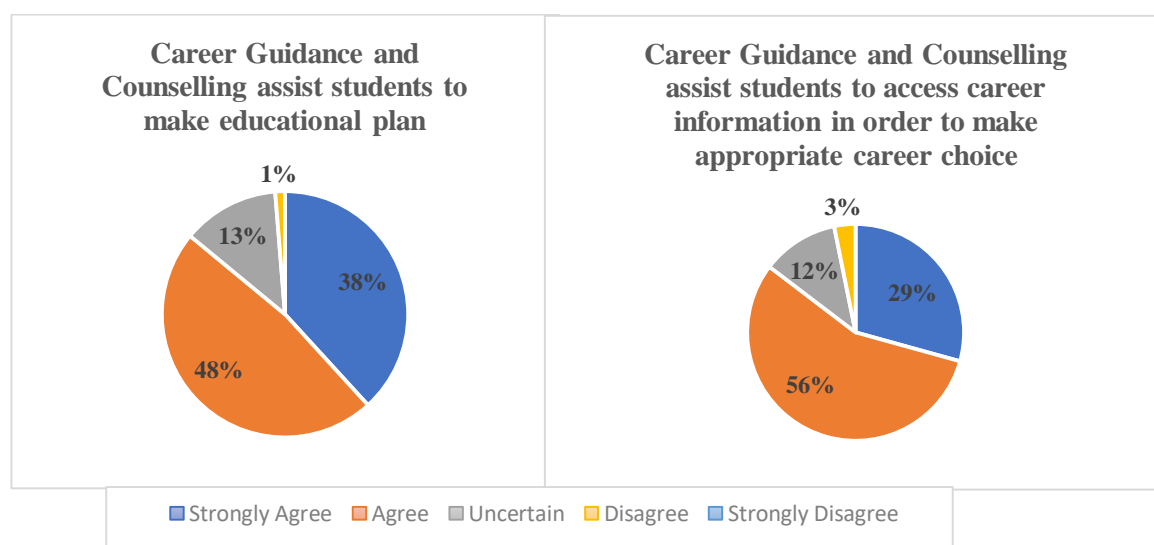


Figure 20: Career Guidance and Counselling assist students to make educational plan & to access career information in order to make appropriate career choice

Furthermore, statement eight scored the third place with the highest percentage with 83.4% of strongly agree and agree (49% agree and 34.4% strongly agree), the participants agreed that career guidance and counselling make for them a positive difference in their career major choice to be the right career path, as shown in figure (21). A total of 81.5% of the participants agreed and strongly agreed that they would like to advise students to consult with career counsellor for any career-related issues, and only 1.9% disagreed (figure 22), who might not be aware about the role of the career counsellor.

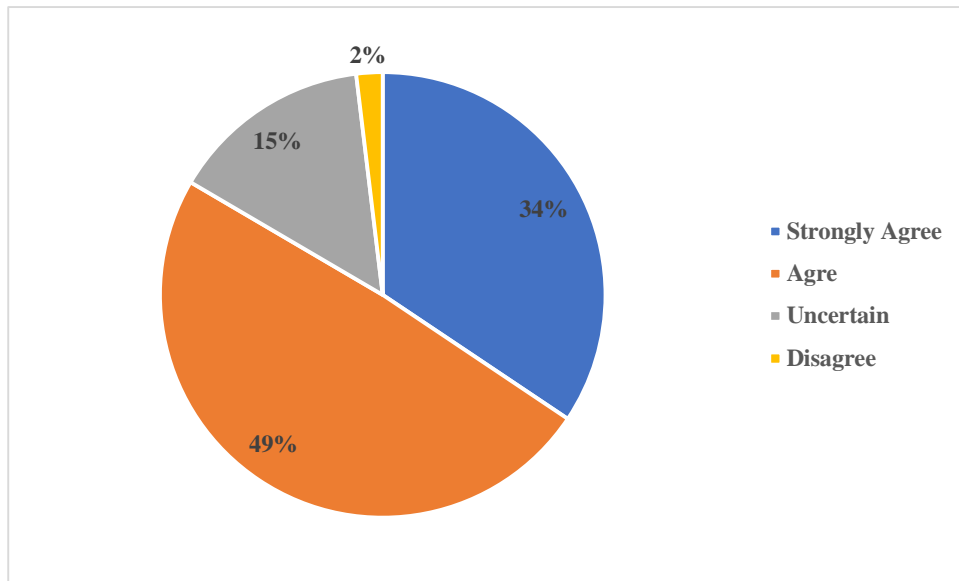


Figure 21: Career Guidance and Counselling make a positive difference in an individual's career choice

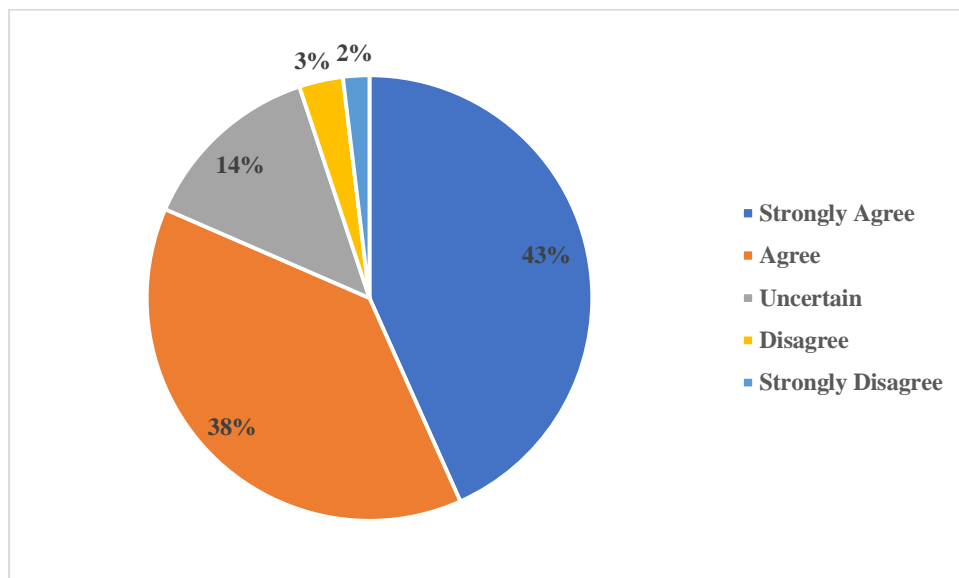


Figure 22: I would advise all students with career issues to consult the college counsellor

Additionally, the pie chart below illustrates that 49% of students agree that career tests and assessments are useful in understanding their personality, interest, values and abilities, in order to be able to choose the right career major, and also 27% strongly agree with this statement, whereas only 2% of the students disagree and strongly disagree about this statement.

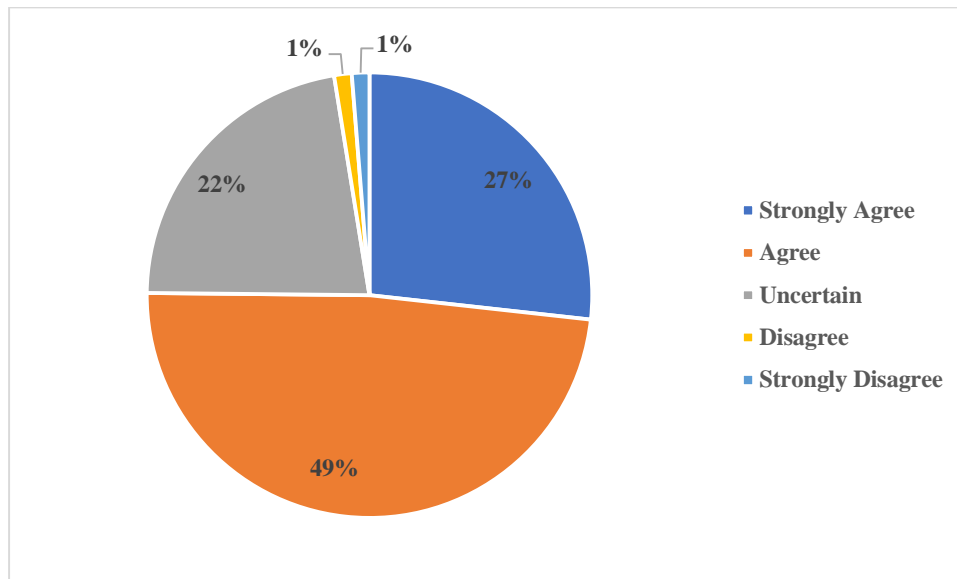


Figure 23: Career tests and assessments are useful in understanding individual differences, personality, interests, values, and abilities

Participants strongly agree and agree that career guidance and counselling assist them on how to make a career major choice based on their career aspirations. The result shows that 51% agree and 31% of them strongly agree, while only 1% of them disagree about this statement as shown in figure (24).

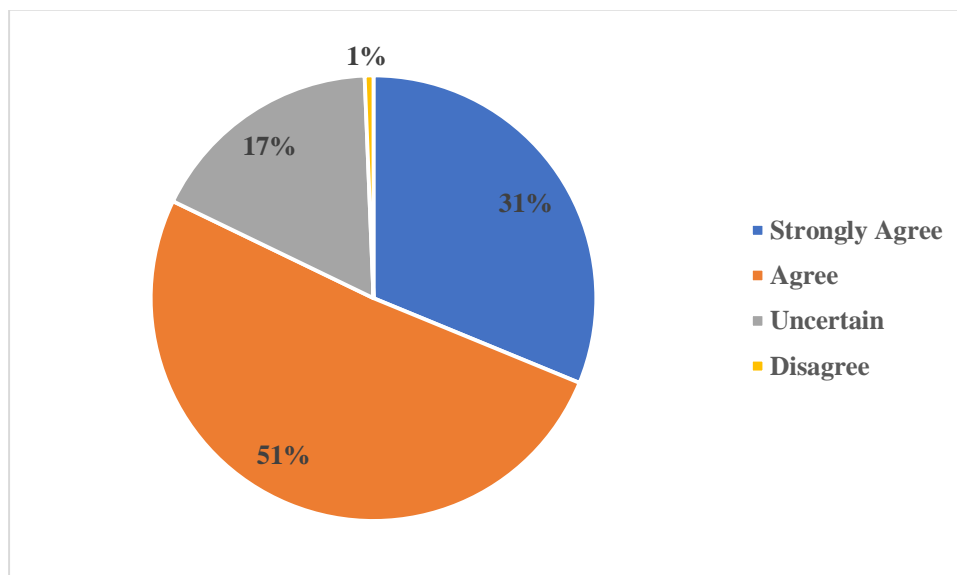


Figure 24: Career guidance and counselling assist students on how to make career major choice based on their career aspirations

Moreover, the participants agreed that the career guidance and counselling department brings them useful speakers to give them some tips about various career major issues, and helps them. The result (figure 25) proves that 71% of the responses agree and strongly agree about inviting speakers to talk about career major issues, while only 5% of them disagree and strongly disagree about this statement.

