



College of Business and Economics
Master of Business Administration Program

**Investigating Business Graduates Employability: The case of Addis
Ababa University**

**A Thesis Submitted to the Department of Management in Partial Fulfillment
of the Requirements for the Degree of Master in Business Administration.**

By

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DECLARATION

I hereby declare that this work entitled “**Investigating Business Graduates Employability the case of Addis Ababa University**” is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

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This is to certify that the thesis prepared by Henok Sirgew Gelaw entitled: “**Investigating Business Graduates Employability, the case of Addis Ababa University** ” and submitted in partial fulfillment of the requirements for the degree of Master of Business Administration in Management complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Abstract

The study has been conducted with the aim of investigating the skill profile of business graduates coming out of Addis Ababa University, the direct and indirect effects of skills on graduates' employability. This study adopts a deduction approach and a quantitative method as the research methodology. Accordingly, a questionnaire was distributed to 242 recent graduates and 135 HR professionals, of which 206 and 110 were collected with a response rate of 81% and 85% respectively. The study employed exploratory and confirmatory factor analyses. The measurement fulfills construct validity and reliability. Empirical findings of the study showed that generic skills have a positive and direct effect on employability. Subject Understanding has a positive and direct effect on graduate employability. Personal Qualities have a positive and direct effect on employability and Metacognition has a positive and direct effect on the employability of the graduates. Counter to prior expectations, Subject understanding has a positive and direct effect on employability. Moreover, the finding indicated personal qualities and metacognition mediate the relationship between subject understanding, generic skills and employability.

Key words: employability, skills, generic skills, personal qualities, subject understanding, metacognition.

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Acronyms

AAU	Addis Ababa University
AMOS:	Analysis of moment structures
CFA	Confirmatory factor analysis
EFA	Exploratory factor analysis
EM	Employability
GS	Generic Skills
GOF	Goodness of fit indices
HR	Human Resource
HEI	Higher Education Institution
MC	Metacognition
MI	Modification index
PQ	Personal Qualities
SEM	Structural equation modelling
SU	Subject Understanding
SPSS	Statistical Package for Social Sciences
VIF	Variance inflation factor

Chapter One-Introduction

1.1. Background of the Study

Modern economy needs highly trained and skilled human resource, and higher education institutions (HEIs) are required to produce qualified graduates to meet the needs of national development and employers. The industry defines the characteristics and skill requirements of its workforce, which may or may not be matched by the graduates being produced by HEIs.

However, given the broad understanding of employability of a graduate, it is important to recognize that the quality of a university graduate is not just a reflection of the quality of the curriculum and its supporting academic environment. It also reflects the demands of the industry as well as the competence of the regulating body (i.e. related government institutions) in shaping the characteristics of higher education graduates (Andrew Clark, 1997).

There are many reasons for going to university, including – naturally – a love of the subject to be studied, and the opportunity to experience a different way of life. Higher education is much more than a production line for work-ready graduates. Nevertheless, there is no denying that people see higher education as a stepping-stone to a good job. And HEIs are given a responsibility of providing sufficient education that will enable graduates to pursue the career of the dreams.

Students after completing their stay at the institutions expect to get good jobs and perhaps a wonderful start to their career. Different organizations on the other hand look for potential employees who can become a great asset and can lead the growth of the company.

Although the fact that youth unemployment has reached the highest and the lack of potential job opportunities have become a concern, many organizations are heard complaining about how the graduates coming out of different HEIs are ill skilled and don't meet their needs. The provision of opportunities for the development of employability skills and careers awareness has become central in debates about the future of higher education.

The concept has become an important construct and has been present since the 1900s (Cranmer,2006). Employability brings with it a shift in responsibility for career development, making the employee ultimately responsible for the investment and continuous development of one's career. Thus, each person becomes increasingly aware of the importance of learning and the role of the HEI in this regard (Van der Heijden, Boon, Van der Klink and Meijs, 2009). It is from

institutions like this that future talent of a nation come from and many argue that it is the breeding ground for employability skills. The review by Harvey (2005, p.13) on employability supports this by noting “it is not just about getting a job, it is about developing, about learning, and the emphasis is less on “employ” and more on ability”. Employability refers to those proactive career behaviors and abilities that allow people to obtain or generate work through optimal use of both occupation-related and career Meta competences (Coetzee & Esterhuizen, 2010).

In the 21st century, people seem to be regarded as competency traders, meaning that employability depends on the knowledge, transferable skills, experience and unique characteristics that are brought to the table. Ultimately then, employability refers not only to the ability to secure and maintain employment or move between sectors; it also refers to the continued ability to create work by means of occupation- specifying skills, which then promote overall employability and expertise (Briscoe & Hall, 1999;Hall and Chandler,2005), cited in Nychola Symngton.

A recent survey conducted by the Asian social science department (2011) showed that most recruiters are focused on certain soft skills and less focus was given to CGPA. Of course the employers were looking for graduates with a degree but less focus has been given to their academic records. The research also showed that most employers stressed on academic records (CGPA) when it comes to departments such as accounting, finance, computer science and engineering industries.

Another research that was conducted by the “I graduate international insight” (2010) for its business, innovation and skills department showed that Graduate employability has become an increasingly important element of curriculum development processes. The trend may have been partially influenced by current economic conditions, but is also due to an increasing realization that graduates should be equipped with skills needed for the workplace.

Also a study by Nosheen Fatima (2011)on the employability skills of Library science professionals in Pakistan showed that in today’s competitive knowledge based economy, the theoretical knowledge of academic subject is not enough for library science graduate to survive in the information market. The graduates will have to develop market-oriented skills to meet the challenging as well as changing needs of employers. They will have to improve their communication skills, problem-solving attitude, good knowledge of IT, storage and retrieval of

information, presentation skills, and proficiency in English language. They will have to provide services to customers with motivation and commitment.

1.2. Statement of the Problem

Employability is critical for a graduate to get successful employment. Organizations will also benefit highly in terms of work performance and well-situated work environment from the employees who possess employability skills.

Academic qualifications are essential, but the aptitudes and attitudes of job seekers are equally, if not more, important to employers. A high grade point average alone does not guarantee employment. It is therefore crucial for graduates to cultivate qualities most sought after by their potential employers. It is also vital that graduates liable to work in many different jobs and industries throughout their entire career seek to constantly improve and update their skill, and willing to learn new technologies. Any sign that they possess some of these qualities might persuade employers to offer them jobs. Young people therefore have a responsibility to prepare themselves for a changing world by improving their knowledge and skills to meet the demands of employers and the realities of the workplace.

According to a research done by the University of Glasgow (2011) regarding the employer perception of employability skill for graduates there were issues and barriers between employers and many of those responsible for HEI policy, particularly in terms of differences in mindset, expectations and priorities.

A survey conducted by Andrew Clarke (1997) describes the employable person as motivated, self-confident, committed, adaptable and flexible. He or she is also a team worker and articulate communicator. The employable person will be an innovator, problem solver, decision maker and manager of change. He or she will also demonstrate an appreciation of business and commerce, a customer-focused approach and a commitment to the highest quality. The employable person will have a strong desire for self-development and will be curious and analytic in their approach.

The 2010 Ethiopia Industry Satisfaction survey revealed the existence of a wide gap between employer expectations and performance of graduates - especially in quality of work, productivity, specific job related knowledge and skills. Forty percent of employers responded that higher

education institutions did not respond appropriately to their needs, in terms of the competencies of new graduates. In fact, “the only thing that employers considered positive about new graduates was that they could be hired cheap” (Bewket, 2013).

A management visit report (Misganaw, 2013) on feedback collected from two giant employers (Ethiopian Airlines & Commercial Bank of Ethiopia) and a well-established employee recruiting agency, Ethiojobs showed that graduates of recent years are observed to lack appropriate attitude for their jobs; they lack practical skills, professionalism, office etiquette, discipline, integrity, the readiness to learn new things and taking responsibility for a certain task. Moreover, it was commented that graduates’ communication and language skills are very poor; they cannot sell themselves; most applicants fail to express themselves and cannot communicate their ideas; and, lack of confidence in one’s potential is observed in many job applicants.

Ethiopia’s economy is a growing one. For the last ten years a 10.3% growth on average has been registered (World Bank, 2015). The country has become the third largest destination of FDI and competent human resources are highly needed and the war for talent is raging (EBR,2015). Still many businesses in the country are heard complaining on the availability of job ready graduates that can become a valuable asset to their companies. (Misganaw, 2013).

This study therefore is organized with the aim of identifying the skills gaps that are observed in the labor market today by assessing the employability profile of graduates coming out of the universities within the context of the skills highly sought after by major employers of the graduates being injected in to the labor market.

1.3. Research Questions

The main central question of the research is “do the graduates possess the necessary skills to secure employment in the context of today’s requirement”.

The research is designed to answer the following questions:

1. What is the employability profile of the students?
2. Does an employability gap exist?
3. Does demographic character affect employability of a graduate?
4. How do graduate skills affect employability?

1.4. Objectives of the Study

The general objective of the research is to investigate the employability profile of business education graduates coming out Addis Ababa University.

The specific objectives of the study are:

- Assess the employability profile of graduate students at AAU.
- Identify the gap observed in the employability of the graduates.
- Ascertain the differences between employability skills with sex.
- Identify the relationship between employability skills and employability.(Identify the skills that have greater effect on employability)

1.5. Research Hypothesis

The research develops basic three hypotheses based on previous studies in order to answer the research questions. These hypotheses are presented as follows:

H1: Generic Skills have a direct positive effect on Employability

H2: Personal Qualities have a direct positive effect on employability

H3: Subject Understanding has a direct positive effect on Employability

H4: Metacognition has a direct positive effect on employability

H5: Subject Understanding has a direct negative effect on Personal Qualities

H6 Generic Skills have a direct positive effect on Metacognition.

H7: Personal qualities has a direct positive effect on Metacognition

H8: Generic Skills has an indirect positive effect on employability.

H9: Subject understanding has an indirect negative effect on employability.

H10: Personal Qualities has an indirect positive effect on employability.

H11: Subject understanding has an indirect positive effect on metacognition

1.6. Significance of the Study

The findings of this research work will no doubt be of great importance to all stakeholders among which are:

Government: The findings of this work will better inform the government on how to plan for the graduates in the country and to equally put the necessary machinery in place geared at repositioning the educational system to be more responsive to the needs of the society.

Students: The students who are major stakeholders will find this work very useful as they prepare for the world of work. It will equally serve as “eye opener” to business students/graduates who are not informed about the skills they are supposed to possess. It will also form vital part of the students’ course materials or reference materials.

Employers: The findings of this work will be of great importance to employers as it will afford them the opportunity to know the areas of weaknesses of our graduates and how to possibly organize a training program to address this challenge.

Researchers: This study will provide a framework for subsequent studies in this area and it will serve as reference work for researchers who intend to do similar study.

1.7. Scope of the Study

The scope of the study was limited to graduates of Addis Ababa University college of Business and Economics to gain an understanding of the skills possessed by graduates. Major employers in Addis Ababa city were surveyed to examine their employability. The research addressed employability from the skills point, education policies have not been covered in this study.

1.8. Limitation of the Study

The research is limited to business graduates of Addis Ababa University. Data collected is from business schools and it might not be generalizable to other streams.

1.9. Organization of the Study

The research paper has five chapters. The first chapter deals with introduction. The second chapter deals with literature review in which critical review of relevant previous scholars work in the research topic will be presented. Chapter three discusses the research methodology. Chapter four discusses the findings of the study with data analysis, presentation and interpretation. Finally, the fifth chapter includes summary of findings, conclusions, recommendation, research contribution and further studies required.

Chapter Two

2. Literature Review

2.1. Theoretical Background and Operational Definition

2.1.1. Theoretical Development of Employability

The recent focus on employability for HEIs is undoubtedly coming from government policies concerning the economic and social needs of the country. Whilst the current focus on employability is very much on graduates and young people, as a concept, employability always plays a crucial role in informing labor market policy in many parts of the world. (McQuaid,2005).

Despite the rapid increase of the interest in employability in recent years, historically, employability, as a concept, can be dated back to 1909 (Gazier, 2001) in western society. It was a phenomenon that emerged within contexts related to industrial development, labor markets and requirements on employment-related issues within the society. Since Beveridge's (cited in Gazier, 2001) first mention of employability in 1909, it has become a political and social concept, which reflects the status and requirements on employment related issues within the society.

Version	Period	Meaning
1. Simple Dichotomy	early 1900s to early 1950s	A person either was or was not employable (i.e. valid and immediately available on the labor market)
2. Socio-medical Employability	1950s and 1960s	A quantitative measurement of a series of items that make up a test of individual employability: physical and mental abilities to undertake employment
3. Adapted Socio-medical Employability	1960s	Manpower policy employability focuses more on the social factors as well as physical disabilities. Mobility and presentation were taking into account as well as professional qualifications. It measures the distance between one's characteristics and the production and acceptability requirements on the labor market.
4. Flow	1960s	The speed at which a certain group of the unemployed finds work. This concept focused on un-employability rather than

Employability		employability had the advantage of directly relating the situation of employment with labor market requirement.
5. Labour market performance employability	1970s and 1980s	Focus on the quality of a job rather than the probability of finding work. It did not propose any link between individual situations, economic actions or social policies and the result in the labor market.
6. Initiative employability (individualistic model)	Early 1990s	Individual responsibility and a person's capacity to trigger a process of accumulation of human and social capital around His/her projects. It can be seem as the marketability of cumulative individual skills and can be measured by the breath of potential or already acquired human capital (e.g. knowledge, skills and learning abilities) and by the level of Individual's social capital (e.g. size and quality of networks).
7. Interactive Employability	Since 1994	It defines employability as the relative capacity of an Ind'l to achieve meaningful employment given the interaction between personal characteristics and the labor market. It connects the individual traits and paths to the circumstances and trends of the labor market.

Table 2.1. Gazier's (2001) seven successive versions of employability in the 20th century

This is apparent throughout Gazier's (one of the leading employability theorists in today's western society) review on the development of employability in 20th century in which seven successive versions of this concept are highlighted as summarized in the above table.

According to Gazier's work employability is a complex and problematic concept which evolves and changes as society develops. Indeed, it is clear employability as a concept has developed from a single dimension to multi dimensions, requiring from individual's physical availability to one's physical and social ability to personal quality. This kind of evolution is largely due to the development of social and economic requirements on the labor market. Clearly, as a concept, employability will carry on changing and evolving based on the broad social and economic requirements of the labor market (Gazier, 2001). Though, at the moment, it seems problematic even to define it. Since as a concept its development does follow a successive motion pattern.

Employability as a construct has enjoyed much international attention over the past decade (de Grip et al., McQuaid, Green & Danson, 2004), yet the topic made its appearance in the scientific arena as early as 1909. Indeed, Mansfield (2001) notes that Sir William Beveridge first noted the concept of employability in a book called *Unemployment: A problem of Table 1: Gazier's (2001) seven successive versions of employability in the 20th Century*

Employability has however changed considerably over the years, which is mainly to changing labor market condition and government policies.

The changes have been set out by Gazier (2001) who proposes that employability has moved through the seven operational versions/ stages set out below

Dichotomic Employability

The concept of Dichotomic Employability was developed in the United States of America and the United Kingdom, where it was distinguished between those individuals that were “unemployable,” such as the elderly, and those able-bodied individuals actively searching for employment (de Grip et al., 2004). The reasoning behind this approach was to distinguish between those individuals in need of relief and those that could be employed. According to McGrath (2009), this can be likened to the long standing Anglo-Saxon dichotomy. The system works to distinguish the “deserving poor” from the undeserving poor”, the former entitled to charity and the latter in need of reform. The criticism of this approach is vast as individuals are classified either as employable or unemployable, with no other variations on the topic or consideration of the labor market context.

Socio-medical employability

This approach dates back to the mid- 1950s, with the focus of the labor market shifting toward the underprivileged with reference to medical and social conditions (de Grip et al. 2004). The reason why much attention was placed on these underprivileged individuals was as a result of the post-war lack of skilled workers. The outcome of this approach brought with it a measure whereby individuals were classified as more or less employable, with the outcome resulting in steps being taken to improve overall employability or compensate the individual who is seen as less employable.

Manpower Policy Employability

The next stage or operational phase of employability came about during the 1950s and 1960s, was relevant mainly in the USA (McGrath, 2009). The focus of this approach shifted to the potential of

an individual to become employed, given that employment was one of the main priorities of the government of the day. The manpower policy is, however, an extension of the socio-medical approach, whereby the focus is the gap between employment needs and employee characteristics such as individual's knowledge, attitudes, and skills (McGrath,2009) pertaining to a broader group of disadvantaged individuals. Such disadvantages included social, physical, mobility (e.g. does one have a driver's license/police record) and presentation (e.g. whether one can visibly be identified as a drug user) (Gazier,2001). The aim was to assist people in their search for employment and placement by means of improving their attitude toward employment and their self-confidence. At this stage, the promotion of employability was for purely macro-economic reasons (de Grip et al, 2004). This approach was the most widely accepted and implemented up until the 1970's, when the concept of flow employability emerged.

Flow Employability

This view on employability was primarily developed in France, and was drastically different to previous approaches. Awareness of the individual was increased in this view, emphasizing mainly occupation-related knowledge and skills. The approach was extended to include knowledge of one's own potential, knowledge of one's position within the labor market, and an increased awareness of the state of the employment market (Mansfield, 2001) in general. The approach was also different in that it focused on the demand aspect of employability and consequently, the ease of access to employment within local and national economies (McGrath, 2009). The definition of employability as "the objective expectation, or more or less high probability, that a person looking for a job can have of finding one" was formulated by Ledrut in 1966 (cited in McGrath, 2009, p.2) as the core principle of flow employability.

It became evident to both employers and researchers toward the end of the 1970s that more than just occupational skills are required to remain attractive or marketable in the general labor market (de Grip et al, 2004). Subsequently, the term "transferable skill" was coined by Hoyt in 1978 to include the importance of acquiring skills that can be transferred to various work contexts, making employees less vulnerable in a recession or economic down-turn. These transferable skills include social and relational skills, and aid the individual, not only in securing employment, but also in maintaining a position or attaining future employment (de Grip et al, 2004)

Labor Market Performance Employability

The 1970s were plagued by a global recession, resulting in the international emergence of labor market performance employability. It was now much tougher to find and more or so to retain employment. This approach was based on measurable labor market results founded on individuals' human capital, and generally included the probability of securing employment, the amount of hours worked, and probable wages (Gazier,2001, McGrath,2009, de Grip et al, 2004)

Initiative Employability

The late 1980s marked the dawn of a new era for employability. As de Grip et al, (2004, p.214) state, "employability has become a meta characteristic of workers required by employers to cope with rapid changes in products, services and processes." It became evident that the concept of a "job for life" was rapidly disappearing, with employers increasingly hiring individuals on a temporary or flexible, part-time contract basis (de Grip et al, 2004; McGrath, 2009). The emphasis shifted toward career development of skills and attitudes that would ensure career success and motivation to search for alternative or better employment with other organizations. Gazier (2001,p.9) views this version of employability as " the marketability of cumulative individual skills" Thus, the employable person is viewed as an entrepreneur, able to create employment as depicted by Arthur in de Grip et al.(2004). It is clear from this view that employability gradually changed to an influential concept, relevant to every stage of the individual career.

Interactive Employability

Interactive employability is, as the name suggests, an approach that incorporates policy makers and employers along with the individual as mutual stakeholders in employability (de Grip et al,2004). This approach emerged in the early 1990s, claiming that the employability of an individual is somewhat relative to the employability of other individuals within the labor market. In de Grip et al, (2004), Outin argues that employability consists of four elements, namely individual characteristics, occupation-related skills, the labor market environment and government and organizational training policies. These elements influence the probability of becoming and remaining active in the labor market.

Employability imposes mutual responsibility upon government, employers and the employee (McGrath,2009). As such, this approach is inclusive of a demand and supply view, taking into consideration local and national demand but not excluding the rules institutions governing the labor market. It is from this that the institutional nature of employability is exposed, in which all

influencing factors within the labor market are mobilized, with a delicate balance between individual and collective responsibility.

From the discussion above, it is evident that there is widespread contention in the literature with regards to the conceptual meaning of employability. However, it is clear that by late twentieth century, the concept had become central to the debate on human resources development in the ever globalizing economic climate the world was facing (de Grip et al, 2005).

2.1.2. Operational Definition

Employability is a collection of understandings, achievements and personal qualities making graduates more likely to achieve employment and to be successful in these chosen employments. Employability benefits the graduates themselves, the workforce, the society and the economy. (Knight & York 2003, 5.)

Skills: the competence and ability acquired throughout conscious, efficient and persistent effort in order to resourcefully and adaptively perform job functions and complex actions. Skills include cognitive skills such as ideas, technical skills in different things and also interpersonal skills in relations with other people. In simplicity skills are the ability to do something well and to have expertise in a certain area. (Business Dictionary 2016; Career Key 2016.)

2.2. Empirical Literature Review

A study conducted on Graduate employability in Asia by estO (2012) delivered different results for the many countries that were surveyed. The studies were conducted by researchers based in the countries following some guiding principles, which could be adjusted to meet country-specific conditions and priorities. The study focused on Malaysia, Indonesia and the Philippines. The studies were to focus on the first degree-undergraduate level. The emphasis was on the employability of graduates, rather than graduate unemployment. The survey among Indonesian graduates showed that many employers wanted the HEIs to improve their curricula to match the needs of the industry by including on-the-job and soft skills training as part of students' skill development. Employers prioritized integrity, intellectual capacity, teamwork skills, and analytical and problem solving skills as the most desirable characteristics they were looking for from the graduates.

The study carried out in Malaysia used a qualitative approach to survey the opinions of graduates, employers and academics regarding the employability of graduates in Malaysia. Information was collected through focus group interviews. In addition, other documents were used to provide additional information. The data was analyzed and interpreted through content analysis. The study found that there is general agreement among employers and graduates that changes are needed in higher education in order to make graduates more “employable” from the perspective of the industry.

Employability among graduates in the Philippines was also surveyed in the report. The conclusion was that graduates were not confident in the skills they possess for a work environment. Also in the report was a need for appropriate and updated labor market information to bridge the information gap between HEIs and employers, and between people looking for work and employers. To increase the availability of labor demand statistics, publication of annual reports that indicate current labor demand by job sector/classification and scenarios for the next few years should be produced.

A study conducted by Esther R Mbise(2014) assessed the employability of business school ex-graduates in the labor market in Tanzania. The study focused on the employability of ex-graduates from higher learning institutions in Tanzania, specifically those regulated by the National Council for Technical Education. In the study Employability was measured using an instrument developed by Van der Heijde and Van der Heijden (2006). The correlation between immediate supervisors’ performance assessment and ex-graduates employability dimensions was established. Ex-graduates indicated their employability with the work environment while immediate supervisors indicated the rating of ex-graduates’ performance at places of work. There was a positive correlation between ex-graduates overall employability and immediate supervisors’ performance assessment of ex-graduates.

A research conducted by University of Glaskow (2011) assessed Employers’ perceptions of the employability in different higher education institutions across the UK. Representatives from the HEIs were surveyed. According to the study, Employers expect graduates to have the technical and discipline competences from their degrees but require graduates to demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical

thinking, problem solving and often managerial abilities or potential. The study recommended that a two-way relationship between HEIs and employers is necessary to meet the needs of students.

A study conducted by Imeokparia P. and Ediagbonya Kennedy (2012) on the employability of business graduates coming out of University of Benin indicated that graduates possessed high skills and the skills they possessed were found to be sufficient to get them work in today's world of work. In addition, improvements regarding the computer skills of graduates were recommended.

This section aims to analyze the previous studies which have been conducted on business graduate employability. Specifically, this part of the study tries to review the direct and indirect effect of the independent variables on employability.

I. Direct Effect of Skills on Employability

The Direct effect of Generic Skills on Employability.

The generic skills commonly demanded by all sectors as identified by employers are communication and analytical skills (Pitan 2015). Some of the other generic skills that employers require are interpersonal skills, organizing skills, the ability to translate ideas into action, and information technology skills (International Labor Organization (ILO) 2013; Sodipo 2014).

These are the knowledge, skills, and attributes that go beyond academic knowledge, and which are applicable in a variety of contexts as against vocational, technical or academic skills (Pitan 2015). Generic skills are also referred to in the literature as “core skills”, “key skills”, “essential skills”, “soft skills” and “transferable skills”. Due to technological change and increasing globalization with strong competitiveness between firms, employers now want graduates who are competent technically and are also well equipped with relevant generic skills.

The generic skills commonly demanded by all sectors as identified by employers in Nigeria are communication and analytical skills (Pitan 2015). Some of the other generic skills that employers require are interpersonal skills, organizing skills, the ability to translate ideas into action, and information technology skills (International Labor Organization (ILO) 2013; Sodipo 2014). Unfortunately, the employers' responses from surveys carried out in Nigeria show that graduate employees lack many of these generic skills and showed a less likelihood of securing employment.

Other studies include those by Wye and Liew (2005) in the Malaysian context using a framework developed by UWA (1996). The study concluded that the five skills with the greatest difference between the Development Index and Importance Index from the students' point of view were; 1) English oral communication, 2) master of information, communication and technology, 3) English written communication, 4) ability to handle risk; and 5) individuals' ability to think creatively and innovatively.

Archer and Davison (2008), for example, found that 86 percent of the study's respondents (UK employers) regarded communication skills as the most important, followed by soft skills (70 percent) and overseas experience (65 percent). CBI (2012) found that almost a third of UK employers (30 percent) have problems with graduates' generic employability skills, such as teamwork, communication and problem solving. Employers are also disappointed by graduates' attitude to work (25 percent), self-management (33 percent), business awareness (44 percent) and foreign language skills (49 percent).

Consequently, the researcher developed the following hypotheses:

H1: Generic Skills have a direct positive effect on Employability

The Direct Effect of Personal Qualities on Employability

The research carried out on the employability profile of graduates from South Africa University indicated that graduates that had personal qualities such as working without supervision, ability to handle pressure and pro activeness had the greater chance of securing employment of interest (Pitan 2015).

A study by Aliaz (2007) in the Malaysian context reveals that unemployed graduates lack many of the soft skills, such as communication skills, including the poor command of English. Among other factors that influence the employability of graduates as enlisted in the same study included self-confidence and field of study.

Another study by Shukran et al. (2004) assessing the lack of skills by HEI graduates found that the quality of graduates is low if it is characterized by inadequacy of the required competencies such as self-confidence, soft skills, proficiency in English and a positive attitude to work.

H2: Personal Qualities have a direct positive effect on employability

The Effect of Subject Understanding on Employability

These are subject or discipline-specific skills and knowledge, which students must possess. McLaughlin (1995) defined academic skills in relation to employability as “those skills that provide the basic foundation to get, keep, and progress in a job to achieve the best results”.

The major reason for university education is to get a degree, which invariably should give its recipients an edge in the labor market. This assertion still holds today that the labor market favors those who have better academic qualification (Pool and Sewell, 2007)). Some researchers refer to “academic skills” as technical skills. In imparting these skills, universities should identify the needs of the labor market in order to be able to provide students not only with relevant theoretical knowledge but also with practical experience, as proposed by Šooš and Jones (2015) in their model.

In the African context, a study by Kolawole and Arikpo (2008) examining predictors of employment efforts among unemployed Nigerian graduates found that the inappropriate curriculum was the major factor. The curriculum does not change with changes in the labor market. As a result, graduates are claimed not to possess adequate competencies needed by employers or the skill to employ themselves.

Karadisi (2012) conducted a study to assess how effective Dar es Salaam colleges and universities in Tanzania are in imparting employability skills to their graduates. The study findings (77 percent of respondents) reveal that the employability skills imparted by universities and colleges are not effective in developing learning either for entrepreneurship or for employment in corporate firms. The findings further show that employability is not only about training or providing additional skills to gain employment, but it is also about how the higher education system, through its universities, develops critical, reflective and empowered graduates who are needed and valued by employers. The study recommends first, there should be a closer relationship between universities/colleges and employers when it comes to developing curricula that meet the needs of industries and for enhancing the dual training system for graduates (hands-on experience). Second, HEIs should employ, in most cases, experiential learning to facilitate learning for entrepreneurship.

The methods not only enable graduates acquire entrepreneurship skills, but also develop positive attitude, the features that are important in the workplace.

H3: Subject Understanding has a direct positive effect on Employability

The Effect of Metacognition on Employability.

A study by Panagiotakopoulos (2012) in Ghana, indicated that graduates do not possess a range of skills as demanded by world of work. Among the skills considered in the research where the ability of graduates to dictate their own learning. Employers in current world of work, require graduates who are continuously ready to learn and develop themselves. The paper argues for an immediate need for policy makers to develop a national policy on addressing this and another gaps for graduates departing from HEIs in order to help students secure employment and to meet the skill needs of domestic firms. A study by Little (2003) presented employability from an international perspective by assessing competencies possessed by European and Japanese graduates. In this study, the ability to learn ranked first in Europe, especially in the UK, which consequently positively affected their ability to secure employment.

H4: Metacognition has a direct positive effect on employability

II. The direct relationship between skills

I. The Direct Effect of Subject Understanding on Personal Qualities

The USEM model illustrates Subject understanding to have an effect on personal qualities and eventually on graduate employability.

Bridgstock R 2009, conducted a study to assess the employability profile of graduates coming out of University of Tanzania and identified students with high subject understanding lacked the qualities such as ability to work under pressure, without supervision and adopt to new work environments.

The study carried out by Katherine Fulgence confirms to this theoretical aspect. The research revealed that graduates that had high subject understanding lacked personal qualities related to sensing and reacting to the emotion of others while greatly possessed the ability to work without minimum supervision. (Katherine Fulgence, 2015). Also a research carried out on graduates

coming out of Nigeria`s business schools indicated that subject understanding is highly positively related to lacking personal qualities.

H5. Subject Understanding has a direct negative effect on Personal Qualities

The direct positive effect of Generic Skills on Metacognition

The study conducted by (Vogel-Walcut, J.J., & Fiore, S. (2010).) in assessing the factors affecting metacognition, indicated that qualities such as such as being aware of one`s own learning processes and requiring minimal supervision, can be used to support or increase metacognitive awareness.

Another study by Shukran, Wok, Majid and Noor, (2004) indicates that HEI students lack relevant Knowledge, Skills, Abilities and Other desirable work characteristics. The study also indicated that being able to recognize key points when reading, ability to work in a structured and efficient manner, ability to set goals and work towards achieving them are directly dictate the graduates ability and willingness to learn.

Based on this the researcher has developed the below hypothesis.

H6. Generic Skills have a direct positive effect on Metacognition.

The direct positive effect of Personal Qualities on Metacognition

The research by Shukran, Wok, Majid and Noor, (2004) shows that the graduate`s ability to evaluate and reach at their core weaknesses can in turn result in a more controlled learning process. The study conducted by Little (2003) also indicates the positive relationship between personal qualities and Metacognition. Based on those studies the below hypothesis is made.

H7. Personal qualities has a direct positive effect on Metacognition

III. Meditational Role of Skills on Employability (Indirect Effect)

Based on the above outlined researches and studies above, the research has also developed the following four hypothesis to address the indirect effect of the skills.

H8. General Skills has an indirect positive effect on employability.

H9. Subject understanding has an indirect negative effect on employability.

H10. Personal Qualities has an indirect positive effect on employability.

H11. Subject understanding has an indirect positive effect on metacognition

2.3. Models of Employability

In the following section, various models of employability will be considered. The focus here is developing a thorough understanding of the development and conceptual knowledge that underpins graduate employability. The models to be considered include Fugate, Kinicki and Ashforth's 2004 model, which views employability as a psycho-social construct; Fugate and Kinicki's (2008) dispositional model; Yorke and Knight's (2006) USEM model; Pool and Sewell's (2007) Key to Employability model, as well as Bridgstock's (2009) conceptual model of graduate attributes for employability.

2.3.1. Fugate, Kinicki, and Ashforth's (2004) model of employability

This model is based on the notion that individual employability encompasses a number of person-centered constructs that are essential in dealing effectively with the career-related changes that are characteristic of the new world of work. Fugate et al. (2004, p. 15) define employability as "... a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behavior, and affect, and enhance the individual-work interface". This definition refers to the adaptability of the individual to change between positions, both within one organization and between organizations, the key being active adaptability consisting of three dimensions: personal adaptability, career identity, and social and human capital.

Personal adaptability in this model is used as the conceptual foundation for employability, and can be described as the willingness, capacity, and competence to change. As such, it is an active and continuous process. Fugate et al. (2004) argue that personal traits such as optimism, a propensity to learn, openness, internal locus of control, and generalized self-efficacy combine at a cognitive and an affective level in those individuals who display high employability, leading to the ability to identify and secure work opportunities. Savickas (1997, p.253) uses the root of the word "adaptation" to show its true meaning as being quick to learn or "to fit," thereby also taking on the meaning of "to make more suitable (or congruent) by changing." This implies flexibility and ease of response to environmental demands, which emphasizes the interaction between the individual and the environment.

According to Fugate et al. (2004), this interaction between the individual and the work environment reduces anxiety and uncertainty, resulting in improved adaptation outcomes, since the individual now has some form of perceived control over the situation. Personal adaptability is the "glue" in the psycho-social construct of employability, emphasizing the importance of personal characteristics. As Fugate et al. (2004, p.18) assert, "... the fundamental premise is that employability is a synergistic collection of individual characteristics that is energized and directed by an individual's career identity."

Career identity relates to specific constructs such as role identity, occupational identity, and organizational identity, referring to how the individual defines him/herself in a certain work context (Fugate et al., 2004). It involves making sense of one's current and past situation, giving clear direction to one's future. Career identity addresses the question of "Who am I?" within the work context, thus allowing for the possibilities of the self at work. As such, career identities can be viewed as the "cognitive compass" of the individual. Career identity therefore serves as a navigational tool (Fugate et al., 2004, p.20) when individuals find themselves outside of the organizational boundaries, which is often the case in the new age protean and boundary less careers. Thus, career identities are the cognitive schemas that direct, guide, and sustain behavior in accordance with the desired self (in the working context).

The third and final dimension of employability is comprised of human and social capital. Fugate et al. (2004) argue that both social and human capital form an inherent part of career identities, entrenching it within the employability construct. Human capital refers to a number of personal variables affecting an individual's career advancement. These variables may include age, education, job performance, tenure within an organization, work experience, and emotional intelligence. The mentioned variables may also be influential in an individual's ability to meet the demands of a specific occupation, thereby contributing to overall adaptability of the individual and the organization (Fugate et al., 2004). Social capital is representative of the interpersonal aspects of employability (McArdle, Waters, Briscoe & Hall, 2007). It is encompassed in DeFillippi and Arthur's (1994) "knowing-whom" competencies that are concerned with formal and informal career-related networks. The importance of these interpersonal connections or social networks lie in that they shape an individual's self-perceptions and are a source of social support that alleviates

the stress associated with the fast-paced change of today's working environment. Fugate et al. (2004) and McArdle et al. (2007) note that these dimensions are synergistically related, forming reciprocal relationships. The authors go on to contrast the three dimensions previously described with other constructs, such as proactive behavior, personal initiative, proactive personality, and career motivation. Fugate et al. further assert that employability consists of cognitive (e.g., career identity), dispositional (e.g., propensity to learn), and market-interactional variables (e.g., social and human capital). It is also argued that employability is explicitly contextualized in work settings, integrating the dispositional and situational aspects of pro-activity. The literature is divided on the inclusion of social and human capital, as it provides for a market-facing dimension that is not found in other constructs such as proactive behavior, personal initiative, proactive personality, and career motivation.