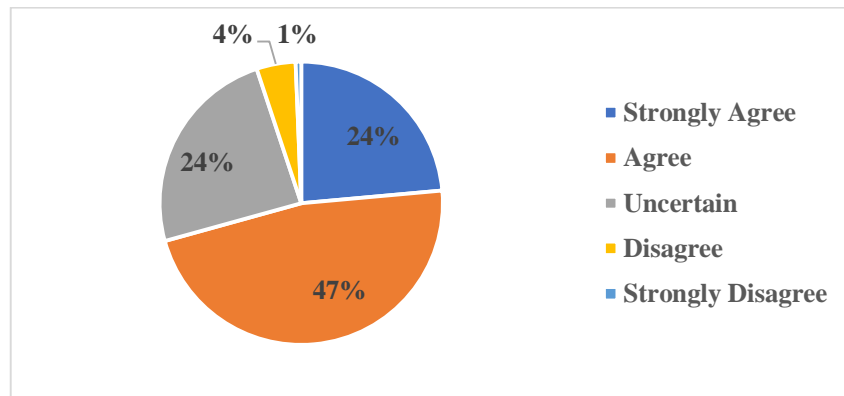


Figure 25: Career guidance and counselling department invites useful speakers on various career issues

Statement Responses	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Career guidance and counselling assist an individual in dealing with career issues	0.0%	1.9%	15.9%	51%	31.2%	1.8854	.73352
Career guidance and counselling assist students to access career information in order to make appropriate career choice	0.0%	3.2%	11.5%	56.1%	29.3%	1.8854	.72473
Career guidance and counselling assist students on how to make major choices based on their career aspirations	0.0%	0.6%	17.2%	51%	31.2%	1.8726	.70462
Career guidance department invites useful speakers on various issues	0.6%	4.5%	24.2%	47.1%	23.6%	2.1146	.83948
Career tests and assessments are useful in understanding individuals' differences, personality, interests, values and abilities	1.3%	1.3%	22.3%	48.4%	26.8%	2.0191	.81234
Career guidance and counselling assists in students' work placement	0.0%	2.5%	14.6%	51%	31.8%	1.8790	.74550

All students should consult career counsellors when making career decisions	1.9%	2.5%	19.1%	42%	34.4%	1.9554	.90117
Career guidance and counselling make a positive difference in an individual's career choice	0.0%	1.9%	14.6%	49%	34.4%	1.8408	.73824
Career guidance and counselling assist students to make educational plans	0.0%	1.3%	12.7%	47.8%	38.2%	1.7707	.71497
I would advise all students with career issues to consult the college counsellor	1.9%	3.2%	13.4%	38.2%	43.3%	1.8217	.91640

Table 21: Statistical analysis of participants' responses to perceptions of the role of career guidance and counselling

The summary of this part is that more than 50% of participants agreed that career guidance and counselling services assist them in:

- Dealing with career issues;
- Accessing career information in order to make appropriate career choices;
- How to make major choices based on their career aspirations; and
- Making educational plans for students.

Moreover, most of the participants' responses agree that career tests and assessments are useful in understanding individuals' personality, values, abilities and interests and they strongly agree that career guidance and counselling services make a positive difference in an individuals' career major choice, and more than 50% of participants recommended all students to consult on their career major issues with their college career counsellor.

4.1.5 T-Test Results of Career Guidance and Counselling

This section presents the t-test results overall and the categories of participating student responses of the questionnaire. Table (22) shows the overall one sample t-test result ($T = 17.600$, $p = 0.000$, $\alpha = 0.05$) to indicate statistical significant difference, meaning that participating students agreed on the effectiveness of the career guidance and counselling in higher education. The table also shows the statistically significant difference of the t-test results for the three categories. The career awareness one sample t-test result ($T = 15.805$, $p = 0.000$, $\alpha = 0.05$) to indicate statistical significant difference meaning that participating students agreed on the effectiveness of the career guidance and counselling in higher education. The career planning one sample t-test result ($T = 6.004$, $p = 0.000$, $\alpha = 0.05$) to indicate statistical significant difference meaning that participating students agreed on the effectiveness of the career guidance and counselling in higher education. The career role one sample t-test result ($T = 24.891$, $p = 0.000$, $\alpha = 0.05$) to indicate statistical significant difference meaning that participating student agreed on the effectiveness of the career guidance and counselling in higher education.

Table (22): t-test results

Statement	N	Mean	Standard Deviation	Test	Significance
Overall (test ≥ 3)	157	3.75	0.54	One sample t-test $t = 17.600$ P-value = 0.000	Higher education students were statistically agreed with overall career choice and services
Status (test ≥ 1.5)	157	1.76	0.23	One sample t-test $t = 14.236$ P-value = 0.000	Students were statistically agreed with the career choice and services based on Status category.
Awareness (test ≥ 3)	157	3.87	0.69	One sample t-test $t = 15.805$ P-value = 0.000	Students were statistically agreed with the career choice and services based on Awareness category.
Planning (test ≥ 3)	157	3.40	0.83	One sample t-test $t = 6.004$ P-value = 0.000	Students were statistically agreed with the career choice and services based on Planning category.

Role (test ≥ 3)	157	4.10	0.55	One sample t-test $t = 24.891$ P-value = 0.000	Students were statistically agreed with the career choice and services based on Role category.
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4.1.6 Descriptive Study of Career Guidance and Counselling

The goal of descriptive statistics is “to describe, summarize, or make sense of a particular set of data” (Johnson & Christensen 2014, p. 518). Moreover, it forms the foundation of the quantitative analysis. Thus, it is used to describe the basic features and to summarize the obtained data regarding both of the main variables of this study, career planning, career awareness and career role, by measuring the mean, standard deviation and percentage of the responses of their elements.

Therefore, the section presents results of the participants’ perception of career guidance and counselling, based on different demographic, age, major and the current year, for the three categorizes of the career guidance and counselling questionnaire.

4.1.6.1 Age

For the three categorizes of age only one category shows significant difference role ($F = 5.073$, $p = 0.007$, $\alpha = 0.05$) meaning that participant students indicated that the counsellor roles are of importance to them, however, the career awareness and career planning did not show significant difference. Furthermore, the categories of awareness, planning and the role all showed difference significance as regards the age. For the awareness, the highest age group of 24 years of age and above had the highest mean (Mean = 4.20) followed by age group 21-23 years old (Mean = 3.92) and the lowest was age group of 17- 20 years old (Mean = 3.75). For the planning, the highest age group was 24 years of age and above which had the highest mean (Mean = 3.59) followed by age group 17-20 years (Mean = 3.39) and the lowest was age group 21-23 years old (Mean = 3.37). For the career role, the highest age group was 21-23 years old which had the highest mean (Mean = 4.22) followed by age group 24 years old of age and above (Mean = 4.15) and the lowest was age group of 17-20 years old (Mean = 3.94).

Table (23): Comparison Analysis by Age

Statement	N	Mean	Standard Deviation	Test	Significance
Awareness (Age)	1 = 67 2 = 77 3 = 13	1 = 3.75 2 = 3.92 3 = 4.20	1 = 0.73 2 = 0.66 3 = 0.52	One-way ANOVA F = 2.693 P-value = 0.071	Participating students were significantly aware of the career choice and services based on age.
Planning (Age)	1 = 67 2 = 77 3 = 13	1 = 3.39 2 = 3.37 3 = 3.59	1 = 0.89 2 = 0.79 3 = 0.77	One-way ANOVA F = 0.392 P-value = 0.677	Participating students were significantly aware of the planning of career choice and services based on age.
Role (Age)	1 = 67 2 = 77 3 = 13	1 = 3.94 2 = 4.22 3 = 4.15	1 = 0.61 2 = 0.47 3 = 0.54	One-way ANOVA F = 5.073 P-value = 0.007	Participating students were significantly aware of the role of career choice and services based on age.

4.1.6.2 Major

Of the three categories, only category 2 shows significant difference: career awareness ($F = 3.148$, $p = 0.006$, $\alpha = 0.05$) meaning that participating students indicated that the importance of the career awareness for the students and career role ($F = 3.996$, $p = 0.001$, $\alpha = 0.05$), meaning that participant students indicated that the counsellor roles had importance to them, however, the career planning did not show significant difference. For the awareness, the highest major was Education programme (Mean = 4.36), followed by Applied Communication programme (Mean = 4.19), Business programme (Mean = 3.97), Engineering programme (Mean = 3.84), CIS programme (Mean = 3.79), TSP programme (Mean = 3.43) and the last was Foundation programme (Mean = 3.35). For career role, the highest major was Applied Communication programme (Mean = 4.26) followed by Business programme (Mean = 4.25), Education programme (Mean = 4.17), CIS programme (Mean = 4.12), Engineering programme (Mean = 3.97), Foundation programme (Mean = 3.76) and the last was TSP programme (Mean = 3.13).

Table (24): Comparison Analysis by Major

Statement	N	Mean	Standard Deviation	Test	Significance
Awareness (Major)	1 = 10	1 = 3.35	1 = 0.72	One-way ANOVA $F = 3.148$ $P\text{-value} = 0.006$	Participating students were significantly aware of the career choice and services based on major
	2 = 7	2 = 4.36	2 = 0.44		
	3 = 24	3 = 4.19	3 = 0.53		
	4 = 68	4 = 3.79	4 = 0.72		
	5 = 21	5 = 3.84	5 = 0.65		
	6 = 23	6 = 3.97	6 = 0.66		
	7 = 4	7 = 3.43	7 = 0.42		
Planning (Major)	1 = 10	1 = 3.22	1 = 0.45	One-way ANOVA $F = 1.913$	Participating students were not significantly aware of the
	2 = 7	2 = 3.81	2 = 0.71		
	3 = 24	3 = 3.84	3 = 1.03		

	4 = 68 5 = 21 6 = 23 7 = 4	4 = 3.26 5 = 3.36 6 = 3.33 7 = 3.45	4 = 0.74 5 = 0.87 6 = 0.86 7 = 0.93	P-value = 0.082	planning of career choice and services based on major.
Role (Major)	1 = 10 2 = 7 3 = 24 4 = 68 5 = 21 6 = 23 7 = 4	1 = 3.76 2 = 4.17 3 = 4.26 4 = 4.12 5 = 3.97 6 = 4.25 7 = 3.13	1 = 0.50 2 = 0.34 3 = 0.54 4 = 0.56 5 = 0.40 6 = 0.54 7 = 0.49	One-way ANOVA F = 3.996 P-value = 0.001	Participating students were significantly aware of the role of career choice and services based on major.

4.1.6.3 Current Year

The three categories shows significant difference: career awareness ($F = 3.943$, $p = 0.010$, $\alpha = 0.05$) meaning that participant students indicated the importance of the career awareness for the students and career planning ($F = 4.827$, $p = 0.003$, $\alpha = 0.05$) meaning that participant students indicated the importance of career planning and the career role ($F = 3.218$, $p = 0.024$, $\alpha = 0.05$), meaning that participants students indicated the importance of the career role. For the awareness, the highest current year was Year three (Mean = 4.13), followed by Year two (Mean = 3.87), Year four (Mean = 3.73) and the last Year one (Mean = 3.70). For planning, the highest current year was Year two (Mean = 3.67) followed by Year three (Mean = 3.58), then Year one (Mean = 3.39) and the last Year four (Mean = 3.03). For career role, the highest current year was Year three (Mean = 4.27), followed by Year four (Mean = 4.10) then Year two (Mean = 4.02) and the last Year one (Mean = 3.92).

Table (25): Comparison Analysis by current year

Statement	N	Mean	Standard Deviation	Test	Significance
Awareness (Current year)	1 = 39 2 = 26 3 = 49 4 = 43	1 = 3.70 2 = 3.87 3 = 4.13 4 = 3.73	1 = 0.81 2 = 0.65 3 = 0.55 4 = 0.67	One-way ANOVA F = 3.943 P-value = 0.010	Participating students were significantly aware of the career choice and services based on current year.
Planning (Current year)	1 = 39 2 = 26 3 = 49 4 = 43	1 = 3.39 2 = 3.67 3 = 3.58 4 = 3.03	1 = 0.84 2 = 0.98 3 = 0.75 4 = 0.71	One-way ANOVA F = 4.827 P-value = 0.003	Participating students were significantly aware of the planning of career choice and services based on current year.
Role (Current year)	1 = 39 2 = 26 3 = 49 4 = 43	1 = 3.92 2 = 4.02 3 = 4.27 4 = 4.10	1 = 0.58 2 = 0.61 3 = 0.49 4 = 0.52	One-way ANOVA F = 3.218 P-value = 0.024	Participating students were significantly aware of the role of career choice and services based on current year.

4.1.7 Key Finding of Quantitative Data

To sum up the finding of quantitative data, the overall Cronbach reliability of questionnaire indicated that is reliable (0.871). additionally, the reliability of sub-categories of the questionnaire were considered acceptable as well: awareness (0.726), planning (0.656) and role (0.736). the normality of the study overall is significance at alpha level 0.05. Moreover, the majority of participating students positively agreed to the influencing factors of their career choice and guidance services that better support them in the federal higher education institutions in the UAE. The finding also shows that overall one sample t-test result indicates statistical

significant difference ($T= 17.600$, $p =0.000$, $\alpha = 0.05$) which means that participating students agreed on the effectiveness of the career guidance and counselling in higher education.

Overall, participating students were significantly aware of the career choices and services available for them based on their age, major, current year.

4.2. Qualitative Results

The purpose of this research is to investigate the influencing factors on higher education students' career choice and to find out the effective career guidance services that better support higher education students in the UAE. The aim of this section was to analyze the findings of the data collected from the interviews and document analysis. As discussed in the methodology section, interviews were conducted in order to get more information about career guidance and counselling services and the influencing factors on the students' career major choice after conducting the questionnaire. In this study, the researcher used only an un-structured interview where all respondents received the same questions, interviews with students (Appendix 3), eight interviewees, from different programmes. Ten questions were asked of participants. Also, an interview was conducted with a career advisor using eleven questions (Appendix 4). Moreover, documents for analysis were collected from the career advisor directly after the interview (Appendix 6).

4.2.1 Interview Analysis

In this study, the interviews went through two steps. The first interview step was conducted with eight students from different majors and the second step conducted one interview with the career advisor from the same higher education institution.

A. Analyzing the interviews with the students

All the questions that were asked to the participants were analyzed and all eight participants' answers were compared together, and it was found that all of their answers were nearly the same, as shown below:

Question One: What career orientation session did you attend?

All of them mentioned that they attended different career orientation sessions and the most common sessions attended by them were time management, how to set your goals, presentation skills, leadership skills and writing and building a professional CV. Besides that, there are other sessions which were not common between the interviewees which are: web design, how to be a public speaker, event management and others.

Moreover, some of the participant students would like to have more sessions related to their major, such as: the CIS participant students would like to have more sessions related to technology and software programs. For instance, student (4) mentioned that “I attended many sessions like time management, set your goals and others but I would like to have more workshops related to technology”, and student (5) agreed with student (4) as both are studying Computer Information Science.

They added that they know about these workshops and sessions through their emails, announcements send by the career advisor and on the TV screens around the campus.”We know about these sessions by emails as we receive different announcements and we can see it around the campus through the college screen,” student (7) said.

Question Two: What was the information provided to you in these sessions?

Generally, each session has its own information. For example, in the time management session, the interviewee learnt how to manage and balance their time between their personal life and education life to be able to do more other things of interest that they would like. Another example is the setting your goals session, where the interviewee learnt how to set their goals for their study and future careers through using the SMART model and be able to know their strength and weaknesses.

Student (3) said that “they teach us how to manage our time, and how to set our goals by having a clear plan for our personal life and for our study journey”.

Question Three: How useful was this information?

Based on the participant students’ answers, they agreed that they got benefit from all sessions for their study and for their knowledge as well, which will benefit them in their personal life.

“They are useful information and it affected my life by changing bad habits to good habits in organizing my time and having a plan for my goals” student (1) said.

Question Four: Did you attend career sessions by a professional/expert from the market, and how useful are these sessions?

Participant students from different programmes had similar experiences. When this question was asked, it seems that most of them had attended the same sessions which were held in their campus. These sessions are run by the career advisor who cooperated with different institutions, associations, banks and other sectors.

One of the participant students from Applied Communication major mentioned that she attended a session with a professional speaker from Emirates Post and, in this session, they taught them how to build a professional CV that included all needed information. A participant student from CIS major added that she attended a session with one of the banks in the city about how to search for a job after you select the right major. Moreover, an Education participant student indicated that she attended some different sessions from different institutions and she received useful information that helped her as she is her final year, such as how to set your goals, build a professional CV, search for a job, and others.

Question Five: How did you plan for your career/major?

Student (1) answered that firstly, “I set my plans, goals, objectives then I sat with my family to get more advice and direction without them choosing the major for me, after that I sat with our career advisor to get more information and knowledge after that I chose the major”. Student (4) replied that “I directly sat with the career advisor to get more help and the right direction for my career major path by doing face-to-face assessment”.

Moreover, other participant students did the same, they consulted with the career advisor for many sessions to put the right plan to ensure that they had chosen the right path.

Generally, from all participant students’ answers, it was found that they put together a good plan with someone’s help, either their family or the career advisor, to put themselves in the right path with the right career major.

Question Six: Who did you ask for help when you have queries/questions/issues about your career planning?

From their answers, student (5) mentioned that whenever she faced a problem in her career planning and major, she asked her oldest sister for help as she knows more about

the career major and planning. Student (6) and student (8) agreed with student (5) that they considered their older sister to be the first person as a reference for them if they face any issues related to career major choice and planning.

Moreover, student (4) and student (7) informed me that their brother is the first person they ask for help if they face any career major planning issues. While the rest of the students mentioned that their parents are the first people to sit and discuss with them their career major issues and they are very happy because they can come to a solution after their discussions. Student (1) said that “I usually get the advice and help from my parents as they know the best for me and the good thing is that they discuss with me all the options without forcing me to their resolution”.

Furthermore, all the participant students agreed that they took help from others like career advisor, teachers and friends but they considered their family to be the first people to get help from.

Question Seven: Who influenced your career major decision?

Based on their above answers, all of them mentioned that one person from their family, either mother, father, sister or brother influenced them in their career major decision.

Question Eight: What types of career programme/assessment did you have?

The participant students were divided equally when they were asked this question. The first group answered that they did the career self-assessment online. This assessment allows them to know their ability, skills, capability, values and interests. By completing this assessment, they will know who they are after sitting with the career advisor to analyze their answers, as mentioned by student (3): “I was not sure about the right career major, therefore my career advisor asked me to do the assessment online. After I finished it, I sat with her and she analyzed it and then she told me that your career path will be in the Applied Communication programme. Now I’m studying this programme and I’m doing well, and my study progress is excellent.”

The other group of the participant students’ answered that they did the programme choice form with the career advisor, face-to-face, where the career advisor asks some direct questions to the participants to get to know their personality and their interest to let them know what major best fits them to be able to choose their career major.

On the other hand, only one of the participants who studied CIS programme mentioned that she did the online assessment by herself and after she finished it, she did not go

back to the career advisor because she found from the result that the suitable major for her is the CIS major which she is studying right now. “I did the assessment by myself just to double check if this programme is suitable for me or not, and I found it is the right programme based on my abilities and interests”, student (4) said.

Question Nine: How useful were these career programme/assessments for your planning?

All of them answered that these two kinds of assessments which are the online and face-to-face are useful for them because they are no longer confused about the selected major that they need to study, and they are on the right path for their career major.”I did not lose any years from my life because I chose the right career major from the beginning because I did the assessment and I consulted the career advisor”, student (6) said.

Question Ten: What do you suggest for making these career programme/assessments more effective?

Most of them agreed that it is an effective assessment but some of them suggested to have fewer questions as it is a long assessment and they recommended that it would be a good if there was a timer while we answer the questions of the assessment. Student (2) mentioned that “it is too long an assessment and some students might get bored and they might not complete the whole assessment, therefore, it might affect their career major choice” . Moreover, student (6) and student (8) had another suggestion which is having more activities to make it more flexible and effective for the students.

To sum up the analysis of the interviews with the students, it has been found that all of them are satisfied with all the career orientation sessions/workshops and the provided information they received either in these workshops or when they attended a session by professionals/experts from the market. Generally, they are able to know how to plan their career major choice by choosing the right path and if they face any career major choice issues, they know that they need to see and sit with their career counsellor to get the right advice. Moreover, they mentioned that the career programme/assessments are useful in their planning and it is good to be able to know their abilities, interests, personality, values, and skills.

B. Analyzing the interview with the career advisor

This part analyzed the eleven questions which were asked to the career advisor to follow up with students' answers and to find out if there is matching between their answers or not and to be able to answer the research questions of this study.

Question One: Do you have sufficient training and qualifications for career counselling?

According to the career advisor's answer, she has a Bachelor in English Language and Master of Education in Management Leadership & Policy, but there is no qualification related to career advising, counselling and guidance. She mentioned that she took in-house workshop with regards to the career counselling and to know how to do different sessions for the students, either face-to-face, individually or as a group. "I attended different workshops, conferences, and sessions related to career guidance and counselling to get more knowledge and experiences from expert people", she said.

Question Two: What do you do as career counselling?

She said that "we provide different services for the students by providing counselling sessions and workshops. We prepare a career plan for each student and help them to know which major fits their personality. Moreover, we follow up with the student from first year of the major until the student graduates and ensure that this student is fully prepared for the world of work with different needed skills".

Question Three: What type of career orientation sessions do you provide to students? And, What key information do you include in these sessions?

From the career advisor's answer, it was found that the centre for the career counselling and guidance provides different orientation sessions about the role of the career guidance and counselling and what they can offer and provide for the students. Moreover, she mentioned that they provide other sessions and workshops, such as setting your goals, leadership skills, time management and others.

She added that the most important key information included in these sessions are tips, best practice and assessment to know their skills, abilities and learning style. She added that this assessment is basic about the six personality types, where the student knows her personality based on the results to be able to know the major that is the best fit for her.