Thus, employability describes the key importance of adaptability in the workplace, with emphasis on knowing who one is, but also being able to gain access to information and networks that will aid in the identification and realization of new opportunities.

This model was not developed with specific reference to graduates, but may be useful in understanding the dynamism and interaction between the mentioned constructs. With its core being adaptability, this model is highly relevant in the changing career arena that graduates seek to enter. Should they be able to draw on a willingness and ability to adapt their knowledge, skills, abilities, dispositions, and even behaviors, their flexibility will enable them to meet changing environmental demands. Knowing how to gain certain expertise or knowledge, and gaining access to key social connections will further strengthen the employability of a graduate student. Being certain of one's occupational

Identity provides the capacity to navigate one's career and seek out the most beneficial opportunities.

2.3.2. Fugate and Kinicki's (2008) dispositional employability model

Fugate and Kinicki's (2008) dispositional employability model is founded on their work done during 2004 to 2006. Fugate (2006) defines dispositional employability as "a constellation of individual differences that predispose employees to (pro) actively adapt to their work and career environments" (as cited in Fugate and Kinicki, 2008, p. 504). Perceived in this way, employability

is fostered by individual characteristics that enable adaptive behaviors and positive employment outcomes.

The dispositional approach includes a broad supply-side view. The rationale behind the dispositional approach is the frequency and intensity of change, resulting in high levels of uncertainty and anxiety, and requiring employees (and organizations) to adapt in a proactive manner. Furthermore, employability research assumes that the required knowledge, skills and abilities for a given job have been clearly identified and remain stagnant, an assumption that is deemed too narrow and, as such, unrepresentative of today's turbulent labor market.

Fugate and Kinicki (2008) therefore developed a model that would bridge some of the mentioned gaps. In 1998, Law, Wong, and Mobley (as cited in Fugate & Kinicki, 2008) extended the understanding of employability to that of a multi-dimensional construct – an underlying higher order trait that enhances proactive adaptability. This model shows that employability includes both reactive and proactive individual characteristics, indicating a conceptual readiness for change.

From literature, it was identified that countless personal characteristics could potentially influence an individual's ability to identify and realize career opportunities. Five specific dimensions are deemed critical, due to the active and adaptable nature of dispositional employability. These dimensions were identified from the fields of applied psychology, careers, management, vocational counselling, and personality research conducted over the years. Fugate and Kinicki (2008) conducted an extensive review process and identified the following five dimensions as critical: (i) openness to changes at work, (ii) work and career resilience, (iii) work and career proactivity, (iv) career motivation, and (v) work identity. Each dimension has its core settled in that of proactive adaptability, which was a prerequisite set by Fugate and Kinicki in their determination of each dimension. These dimensions are briefly discussed below.

Openness to change at work: This dimension is deemed fundamental to dispositional employability as it supports continuous learning, which, essentially, enhances adaptability. This dimension also emphasizes flexibility, indicating that people who are open to change are likely to be adaptable and generally positive toward ambiguous or challenging situations and new experiences. Fugate and Kinicki (2008) argue that this openness to change ultimately makes people more employable due to their active adaptability portrayed in any situation; Work- and career resilience in individuals point to a generally optimistic view of life facets, in other words, having positive

expectations of current and future situations. Resilient individuals also show confidence in their ability to deal with adversity or challenges in their career, viewing each as a learning opportunity. Ultimately, work and career resilience are part of work identity, and as such, is representative of dispositional employability;

Career motivation is seen as a determinant of continuous learning, ensuring self-management and future planning. Individuals who are highly motivated tend to persist and are more willing to adapt to changing circumstances, which subsequently influences and determine dispositional employability.

Work- and career proactivity refer to individuals' tendency and actions to gain knowledge regarding the environment, career interests, and even their employer, given that these aspects may potentially influence their career. Work- and career proactivity facilitate the identification and realization of opportunities. Thus, an employable person is one who purposely seeks out information relevant to his/her personal job interests and potential career opportunities; and lastly

Work identity is how the individual views him/herself in the work environment. It is the cognitive and affective foundation of dispositional employability, relating to the self-perceptions consistent with career-related actions. Career identity drives the career direction and goals needed to manage the boundary less careers that characterize the new world of work. It is the guiding force for any individual career. A clear path and understanding of oneself in the working context support active adaptability and, as such, employability.

The dispositional model extends well beyond the mere "core" or "generic" skills required to be seen as employable, as is the case with most previous literature on the topic. It is rather easy to become entrenched in the skills needed as opposed to the underlying foundation that ensures sustainable employability. Sustainability is core to the changing work environment of the 21st century. With its innate focus on employability as a disposition, it brings the knowledge of both the reactive and proactive personal characteristics that are essential for meeting environmental demands as well as identifying and securing career opportunities. However comprehensive the model may be, it is lacking in that it does not include relationship building or human capital aspects per say, which have been noted as essential to students in particular. Fugate and Kinicki (2008) and Fugate (2006) have contributed significantly to the knowledge base of employability; however

the current study focuses on graduate students and not solely on those individuals who do have work experience.

2.3.3. Pool and Sewell’s (2007) Key to Employability Model

The Key to Employability Model is based on the following definition: “Employability is having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful” (Pool & Sewell, 2007, p. 280).

This model argues for the inclusion of "satisfaction," focusing on individual facets that will allow a student to better adapt in the working context. The model shows that each component is absolutely essential, and asserts that one missing component will significantly lower the employability of the graduate student.

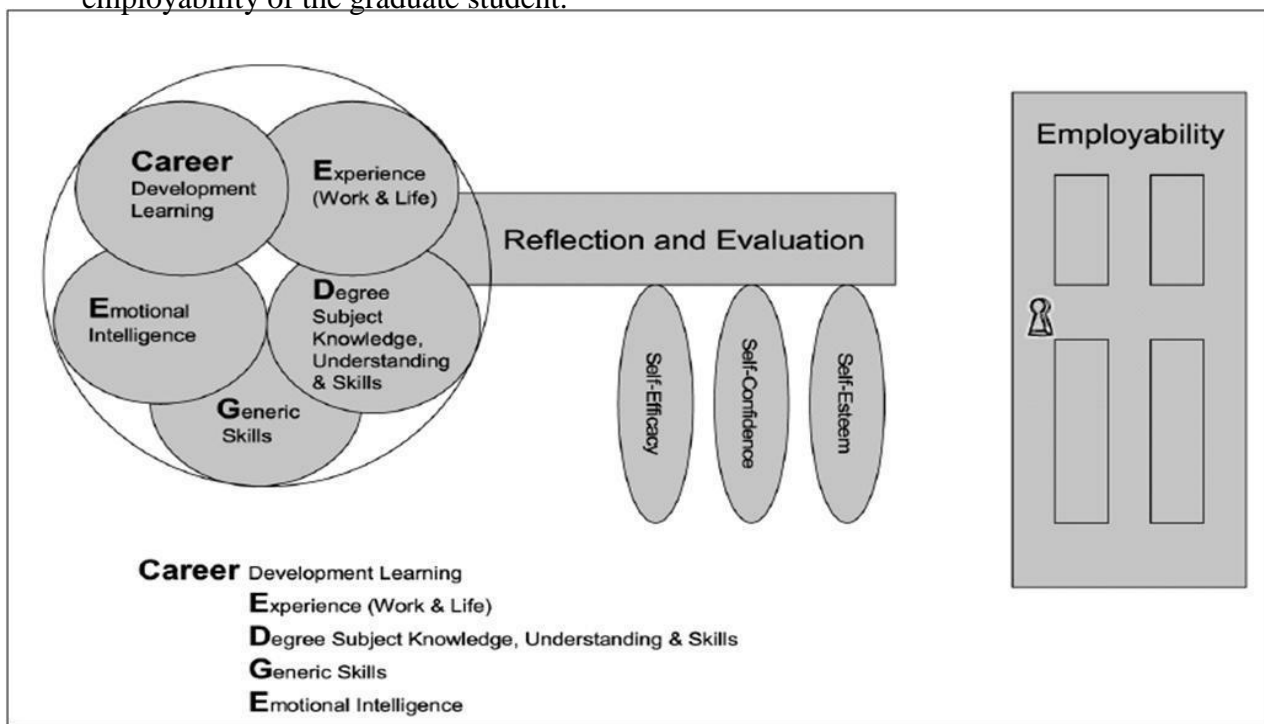


Figure 2.1. Pool & Sewell CareerEDGE Model (2007, p.281)

The authors show five inter-related components in Figure 2.2 above: (i) degree subject knowledge, understanding and skills; (ii) generic skills; (iii) emotional intelligence; (iv) work and life experience; and (v) career development learning. These five components are also known by the mnemonic of CareerEDGE. Pool and Sewell suggest that, by providing graduates with the

opportunity to not only access, but also develop these five components, and then reflect on and evaluate such experiences, ultimately result in development of higher levels of self-efficacy, self-confidence, and self-esteem, which have been shown to be critical in employability (Pool & Sewell, 2007; Yorke & Knight, 2006).

Pool and Sewell (2007) argue that the key benefit of this model lies in its simplicity. It can be explained with ease to any student or lecturer, or perhaps even to a parent. The model has also been useful in the planning of curricula and may in future serve to demonstrate to employers the valued role of higher education institutions, and how both employers and HEIs may contribute to increased employability, consequently benefiting all relevant parties. However, the model's relevance is shown in its continuous aim to ensure adaptability to our changing world of work and, hence, an increased chance of occupational satisfaction and success.

2.3.4. Bridgstock's (2009) conceptual model of graduate attributes for employability

The model developed by Bridgstock (2009) proposes those skills that are critical to the enhancement of graduate employability and the role of career management. Figure 2.4 below shows the relevant skills, namely self-management skills, career building skills, generic skills, discipline-specific skills, employability skills, together with underpinning traits and dispositions.

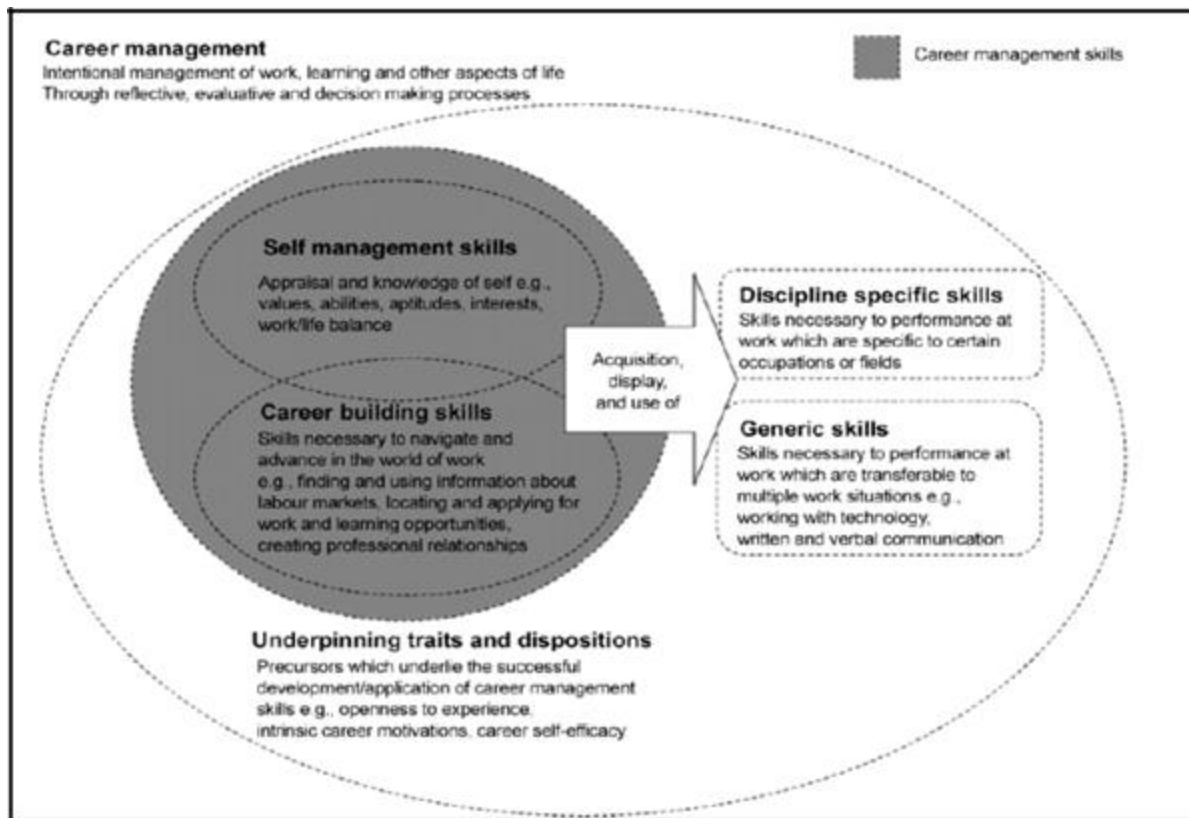


Figure 2.2. Bridgstock's (2009) conceptual model of graduate attributes for employability

Career management can be seen as an ongoing process. One must utilize skills for self-management and career building that are grounded in the underlying traits and dispositions in order to successfully secure, display, and employ generic as well as discipline-specific skills in the new working context. This is inclusive of incessant reflective, evaluative, and decision-making processes. In its purest form, career management allows for the creation of realistic yet personally meaningful goals, identifying and engaging in strategic work decisions and learning opportunities, recognizing a work/life balance, and realizing the functional relationships between work, the economy, and society in general. However, career management also includes a more immediate focus on the processes involved in obtaining and maintaining work (Bridgstock, 2009).

Those skills relating to individuals' perception and appraisal of themselves regarding their values, abilities, interests, and goals, referred to as self-management skills in the above model, are deemed to be closely related to the concept of career identity (Bridgstock, 2009). Bridgstock (2009, p. 62) cites the work of Eby, Butts, and Lockwood, conducted during 2003, indicating that students who displayed a clearly developed concept of their personal career goals as well as a positive and

realistic appraisal of their own capabilities (thus, a strong and well defined career identity) reported higher levels of employability than other students. Career building skills are closely intertwined with self-management skills, as illustrated in Figure 2.4.

Career building skills include the critical ability to research the working environment/landscape, and subsequently locating, securing, and maintaining a job, as well as being able to exploit such employment opportunities to gain advancements or other desirable career-related outcomes. According to Bridgstock (2009), career building skills include the following:

Knowledge of one's core industry: Students should be well aware of the opportunities, threats, and critical success factors related to their relevant area of expertise. Included in this is knowledge of "the rules of the game," the industry structure, beliefs, norms, values, and culture, and labour market information (mean salaries, unemployment rates, and relevant economic news);

The ability to successfully identify and choose the best opportunities for future growth prospects relating to geographical location, projects, and position;

Being able to identify when to start looking at alternative options: This includes the acquisition of new skills, training opportunities, and the ability to act swiftly once a new opportunity arises;

Being able to represent oneself and one's skills in such a way that any prospective employer will see the value-add that one has to offer. Knowing how to accurately and attractively represent oneself is pivotal to career building; and

The ability to create strategic personal and professional relationships, as this has been shown to have a direct effect on perceived and real employability.

Generic skills as another component of graduate employability are the transferable skills, key/core competencies, or actual employability skills that ensure graduate employability. As mentioned earlier, it has been widely noted that there is little empirical consensus on the meaning of the term, as well as whether the possession of such skills leads to increased employability (Bridgstock, 2009). However, the inclusion of generic skills as a component of the model remains important, as the literature has indicated that these skills are indeed what employers look for in graduates.

Discipline-specific skills are those skills traditionally incorporated in higher education curricula in order to meet specific theoretical requirements posed by each unique subject-matter area. Discipline-specific skills in conjunction with generic skills, as described above, and self-management and career building skills are thus termed employability skills. Bridgstock (2009, p. 37) goes on to state that career management skills and knowledge are vital to employability since “...they play a large part in determining which, to what extent, in what manner, when and where generic and discipline-specific skills are learned, displayed (e.g., in applying for a job) and used”. Based on this model, it can be said that employability skills indeed ensure that a graduate is able to secure a job.

Bridgstock (2009, p. 36) defines underpinning traits and dispositions as “...those precursors that underlie the successful development and application of career management skills.” Such traits and dispositions may include openness to experience, sociability, agreeableness, initiative, intrinsic motivation, career self-efficacy, and self-confidence, which may result in overall increased work-life satisfaction as well as a smoother transition from studying to the working environment.

As seen in Figure 2.4, much emphasis is placed on career management skills. This is understandable, given the increasing pressure on individuals to assume responsibility for their careers and development as a result of the fast-paced change that characterises today’s working environment (Zhiwen & van der Heijden, 2008; Fugate, et al., 2004). From this model, it is clear that employability consists of more than just the mentioned generic skills, and includes many of the variables that are also incorporated in other models, such as Yorke and Knight’s (2006) USEM Model and Pool and Sewell’s (2007) Key to Employability Model. This model therefore provides a more comprehensive focus on graduate employability.

2.3.5. Bezuidenhout’s Graduate Employability Model

The work of Bezuidenhout has been critical in the development of an employability measure. The model is also the foundation for the measure utilized in this study and, as such, consideration should be given to the concepts that underlie the measuring instrument.