The career advisor mentioned that “we offer different workshops for the students, such as leadership skills, how to write a professional email, set your goals, event management, time management and others. At the same time, we are trying to present the suitable workshops for students based on the offered programmes/major in the institution, plus that, if any students would like to have a workshop that we do not offer, we try our best to offer them the needed workshops as they suggest”.

Question Four: How did you motivate students to attend orientation sessions?

The career advisor mentioned that they send emails to all students, announcements pop-up in their system, TV screens around the campus have different motivational quotes to encourage the students and inform them that they are available for them to help them whenever they need it.

She said that “by using different motivational ways, like sending emails, posting posters around the campus, and using the campus screens to post different motivation quotes and the upcoming workshops and sessions, we reach a good number of attendances in each session, around 50 students and more” .

Question Five: Why were some students not motivated to attend?

Her answer is some of the students are not checking their email regularly and some of them are not interested to attend these sessions and workshops. On the other hand, they keep a list of the students who attend and who do not, so they can follow up with the students who are not showing up individually to see if they are facing any problem in choosing their major or not.

“Not only our department is facing this problem, also in other departments in the campus the students are not checking their emails, so they will not be able to know what is going on their campus. The other way we are using is putting all the announcements on the TV screens around the campus”, the career advisor said.

Question Six: Did you work with professionals/experts in the market on students’ career choices?

Based on her answer, it was found that she is finding out what the job market needs for each major, therefore, she brings employees from the job market weekly to meet with the students and to prepare them for the world of work, but she did not mention whether she invites a guest speaker who is a specialist on the career major choice. However, she

prepares the students with the needed skills for the job market that match with their major. "Each week, I arrange to bring one organization/association either government or private sector to present for the students different available opportunities such as, part time jobs, full time jobs, summer jobs and internship programme", the career advisor said.

Question Seven: What factors do your students consider when choosing their programmes/majors?

The career advisor answered that based on her meeting with different students who would like to change their major, she found out that they wanted to change it because they did not choose the major by themselves. First, some of the students chose the wrong major because they followed their best friend, only to be with them. For example, one student after studying the major for three years, discovered that she cannot complete this major and she would like to change it. The problem is that the students are not aware about how many years they are losing because of the wrong major choice, and also, because of the deadline of drop/add and change, the students come after the deadline. In this case, the student needs to withdraw and come back after one semester or academic year depending on the available places.

The second factor was their parents. Some of the parents insisted that their daughter must study what they want without thinking about her interests, ability, skills and what exactly she wants. That leads her to face difficulty in studying the major and she might fail in it.

The last factor was the job market. The students choose the major in their first year based on the job market, but when they reach the fourth year, the year of the graduation, they discover that their major does not fit with their plans because they did not think about the job market after four years, how it will be.

The career advisor added that the best thing for the students is to choose their major by themselves, but after they do the assessment with us and know their capability and skills to be able to choose the right major.

Question Eight: Were all factors relevant?

Yes, based on the cases we faced, and we solved. These are the most relevant factors we faced with the students.

Question Nine: Did you work with parents/teachers on students' career issues?

Based on the career advisor's answer, yes, she works with the parents, if she finds out that the main factor in the student's career issues is them or if any teacher reports to the career centre about any student's career issue. Teachers are the first person as they are dealing with students in the class, so they will be able to know if the students face any academic progress problem, therefore, they can report it to the career counsellor to guide the students. On example that the career advisor cannot forget is that of "one of the students, her parents forced her to study in this higher education institution, and she didn't want to. For around two weeks, the student did not attend any class. Later, she discovered about the career centre. I sat with her around 35 hours over two weeks to find out what is her problem, I took her step by step. I helped her to do the assessment and insisted to her to attend different workshops to be able to know her abilities, skills and to set her goals. After one full semester, the student totally changed her mind and she started to love the campus and was willing to complete it."

Question Ten: What were the barriers students discussed with you about pursuing a programme/major choice?

Their parents are the answer, in cases where they insist that their daughter must study the major in the college/university that is chosen by them not by the student, which leads to the student not being motivated to study and just losing years from their life without getting any benefits. Moreover, some of the students would like to study in another institution, just because they like the sound of it, without thinking. They might think in this way because of the name of university/college without thinking about exactly which major they want to study.

Question Eleven: Do you have any additional comments to add that I didn't ask about?

The career advisor added about the consultation sessions. She said that "in these sessions, I do the assessment for each student and sit with them individually because each student has her own ability, skills, vision and her own thinking which is different than other students".

These individual consultation sessions take more time but at the same time, it is a good benefit for the students. The career advisor mentioned that these sessions reduce the withdrawal rate from the higher education institution which has nearly become 0% and,

the transfer from major to major becomes less as well, excepting the students who do not attend the consultation sessions who do want to change their major.

To summarize the analysis of the interview with the career advisor, it shows that the career advisor provides different orientation sessions where she informs the students about her role and the main roles of the career guidance and counselling centre with the services provided. She follows up with each individual student and takes them step by step to ensure that they are on the right path and to reduce the number of students withdrawing and changing their career major. She provides the career assessment for all students to be able to know their abilities, values, interests and personality. Moreover, she involves the job market to find out what they need, in order to prepare the students for the needed fields and brings these markets to the institutions to provide their offers to the students. The most important point is that the career advisor is involving student's parents to know more about the student's personality.

4.2.2 Document Analysis

This portion is doing document analysis of the career coach guide online, programme choice consent form and in-house workshops. This document analysis will answer the three research questions. As mentioned in the previous chapter, document analysis provides a rich source of information to help the researcher to understand the central phenomena in qualitative studies, and the document analysis in this study will explore the related researcher questions with the interview questions with the career advisors, following some guidelines. This method will find out the services that are offered to the students and how this help them in their career major choice, which will be analyzed in this part.

Table 26: Summary of document analysis use for this study

Items	Documents		
Title	Career Coach Guide	In-House Workshop	Programme Choice Consent
Objective	Students explore their abilities and characters through doing self-explorations and life skills questions plus assessment	To hold different workshops of functional and soft skills for the students by different presenters, either career counsellor, teachers or expert from the job market	Face-to-face consultation for students who don't know what the suitable programme/major is to choose
Tools	Online	Form	Form
Duration	15 – 20 minutes	1 – 1.5 hours	Depends on student's case
Task Given	Assessment	Workshops	Counselling Sessions
Target Audience	Students	Students	Students
Present by	Students	Faculty & Staff	Career Counsellors

A. Career Coach Guide (Online):

This career coach guide online is the platform used by one of the federal higher education institutions. This guide consists of three phases, which are: self-exploration, life skills (goal setting, time management, communication skills, leadership skills, teamwork, conflict, and others) and the job search process, and there are different assessments/questionnaires for the students where they answer to be able to know what programme/major fits their ability and character. In the first phase which is self-exploration, it leads to have:

- A clear understanding of who you are, your abilities, values, skills, ambitions, interests and other factors;
- Knowledge of the world of work: job availability, job skills, job description and performance; and

- Combining these two factors, it will enable choice of the right career major and to be able to select the right job for the future that meet the individual's personal skills and interest.

This phase helps the students to discover themselves in-depth and to understand their values, personal style, learning style and build their self-esteem, and this information is useful especially for the students who are in their first year as they start their higher education life. The reason is that they will be capable to identify their own styles and values, and discover their strengths and weaknesses and the way to overcome them. Moreover, in this phase, the career counsellor conducts the main workshops for the students to able to know themselves, and these workshops are:

- Personal characteristics;
- Skills inventory;
- Confidence and self-esteem;
- What are my values;
- Learning styles; and
- College workshop.

The second phase is the life skills and it is designed to help students bridge the deficiency of skills between the school system and higher education and it is important for the students as they start their new higher education journey in order to be ready with the needed skills academically and personally, where the students start setting their goals for short-term and long-term. In this phase, the students will obtain the opportunity to self-assess their leadership, communication, time management and presentation skills. Life skills begin with transformation. In this phase, the career counsellor runs the basic workshops of:

- Time management;
- Communication skills;
- Communication style;
- Leadership skills;
- Teamwork skills;
- Conflict resolution;
- Presentation skills, and
- Assessment management.

The last phase is about the job search process which is based on the self-exploration and life skills phases, which are designed to reflect upon personal information gathered in the first two phases. In this phase, the career advisor supports the students in their final year to prepare them for their future career after they have chosen their career major. The students attend different workshops to help them to achieve their goals and be able to create their own professional CVs, which are:

- My strength and weaknesses;
- My work values;
- Job search preparation;
- Interview techniques;
- Job maintenance, and
- Career action plan.

Overall, through all these workshops, the student must do different assessments and tests, to know their values, abilities, interest and capabilities, which will allow them to choose the best fit of career major.

B. Program Choice Consent Form:

This consent form (Appendix 8) must be completed by the career counsellor and student, face-to-face and individually when the student faces problems with their career major choice. Most of the students were not be able to choose the right career major and if they selected a major based on their parents' choice, friend's choice or other factors without knowing their abilities, values, and interests, they would drop out from the major and they will need to change it. Therefore, the career counsellor conducts different sessions with the student individually to be able to know her abilities, values and interests to guide her to the right career major choice and let her do a 'Who I am' test to be able to know her personality: if she is helper, creator, organizer, thinker, doer or persuader, and based on the result the student will be able to know which major is a fit for her. This form was included in the document analysis because it is being used during the individual career counselling sessions.

C. In-House Workshops:

In this part the career counsellor conducted different workshops for students, and at the same time, assigned some faculty and staff to conduct workshops for students who were interested to attend these workshops. In this case, whoever wanted to conduct a workshop for the students' needs to fill in the in-house workshop form (Appendix 7) which consists of the name of the workshop, workshop goals and description, so when the counsellor sends the announcement for the students regarding the workshop, the counsellor can specify the target of the workshop: if it is general to all students or to a specific level or major. Through the announcement, the counsellor includes the name of the workshop, day, and time, so the students who are free at this time can attend the workshop.

Moreover, the career counsellor arranged with the faculty and staff who were willing to conduct a workshop by giving them a list of the needed workshops for the students in the first year to assist them to choose their career major; and, they can give the workshop for students in different levels.

At the end of each workshop, there is a workshop evaluation form (Appendix 12) which is distributed to the students to evaluate the presenter and the workshop itself. The last part of the evaluation form is where the student can suggest any workshop they would like to have, to ensure to build their skills and capabilities.

4.2.3 Key Finding of Quantitative Data

The key finding from students and career advisor's interviews and document analysis indicated that all of them agreed that their institution provide different orientation sessions for students to know the main roles of the career guidance and counselling centre with the services provided. All of them are satisfied with all the career orientation sessions/workshops and the provided information they received either in these workshops or when they attended a session by professionals/experts from the market. Moreover, they specified that the career programme/assessments are useful in their planning and it is good to be able to know their abilities, interests, personality, values, and skills.