This model emphasizes the notion that employability cannot be seen in isolation from the demands that arise from a challenging new world of work. Bezuidenhout (2011) goes on to show how the work of Fugate et al. (2004) and that of Fugate and Kinicki (2008) have been critical to this conceptualization, as is evident from the definition that forms the basis of the model. As such,

employability is said to be “a psycho-social construct representing a combination of attributes (dispositions, values, attitudes and skills) that promote proactive adaptability in changing environments and enhance an individual’s suitability for employment and the likelihood of obtaining career success” (Bezuidenhout, 2011, p. 78).

It is important to note the role of adaptability in this definition. It is seen as the result of the interaction between one’s dispositions, values, attitudes, and skills that brings about proactive behavior that not only enables an individual to adapt to changing environments but also leads to an increased chance of overall career-related success.

The dimensions of this model are displayed visually in Figure 2.4 and show that the notion of employability relates strongly to that of adaptability. More specifically, the dimensions of career self-management drive, cultural competence, and personal dispositions are all shown to encompass adaptability as core to their meaning.

Career Self-Management

Career self-management relates to the idea that the world of work today requires the employee to take charge of his/her own development. This shift is aligned with the new styles of careers, which include the boundary less and the protean career (Inkson, 2006). These new career styles will be discussed further in the coming sections; however, it is important to note that both emphasize career self-management and adaptability. De Vos and Soens (2008) conducted an in-depth study of the protean attitude and career success, and indicate that it is indeed career self-management that makes the difference when it comes to career success. Career self-management is the creation of opportunities, the setting of goals, and the constant search for new information, which add to the adaptable behavior of any employable individual.

Cultural competence plays an integral role in the 21st century, given the globalized environment in which individuals find themselves. A number of studies have shown that employers value international work experience, and with this comes a multi-cultural working

environment. As such, the ability to understand and effectively deal with diversity is a core competency in employability.

Personal Dispositions

The model goes on to indicate how several personal dispositions interact to promote adaptability. These dispositions are further described in terms of career-related self-evaluation, entrepreneurial orientation, sociability, career resilience, proactivity, and an openness to change. Bezuidenhout (2011) argues that the interaction between these dispositions and other attributes may result in an improvement of overall employability and perhaps even career success. These attributes will be briefly discussed in order to fully describe the model that is the basis of the measuring instrument used in the current study.

Career-related core self-evaluations relate to self-esteem, locus of control, generalized self-efficacy, and emotional literacy, i.e. evaluation of one's personal worth in the career context. A positive self-evaluation and the ability to manage one's emotions in a constructive manner should result in adaptive behavior.

Entrepreneurial orientation refers to an innovative, driven, and proactive approach to one's life and career. It is the propensity to take risks and exploit opportunities whilst being achievement-orientated.

Sociability as described in the context of the model refers to an ability to establish and maintain social connections, but also to feel free to utilize these connections to one's advantage in a career.

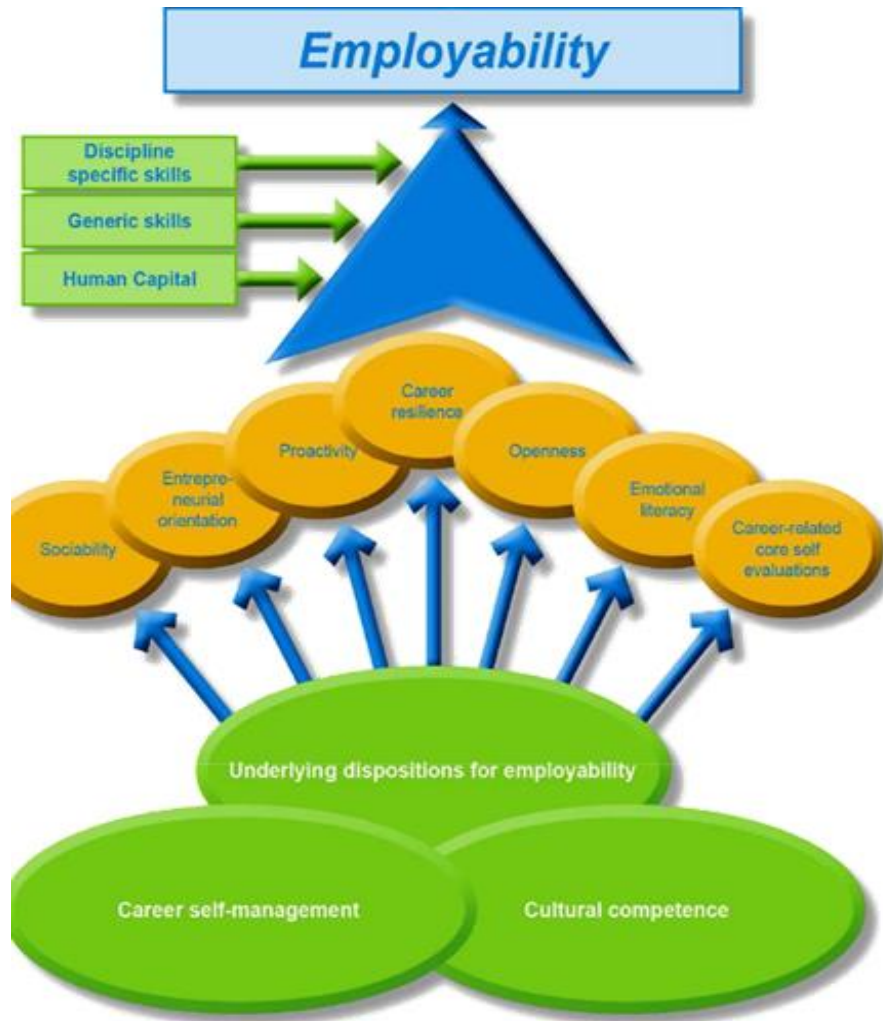


Figure 2.3. Bezuidenhout Graduate Employability Model

Career resilience shows a high level of adaptability, flexibility, self-confidence, and competency, regardless of the adversity of any work-related situation. It is the ability to "bounce back" after a setback.

Proactivity is the active, future-orientated, self-initiated actions that lead to an improvement of a situation or of oneself in general.

Openness to change refers to the willingness to purposefully seek out new experiences, and includes the willingness to explore new ideas.

As with any model, there are the main dimensions that make up the basis or core. However, employability is no simple construct (Clarke, 2008), and includes technical skills (discipline-specific skills), generic skills, and human capital skills, as portrayed in the Graduate Employability Model.

McArdle et al. (2007) set out to investigate the psycho-social model developed by Fugate et al. (2004), based on a sample of 416 unemployed individuals. Human and social capital was identified as one of dimensions of employability in the psycho-social model. It is a construct that refers to aspects such as education, work experience, training, skills, and knowledge that are unique to each person and play a role in career advancement (McArdle et al.). Discipline-specific skills remain critical to many technical positions, and employers continue to value the knowledge that underpins a specific career field. While knowledge is valued, most employers no longer make their recruitment decisions based purely on specific subject matter knowledge. Generic skills are a top priority when it comes to graduate employment. As Bezuidenhout (2011) also indicates, the combination of these skills is widely accepted as increasing employability.

2.4. Conceptual Framework

This model is deemed one of the most widely accepted and influential in terms of employability literature (Pool & Sewell, 2007). The work of Yorke and Knight is seen as critical to the understanding of graduate employability and how it may be entwined with higher education curricula (Pool & Sewell). The researchers have subsequently introduced a model that suggests that employability is influenced by four broad, yet inter-related components. The model is depicted in Figure 2.2, and shows the interaction between the components.

The first construct, subject understanding refers to the understanding and furthermore to the knowledge that the person has. This section is mostly a key outcome gained from higher education and clearly plays a crucial part in being employable. Skills being the second component in the model demonstrate that the skills of the person are likewise a major element of employability. In this model they are seen as a component of employability instead of determinate achievements. Skills can be readily measured and without any problems transferred from a setting to a setting. In order to be more simplified, skills are seen as a component so that further introduction to elaborate them more in detail is not needed. (Knight & Yorke 2003, 8-10.) Skills and understanding are still not enough to gain employability. Even though many might think that their success comes from

luck and being intelligent, while failures comes from harmful forces and absence of skills. This way of thinking might be a result in shortage of perseverance and giving up when there is no definite rapid resolution for gaining employment. Efficacy beliefs, the third component of the model, are covering one's self theories and personal qualities. These have significant importance, as they are being extent to the point of affecting on one's thoughts about themselves and their abilities. Of course, this is not the case every time and with every person but it can also get in the way of seeing the true ability that the person has. (Knight & Yorke 2003, 8-10.)

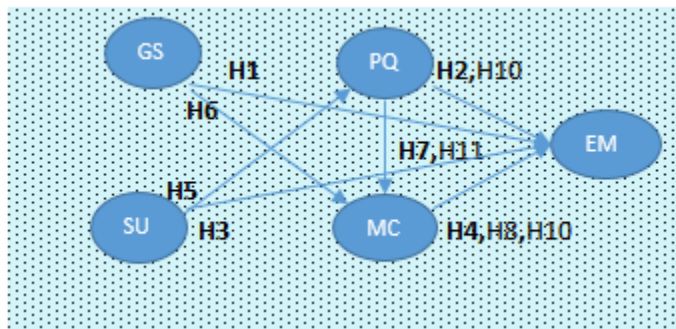


Figure 2.4. Adapted USEM Employability Model (Yorke & Knight, 2006, p.5)

The last component of the model is metacognition, which signifies surrounding self-awareness concerning the person's own learning and the ability to reflect it in, on and for action. According to Knight & Yorke, metacognition signifies three factors, which are knowing what you know, knowing how it can be used and knowing how you get new knowledge. The idea of metacognition is that people are more aware of what they know and how they know it. In this way they can use their assets to have a good influence and obtain new needed knowledge for given situations. (Knight & Yorke 2003, 8-10.)

In summary, the USEM model has proven very useful in its application within the higher education arena, providing a strong base for educators and students to assess employability. It is critical to possess a thorough understanding of one's subject, along with skilful practices (core skills). More so, a malleable self-theory ensures positive experience and outcomes in the face of adversity. This model places much emphasis on continuous learning, which has been identified as a requirement of the new world of work.

This model allows all parties to understand the concept of employability and what is required in order to be deemed employable. Therefore the researcher has adopted the USEM model in carrying out this research.

Chapter Three: Research Design and Methodology

3.1.Introduction

This chapter reports the research methodology which is a systematic way to accomplish the research objectives or to solve the research problem. This chapter is structured as follows: the first Section explains about research approach. Section 3.3 represents about research methods. Section 3.4 of this chapter is about research design which includes purpose of the research, research strategies, data collection, research measures, population, sampling, sampling frame, and sample size. The last section 3.5 is about questionnaire pilot testing which is about validity and reliability of the questionnaire.

3.2.Research Approach

Saunders et al (2012) state that there are two types of research approaches: the deduction approach and the induction approach. The study used deduction approach because the conceptual framework or research hypotheses are built based on the previous studies. A deduction approach adopts current theories and concepts to justify research relationships and test the casual relationship among variables.

3.3.Research Method

As described by Creswell (2009), there are three common approaches to conduct a research project in the area of business and social sciences research namely; quantitative, qualitative, and mixed research approaches.

In order to achieve the objectives of this study and thereby to give answer for its problems, quantitative research approach was used by the researcher due to appropriateness as the method helps to achieve greater objectivity and more accurate results

3.4.Research Design

A research design is the preparation of conditions for the collection and analysis of the data required either to solve the research problem or to achieve the research purpose (Kothari, 2004).

3.4.1. Purpose of the Research

There are three types of research namely; exploratory, descriptive, and explanatory research as follows (Kothari, 2004).

The study used explanatory research because it aimed to test the relationship between the dependent variable (employability) and independent variables (factors of employability i.e. personal qualities, key skills, subject understanding and metacognition).

3.4.2. Research Strategies

There are many types of research strategies such as experiment, survey, case study, action research and grounded theory (Saunders et al, 2009).

The study employed survey strategy because the data collected from the survey strategy can be used to suggest a possible explanation of the relationship between the study's variables. Furthermore, the survey is the most relevant to the study which follows deduction approach and quantitative method (Saunders et al, 2012).

3.4.3. Data Collection

Data Type

There are two types of data: primary data and secondary data. Primary data is collected for a specific issue. It could be either qualitative such as interviews, semi-structured or unstructured; focus groups; observations; and case studies, or it could be quantitative such as questionnaires; and structured interview (Saunders et al, 2012). Based on the research questions and objectives, this study employed primary data.

Data Collection Technique

A questionnaire is considered to be a key tool in collecting data and it is the most widely used tool in social research (Lancaster, 2005). It contains standardized questions whereby all respondents may understand these questions in the same way. Therefore, it is more suitable for descriptive or explanatory research and is inappropriate to exploratory research which requires many open-ended questions (Saunders et al, 2009). Hence, this study collected data using a questionnaire because the present study is an explanatory research.

Time Horizon of the Collected Data

Based on the horizons of the collected data, studies can be divided into cross-sectional or longitudinal studies (Saunders et al, 2012).The study used a cross-sectional data because it considered only the current situation of employability and factors affecting employability.

3.4.4. Research Measures

This section outlines both the dependent and independent variables for this study and their measurement. The independent variables are factors affecting employability which include: personal qualities, key skills, subject understanding and metacognition whereas, the dependent variable is graduate employability. Each construct was measured with multi-item scales which were developed to be appropriate to the employers as well as graduating students. These items were extracted from previous researchers (see in the appendix A). Items were measured on a five-point Likert-type scale ranging from “1= strongly disagree” to “5 = strongly agree”.

3.4.5. Study Population, Sampling, Sampling Frame, and Sample size

Study population

Two categories of population were used for the study. The first category comprised major employers employing many graduates every year. And these employers are financial institutions, companies in the beverage industry, Ethiopian revenues and customs authority, Ethiopian airlines, and Ethio-telecom. And the second category of population is graduates of Addis Ababa University.

In the first category of the population, human resource managers/professionals were considered as respondents, as they are assumed to be involved in the employment process and measuring performance appraisals of graduates employed in their respective companies.

Sampling

To select employers, human resource managers, purposive sampling was employed because human resource managers are responsible for getting employable graduates and once graduates get employment they are responsible to maintain with the company. Sample from each industry was selected proportionally that is; depending on the number of graduates industries take for employment.

Simple random sampling technique was used to select graduates because such a sampling technique avoids researcher bias in selecting the sample and improves the external validity/generalizability of the research. Moreover, all graduates are assumed to be fit for employment as they fulfill the minimum requirements for graduation.

Sampling Frame

For a probability sample, the sampling frame is “a complete list of all the cases in the population from which your sample will be drawn” (Saunders et al., 2009). Sampling frame of this study was list of graduating students in the university obtained from the university registrar. The sampling frame contained 612 students.

Sample Size

The study employed structural equation modeling (SEM) to test its hypotheses. The SEM fit model depends mainly on the sample size and it helps support the sufficient statistical power and precision of the parameter estimates in an SEM research and in order to apply SEM the sample size should involve at least 100 to 200 (Ahmed, 2014).

When the target population size is known, Yamane's (1967) provides a simplified formula to calculate sample size. His formula is presented as follows.

$$n = \frac{N}{1 + Ne^2}$$

Where, n= sample size

N= population size

e= the desired level of precision (5%)

Based on Yamane's formula the sample size of the study was calculated. For business and social science research a confidence level of 95 percent, margin of error ± 5 percent is acceptable (Krejcie and Morgan, 1970).

As per the data obtained from College of Business and Economics registrar office, there were about 230 female and 382 male totaling 612 regular business students expected to be graduated in the academic year of 2016/17.

$$n = \frac{612}{1 + 612 * 0.05 * 0.05} = 242$$

Accordingly about 242 questionnaires were distributed to graduating students and 206 usable questionnaires were returned implying a response rate of 85%.

Distributed and returned questionnaires for employers are presented in the table below.

No	Industry	Questionnaire Distributed	Questionnaire Returned
1	Financial Industry	81	68
2	Beverage Industry	30	23
3	Ethiopian Revenues and Customs authority	8	6
4	Ethiopian airlines	8	7
5	Ethio-telecom	8	6
Total		135	110

Table 3.1 Distributed and returned questionnaires

Chapter Four: Results and Discussion

4.1. Introduction

This chapter presents quantitative statistics in order to analyze data and test hypothesis. Specifically, this chapter is composed of four major sections. Section 4.1 tests the non-response bias, section 4.2 discusses about questionnaire pilot testing, section 4.3 is about profile of the respondents, and section 4.4 assesses the quality of the data. Section 4.5 conducts confirmatory factor analysis. **Section 4.6 discusses about findings of empirical results.**

4.2. Testing for Non-Response Bias

It is likely that data may not be fully collected when the instrument is questionnaire. Test for non-response bias needs to be conducted if there are questionnaires distributed but not collected. The study distributed 135 and 242 questionnaires for employers and graduating students respectively. Among distributed, 81% and 85% were returned from employers and graduates respectively. This implies a need to conduct independent t-test to check non-response bias if there is any mean difference between late and early respondents. There is no consensus around the number of items to be taken to conduct the test. Armstrong and Overton, (1977) used 53 of the 112 items (47%); Lambert and Harrington (1990) chose 28 of 56 original questions; whilst Yaghi (2006) used 20 of the 74 items. This study used 40% of the collected data half of which (20%) are late respondents and half of them are early respondents. The t-tests results revealed that for almost all the items (100% and 95%), for employers and students respectively, there were no significant difference between the late and early respondents ($p > .05$) indicating that non-response bias was not a problem for the data. (See in the appendix B).

4.2.1. Questionnaire Pilot Testing

In business research, a questionnaire is a common tool used to collect data. This questionnaire should be piloted. The pilot test aims to refine the questionnaire to ensure that respondents have no problems answering the questions. It assesses, also, the validity and reliability of the questions (Saunders et al., 2009). A pilot study should be undertaken for pre-testing the questionnaire. Based on the results of the pilot study, the questionnaire may be edited (Kothari, 2004).