4.3 Summary of Data Collection Finding

The overall finding from quantitative finding (questionnaire) and qualitative finding (interviews and document analysis), it shows that there are a lot of similarities. The responded from questionnaire and interviews with participating students and career advisors shows that all of them are aware and satisfy about types of career guidance provided to higher education students and these types are individual (face-to-face) sessions, and group sessions where the higher education students can able to set their goals, to know their values and interests and for getting more information and skills related to their academic work and making career decisions

Moreover, all the finding presented that participating students can build their interests, abilities, skills and personality by attending different workshops of the group sessions, such as: setting your goals, leadership skills, time management, how to build a good CV, communication skills, teamwork and others, and attending the sessions which are presented by guest speakers who talk about the various career major issues. Also, by doing the career coach assessment online

The majority of participating students and career advisors positively agreed to the influencing factors of their career choice and guidance services that better support them in the federal higher education institutions in the UAE. They indicated that the primary preferences for the students include parents, friends, peers, career advisor, brothers, sisters and teachers

Based on the finding from students' and the career advisor's responses, there are different career guidance and counselling services available for the students whenever they need support and guidance and these services are: group sessions, individual (face-to-face) sessions and career test assessment.

CHAPTER FIVE: DISCUSSION, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

This chapter gives a discussion part and summary of this research, how it was conducted, the findings of the study and how it links to the research questions, and the recommendations towards improvement of the career guidance and counselling in higher education.

5.1 Discussion

This section presents an overall discussion of both the qualitative and quantitative results and how they are together able to answer the research questions. This section will be divided into three parts to highlight the types of the career guidance provided to the students and to find out the main factors that influence the students' career major choice, as perceived by students and the career advisor. Additionally, to discuss the effective and available career guidance services provided for the students in higher education.

5.1.1 Types of Career Guidance

From the above results it was found out that there are two types of career guidance and counselling that have been provided for the students, which are: individual (face-to-face) sessions, and group sessions. From students' interviews and the questionnaire results, it was shown that the students attend two types of group sessions. The first one is attending different workshops to get more knowledge and to set their goals to be able to select the right career major, where the above result shows that 71.3% of the students attend these sessions. The second one is attending group sessions presented by guest speakers who talk about making their career major choice and related issues and 77.1% of the students attend this type of session.

Moreover, some of the students mentioned that if they are facing any problem with regards to their career major issues, they met with the campus career counsellor for individual counselling (face-to-face) sessions to set their goals and to select the right major, after conducting different individual sessions and doing the career-test assessment. The results of the students' responses show that 61.1% of them are willing to get the advice from their campus career counsellor.

This result agreed with the career advisor's interview. In the career advisor's interview, she mentioned that she is doing individual consultation sessions to give the full attention to each student as each student has different thinking, values and interests, as agreed with Varalakshmi and Moly (2009) who stated that these sessions help and assist the students for their future educational and career major choice and to be able to know their strengths and weakness by having different sessions to improve their personal development and skills. Besides that, she offered group sessions through providing different workshops, such as: setting your goals, time management, build a professional CV, teamwork, communication skills and others, or through inviting speakers to talk about various career major choices and issues. It has been reviewed in Odera's (2014) studies who stated that career guidance and counselling services might be individual or group sessions in the higher educational level. It has been mentioned that individual sessions facilitate face-to-face where it was more suited to help each student individually, where group sessions were more effective for discussion about the impact of the information through providing different useful workshops to prepare the students both academically and for the world of work (Okoth 2002; Owino & Odera 2014). Moreover, Litoiu and Oproiu (2012) agreed that career counsellors should give personal (face-to-face) counselling as well as group counselling and in these two types, they mentioned that these increase the self-awareness of the students in making decisions, goals setting and establish educational plan.

The researcher believed that both two types of these sessions are important in the students' study journey to ensure that they select the accurate career major choice. Based on the above results and researchers' experiences and knowledge, the students at an early stage (their first year) need to meet with the campus career counsellor individually for different sessions to set their goals, to know their values and interests and for getting more information and skills related to their academic work and making career decisions. This could happen through doing the career-test assessment, which is related to their major choice and personality, as well to be able to know their suitable career major to be able to put in place an educational plan for fully four years. Moreover, they can build their interests, abilities, skills and personality by attending different workshops of the group sessions, such as: setting your goals, leadership skills, time management, how to build a good CV, communication skills, teamwork and others, and attending the sessions which are presented by guest speakers who talk about the various career major issues. Overall, these types of sessions help the students in overcoming any misunderstanding in their career major choice and direct them to the right career path.

5.1.2 Factors Influencing Students' Career Choice

The overall results show that if students face any major issues in their career choice they preferred to consult people in order to get help and support from them. Different studies in the West and East have demonstrated that there are different factors that affect students' career major choice and influence students' academic success and drop-out rate from higher education institutions (Alextich & Page 1997; Bardick et al. 2014; Bean 1980; Bean & Metzner 1985; Ferry et al. 2000; Jansen & Bruinsma 2005; Magnusson & Bernes 2002; Tinto 2012; Van den Berg & Hofman 2005). They indicated that the primary preferences for the students include parents, friends, peers, career advisor, brothers, sisters and teachers. However, from the questionnaire and interview results which were carried out with the students, the majority of the students preferred to have their parents, with 36% as the main resource; then they preferred the career counsellor, with 26%; after that the results show their teachers with 14%; brother and sisters (15%); and friends (9%) as other preferences for their career major issues. They believed that their parents encouraged, guided and discussed with them to have the right advice to be on the right path. This has been reviewed in the literature by Boatwright et al. (1992), Bojuwoye and Mbanjwa (2006), Hairston (2000), Knowles (1998), Mau and Bikos (2000), Mickelson and Velasco (1998), Wims (1994) and Wilson and Wilson (1992), who indicated that the main factor that influences the students in their career major choices is their parents who inspire and give their daughters the guidance either directly or indirectly in their career major choices and most of the students are influenced by their parents especially if their parents have a high educational degree (Boatwright et al. 1992).

However, in the career counsellor's interview, she mentioned that the parents gave the wrong direction for their daughters and insisted that they should study a major based on their family business or because it was their own major before, if they have a high educational degree. She added that some of the parents have no knowledge about the job market, which means that the student has no opportunity to get a job in the future. This is in agreement with Vu Tuan Anh's study (2014) which mentioned that the reason for having a high proportion of undergraduate unemployment is due to their own parents' mistakes in making career decisions of their daughters. Moreover, parents have no training or experience in providing advice about the career path for their daughter aside from their own current path (Sharf 2016).

Therefore, the researcher thought that parents can be a first step for students for discussion and taking their opinions only, but not to choose for their daughter the major which they need to study. The parents need to give their daughter some tips about their career major choice and

the career path as they know their daughters' abilities, skills and personality and they need to guide them to the campus career counsellor to consult and guide them to the right decision, where the parent can be involved in these sessions if they would like and where they can provide support for their daughter with the career counsellor's help.

Furthermore, the second factor is the career counsellor as a preference for making a career major decision. From the students responses in the interviews and the questionnaire, 26% stated that the career counsellor is their second preference after their parents where they can get guidance and advice from them, and 61% of them informed that if they face any career major choice issues, they refer to their campus career counsellor for consultations, as mentioned in different studies by Doman, J. et al (2006), Eyo et al. (2011) and Lazarus (2011) who reflected that the career counsellor is the best and the most preferred source in supporting the students in their educational planning needs and career major choice. Most of the students agreed that they get all the support and assistance necessary from their campus career counsellor which allows them to access the career information to make an appropriate career major choice through preparing an educational plan that helps them in their four years of study. These responses suggested that when a student works closely with the campus career counsellor for their career major decision, especially if the campus career counsellor builds a good relation with each student individually, the student will keep in touch with their campus career counsellor to provide her with information and guidance for her career path and to support her to notice her strengths and weaknesses through doing the self-assessment and career-test assessment, which was pointed out by Hughey et al.'s (2009) study. Stoke (1986) added that the main goal of the career counsellor is to direct the students to certain goals and link it with the academic skills to achieve their goals and select the right career major and by giving them some awareness to help them to avoid any barriers.

On the other hand, to be able to provide the help and support for students, the campus career counsellor needs to be qualified with the career counselling degree, as Bark (2003) informed, that career counsellors need to be qualified and trained to be able to support the structure of the career counselling and guidance programme for the students to help them in managing their life and making their own career major decision. In the career advisor's interview, she mentioned that she didn't have a degree relevant to career counselling, but she attended different sessions, seminars, and workshops about career counselling and knew how to provide good tips and guidance for the students. Therefore, the lack of career counsellor's awareness and knowledge about the role of the career counsellor could be linked with the student's lack

of awareness about the career counsellor as well, and this might be reflected in the students' academic performance which leads to drop-out from their study, transfer from major to major or choosing the wrong career major, which might lead the student to change their major or become an unemployed graduate, as stated in Sharf's (2016) study and Vu Tuan Anh's (2014) study.

Furthermore, the career counsellor knows about the latest economic changes and the needs of the job market and how it is related to the available majors in the campus, therefore, the career counsellor will be helping the students based on the job market as well by informing them of the requirements of the job market and what they need to choose if they would like to work in a specific job, and to assist the students' ability to adapt with the changing and competitive job market. Generally, with this factor results of this study, researcher think that the career counsellor is the best preference for the students as they have more knowledge and training with experience to support and guide the students in making the career major decision and to improve students' academically and build their personality with different skills, which leads to reducing the number of withdrawing students and lessens the number of the students who would like to change their major. Moreover, career counsellors have to be aware about what factors might influence the students' career choice to be able to help students to make long-term plans about their education plan and career major choice to ensure the students will have better achievements.

The third factor is teachers, and they have an active role in embedding the personal beliefs on the mission and vision of the career counselling and guidance programme (ASCA, 2003). The responses showed that 17% of the students prefer to get help and guidance from their teachers if they have a career major issue as there is a good relationship between the student and teacher as they see them nearly daily, and from the above result, it shows that 15% of the students agree that they like to take their teachers' opinion in their career major choice. Moreover, they think that their teachers provide them with more helpful advice as stated in Alextich and Page's (1997) study, where the student opinions are that their teachers are more helpful compared to the career counsellor.

From researchers' experience, the teacher might not know the ability of the student well, her skills, or they might not know more about the job market needs comparing with the career counsellor who keeps updated with the latest needs of the job market. Thus, teachers need to guide the students directly to the campus career counsellor and if they feel one of the students

faces any problem in their career major choice, they need to inform the career counsellor to follow up with the student to ensure that the student is on the right career major choice path.

Additionally, there are other factors that affect students' career major choice that were mentioned by the students in their responses through the interview which are considered as external factors that might encourage or discourage an individual from pursuing a certain career major choice, such as:

- Close Best Friend: where it shows that 16% of the students agree that they take their best friend's choice, but at the same time 30% of them are not following their friend's choice, and in the career counsellor's interview, she agreed that the students who chose their major based on their best friend's choice, come to change their major because they discover later either it is not their interest or due to difficulty in the major.
- Family Business: some of the students choose their major based on their family business as they seek to guarantee the future job, without thinking about their own interest and ability.