A pilot study was conducted prior to the beginning of the full study. The objective of the pilot study was to establish that the respondents understand the questions in the survey, to solicit feedback for improvements to the instrument. The responses showed the general ease of completion of the questionnaire, and there were no comments or improvement suggestions from the respondents. Therefore, no further adjustments were needed. In addition, a reliability test was conducted to examine the internal consistency of the instruments employed in this study.

4.2.2. Validity

Validity refers to the extent to which an instrument measures what it is supposed to measure (Bryman and Bell, 2007). A measure's validity relies on the definitions of the variable which is used to design the measure. There are different types of validity such as content, external, construct (convergent and discriminant) validity. The questionnaire was evaluated by respondents (HR professionals), graduating students and university lecturers and they responded that the contents included in the questionnaire were good and easy to understand implying that the instrument fulfills content validity. The questionnaire has adequate sample size to make inference about the population as a result it fulfills external validity or the study can generalize about the population based on the sample. Convergent and discriminant validity are assessed in the factor analysis part of this chapter.

4.2.3. Reliability

Bordens and Abbott (2014) showed that reliability related to the extent to which a test measured consistently regardless of what it measured or whether or not a test produced the same results on different occasions. The measure was reliable when respondents gave the same answer in different situations. A question might be unreliable because it contained words which could be misunderstood and, consequently, which might cause confusion. Researchers use multiple-item indicators to create reliable indicators.

The values of Cronbach's alpha range from 0 (observed items are not consistent) to 1 (they completely correlate). This means that internal consistency will be acceptable if Cronbach's alpha is high (George and Mallery, 2003). Hair et al. (2010) reported that Cronbach's alpha ought to be equal to or above 0.70 or 0.60.

In order to achieve Cronbach's alpha, the study may use a smaller sample (Ahmed 2014). Therefore, 15 initial questionnaires was delivered to and collected from HR professionals and

students in order to obtain some assessment related to the questions' reliability and validity. Accordingly 12 and 14 usable questionnaires were returned (a response rate of 80% and 93%) from HR professionals and students respectively. This was an acceptable response rate according to Saunders et al. (2009) who recommended that a 30% response rate was reasonable for questionnaires delivered and collected for pilot test.

This study used the following three criteria to evaluate reliability: First, Cronbach's alpha ought to be above 0.70 (Hair et al., 2010). Second, corrected item-total correlations ought to be retained if the value not less than 0.35 (Netemeyer et al., 2003). Correlated item-total correlations should not be less than 0.3 (Bernstein, 1994). This value revealed the extent to which, within a scale, an item correlated with the other items. It was employed to determine the items which ought to be retained in a scale to support construct validity. For better reliability, this study used 0.35 as cutoff point. Third, inter item correlation should not exceed 0.8 for all pairs of items (Bernstein, 1994).

As can be seen in Table 4.1 shows that the measure of GS began with 15 items. Four Items were dropped. Hence, using 11 items Cronbach alpha for GS was 0.875. PQ began with 8 items, of which 1 was dropped, as a result; Cronbach alpha for PQ was 0.885. MC did not drop any item and its Cronbach alpha was 0.792. SU dropped two items because their inter item correlation with other items were above 0.8 resulting in Cronbach alpha of 0.891. EM also did not drop any item and its Cronbach alpha was 0.789.

Table 4.1: Instrument Reliability

Constructs	No. of items proposed	No. of items dropped	No. of items retained	Cronbach's alpha
Generic skill (GS)	15	4	11	0.875
Personal quality (PQ)	8	1	7	0.885
Meta cognition (MC)	5	-	5	0.792
Subject understanding (SU)	12	2	10	0.891
Employability (EM)	5	-	5	0.789

4.3. Description of Profile of the Respondents

The findings in Table 4.2 below shows that 3%, 61% and 34% of HR professionals are diploma, degree and masters and above holders respectively which implying that they are educated. Looking at respondents' participation in recruitment and selection process in the last one year reveals the majority of them (73%) participated and the remaining 27% did not participate. This implies majority of them directly participated in evaluating competency of graduates.

Respondents' participation in recruitment and selection of business graduates shows that 88% did participate implying that they are very close with the study's target group. Looking in to students' profile on gender, 66% were male while the rest 34% were female.

Table 4.2 Profile of the respondents

Variable	Category	Frequency	Percentage
Education	Diploma	4	3%
	Degree	68	61%
	Masters and above	38	34%
Participation in recruitment and selection in the last 12 months	Yes	81	73%
	No	29	27%
Participation in recruitment and selection of business graduation	Yes	97	88%
	No	13	12%

4.4. Data Analysis: Assessing the Quality of Data

4.4.1. Assessing the Sample Size

The sample size should involve at least 100 to 200 cases in order to conduct structural equation modeling (Loehlin, 2004). The research employed Confirmatory Factor Analysis (CFA) to reach at the final research results. The sample size affects the accuracy of all the statistical estimates. The sample size used for this study was 110 and 206 from HR professionals and graduating students respectively which are suitable for performing the CFA.

4.4.2. Assessing Missing Data

In social science research, missing (or incomplete) pieces of data are a common problem. There are many reasons for the occurrence of missing data which, usually, are beyond the researcher's control. As example, the respondent forgot to answer some items in the questionnaire and he/she was absent on the day of data collection or some questions were sensitive for the respondent or missing data might occur because the questionnaire is too long. On the other hand, missing data may cause the following two negative effects on the research results: (1) it may produce biased estimates and (2) it reduces the model's fit (Ahmed 2014).

Hair et al, (2010) reported that variables or cases ought to be omitted if they had 50% or more missing data. Therefore, the researcher omitted 4 and 3 cases from questionnaire collected from HR professionals and graduating students respectively. Hence, the numbers of responses were reduced from 114 to 110 and from 209 to 206 usable questionnaires from HR professional and students respectively. These were enough for conducting CFA. (Appendix C)

4.4.3. Assessing outliers

Outliers are extreme values which are either on one or a set of variables (Tinsley and Brown, 2000). Outliers can cause negative effects on data analysis. For example, data can contain collinearities and non-normality which can lead to negative variance estimates (Brown, 2006). These effects can deform statistical results which cannot be generalized. Outliers can occur as “a result of an error in the data file (e.g., entry of an incorrect value), a programming error (e.g., an error in recoding or transforming variables or a failure to identify missing data values correctly), or the presence of a valid but exceptional data point” (Tinsley and Brown, 2000). Outliers can be univariate related to cases with an extreme value on a single variable or these values exist in cases of two or more variables (multivariate outliers) (Kline, 2005).

In order to find univariate outliers, the researcher used the frequency distributions of z scores. If the Z score is greater than 3.29 with $p < .001$, it indicates that there is a univariate outlier (Tinsley and Brown, 2000). Accordingly, based on the previous rule, there were no outlier cases in this study.

There are two common techniques of dealing with outliers namely trimming and winsorizing. Trimming is eliminating data points from analysis usually done when data is out of range or entry error and winsorizing is assigning outlier the next highest or lowest value found in the sample that is not an outlier done when small amounts of scores are legitimate outliers. Trimming or winsorizing less than 5% of the data points will not likely affect the hypothesis testing outcome (Rocky Mountain University, 2015). In order to address these outliers the questionnaires were reviewed to ensure that the data of outliers' cases were entered correctly and there were no data entry errors and winsorizing techniques was applied because all the outliers were legitimate and after that all outliers were completely cleaned from the original data set.

4.4.4. Assessing Linearity Assumption

Linearity defines the dependent variable as a linear function of the predictor (independent) variables. Standard multiple regression can only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature. As there are many instances in the social sciences where non-linear relationships occur (e.g., anxiety), it is essential to examine analyses for non-linearity. If the relationship between independent variables and the dependent variable is not linear, the results of the regression analysis will under-estimate the true relationship. This under-estimation carries two risks: increased chance of a Type II error for that independent variables, and in the case of multiple regression, an increased risk of Type I errors (over-estimation) for other independent variables that share variance with that independent variables. If linearity is violated all the estimates of the regression including regression coefficients, standard errors, and tests of statistical significance may be biased (Keith, 2006).

The study conducted curve estimation for all the relationships in the model and all the relationships were sufficiently linear to be tested using a covariance based structural equation modeling algorithm. (Appendix D)

4.4.5. Assessing Multicollinearity Assumption

Multicollinearity refers to the assumption that the independent variables are uncorrelated. The researcher is able to interpret regression coefficients as the effects of the independent variables on the dependent variables when collinearity is low. This means that we can make inferences about the causes and effects of variables reliably. Multicollinearity occurs when several independent variables correlate at high levels with one another, or when one independent variable is a near linear combination of other independent variables. The more variables overlap (correlate) the less able researchers can separate the effects of variables (Keith, 2006). If this assumption is not satisfied, autocorrelation is present. Multicollinearity can result in misleading and unusual results, inflated standard errors, reduced power of the regression coefficients that create a need for larger sample sizes (Jaccard et al., 2006; Keith, 2006).

Widely used technique of identifying the existence of multicollinearity is calculating variance inflation factor (VIF) between all independent variables. The VIF is an index of the amount that the variance of each regression coefficient is increased over that with uncorrelated independent variables (Keith, 2006). When a predictor variable has a strong linear association with other predictor variables, the associated VIF is large and is evidence of multicollinearity (Shieh, 2010). A rule of thumb of collinearity VIFs is 3.3 or lower to suggest no multicollinearity in the model (Kock, 2013).

As can be seen in table 4.4, the study calculated VIF for all independent variables in SPSS and the results revealed that all of the VIF results are below the threshold of 3.3 indicating there is no multicollinearity problem for the data.

Table 4.3 Statistics of Multicollinearity Test

No.	Independent Variable	VIF
1	Personal cognition	1.325
2	Generic skills	1.514
3	Subject understanding	1.542
4	Meta cognition	1.255

4.4.6. Assessing Normality Assumption

Normality focuses on the extent to which the sample data distributes according to normal distribution (Hair et al., 2010). The researcher used skewness and kurtosis to evaluate the normality of the observed items. Skewness is “a measure of the asymmetry of the probability distribution of a real-valued random variable”. On the other hand, kurtosis refers to “the peakedness or flatness of the distribution compared to the normal distribution” (Landau and Everitt, 2003). Values of skewness can be positive, negative, or zero. Skewness’s value, which is zero, indicates a perfectly symmetrical distribution, whilst a positive skewness value indicates that the tail on the right side is longer. On the contrary, a negative value refers to left-tailed. On the other hand, a kurtosis value is zero for normal distributions, whilst it is negative for flat distributions (low kurtosis) and a positive value for peaked distributions (high Kurtosis). As a rule of thumb, the values of skewness and kurtosis should be between -1 and +1 in order to obtain a reasonably normal distribution (Bachman, 2004). The study examined the indicators’ univariate kurtosis and skewness and the values of skewness and kurtosis were well within their respective rule-of-thumb ranges (between -1 and 1) which provided support for univariate normality (see in the appendix E).

4.4.7. Confirmatory Factor Analysis

There are broad ranges of analytical tools available to analyze quantitative research results. As a second generation data analysis technique, structural equation modeling (SEM) stands out by offering benefits not provided by first generation statistical techniques such as correlation analysis, exploratory factor analysis, multiple regression, discriminant analysis, analysis of variance or logistic regression (Bagozzi and Yi 2012; Haenlein and Kaplan 2004). SEM has the ability to evaluate latent variables in the measurement model and simultaneously test multiple relationships of latent variables in the structural model. Factor analysis and hypotheses are tested in the same analysis, hence providing a more rigorous analysis of the proposed research model (Gefen et al, 2000).

Structural equation modeling (SEM) is defined as “a statistical method that takes a confirmatory (i.e., hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon”. This theory represents “causal” processes which generate observations on multiple variables (Byrne, 2010). SEM aims to test the relationships between one or more independent and dependent variables by assessing the extent to which the hypothetical constructs are suitable or fit with the obtained data. These variables may be measured (manifest or observed) or latent. The

observed variable, such as income, heart rate or weight, is measured directly whilst the latent variable is not measured directly but through two or more observed variables, for instance, buying behavior or personality (Kline, 2005). In achieving the results, a SEM analysis has many stages (see Figure 4.1).

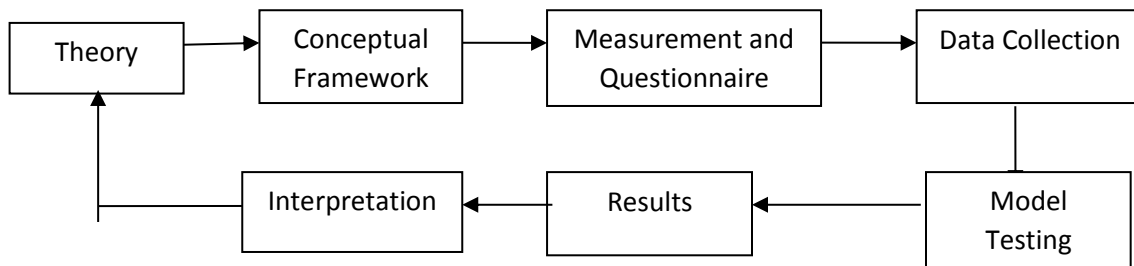


Figure 4.1: The process of SEM results

When researchers have complex relationships with multi-dimensions, SEM can test all these relationships simultaneously. SEM is considered to be the only statistical technique to perform this analysis (Hair et al, 2010). SEM is used to test a theory. SEM cannot work properly without prior knowledge. This means that a conceptual framework or relationships between variables must be built based on an extensive literature review (Tabachnick and Fidell, 2001).

SEM employs CFA rather than an exploratory approach to data analysis, and enables better inferential analysis (Hair et al, 2006). Secondly, although hypothesis testing is difficult in most multivariate techniques, SEM offers a less difficult means to test research hypotheses, and enables the analysis of relationships between dependent variables (Kline, 2005). Thirdly, SEM enables explicit estimates of error variance parameters, which is not possible in traditional multivariate techniques (Holmes-Smith, 2007; Kline, 2005).

The SEM method is a powerful multivariate analysis technique which can be used for two purposes. Firstly, similar to factor analysis, SEM provides a parsimonious summary of the interrelationships among variables. Expanding on the potential of EFA, SEM can include CFA that can test specific hypotheses about the structure of the factor loadings and inter-correlations (Holmes-Smith, 2007). Secondly, similar to path analysis, SEM can test hypothesized relationships among constructs with a linear equation system (Weston and Gore, 2006). Both

applications mean that the SEM method can simultaneously assess the properties of the underlying measurement model and test the theoretical propositions. For analytical purposes, the SEM method can be separated into two models: the measurement model and the structural model (Byrne, 2001). The measurement model is concerned with the variables that are supposed to measure the concept or, in other words, the measurement model represents the CFA model, and shows how the latent variables, or constructs, are represented by their respective indicators. As mentioned above, the SEM method thereby adopts a confirmatory approach. The subsequent structural model in SEM describes the relationships between the latent variables, or constructs. Both models together are called the composite, or full, structural model (Weston and Gore, 2006). This study conducted SEM process using Analysis of Moment Structures (AMOS) version 20.0 for both measurement and structural models.

Measurement Model

The main purpose of using SEM to assess the measurement model is to find the most parsimonious model which is well fitting and valid. A measurement model is employed to evaluate construct validity in terms of convergent and discriminant validity to discover the extent to which the measures have adequate internal consistency by conducting the necessary tests and the acceptance levels for goodness of fit. The full structural model will then only be valid and reliable when the measurement model is based on theory and well defined constructs, so that the subsequent structural model is based on a solid theoretical foundation (Paschke, 2009).

Table 4.4 Model fit
CMIN

Model	NPAR	CMIN
Default model	127	3509.104

AIC

Model	AIC	BCC	BIC	CAIC
Default model	3763.104	3824.679		

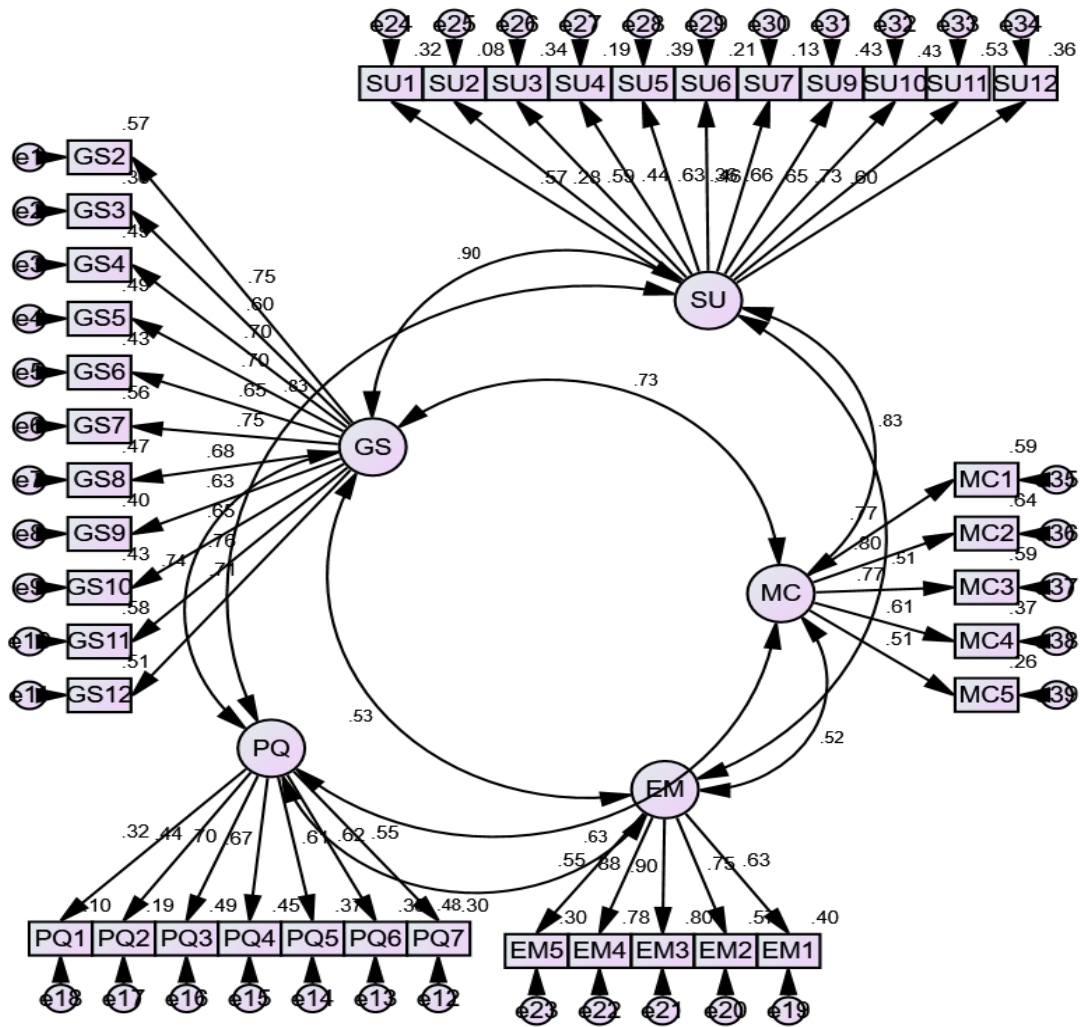


Figure 4.2: Proposed Measurement Model

Regression Weights: (Group number 1 - Default model)

Item		Variable	Estimate	SMC	S.E.	C.R.	P	Convergent validity
GS2	<---	GS	.754	0.569				Holds
GS3	<---	GS	.603	0.364	.080	8.617	***	Holds
GS4	<---	GS	.697	0.486	.087	10.057	***	Holds
GS5	<---	GS	.702	0.493	.097	10.075	***	Holds
GS6	<---	GS	.653	0.426	.102	9.248	***	Holds
GS7	<---	GS	.751	0.564	.084	11.009	***	Holds
GS8	<---	GS	.682	0.465	.080	9.881	***	Holds
GS9	<---	GS	.631	0.398	.092	9.055	***	Holds
GS10	<---	GS	.654	0.428	.100	9.409	***	Holds
GS11	<---	GS	.760	0.578	.075	11.229	***	Holds
GS12	<---	GS	.712	0.507	.080	10.341	***	Holds
PQ7	<---	PQ	.548	0.300				Holds
PQ6	<---	PQ	.619	0.383	.143	6.654	***	Holds
PQ5	<---	PQ	.612	0.375	.121	6.332	***	Holds
PQ4	<---	PQ	.670	0.449	.169	6.624	***	Holds
PQ3	<---	PQ	.702	0.493	.147	6.847	***	Holds
PQ2	<---	PQ	.441	0.194	.131	5.081	***	Doesn't holds
PQ1	<---	PQ	.317	0.100	.145	3.879	***	Doesn't holds
EM1	<---	EM	.631	0.398				Holds

Item		Variable	Estimate	SMC	S.E.	C.R.	P	Convergent validity
EM2	<---	EM	.753	0.567	.131	8.961	***	Holds
EM3	<---	EM	.897	0.805	.141	10.097	***	Holds
EM4	<---	EM	.884	0.781	.139	10.003	***	Holds
EM5	<---	EM	.547	0.299	.100	6.984	***	Holds
SU1	<---	SU	.566	0.320				Holds
SU2	<---	SU	.277	0.077	.151	3.633	***	Doesn't holds
SU3	<---	SU	.586	0.343	.148	6.798	***	Holds
SU4	<---	SU	.438	0.192	.178	5.463	***	Doesn't holds
SU5	<---	SU	.626	0.392	.163	7.103	***	Holds
SU6	<---	SU	.463	0.214	.134	5.705	***	Doesn't holds
SU7	<---	SU	.364	0.132	.134	4.631	***	Doesn't holds
SU9	<---	SU	.658	0.433	.206	7.429	***	Holds
SU10	<---	SU	.654	0.428	.175	7.296	***	Holds
SU11	<---	SU	.727	0.529	.167	7.834	***	Holds
SU12	<---	SU	.598	0.358	.174	6.808	***	Holds
MC1	<---	MC	.768	0.590				Holds
MC2	<---	MC	.798	0.637	.102	11.777	***	Holds
MC3	<---	MC	.769	0.591	.097	11.016	***	Holds
MC4	<---	MC	.609	0.371	.112	7.922	***	Holds
MC5	<---	MC	.512	0.262	.114	6.723	***	Doesn't holds

Table 4.5 Convergent Validity for proposed model

As can be seen in the table above, few items , PQ1, PQ2, MC5, SU2,SU4,SU6, and SU7 have a lowest loading or squared multiple correlations than expected to be (0.3). This implies that these items or observed variables do not actually converge to their respective unobserved variable. Hence they have been dropped to get a better convergent validity of the model and better estimates.

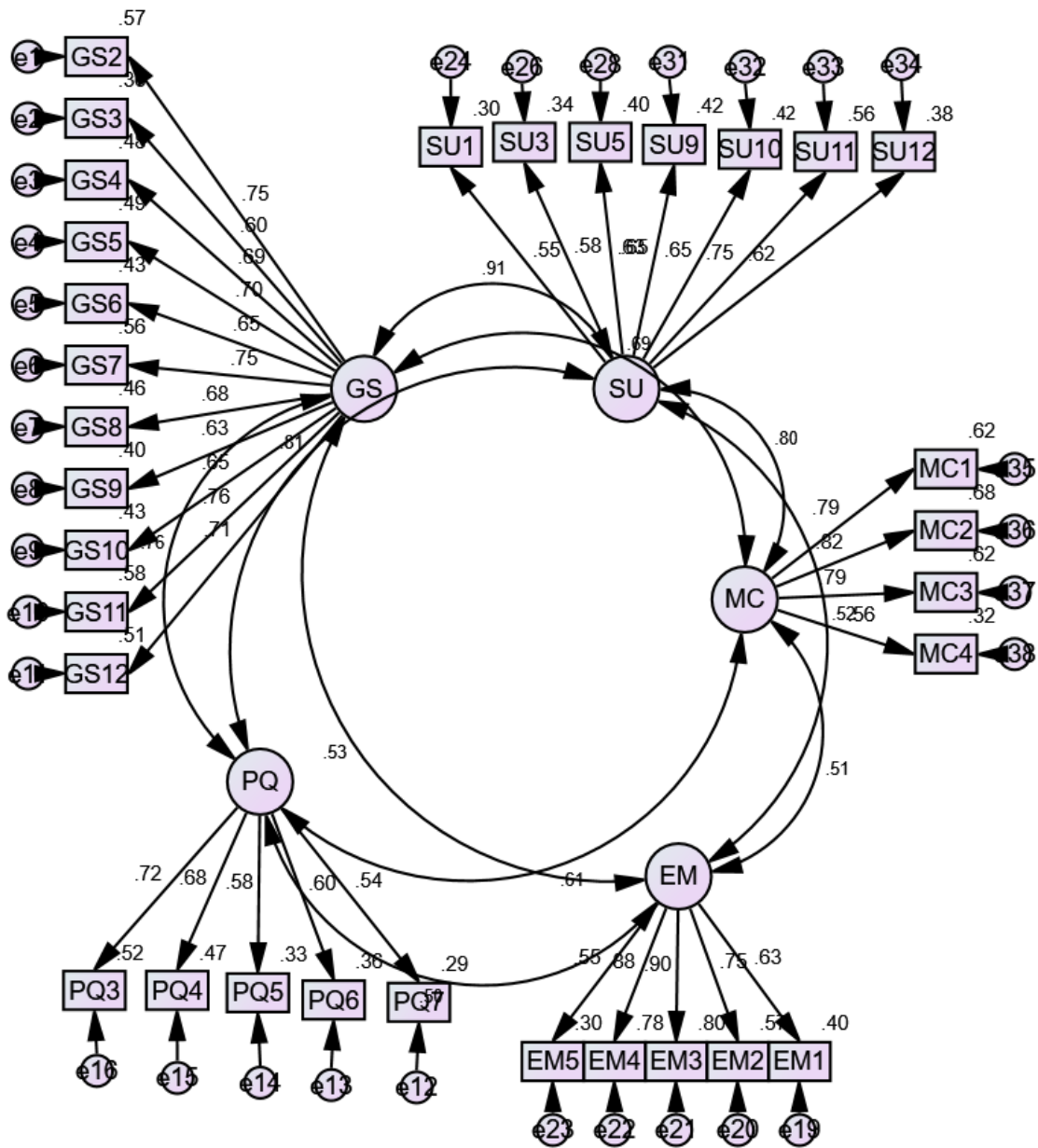


Figure 4.1. Re-Specified Measurement model

CMIN

Model	NPAR	CMIN
Default model	106	2653.752

AIC

Model	AIC	BCC	BIC	CAIC
Default model	2865.752	2906.427		

Regression Weights: (Group number 1 - Default model)

			Estimate	SMC	S.E.	C.R.	P	Convergent validity
GS2	<---	GS	0.752	0.566				Holds
GS3	<---	GS	0.603	0.364	.080	8.604	***	Holds
GS4	<---	GS	0.694	0.482	.088	10.009	***	Holds
GS5	<---	GS	0.701	0.491	.097	10.053	***	Holds
GS6	<---	GS	0.652	0.425	.102	9.227	***	Holds
GS7	<---	GS	0.751	0.564	.084	11.000	***	Holds
GS8	<---	GS	0.679	0.461	.081	9.822	***	Holds
GS9	<---	GS	0.63	0.397	.092	9.039	***	Holds
GS10	<---	GS	0.655	0.429	.101	9.409	***	Holds
GS11	<---	GS	0.763	0.582	.075	11.258	***	Holds
GS12	<---	GS	0.714	0.510	.080	10.356	***	Holds
PQ7	<---	PQ	0.541	0.293				Holds

			Estimate	SMC	S.E.	C.R.	P	Convergent validity
PQ6	<---	PQ	0.598	0.358	.145	6.424	***	Holds
PQ5	<---	PQ	0.578	0.334	.122	6.019	***	Holds
PQ4	<---	PQ	0.685	0.469	.178	6.512	***	Holds
PQ3	<---	PQ	0.721	0.520	.155	6.733	***	Holds
EM1	<---	EM	0.632	0.399				Holds
EM2	<---	EM	0.753	0.567	.131	8.977	***	Holds
EM3	<---	EM	0.896	0.803	.140	10.115	***	Holds
EM4	<---	EM	0.884	0.781	.138	10.024	***	Holds
EM5	<---	EM	0.547	0.299	.100	6.994	***	Holds
SU1	<---	SU	0.549	0.301				Holds
SU3	<---	SU	0.581	0.338	.156	6.568	***	Holds
SU5	<---	SU	0.631	0.398	.174	6.918	***	Holds
SU9	<---	SU	0.651	0.424	.218	7.156	***	Holds
SU10	<---	SU	0.648	0.420	.185	7.027	***	Holds
SU11	<---	SU	0.746	0.557	.181	7.668	***	Holds
SU12	<---	SU	0.617	0.381	.187	6.749	***	Holds
MC1	<---	MC	0.788	0.621				Holds
MC2	<---	MC	0.824	0.679	.097	12.392	***	Holds
MC3	<---	MC	0.787	0.619	.094	11.397	***	Holds
MC4	<---	MC	0.564	0.318	.105	7.634	***	Holds

Table 4.6 Convergent validity for re specified model

As can be observed in the table above, all observed variables or items have a squared multiple correlation value of 0.3 and above implying that they actually converge to their respective unobserved variable. Hence, the model fulfills convergent validity and the model is fit for further analysis.

Structural model

Structural model is part of structural equation modeling (SEM) and shall be conducted in two steps (Hair et al, 2006).

The first step involves testing the full measurement model's fit, as well as its construct validity. The goal of testing the measurement model is to establish how well the observed variables of a hypothesized construct relate to one another. This was reported in measurement model and the result shows acceptable model fit and validity. However, the test of the full measurement model does not investigate the nature of the relationships between constructs beyond simple correlations. As such, a measurement model is a means towards establishing the fit and validity of a structural model, rather than an end in itself (Hair et al, 2006).

Thus, the second step in the process requires testing of the structural model, including for the significance of the structural relationships. The structural model can be tested only after adequate measurement and construct validity are established, as the latter is the groundwork for the structural model. Hence, this section reports on the tests of the structural model.

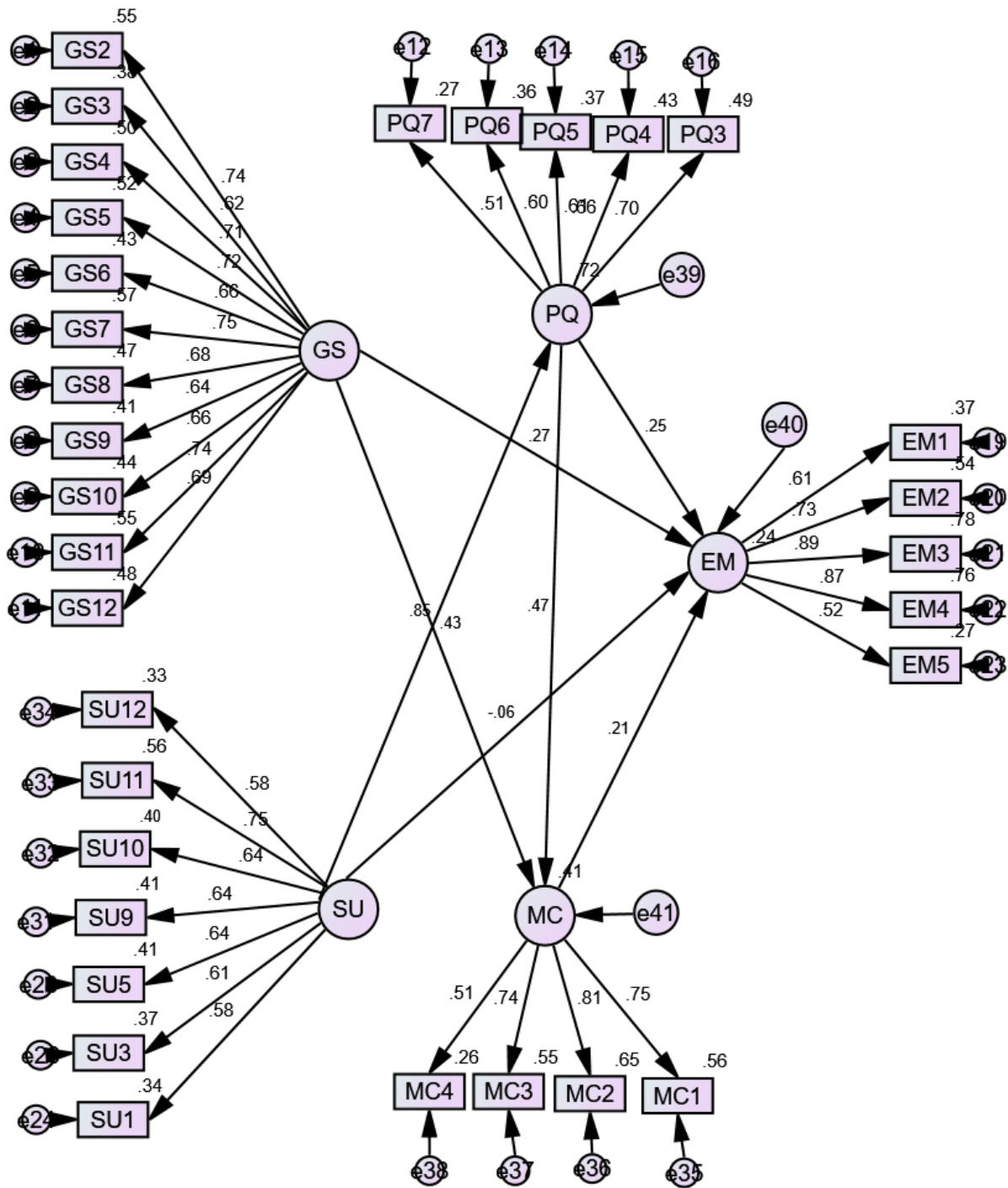


Figure 4.4 Structural Model

Regression Weights: (Group number 1 - Default model)

Item		Variable	Estimate	SMC	S.E.	C.R.	P	Convergent validity
GS4	<---	GS	0.71	0.504	.092	9.933	***	Holds
GS5	<---	GS	0.719	0.517	.102	9.986	***	Holds
GS6	<---	GS	0.657	0.432	.108	9.013	***	Holds
GS7	<---	GS	0.753	0.567	.088	10.681	***	Holds
GS8	<---	GS	0.684	0.468	.084	9.632	***	Holds
GS9	<---	GS	0.640	0.410	.096	8.952	***	Holds
GS10	<---	GS	0.665	0.442	.105	9.296	***	Holds
GS11	<---	GS	0.739	0.546	.079	10.565	***	Holds
PQ7	<---	PQ	0.515	0.265				Holds
PQ6	<---	PQ	0.597	0.356	.158	6.189	***	Holds
PQ5	<---	PQ	0.609	0.371	.135	6.020	***	Holds
PQ4	<---	PQ	0.656	0.430	.188	6.192	***	Holds
PQ3	<---	PQ	0.701	0.491	.166	6.435	***	Holds
EM1	<---	EM	0.608	0.370				Holds
EM2	<---	EM	0.733	0.537	.131	8.974	***	Holds
EM3	<---	EM	0.885	0.783	.140	10.110	***	Holds
EM4	<---	EM	0.872	0.760	.139	10.018	***	Holds
EM5	<---	EM	0.524	0.275	.100	6.991	***	Holds
SU1	<---	SU	0.579	0.335				Holds

Item		Variable	Estimate	SMC	S.E.	C.R.	P	Convergent validity
SU3	<---	SU	0.612	0.375	.151	6.784	***	Holds
SU5	<---	SU	0.642	0.412	.166	6.996	***	Holds
SU9	<---	SU	0.638	0.407	.202	7.183	***	Holds
SU10	<---	SU	0.636	0.404	.174	6.981	***	Holds
SU11	<---	SU	0.749	0.561	.171	7.708	***	Holds
MC1	<---	MC	0.745	0.555				Holds
MC2	<---	MC	0.808	0.653	.099	12.474	***	Holds
MC3	<---	MC	0.745	0.555	.095	11.254	***	Holds
MC4	<---	MC	0.511	0.261	.106	7.514	***	Holds
SU12	<---	SU	0.576	0.332	.174	6.420	***	Holds
GS2	<---	GS	0.738	0.545				Holds
GS3	<---	GS	0.62	0.384	.083	8.657	***	Holds
GS12	<---	GS	0.692	0.479	.084	9.740	***	Holds

Table 4.7 Variable Relationship

Direct Relationships

Variable	Effect	Variable	Estimate	SMC	S.E.	C.R.	P -value
PQ	<---	SU	0.846	0.716	.164	5.649	***
MC	<---	GS	0.434	0.188	.082	3.912	***
MC	<---	PQ	0.469	0.220	.143	3.458	***

Variable	Effect	Variable	Estimate	SMC	S.E.	C.R.	P -value
EM	<---	GS	0.268	0.072	.103	2.160	.031
EM	<---	SU	-0.056	0.003	.286	-.255	.799
EM	<---	MC	0.209	0.044	.121	1.938	.053
EM	<---	PQ	0.248	0.062	.248	1.190	.234

Hypothesis testing

The table below tests the hypothesis proposed earlier empirically. The direct relationships, the indirect relationships and the relationship among independent variables has been outlined below.