5.1.3. Effectiveness of Current Available Career Guidance Services

Based on the students' and the career advisor's responses, there are different career guidance and counselling services available for the students whenever they need support and guidance. These services are:

- **Group Sessions:**

From the questionnaire, students' interviews and career counsellor's interview, all of them agree that there are two types of group sessions, which are personal development workshops and seminars. From students' responses as mentioned above, they stated that the first type is attending different personal development workshops to get more knowledge and to set their goals to be able to select the right career major, where the above result shows that 71.3% of the students attend these workshops. Some of these workshops as stated by participant students are in time management, setting your goals, event management, leadership skills, build a professional CV and communication skills, also as mentioned by the career counsellor in the interview. Moreover, the document analysis supports the above results through using the in-house workshop where the career counsellor conducted different workshops and at the same time, the counsellor collaborated with the faculty and staff to conduct workshops for the students.

These workshops helped the students to build their personality, skills, values, and to be able to know their goals; as stated by Abubaker (2001) participation in these kinds of activities provides students with the important knowledge and skills about their personality and awareness about the world of work. The second one is attending seminar sessions presented by professional guest speakers who talk about making the career major choice and related issues, and 77.1% of the students attend this type of session. Moreover, based on the career counsellors' interview, she stated that she brought in professional employees from the job market to give the students different sessions.

Overall, these types of workshops and sessions are important for the students, especially those in their first year, as they are building their personality, interests, values and skills to be able to choose the right career major and to be ready for the job market. One of the studies agreed that career counsellors offer different development courses and workshops which include different topics about setting your goals, how to search for a future job, and career exploration activities for those who would like to use the advising services to build their personality (Doyle, J.W 2001).

- **Individual (face-to-face) Sessions:**

This type of session could be one session or more depending on the student's case. These sessions are held for the students who have a career major issue or they want to have a consultation with the career counsellor, and the above result shows that 26% of the students prefer to get consultation from the campus career counsellor.

In the case of the students who want to change their major, they need to meet with the career counsellor for consultation. In this case, the career counsellor needs to do the career-test assessment which will be discussed in the next point, and after the results come up, the counsellor explains to the students all the possibilities of their suitable career major based on their personality, interests, values and skills. Later, the career counsellor uses the programme choice consent form. As explained in the document analysis of this consent form, the career counsellor conducts different sessions with the student individually to be able to know her abilities, values and interests to guide her to the right career major choice and let her do a 'Who I am' test to be able to know her personality, whether she is helper, creator, organizer, thinker, doer or persuader, and based on the result the student will be able to know which career major is the best fit for her.

From researchers' experience, she preferred for the career counsellor at the beginning of each academic year to do orientation sessions to spread the awareness among the students about the role of the campus career counsellor and about what services they can offer for the students. Moreover, the career counsellor needs to have individual sessions, more than one, with the new entry students to start with them from scratch and lead them step by step through doing the career-test assessment, inform them about the personal development workshops and seminar sessions and encourage them to attend these sessions and workshops to ensure that they are on the right career major path and to build their personality, skills, values and interests from the beginning.

- **Career-Test Assessment:**

This assessment is online and is called 'career guide coach' as explained in the document analysis part. This assessment gives students the chance to explore their personal skills, values, interests, abilities and other factors. It helps them to discover themselves in-depth, to understand their personal style and learning style to be able to choose the right career major, as stated by Biswalo (1996) and Varalakshmi and Moly (2009), that this assessment gives them the chance to explore the major choice, know their personality and to be trained and ready for the world of work.

Furthermore, from the above result from the questionnaire, it shows that 76% of the students agree and strongly agree that doing career tests and assessments are useful in understanding their personality, values, interests and abilities. Most of the participant students who did this test were able to know their personality and to choose the right career major, based on the participant students' interviews. They stated in their interviews that after doing the test, they are not confused any more about the selected career major that they need to study, and they can set a clear long-term career plan for their educational period. At the same time, in the interview, the career counsellor agrees that this assessment is benefit for all students who are confused and for those who would like to change their major. This assessment allows the students to know their personality based on the results they get from it.

Generally, this assessment helps and prepares the students to set their goals for the short-term and long-term, and be able to access the right educational plan, with the career counsellor's help to ensure that the student will be on the right career major path to avoid any change in the major choice and other factors that might affect their career

major choice. Additionally, the benefit of the assessment will build the personality skills of the students by knowing their values, interests, skills and abilities.

5.2 Conclusion

The aim of this research was to investigate the influencing factors on higher education students' career major choices and to find out the effective career guidance services that best support students in one of the federal higher education institutions in the UAE. The research questions of this study were:

1. What are types of career guidance is provided to higher education students in the UAE?
2. What are the main factors that influence higher education students' career choices as perceived by college students and career counsellors?
3. What are the effective and available career guidance services for new entry students in higher education in the UAE, and how successful are they?

This study was conducted in one of the federal higher education institutions in the UAE. An interview, questionnaire and document analysis were utilized to find out students' opinions on the effectiveness of the career counsellors' roles and the factors that affect their career major choice, as perceived by students and a career counsellor. The participants were selected randomly from different majors. There were one hundred and fifty-seven students as participants for the questionnaire, eight students for the interviews, and one interview with the career counsellor. Ethical considerations were observed and the participants in the questionnaire were informed that their answers would be confidential, and the participants for the interview signed the consent form. Based on the analysis of the results of the questionnaire as well as the interviews, this study came up with the following conclusions in relation to the stated research questions:

1. There are two types of career guidance and counselling programme, which are group sessions and individual (face-to-face) sessions, wherein both types, students are able to increase their self-awareness in making decisions, goals setting and establishing their educational plan.
2. Factors influencing students' career as perceived by participant students and the career counsellor are: parents, friends, and teachers. These influences were found to lead the students to change their majors or stay in the major that wasn't best fitted for them for a year or two.

3. Career Guidance and Counselling Centre provides different services which students benefit from, such as: workshops, seminars, career assessment test, career orientation, and others.
4. Campus career counsellor plays a significant role in student career major choice and planning for all students especially for the new entry students in the higher education level.
5. There was a positive link between students' perceptions and their career awareness and planning levels.
6. Career guidance and counselling programme was implemented in this institution; some areas may need improvement; hence appropriate recommendations were provided in this research.

Moreover, to conclude based on the findings:

1. Career awareness among students leads to career planning.
2. The career guidance and counselling services have a positive impact on career awareness among students.
3. Students who were aware of the career guidance and counselling had higher knowledge of career awareness and planning, and they chose the right career major that matched their skills and personality.
4. Students who were aware about the services that are offered by the campus career counsellor become more confident, increase their self-esteem, learn how to work in teamwork, enhance leadership skills, time management, become more critical in their thinking and improve their communication skills.
7. Students were aware that the main person they need to refer to regarding any career major choice issues is their campus career counsellor, to get the right consultation to be on the right path and to be fully prepared for their study life and for their future job.

To conclude, the career guidance and counselling programme presents a highly positive effect on students' career major choice. It has a beneficial impact on the students within career counselling and guidance activities and the students seek outcomes that are beneficial for their study life and future job because they can practise and improve skills such as: communication skills, leadership skills, time management, critical thinking skills and setting their goals. In addition, it increases achievements and productivity in their career major choice process.

5.3 Research Recommendations

Based on the outcomes of this study, some of the research recommendations for future research could be sample size. Since this research is based on a sample size of one hundred and fifty-seven participants, future research is recommended to use a larger sample size to achieve a greater perspective and reliability. Future researchers might expand this study to a larger site through involving other public and private institutions. Moreover, future research should also include male students to investigate possible gender similarity and/or differences in relation to the effectiveness of the career guidance and counselling programme.

On a methodological level, future proposed studies could use more qualitative approaches: observations and focus group to gain more reliability of the theoretical framework used in this study and to be consider that questionnaires and the interviews to be translated into Arabic.

5.4 Professional Implications

Based on the outcomes of this study, some of the professional implications for future research is that it could explore the teachers' perspectives on the effectiveness of the career guidance and counselling, to improve the services of the programme. Additionally, researcher could also investigate different approaches to develop the effectiveness of the career guidance and counselling programme. Online programs can be tailored to connect with other students from different universities and colleges to get their experience and knowledge and provide more materials and resources, as well as applications for peer counselling.

Moreover, career counsellor needs to be aware and take time to understand the personality background of each student, and they can offer orientation for parents to keep them aware about the career major choices and the latest world of work needs in their career and guidance center. Additionally, they can involve social partners like family members, community groups and employers to get more beneficial ideas about the career path and the needed information to achieve the goals. Career guidance and counselling services should be presented to the students well before the point at which they make decision about their major and future. It needs to be introduced at grade 12, or at least the first year of their higher education study. They need to

arrange open days for the students by inviting different private and public associations and organizations to ensure students are making their right decision on majors for their future job.

Career counsellors and advisors need to recognize the career interests of the students before giving training courses and workshops and increase the awareness of the importance of career guidance and counselling services and that good quality information is available and ensure that all students are given the same advantages of the guidance and counselling services.

In order to provide a good services for students, career guidance counsellors should be trained in their field on how to carry out their duties by attending many workshops and seminars to improve their skills, to be able to give the right information and guide the students to the right path.

5.5 Practical Implications

Based on the outcomes of this study, some of the practical implications for future research is that since this study was based on six majors, future research could explore the effectiveness of the career guidance and counselling programme in other majors such as Health Science programmes, Law programmes, Aviation programmes and other divisions within Engineering, Applied Communication programmes and Computer Information Sciences programmes. Also, it could cover different level – senior levels – within each programme which would help to get students' further perspectives on the effectiveness of the career guidance and counselling.

There is a need to integrate guidance and counselling in the curriculum to ensure that the students move up the educational level with guidance and counselling knowledge and create a full professional career guidance and counselling model that could be used in public and private higher education.

5.6 Limitations

Since the main focus of this study is to investigate the influencing factors of higher education students' career choice and to find out the effective career guidance and counselling services that better support undergraduate students in the UAE, there are some limitations facing the study, which are:

- Emirati students in higher education institutions are the scope of the study, therefore, the results of this study cannot be generalized to non-Emirati students.
- Emirati students are from public higher education institutions in the UAE, not from private higher education institutions, therefore, the results cannot be generalized to government agencies or private institutions.
- Undergraduate female Emirati students in the UAE are the scope of the study, accordingly the result cannot be generalized to male students.
- The time of the research was critical because the students were busy with their final projects and exams which affected the sample size, therefore, the researcher should consider the research timing such that it wouldn't conflict with students' requirements such as projects and exams.

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APPENDICES

Appendix 1: Career Questionnaire for Students (Adopted from Ndung (2008))

This questionnaire is designed to investigate the main factors influencing higher education students' career choice and further develop an effective career-counselling program for higher education students in United Arab Emirates. It takes approximately 15 minutes of your time to complete.

Your participation in this project is completely voluntary and you are free to decline the invitation to participate, without consequence, at any time prior to or at any point during the activity. Any information you provide will be kept confidential and used only for the purposes of this study and will not be used in any way to reveal your identity. All questionnaire responses, notes, and records will be kept in a secured environment.