	Exogenous variables	Mediator variable	Endogenous Variables	Path coefficients	P-value	Results	Type of the mediating effects
H							
Direct Relationships							
H1	GS		EM	0.268	0.031	Supported	
H2	GS		EM	0.268	0.031	Supported	
H3	SU		EM	-0.056	0.799	Not supported	
H4	MC		EM	0.209	0.053	Not Supported	

H5	SU		PQ	0.846	***	Supported	
H6	GS		MC	0.434	***	Supported	
H7	PQ		MC	0.469	***	Supported	
Indirect Relationships							
H8	GS	MC	EM	0.091	***	Supported	Partial/complementary
H9	SU	PQ	EM	0.293	***	Supported	Full/indirect only
H10	PQ	MC	EM	0.098	***	Supported	Full/ indirect only
H11	PQ	MC	EM	0.098	***	Supported	Full/ indirect only

Table 4.8 Hypothesis Testing

Discussion of the results

The discussion of this research is presented in four sections. The first section presents the descriptive statistics. The second section presents the relationship among employability skills. The third section discusses the direct effects of employability skills on employability. The fourth section discusses about the indirect effects of employability skills on employability.

Descriptive Analysis

As presented in the table above, respondents, graduating students, reflected that the highest skill they possess is meta-cognition followed by personal quality with a mean of 3.96 and 3.72 respectively.

Variable	Mean
MC	3.96
PQ	3.72
SU	3.69
GS	3.45

Table 4.9 Perceived skills possessed by graduating students.

This implies that the graduates are highly willing and interested in continuous learning and development. In contrary, the skill they ranked least was the extent of generic skill they possess. This indicates that the graduates are less confident regarding their skills to write clear reports, retrieve information, prioritize tasks and resolve conflicts. The mean score also purports that the skillset of the graduates requires development and indicating a need for a course of action set at improving the skill set of the graduates. Employers differ according to the sector they work in and the skills required for it. Indeed, according to Canny (2004), requirement recruitments from different sectors vary. For instance, those in manufacturing place more emphasis on technical skills than individual characteristics. A study by Tan and French-Arnold (2012), for example, established that nongovernment organizations (NGOs) and industry employers regard employable graduates as those prepared to work, having the appropriate skills and competencies and the ability to learn and relearn. Additionally, while NGOs focus more on humanitarian values (such as honesty, caring, patience) and socially desirable attitudes (such as being open, curious and confident) as the key characteristics of employability, other industry employers focus on attitude (such as preparedness, positivity, interest, dedication, team spirit, and readiness to face challenges and hardship) and work-related competencies (such as the ability to apply theory in the work environment, the ability to speak English and communication skills) as important characteristics.

4.4.8. Profile of Respondents by Gender

As can be seen in the table above graduates' perception on the skills they possess were compared based on gender.

Skills	Mean		
	Male (n1: 136)	Female (n2:70)	Combined (n: 206)
Generic skills	3.41	3.53	3.45
Meta cognition	3.95	3.98	3.96
Personal qualities	3.76	3.70	3.74
Subject understanding	3.79	3.50	3.69

Table 4.10: Gender and Skills

Male graduates were found to possess higher subject understanding while female graduates were found to possess greater generic skills than their male counter parts. Gender has been found to not being a factor for attributes of Meta cognition and Personal Qualities.

4.4.9. Direct effects of USEM on Employability

The below section discusses the relationship between the skills indicated on the USEM model and graduate employability.

GS has a direct positive impact on EM

Empirical results of the study revealed that GS has a statistically significant positive effect on employability ($\beta = 0.268$, $P < 0.05$) supporting H1. The result goes in alignment with the study carried out by Pitan (2015) Sopido (2014) and Wye and Liew (2005).

As purported by the results of the different researchers, graduate employability is highly affected by the types and extent of the skills possessed by the graduates. Companies are looking forward to adding skillsets that can give them an edge in today's competitive nature of business environment and not just adding full time employees to their staffing needs. Possessing the skills highly indicated as important, interpersonal skills, organizing skills, the ability to translate ideas into action, and information technology skills (Sopido, 2014) can ease the process of securing and sustaining employment.

PQ has a direct positive impact on EM

Empirical results of the study revealed that PQ has a statistically insignificant positive effect on employability ($\beta = 0.248$, $P > 0.05$) supporting H2.

The study is supported by the researches of Aliaz (2007) and Shukran et al. (2004). In today's world of graduates highly expected to be emotionally intelligent, work unsupervised under pressure and respond to changing circumstances and challenges.

SU has a direct positive impact on EM

Empirical results of the study revealed that SU has a statistically insignificant positive effect on employability ($\beta = 0.056$, $P > 0.05$) supporting H3.

The result highly goes with the findings of Saunders V. and Zuzel, K. (2010), Kolawole and Arikpo (2008). Subject understanding has a positive effect on employability. But the degree of its effect is highly dependent on the destination sector. McIlveen et al (2013), clearly indicates that high subject understanding is required for graduates expecting to join the computer engineering, and

legal companies while less subject understanding was demanded for those interested in serving on the humanitarian sector.

MC has a direct positive impact on EM

Empirical results of the study revealed that SU has a statistically insignificant positive effect on employability ($\beta = 0.209$, $P > 0.05$) supporting H4. The result highly goes with the findings of Panagiotakopoulos (2012) & Little (2003).

Graduates that are willing and highly interested in continuous learning and development display a proactive control of where they want to be in the next few years and how they can make an impact in an organization and therefore are highly deemed employable.

4.4.10. Relationship among USEM

Empirical result of the study shows that the relationships among employability skills are found to be all positive and statistically significant (with p-value below 0.01). The effects (path coefficients) of SU on PQ, GS on MC, and PQ to MC are 0.846, 0.434, and 0.469 respectively. The effect of SU on PQ is the highest among the relationship observed.

H7: SU has a direct positive effect on PQ

SU has a statistically significant positive effect on PQ. SU affects PQ with a standardized path coefficient of ($\beta = 0.846$, $p < 0.01$). As a result, H5 is rejected, as the empirical result denies the proposed relationship. The result goes against the researches of, Bridgstock R (2009), Katherine Fulgence (2015) & (Pitan, 2016).

Graduates that have high subject understanding were found to greatly possess qualities such as evaluating their weakness and strength periodically, confident in their ability to deal with challenges of employment and life in general, and they can work unsupervised and at times of great pressure.

H6: GS has a direct positive effect on MC

GS has a statistically significant positive effect on MC. GS affects MC with a standardized path coefficient of ($\beta = 0.434$, $p < 0.01$). As a result, H6 is accepted as the empirical result confirms the proposed relationship. The result goes with the findings of Pitan (2015) and Wye and Liew (2005).

The ability of graduates to think creatively, prioritize tasks, and work in a structured manner also the graduate's tendency to be able to easily read and understand directly affects their willingness and ability to engage in continuous learning and development. Being able to prioritize and work in a structured manner gives the graduates the edge to dictate their learning and progress. (Pitan, 2015) Being capable of effective reading, understanding key points creates the platform for a smooth learning (Wye and Liew, 2005)

H8: PQ has a direct positive effect on MC

Empirical results of the study revealed that PQ has a statistically significant positive effect on meta-cognition ($\beta = 0.469$, $P < 0.01$) supporting H7. The result goes in alignment with the study carried out by Shukran et al (2004) and Little (2003).

Possessing the personal qualities desired for securing employment, qualities such as being able to evaluate one's weakness and strength will enable the graduates to take ownership of their personal development and address their learning needs.

4.4.11. The Meditational Effect of USEM on employability

Mediation analysis was performed to test the mediating effect on Personal Qualities, Metacognition and Subject Understanding. This research has four major hypotheses on mediation.

Zhao et al, (2010) suggest three factors that researchers need to take into consideration to testing mediation. First, researchers should use the size of an indirect effect to measure the strength of the mediation effect. Second, the only requirement for determining a mediation effect is the significance of an indirect effect. Finally, a bootstrap test (Preacher and Hayes, 2004) should be used to test the significance of the indirect path. Bootstrapping is regarded as a more rigorous and powerful method for testing the significance of indirect effects.

The following procedures were conducted to analyze mediation which is explained as follows. First, it is crucial to identify the significance of the indirect effect to establish mediation and to decide between two major categories of mediation or non- mediation. Prior to identifying the indirect effect, the path coefficients of both direct and indirect and their significance were estimated simultaneously by using Amos version 20. The significance of indirect effects was assessed by employing procedures.

Second, the classification of mediation or non-mediation is identified based on whether direct effect is significant or not. The p-values for indirect effects were obtained from the bootstrap result using bias corrected confidence intervals in Amos. Next, to determine the type of mediations or non-mediation according to the criteria listed below (Zhao et al, 2010).

1. Complementary mediation occurs if both indirect effect and direct effects are significant and have the same direction.
2. Competitive mediation occurs if indirect effect and direct effects are both significant and have opposite directions.
3. Indirect-only mediation occurs if indirect effect is significant, but not direct effect.
4. Direct-only non-mediation occurs if direct effect is significant, but not indirect effect.
5. No effect non-mediation occurs if both direct and indirect effects are insignificant.

Complementary mediation is known as partial mediation in Baron and Kenny's approach. While the indirect-only mediation is the same as full mediation. However, competitive mediation, direct-only non-mediation and no effect non-mediation fall under no- mediation category in Baron and Kenny's approach which may cause projects to be discarded (Zhao et al, 2010).

There are several implications for the type of mediation or non-mediation established. First, when the first three cases; complementary, competitive and indirect-only mediation occur, the data supports the hypotheses for mediation. Second, in both complementary and competitive mediation, the mediator identified is consistent with the hypothesized theoretical framework, and the significant direct effect signals that there is second possibly omitted mediator which can be examined in any future study. The sign of the direct effect signals for the sign of an omitted indirect path. Third, indirect-only mediation implies that the mediator identified is consistent with hypothesized theoretical framework and there is no need to test for further indirect effects. The sign of the direct effect in direct only non-mediation implies that there is yet undiscovered mediators. Finally, the no effect non-mediation is a failure for testing mediation (Zhao et al, 2010).

The indirect effect of GS on EM via MC

The current study reveals that the indirect effect of generic skills on employability via meta-cognition is found to be statistically significant with a path coefficient of 0.091 and p-value less

than 0.01 indicating that meta-cognition has a partial or complementary mediation in the effect generic skill has on employability. The empirical result of the study confirms the suggested hypothesis and hence H8 is accepted. The results of the research is similar with the findings of Shukran et.al (2004).

The graduates that possess generic skills such as are being able to identify and look for key points while reading, confidence in presenting information to a group of people and being able to prioritize tasks are essential for the graduates to identify learning areas, and pursue in the development of one's potential eventually affecting the propensity of the graduates to get and sustain employment. The effect of the generic skills on the employability of the graduates through metacognition is found to be insignificant on the research carried out by Shukran et .al (2004).

The indirect effect of SU on EM via PQ

The study reveals that the indirect effect of personal qualities on employability via meta-cognition is found to be statistically significant with a path coefficient of 0.293 and p-value less than 0.01 indicating that personal qualities has a full or indirect only mediation in the effect subject understanding has on employability. The empirical result of the study confirms the suggested hypothesis and hence H9 is rejected. The results of the research is different from that of Katherine Fulgence (2015)

Subject understanding has a negative impact on possessing personal qualities (Katherine Fulgence,2015), but study found out that graduates that have high subject understanding possessed qualities such as taking care of actions without being prompted and assessed the level of their performance regularly which in turn affected their chance of securing and sustaining new employment.

The indirect effect of PQ on EM via MC

The findings of the current study reveals that the indirect effect of personal qualities on employability via meta-cognition is found to be statistically significant with a path coefficient of

0.098 and p-value less than 0.01 indicating that meta-cognition has a full or indirect only mediation in the effect personal qualities has on employability. The empirical result of the study confirms the suggested hypothesis and hence H10 is accepted. The results of the research is similar with the findings of Little (2003).

The indirect effect of SU on MC via PQ

The findings of the current study reveals that the indirect effect of subject understanding on meta-cognition via personal qualities is found to be statistically significant with a path coefficient of 0.397 and p-value less than 0.01 indicating that meta-cognition has a partial or complementary mediation in the effect personal qualities has on employability. The empirical result of the study confirms the suggested hypothesis, hence H11 is accepted.

Chapter Five: Conclusion and Recommendation

5. Introduction

The previous chapter presents data analysis based on empirical findings. Accordingly, this chapter presents conclusion of the results, recommendations forwarded, research contributions and lastly direction for future research.

5.1. Conclusion of the Results

Based on the empirical findings of the study this research reached to the following conclusions.

- Generic Skills have the strongest positive effect on employability of business graduates among other factors.
- Skills possessed by the graduates differs based on the Gender of the graduates. Generic Skills are highly possessed by female graduates while a higher subject understanding is seen among male graduates. Metacognition and Personal qualities show no significant difference based on the gender of the graduates.
- Personal Qualities and Subject understanding have not only a direct effect on the employability of the graduates but also a mediating effect on their employability.
- The skill set of the graduates needs development and nurturing.

5.2. Recommendations

Based on empirical findings of the study the following recommendations are forwarded.

- A course of actions should be laid out to identify the sector of interest for the prospective graduates
- Skill sets of the graduates need to be identified before completion of program.
- Industry profile on specific skill requirement needs to be developed
- Employability center needs to be developed for graduates

5.3. Directions for Future Research

As this research mainly focused on the current skill possession of the business graduates and their employability. There is still a lack of study for impact of current curricula and graduates stay at the institution on the skillset of the graduates. Moreover the skill requirements of the destined employers per sector and potential gaps need to be identified.

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Appendices

Appendix A: Questionnaire

Addis Ababa University
College of Business and Economics
MBA Program

Dear participant, I am a graduate student of business administration at the university of Addis Ababa. I am currently conducting a research entitled “Business Graduate Employability: The Case of Addis Ababa University”.

The participation will be very helpful to reach at genuine finding. Any information you provide is confidential and will not be used for any purpose other than the research. Dear respondent please adhere strictly to your current status and not your desired state. Thank you in advance for your time to fill in the questionnaire.

The first part of the questionnaire deals with general information of respondents. The second part is posed with the purpose of finding out the skills the graduates possess currently.

I. Basic Graduate Information

1. Sex

A. Male

B. Female

II. Graduate`s Skill Measurement

No	I: Personal Qualities	SA	A	N	D	S D
PQ1	I have an awareness regarding the values, strength and weakness I possess.					
PQ2	I am confident to deal with challenge of employment and life					
PQ3	I can work without being supervised or I can work independently					
PQ4	I am sensitive to the emotions of others and the effect these emotions might have					
PQ5	I can respond well to changing circumstances and challenges					

PQ6	I can work under pressure					
PQ7	I can take actions without being prompted					
PQ8	I can assess the level of my performance					
No	II: Generic Skills	SA	A	N	D	S D
GS1	I can recognize key points when I read					
GS2	I can work comfortably with numbers					
GS3	I can easily retrieve information from different sources					
GS4	I can work in structured and efficient manner					
GS5	I can think creatively					
GS6	I can write clear reports tailed to specific reader					
GS7	I am confident in presenting information to a group of people					
GS8	I can easily explain something in writing or oral					
GS9	I can easily rank tasks according to their order of importance					
GS10	I can set achievable goals and set action towards achieving them					
GS11	I can easily select and use appropriate methods to find solutions					
GS12	I can easily convince others of the validity of once point of view					
GS13	I can easily resolve conflicts when the need arises					
No	III: Meta Cognition	SA	A	N	D	S D
MC1	I am committed to ongoing learning					
MC2	I am curious to learn and develop my self					
MC3	When I come across a problem I try to increase my efforts					
MC4	When I learn a new rule I reflect on its possible application on other fields					
MC5	When I find difficulties in understanding what I am studying I try to change the method					

No	IV: Subject Understanding	SA	A	N	D	S D
SU1	I have a clear understanding of the courses undergone in the degree program					
SU2	I have a good understanding of the applicability of theoretical learning.					
SU3	Contents and quality of mandatory courses are adequate.					
SU4	Coursework is appropriate to students' prior knowledge					
SU5	The degree to which the study program contents fulfilled your expectations					
SU6	Lectures were effective for understanding required contents					
SU7	Practical work was attained to check acquired knowledge and skills in practice					
SU8	Usefulness and quality of study materials (literature, collections, Internet etc.)					
SU9	Clearly defined assessment criteria (is it clear what the student needs to learn in order to pass and to earn higher grades)					
SU10	Regular and clear feedback on successfulness in learning and in exams					
SU11	The study program fulfilled your initial expectations.					
SU12	The grade attained after completion is average.					

Questionnaire provided for HR professionals.

Addis Ababa University
College of Business and Economics
MBA Program

Dear participant, I am a graduate student of business administration at the university of Addis Ababa. I am currently conducting a research entitled “Business Graduate Employability: The Case of Addis Ababa University”.

The participation will be very helpful to reach at genuine finding. Any information you provide is confidential and will not be used for any purpose other than the research.

III. Basic Employer Information

1. What is your education level?

- a. Diploma b. Degree c. Masters and above

2. Did you recruit any employees in the past 12 months?

- a. Yes b. No

3. Did you recruit any employees with a business background?

- a. Yes b. No

No	IV. mployability	SA	A	N	D	S D
EM1	I have had difficulties to recruit the right people for any given job.					
EM2	I am satisfied with the overall skills level of the recent graduates.					
EM3	Additional courses that are more relevant to the needs of enterprises need to be run.					
EM4	Compulsory work placement experience as an integral part of the curriculum needs to be included.					
EM5	Lack of basic knowledge (make up for and fill gaps in what are considered to be basic skills that the university should provide students) needs to be acted up on.					

Appendix B- T-Test

Items	t- test	Sig. (2-tailed)	Items	t- test	Sig. (2-tailed)
PQ1	-.144	.886	MC1	.628	.531
PQ2	-.094	.925	MC2	-1.384	.169
PQ3	-.403	.688	MC3	.000	1.000
PQ4	.866	.388	MC4	.526	.600
PQ5	.579	.564	MC5	.103	.918
PQ6	1.059	.292	SU1	-.644	.521
PQ7	.531	.597	SU2	-1.568	.120
PQ8	1.722	.088	SU3	-1.310	.193
GS1	-1.038	.302	SU4	-1.123	.264
GS2	-.448	.655	SU5	-.965	.337
GS3	.804	.423	SU6	-.881	.380
GS4	-.670	.504	SU7	-1.370	.173
GS5	-.797	.427	SU8	-1.206	.230
GS6	-1.425	.157	SU9	.000	1.000
GS7	2.688	.008	SU10	1.323	.188
GS8	-.220	.826	SU11	-1.053	.294
GS9	-.922	.358	SU12	.000	1.000
GS10	-3.229	.002	EM1	.589	.655
GS11	-1.927	.057	EM2	-.235	.423
GS12	-1.554	.123	EM3	.365	.504
GS13	.611	.543	EM4	.236	.427
GS14	.748	.456	EM5	.874	.157
GS15	.311	.757			

Appendix C- Reliability

Test of Reliability

a. Subject Understanding

Case Processing Summary

		N	%
Cases	Valid	195	94.7
	Excluded ^a	11	5.3
	Total	206	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.760	12

Item Statistics

	Mean	Std. Deviation	N
The grade attained after completion is average.	3.60	.905	195
The study program fulfilled your initial expectations.	3.70	.828	195
Regular and clear feedback on successfulness in learning and in exams	3.59	.900	195
Clearly defined assessment criteria (is it clear what the student needs to learn in order to pass and to earn higher grades)	3.28	1.072	195
Usefulness and quality of study materials (literature, collections, Internet etc.)	4.13	2.038	195
Practical work was attained to check acquired knowledge and skills in practice	4.12	.796	195
Lectures were effective for understanding required contents	3.96	.769	195
The degree to which the study program contents fulfilled your expectations	3.79	.869	195
Coursework is appropriate to students' prior knowledge	3.39	1.001	195
Contents and quality of mandatory courses are adequate.	3.78	.803	195
I have a good understanding of the applicability of theoretical learning.	3.64	.927	195
I have a clear understanding of the courses undergone in the degree program	3.63	.823	195

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The grade attained after completion is average.	41.02	36.360	.458	.738
The study program fulfilled your initial expectations.	40.92	35.638	.591	.727
Regular and clear feedback on successfulness in learning and in exams	41.03	35.242	.573	.726
Clearly defined assessment criteria (is it clear what the student needs to learn in order to pass and to earn higher grades)	41.34	33.969	.565	.723
Usefulness and quality of study materials (literature, collections, Internet etc.)	40.49	34.148	.163	.822
Practical work was attained to check acquired knowledge and skills in practice	40.50	38.736	.283	.755
Lectures were effective for understanding required contents	40.66	37.742	.406	.745
The degree to which the study program contents fulfilled your expectations	40.83	35.760	.545	.730
Coursework is appropriate to students' prior knowledge	41.23	36.323	.402	.743
Contents and quality of mandatory courses are adequate.	40.84	36.148	.558	.731
I have a good understanding of the applicability of theoretical learning.	40.98	38.185	.273	.757
I have a clear understanding of the courses undergone in the degree program	40.99	36.278	.526	.733

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
44.62	42.175	6.494	12

B. Personal Qualities

Case Processing Summary

		N	%
Cases	Valid	200	97.1
	Excluded ^a	6	2.9
	Total	206	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.599	8

Item Statistics

	Mean	Std. Deviation	N
I can assess the level of my performance	3.66	2.066	200
I can take actions without being prompted	3.31	.988	200
I can work under pressure	3.76	.842	200
I can respond well to changing circumstances and challenges	3.98	.698	200
I am sensitive to the emotions of others and the effect these emotions might have	3.74	.926	200
I can work without being supervised or I can work independently	3.91	.787	200
I am confident to deal with challenge of employment and life	3.74	.840	200
I have an awareness regarding the values, strength and weakness I possess.	3.67	.958	200

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I can assess the level of my performance	26.09	14.701	.067	.748
I can take actions without being prompted	26.44	15.986	.388	.542
I can work under pressure	25.99	15.633	.555	.508
I can respond well to changing circumstances and challenges	25.77	16.804	.479	.538

I am sensitive to the emotions of others and the effect these emotions might have	26.00	16.070	.418	.536
I can work without being supervised or I can work independently	25.84	16.380	.476	.531
I am confident to deal with challenge of employment and life	26.00	16.663	.388	.548
I have an awareness regarding the values, strength and weakness I possess.	26.08	17.497	.202	.592

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
29.74	20.033	4.476	8

C. Metacognition

Case Processing Summary

		N	%
Cases	Valid	201	97.6
	Excluded ^a	5	2.4
	Total	206	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.818	5

Item Statistics

	Mean	Std. Deviation	N
When I find difficulties in understanding what I am studying I try to change the method	3.78	.907	201

When I learn a new rule I reflect on its possible application on other fields	3.85	.882	201
When I come across a problem I try to increase my efforts	4.00	.834	201
I am curious to learn and develop my self	4.01	.903	201
I am committed to ongoing learning	4.18	.792	201

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
When I find difficulties in understanding what I am studying I try to change the method	16.04	7.548	.491	.818
When I learn a new rule I reflect on its possible application on other fields	15.97	7.389	.553	.799
When I come across a problem I try to increase my efforts	15.83	7.165	.663	.767
I am curious to learn and develop my self	15.81	6.727	.700	.754
I am committed to ongoing learning	15.64	7.361	.658	.770

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.82	10.818	3.289	5

D. Generic Skills

Case Processing Summary

		N	%
Cases	Valid	193	93.7
	Excluded ^a	13	6.3
	Total	206	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.913	13

Item Statistics

	Mean	Std. Deviation	N
I can easily resolve conflicts when the need arises	3.42	.726	193
I can easily convince others of the validity of once point of view	3.61	.872	193
I can easily select and use appropriate methods to find solutions	3.63	.838	193
I can set achievable goals and set action towards achieving them	3.36	1.110	193
I can easily rank tasks according to their order of importance	3.28	1.008	193
I can easily explain something in writing or oral	3.58	.875	193
I am confident in presenting information to a group of people	3.41	.926	193
I can write clear reports tailed to specific reader	3.18	1.091	193
I can think creatively	3.41	1.048	193
I can work in structured and efficient manner	3.53	.941	193
I can easily retrieve information from different sources	3.56	.865	193
I can work comfortably with numbers	3.40	1.001	193
I can recognize key points when I read	3.81	.810	193

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I can easily resolve conflicts when the need arises	41.76	66.537	.497	.912
I can easily convince others of the validity of once point of view	41.58	62.932	.669	.906
I can easily select and use appropriate methods to find solutions	41.55	63.040	.692	.905
I can set achievable goals and set action towards achieving them	41.82	60.010	.681	.905

I can easily rank tasks according to their order of importance	41.91	61.627	.652	.906
I can easily explain something in writing or oral	41.61	63.239	.643	.907
I am confident in presenting information to a group of people	41.78	61.987	.693	.905
I can write clear reports tailed to specific reader	42.01	60.984	.632	.908
I can think creatively	41.77	60.479	.698	.904
I can work in structured and efficient manner	41.65	62.186	.666	.906
I can easily retrieve information from different sources	41.63	64.016	.592	.909
I can work comfortably with numbers	41.79	60.981	.702	.904
I can recognize key points when I read	41.38	65.924	.485	.912

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
45.19	72.955	8.541	13

E. Employability

Case Processing Summary

		N	%
Cases	Valid	109	52.9
	Excluded ^a	97	47.1
	Total	206	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.860	5

Item Statistics

	Mean	Std. Deviation	N

Lack of basic knowledge (make up for and fill gaps in what are considered to be basic skills that the university should provide students) needs to be acted up on.	3.74	.821	109
Compulsory work placement experience as an integral part of the curriculum needs to be included.	3.51	1.033	109
Additional courses that are more relevant to the needs of enterprises need to be run.	3.63	1.033	109
I am satisfied with the overall skills level of the recent graduates.	3.76	1.017	109
I have had difficulties to recruit the right people for any given job.	3.82	1.029	109

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Lack of basic knowledge (make up for and fill gaps in what are considered to be basic skills that the university should provide students) needs to be acted up on.	14.72	12.164	.502	.870
Compulsory work placement experience as an integral part of the curriculum needs to be included.	14.95	9.526	.803	.796
Additional courses that are more relevant to the needs of enterprises need to be run.	14.83	9.472	.813	.794
I am satisfied with the overall skills level of the recent graduates.	14.71	10.302	.670	.833
I have had difficulties to recruit the right people for any given job.	14.65	10.581	.609	.849

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.47	15.714	3.964	5

Appendix D-Test for Lincity

Model Summary and Parameter Estimates

Dependent Variable: EM

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	b1	b2	b3
Power	.962	5221.162	1	205	.000	.987		
Logarithmic	.963	5404.749	1	205	.000	2.825		
Inverse	.898	1812.731	1	205	.000	12.632		
Quadratic	.964	2736.243	2	204	.000	1.324	-.088	
Cubic	.964	1824.719	3	203	.000	1.829	-.361	.036
Compound	.968	6115.630	1	205	.000	1.407		
Linear	.970	6544.858	1	205	.000	.978		
S	.911	2104.536	1	205	.000	4.392		
Growth	.968	6115.630	1	205	.000	.342		
Exponential	.968	6115.630	1	205	.000	.342		
Logistic	.968	6115.630	1	205	.000	.711		

The independent variable is SU.

Model Summary and Parameter Estimates

Dependent Variable: EM

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	b1	b2	b3
Power	.958	4638.070	1	205	.000	.977		
Logarithmic	.960	4983.244	1	205	.000	2.806		
Inverse	.903	1902.579	1	205	.000	12.753		
Quadratic	.962	2560.158	2	204	.000	1.448	-.121	
Cubic	.962	1708.279	3	203	.000	2.008	-.422	.039
Compound	.964	5424.778	1	205	.000	1.403		
Linear	.967	6033.824	1	205	.000	.972		
S	.915	2204.723	1	205	.000	4.432		
Growth	.964	5424.778	1	205	.000	.338		
Exponential	.964	5424.778	1	205	.000	.338		
Logistic	.964	5424.778	1	205	.000	.713		

The independent variable is PQ.

Model Summary and Parameter Estimates

Dependent Variable: EM

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	b1	b2	b3
Power	.961	5079.607	1	205	.000	.917		
Logarithmic	.964	5480.839	1	205	.000	2.683		
Inverse	.880	1501.640	1	205	.000	13.217		
Quadratic	.965	2800.068	2	204	.000	1.324	-.098	
Cubic	.965	1865.741	3	203	.000	1.707	-.294	.025
Compound	.966	5905.383	1	205	.000	1.373		
Linear	.970	6696.159	1	205	.000	.929		
S	.892	1697.252	1	205	.000	4.595		
Growth	.966	5905.383	1	205	.000	.317		
Exponential	.966	5905.383	1	205	.000	.317		
Logistic	.966	5905.383	1	205	.000	.728		

The independent variable is MC.

Model Summary and Parameter Estimates

Dependent Variable: EM

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	b1	b2	b3
Power	.956	4491.954	1	205	.000	1.042		
Logarithmic	.961	5018.580	1	205	.000	2.977		
Inverse	.849	1150.432	1	205	.000	10.997		
Quadratic	.966	2925.751	2	204	.000	1.675	-.170	
Cubic	.966	1941.697	3	203	.000	1.761	-.220	.007
Compound	.960	4937.189	1	205	.000	1.434		
Linear	.965	5727.298	1	205	.000	1.030		
S	.862	1282.584	1	205	.000	3.826		
Growth	.960	4937.189	1	205	.000	.361		
Exponential	.960	4937.189	1	205	.000	.361		
Logistic	.960	4937.189	1	205	.000	.697		

The independent variable is GS.

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
The grade attained after completion is average.	203	-.570	.171	.150	.340
The study program fulfilled your initial expectations.	206	-.648	.169	.426	.337
Regular and clear feedback on successfulness in learning and in exams	205	-.485	.170	-.098	.338
Clearly defined assessment criteria (is it clear what the student needs to learn in order to pass and to earn higher grades)	205	-.309	.170	-.572	.338
Usefulness and quality of study materials (literature, collections, Internet etc.)	205	-.780	.170	.744	.338
Practical work was attained to check acquired knowledge and skills in practice	206	-1.120	.169	2.113	.337
Lectures were effective for understanding required contents	206	-1.134	.169	2.712	.337
The degree to which the study program contents fulfilled your expectations	204	-.684	.170	.867	.339
Coursework is appropriate to students' prior knowledge	205	-.409	.170	-.301	.338
Contents and quality of mandatory courses are adequate.	204	-.727	.170	.948	.339
I have a good understanding of the applicability of theoretical learning.	205	-.792	.170	.452	.338
I have a clear understanding of the courses undergone in the degree program	205	-.803	.170	.845	.338
I can assess the level of my performance	205	-.522	.170	-.048	.338
I can take actions without being prompted	205	-.344	.170	-.255	.338
I can work under pressure	206	-.772	.169	.774	.337
I can respond well to changing circumstances and challenges	206	-.589	.169	.858	.337
I am sensitive to the emotions of others and the effect these emotions might have	204	-.790	.170	.759	.339
I can work without being supervised or I can work independently	204	-.600	.170	.547	.339
I am confident to deal with challenge of employment and life	204	-.502	.170	.309	.339
I have an awareness regarding the values, strength and weakness I possess.	206	-.743	.169	.288	.337
When I find difficulties in understanding what I am studying I try to change the method	204	-.665	.170	.165	.339
When I learn a new rule I reflect on its possible application on other fields	206	-.700	.169	.358	.337
When I come across a problem I try to increase my efforts	203	-.661	.171	.264	.340
I am curious to learn and develop my self	206	-.861	.169	.476	.337
I am committed to ongoing learning	206	-.922	.169	.771	.337

I can easily resolve conflicts when the need arises	199	-.364	.172	.467	.343
I can easily convince others of the validity of once point of view	205	-.639	.170	.387	.338
I can easily select and use appropriate methods to find solutions	205	-.480	.170	-.037	.338
I can set achievable goals and set action towards achieving them	206	-.351	.169	-.471	.337
I can easily rank tasks according to their order of importance	205	-.309	.170	-.243	.338
I can easily explain something in writing or oral	205	-.591	.170	.223	.338
I am confident in presenting information to a group of people	206	-.355	.169	-.121	.337
I can write clear reports tailed to specific reader	206	-.130	.169	-.840	.337
I can think creatively	206	-.453	.169	-.267	.337
I can work in structured and efficient manner	204	-.761	.170	.452	.339
I can easily retrieve information from different sources	204	-.543	.170	.104	.339
I can work comfortably with numbers	206	-.479	.169	-.054	.337
I can recognize key points when I read	203	-.819	.171	.863	.340
Lack of basic knowledge (make up for and fill gaps in what are considered to be basic skills that the university should provide students) needs to be acted up on.	110	-.806	.230	1.288	.457
Compulsory work placement experience as an integral part of the curriculum needs to be included.	110	-.255	.230	-.693	.457
Additional courses that are more relevant to the needs of enterprises need to be run.	110	-.499	.230	-.328	.457
I am satisfied with the overall skills level of the recent graduates.	110	-.640	.230	-.205	.457
I have had difficulties to recruit the right people for any given job.	109	-.973	.231	.586	.459
Valid N (listwise)	93				