Part 1: Demographic Information

1. How old are you?
 - ☐ 17 – 20
 - ☐ 21 – 23
 - ☐ 24 and above

2. Gender: ☐ Female ☐ Male

3. Which program/major are you studying?
 - ☐ Foundation
 - ☐ Education
 - ☐ Applied Communication
 - ☐ Information Technology
 - ☐ Engineering
 - ☐ Business

4. Which year are currently in?

- ☐ Year One (Semester One – Semester Two)
- ☐ Year Two (Semester Three – Semester Four)
- ☐ Year Three (Semester Five – Semester Six)
- ☐ Year Four (Semester Seven – Semester Eight)

5. Is this your first major/program choice?

- ☐ Yes
- ☐ No

If Yes, please go to section 2, if No, please go to Q6.

6. What was your first major/program? _____

7. Why you change your major/program?

- ☐ Friends
- ☐ Parents
- ☐ Market needs
- ☐ Difficult major
- ☐ Other: _____

You have completed Part 1 of the questionnaire. Please continue to Part 2, remember to answer all questions.

Section 2: Status and Role of Career Guidance and Counselling

(Please tick where appropriate)

#	Statement	Yes	No
8	Is career guidance and counselling offered in your college?		
9	Did you find enough time for career guidance and counselling?		
10	Have you consulted the college counsellor on making career choice issues?		
11	Did you attend group career guidance and counselling sessions?		
12	Have you read or watched video about making career choice?		
13	Have you had speakers on making career choice?		
14	Have you benefited from career guidance and counselling program?		
15	Has career guidance and counselling helped you choose the right career?		

16. Who is your most important consultant on career issues?				
College Career Counsellor	Teacher	Parents	Friends	Brother/Sister

You have completed Part 2 of the questionnaire. Please continue to Part 3, remember to answer all questions.

Section Three – Career Awareness

(Please tick the answer that best describes your opinion or perception of the stated fact. The choices are as follows: - SA- strongly agree, A- agree, U- uncertain, D - disagree, SD- strongly disagree)

#	Statement	SA	A	U	D	SD
17	I understand what a career means.					
18	I am aware of the various careers available in the country.					
19	I know the training requirements for various careers.					
20	I know the various working conditions for various careers.					
21	I know my abilities in terms of career involvement.					
22	I know my career interests.					
23	I know the career that would give optimum satisfaction					
24	I have some experience through volunteering/work placement in my career of choice.					
25	I know the career environment in which I can work best.					
26	I know my career capabilities and limitations.					

You have completed Part 3 of the questionnaire. Please continue to Part 4, remember to answer all questions.

Section Four- Career Planning

(Please tick the answer that best describes your opinion or perception of the stated fact. The choices are as follows: - SA- strongly agree, A- agree, U- uncertain, D - disagree, SD- strongly disagree)

#	Statement	SA	A	U	D	SD
27	I have made my own career choice					
28	I chose my major based on my future career experiences.					
29	I have consulted professionals in my career of choice.					
30	I have read and explored the market to make my career choice.					
31	I have consulted a college counsellor on my career choice					
32	I have obtained enough knowledge on my career choice					
33	I chose my career major because it's my parents' choice					
34	I chose my career major because of my family business					
35	I chose my career major because I followed my best friends' choice					
36	I chose my career major based on my teachers' opinions					

You have completed Part 4 of the questionnaire. Please continue to Part 5, remember to answer all questions.

Section Five- Perceptions of the Role of Career Guidance and Counselling

(Please tick the answer that best describes your opinion or perception of the stated fact. The choices are as follows: - SA- strongly agree, A- agree, U- uncertain, D - disagree, SD- strongly disagree)

#	Statement	SA	A	U	D	SD
37	Career guidance and counselling assist an individual in dealing with career issues.					
38	Career guidance and counselling assist students to access career information in order to make appropriate career choices.					
39	Career guidance and counselling assist students on how to make major choices basing on their career aspirations.					
40	Career guidance department invites useful speakers on various career issues.					
41	Career tests and assessments are useful in understanding individual differences, personality, interests, values, and abilities.					
42	Career guidance and counselling assists in students' work placement.					
43	All students should consult career counsellors when making career decisions.					
44	Career guidance and counselling make a positive difference in an individual's career choice.					
45	Career guidance and counselling assist students to make educational plans.					
46	I would advise all students with carer issues to consult the college counsellor					

Thanks for your cooperation

Appendix 2: Career Questionnaire for Students in Arabic

استبيان عن الارشاد والتوجيه الأكاديمي والمهني

يهدف هذا الاستبيان لمعرفة العوامل المؤثرة في اختيار الطالب للتخصص الدراسي بالإضافة إلى تطوير برنامج الارشاد والتوجيه الأكاديمي والمهني لطلبة الكليات والجامعات في دولة الامارات العربية المتحدة.

يتطلب من الاجابة عن الاسئلة كاملة وأن تبدي رأيك بدقة وصراحة وموضوعية، وتأكدي تماماً أن اجاباتك على هذا الاستبيان ستعامل بمنتهى السرية.

سيستغرق الاجابة على هذا الاستبيان حوالي 15 دقيقة.

الجزء الأول: المعلومات الشخصية

1. العمر:

20 – 17 ☐

23 – 21 ☐

24 وأكثر ☐

2. الجنس:

أنثى ☐ ذكر ☐

3. البرنامج الدراسي:

☐ السنة التأسيسية (Foundation)

☐ التربية (Education)

☐ الاتصال التطبيقي (Applied Communication)

☐ تكنولوجيا المعلومات (Computer Information Science)

☐ الهندسة (Engineering)

☐ إدارة الأعمال (Business Administration)

4. في أي سنة دراسة حالياً؟

السنة التأسيسية ☐

السنة الأولى (Semester One – Semester Two) ☐

السنة الثانية (Semester Three – Semester Four) ☐

السنة الثالثة (Semester Five – Semester Six) ☐

السنة الرابعة (Semester Seven – Semester Eight) ☐

5. هل هذا البرنامج اختياريك الأول للدراسة؟

نعم ☐ لا ☐

في حال كانت الإجابة السابقة “لا”، أجبني عن السؤال 6 و 7، وفي حالة الإجابة السابقة “نعم”، يرجى التوجه للجزء الثاني.

6. ماذا كان برنامج دراستك السابق؟

7. ما هو سبب تغييرك لبرنامج دراستك؟

الأصدقاء ☐

والدين ☐

احتياجات سوق العمل ☐

التخصصات الصعبة ☐

أخرى: ☐ _____

لقد انتهيت من الجزء الأول من الاستبيان، الرجاء التوجه للجزء الثاني

الجزء الثاني: دور الإرشاد والتوجيه الأكاديمي والمهني

(يرجى وضع علامة (✓) عند الإجابة)

#	العبارة	نعم	لا
8	هل يتم توفير الإرشاد والتوجيه الأكاديمي والمهني في كليتك؟		
9	هل توفر لك الكلية الوقت الكافي لخدمات الإرشاد والتوجيه الأكاديمي والمهني؟		
10	هل استشرت المرشد الأكاديمي والمهني في اختيار تخصصك؟		
11	هل حضرت محاضرة في الإرشاد والتوجيه الأكاديمي والمهني؟		
12	هل شاهدت أو قرأت عن اختيار تخصصك الدراسي؟		
13	هل توفر لك متحدثين عن اختيارات التخصص الدراسي؟		
14	هل استفدت من برنامج الإرشاد والتوجيه الأكاديمي والمهني؟		
15	هل ساعدك برنامج الإرشاد والتوجيه الأكاديمي والمهني في اختيار تخصصك؟		

16. من هو الشخص الرئيسي لاستشارته في اختيار تخصصك الدراسي؟				
المرشد الأكاديمي والمهني	المعلم	الوالدين	الأصدقاء	الأخوة والأخوات

لقد انتهيت من الجزء الثاني من الاستبيان، الرجاء التوجه للجزء الثالث

الجزء الثالث: التوعية بالارشاد والتوجيه الأكاديمي والمهني

يرجى اختيار الإجابة الأفضل من جهة نظرك

#	العبارة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
17	أفهم ما يعني المجال المهني والوظيفي					
18	لدي علم بمختلف المجالات المهنية المتوفرة في الدولة					
19	أعرف التدريبات المطلوبة من مختلف المجالات المهنية					
20	أعرف طبيعة عمل المجالات المهنية المختلفة في الدولة					
21	أعرف قدراتي وامكانياتي المتعلقة بالمجالات المهنية					
22	أعرف نوعية المجال المهني المناسب لي					
23	أعرف المجال المهني الذي يعطيني الرضاء النفسي					
24	لدي خبرة في مجالي المهني عن طريق العمل التطوعي أو التدريب المهني					
25	أعرف بيئة العمل المناسبة لي					
26	أعرف نقاط امكانياتي وقیودي في مجالي المهني					

لقد انتهيت من الجزء الثالث من الاستبيان، الرجاء التوجه للجزء الرابع

الجزء الرابع: التخصص الدراسي

يرجى اختيار الإجابة الأفضل من جهة نظرك

#	العبرة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
27	اخترت مجال تخصصي المهني بنفسي					
28	اخترت تخصصي الدراسي بناءً على خبرتي السابقة					
29	استشرت المختصين في اختيار مجال دراستي					
30	قرأت وبحثت في سوق العمل حول اختيار التخصص الدراسي					
31	استشرت المرشد الأكاديمي والمهني في اختيار تخصصي الدراسي					
32	حصلت على ما يكفي من المعلومات حول اختيار التخصص الدراسي					
33	اخترت تخصصي الدراسي بناءً على اختيار والدي					
34	اخترت تخصصي الدراسي بناءً على تجارة العائلة					
35	اخترت تخصصي الدراسي بناءً على اختيار أصدقائي					
36	اخترت تخصصي الدراسي بناءً على نصيحة معلمي					

لقد انتهيت من الجزء الرابع من الاستبيان، الرجاء التوجه للجزء الخامس

الجزء الخامس: مفهوم دور الإرشاد والتوجيه الأكاديمي والمهني

يرجى اختيار الإجابة الأفضل من جهة نظرك

#	العبارة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
37	يساعد الإرشاد والتوجيه الأكاديمي والمهني الأشخاص في مشاكل تحديد المهن					
38	يساعد الإرشاد والتوجيه الأكاديمي والمهني الطلاب في الحصول على معلومات لتحديد اختياراتهم الدراسية والمهنية					
39	يساعد الإرشاد والتوجيه الأكاديمي والمهني في اختيار التخصص الدراسي بناءً على اهتماماتهم المهنية					
40	يدعو قسم الإرشاد والتوجيه الأكاديمي والمهني ضيوف في شتى المجالات المهنية					
41	تعتبر التقييمات والاختبارات المهنية مناسبة لفهم اختلافات الأفراد واهتماماتهم ومهاراتهم وقدراتهم					
42	يساعد قسم الإرشاد والتوجيه الأكاديمي والمهني الطلاب في التدريب العلمي					
43	يجب على كل الطلاب استشارة المرشد الأكاديمي والمهني في مرحلة اختيار التخصص الدراسي					
44	يُحدث الإرشاد والتوجيه الأكاديمي والمهني أثر إيجابي في اختيارات الطلاب الدراسية					
45	يساعد الإرشاد والتوجيه الأكاديمي والمهني الطلاب في خططهم الدراسية					
46	أنصح كل الطلاب باستشارة المسؤول الأكاديمي والمهني في اختيار التخصص والمجال المهني					

شكراً لحسن تعاونكم

Appendix 3: Interview Questions for Students

1. What career orientation session did you attend?
2. What was the information provided to you in these sessions?
3. How useful were this information?
4. Did you attend career sessions by professional/expert from the market? How useful are these sessions?
5. How did you plan for your career/major?
6. Who did you ask for help when you have queries/questions/issues about your career planning?
7. Who influence your career major decision?
8. What types of career program/assessment did you have?
9. How useful were these career program/assessments for your planning?
10. What do you suggest making these career program/assessments more effective?

Appendix 4: Interview Questions for Career Advisors (Adopted from Ndung (2008))

1. Do you have sufficient training and qualifications as career counseling?
2. What do you do as career counselling?
3. What type of career orientation sessions do you provide to students? What key information do you include in these sessions?
4. How do you motivate students to attend orientation session?
5. Why does some student not motivate to attend?
6. Do you work with professional/expert in the market on students' career choices?
7. What factors do your students consider when choosing their programs/majors?
8. Are all factors relevant?
9. Do you work with parents/teachers on students' career issues?
10. What barriers have you had students discuss with you about pursuing program/major choice?
11. Do you have any additional comments to add that I didn't ask about?

Appendix 5: Consent Form

The British University in Dubai and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection and full understanding of the procedures. Your signature on this form will signify that you have received a document which describes the procedures, possible risks, and benefits of this research project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Any information that is obtained during this study will be kept confidential to the full extent permitted by law. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on the research materials. Materials will be held in a secure location and will be destroyed after the completion of the study.

I have been asked by **SUMAYYA NAAJEM AL RASBI** a **Doctorate student at The British University in Dubai** to participate in:

A thesis research on **”Effectiveness of Career Counselling and Guidance for Higher Education Students in the UAE”**

Purpose:

The purpose of this research is to investigate the influencing factors of higher education institution students' career choice and to find out the effective career guidance services that has better support for higher education students in the UAE.

The importance of this topic comes from first, the lack of knowledge about undergraduate Emirate students' career development in the UAE. Secondly, lack of literature which investigates the college career guidance and success for the college students in the UAE. Thirdly, create a UAE career guidance model through adopting from international models.

Interview process:

It will be one interview for around 30 minutes to 1 hour (as per the agreement with the research) held in a place chosen by the participants.

I will be using a voice recorder upon the agreement of the participants and in case they do not agree a notes will be taken. The interviews will be transcribed and a copy will be given to the participants for their approval. The tape, interview notes, and transcription will be kept in a locked cabinet and the researcher will be the one with sole access to it. Upon completion of the thesis, the tapes and original transcripts will be destroyed.

I have read the procedures specified in the document.

I understand the procedures to be used in this experiment and the personal risks to me in taking part.

I agree to participate by taking part in this interview during the time period agreed and placed agreed by the research and the participants.

I understand that I may withdraw my participation in this study at any time.

I also understand that I may register any complaint I might have about the experiment with the researcher named above or with:

Prof. Sufian Forawi, , Science Education (Supervisor)

Faculty of Education at the British University in Dubai

Telephone number: 04-2791400

sufian.forawi@buid.ac.ae

I may obtain copies of the results of this study, upon its completion, by contacting:

Sumayya Naajem Al Rasbi

Email: 2014121140@student.buid.ac.ae

I have been informed that the research material will be held confidential by the Principal Investigator.

I understand that my supervisor or employer may require me to obtain his or her permission prior to my participation in a study such as this.

NAME (Please type or print legibly):

ADDRESS: _____

SIGNATURE: _____

DATE: _____

Appendix 6: Document Analysis Guide

Connection to Research Question	Data Source	Description
1. What types of career guidance services are available for new entry students in higher education in the UAE?		
2. What kinds of additional training for career advisors and programme development should take place?		

Appendix 7: In-House Workshop Form

In-House Workshop Form	
Presenter Name:	
Job Title:	
Contact Number:	
Workshop Title:	
Workshop Description:	
Workshop Goals:	
Target Audience:	
Preferred Date and Time:	
Approximate Length:	
Language:	
Number of participants:	

Appendix 8: Program Choice Consent Form

Student Information	
Student Name:	ID:
Date:	Mobile No:
Category:	
Who am I? test result	
Helper:	Persuader:
Creator:	Thinker:
Organizer:	Doer:
Programs	
Computer Information Science: <ul style="list-style-type: none"> ○ Networking ○ Interactive Multimedia Technologies ○ Applications Development ○ Security and Forensic ○ Business Solutions 	Business: <ul style="list-style-type: none"> ○ Marketing ○ Human Resource Management ○ Accounting ○ Finance and Banking ○ Quality Management ○ Business Analytic
Applied Communication: <ul style="list-style-type: none"> ○ Video Production ○ Graphic Design ○ Cooperate Communication 	Education: <ul style="list-style-type: none"> ○ Primary Education
Engineering: <ul style="list-style-type: none"> ○ Electrical Engineering ○ Mechanical Engineering 	

Recommended Choice:
Career Advisor Notes:

Student Name:

Signature:

Specialist Student Careers Signature:

.....

Appendix 9: Ethical Approval from BUiD



Christine Salvador <christine.salvador@buid.ac.ae>

to eman.gaad, me, Sufian ▼

Oct 21, 2019, 2:43 PM



Dear Sumayya

Please be informed that your ethics request has been approved – see attached.

Regards,

Christine

Christine Salvador

Research Programmes Officer

Student Administration Department

The British University in Dubai (BUiD)

Appendix 10: Letter from BUiD



14 December 2016

To Whom It May Concern

This is to certify that **Miss Sumayya Najem Al Rasbi** with ID number **2014121140** is a registered part-time student on the **Doctor of Education** programme in The British University in Dubai since **September 2014**.

Miss Al Rasbi is currently working on her research titled "**A Case Study of Undergraduates Career Guidance in the United Arab Emirates**". She is required to visit different colleges and universities to obtain general information about career guidance. Further support provided to her in this regard will be highly appreciated.

This letter is issued on Miss Al Rasbi's request.

Yours sincerely,

Amer Alaya
Head of Student Administration

PO Box 345015 • Block 11 Dubai International Academic City Dubai U A E • T +971 4 279 1400 • F +971 4 279 1490

f FB.com/BUIDTeam

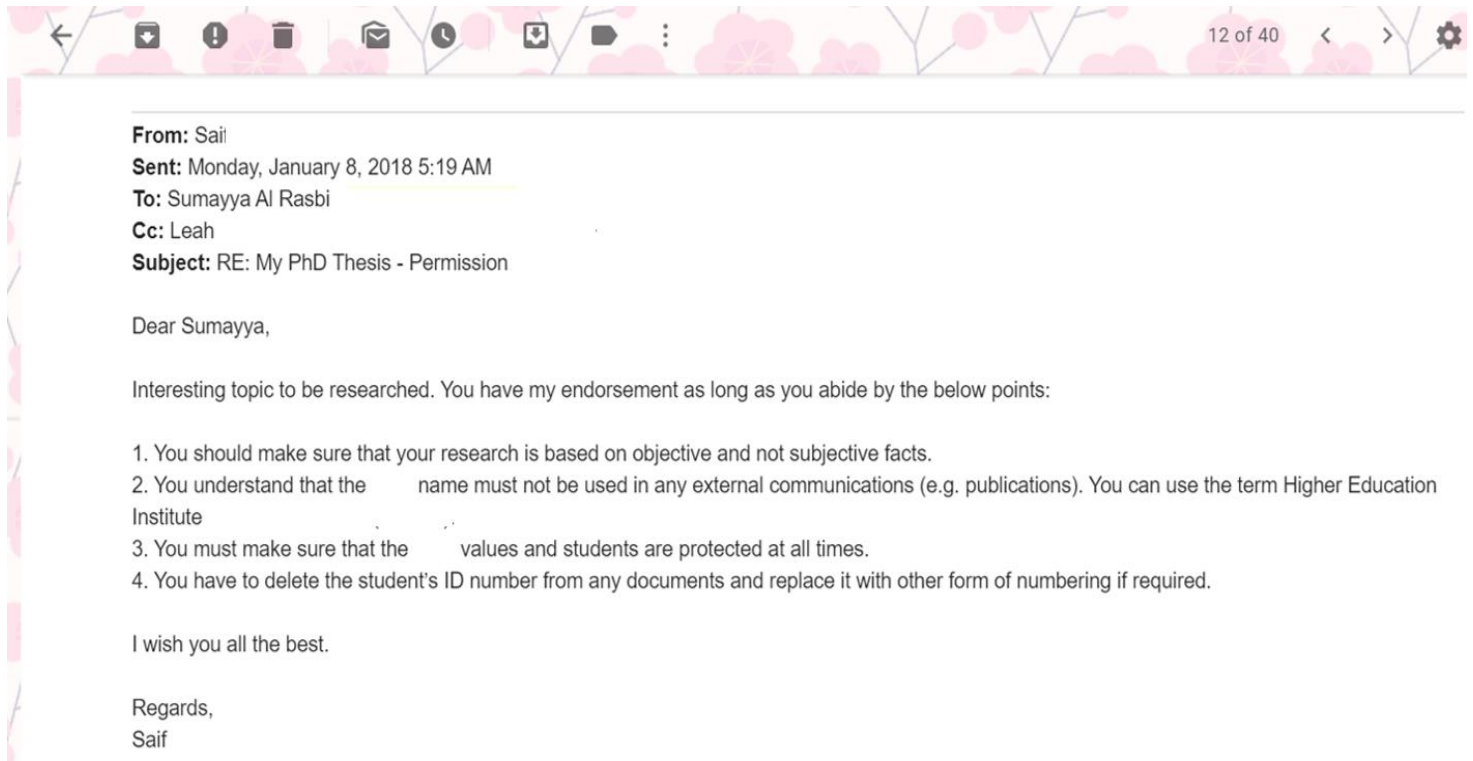
BUiD_Team

youtube.com/BUIDAdmin

@BUID_Team

in BUID

Appendix 11: Approval Letter from Research Site



Appendix 12: Workshop Evaluation Form

Workshop Title:						
Presenter Name:				Date:		
Indicate your reaction		Excellent	Good	Fair	Poor	Not applicable
content	Covered Useful Material					
	Practical to My Needs and Interests					
	Well Organized					
	Presented at the Right Level					
	Effective Activities					
	Useful Visual Aids and Handouts					
Presentation	Presenter's Knowledge					
	Presenter's Presentation Style					
	Presenter Covered Material Clearly					
	Presenter Responded Well to Questions					
	Presenter Helped develop New Skills					
Overall	How would you evaluate this workshop?					
Mention other workshops you prefer to attend <ul style="list-style-type: none"> • • • 						