

HIGHER EDUCATION & EMPLOYABILITY
IN PAKISTAN: PERSPECTIVE FROM
EMPLOYERS & BUSINESS GRADUATES



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CERTIFICATE

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A handwritten signature in black ink, appearing to read 'Sarah', with a stylized flourish at the end.

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Abstract

Employees entering the labour market devote four years to their education and professional development. Institutions of higher education release graduates into the job market assuming that they are well-equipped to succeed professionally and personally. However, employers all over the world have expressed that recent graduates lack employability skills and a gap exists between outcomes of higher education and the needs of job market and employers. Therefore, it is crucial to analyze the employability skills development. Research in Pakistan have mostly adopted a one-sided approach by analyzing only the employers' or graduates' outlook and therefore, this study aims to provide new insights and solutions to enhance employability of Pakistani graduates. This research has adopted a mixed-method design. Using purposive sampling, a sample of 372 graduates and 71 employers were obtained for the quantitative analysis. By conducting a factor analysis, four skillsets are identified namely specific skills, core skills, personal attributes and communication skills. A sample size of 6 employers was chosen through convenience sampling. Through semi-structured interviews, the requirements of the job market are discussed. Both findings show that core skills are highly relevant in the labour market for business and social sciences' graduates. Employers assign great value to university reputation and prior experience. Employers have expressed their dissatisfaction over the lack of core skills and personal attributes in Pakistani graduates. Both stakeholders state that industry-academia linkages should be strengthened and work-based learning and practical courses should be incorporated to prepare students for the job market. The study contributes by providing detailed analysis on both the graduates' and employers' perspectives and to the best of my knowledge, no other recent paper in Pakistan has used this methodology. It suggests useful directions for graduates to develop the important skills and for universities to collaborate with organization.

Keywords: Employability, business graduates, higher education, skills, satisfaction

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List of Abbreviation

CV	Curriculum vitae
HEC	Higher Education Commission
HEI	Higher Education Institutes
WIL	Work-Integrated Learning

Chapter 1

Introduction

Employability is defined as skills and understandings that increase the chances of employment for graduates (Yorke & Knight, 2004). The employability skills help individuals to succeed in their careers and benefit the workforce and economy. Employers expect graduates to possess necessary skills to be able to work therefore, employability of graduates has become a concern for not only graduates themselves but the universities and government (Pitan & Muller, 2020; Poon, 2014). Employers will be dissatisfied with the lack of skills which can lead to difficulty attaining employment also poses a threat to economic development of the country. (Raza & Naqvi, 2011). These skills which help individuals to become prepared and ready are commonly divided into groups of core, professional, specific, and generic skills (Yorke & Knight, 2004). Written and oral communication skills, critical thinking, teamwork skills, ethical decision-making along with the ability to apply knowledge in real world are typically considered highly relevant and important in developed nations (Hart Research Associate, 2015). Competencies given most importance include communication skills, teamwork, professionalism, and core skills including critical thinking, leadership skills, interpersonal skills (JHumburg, Van der Velden, & Verhagen, 2013; Jackson 2013; Paranto & Kelkar, 2000). Evidence suggests that while students are able to possess technical knowledge, they lack behind in their level of generic and interpersonal skills (Alam et al., 2022; Poon, 2014).

The development of employability has gained attention from institutions all over the world. Governments and employers have stressed on higher education institutes (HEIs) to prepare graduates for the job market (Yorke, 2006). There is an increasing pressure to formulate academic programs that cater to the need of labour market and therefore, universities all over the world are enhancing employability of their students. (Yorke & Knight, 2004). Graduates in Bangladesh have expressed their concern on lack of skills development by educational institutes and highlighted have HEIs do not take the necessary interventions and initiatives to enhance employability (Alam et al., 2022).

By identifying the employability skills that are required and successfully including employability development through academic courses can higher education play a significant role in the market (Humburg et al., 2013; Yorke, 2006). Various suggestions to increase and refine graduate employability development have been given by governments, universities, and other stakeholders. However, the concept of employability and ensuring readiness of graduates remains complex and a gap exists between employers' expectations and graduates' workplace performance (Cheng et al., 2021; Rae, 2007).

Existing literature in developed countries highlights that competencies such as teamwork and confidence are exhibited by business graduates, whereas graduates are unable to meet employers' expectations in critical thinking, leadership and decision-making skills (Jackson & Bridgstock, 2021; Jackson & Chapman, 2012). Employers claim that higher education institutions are focused on theoretical knowledge and graduates are unable to comprehend the realities of actual workplace (Hernandez-March et al., 2009). Many studies have been conducted to understand the employers' perception of employability

skills. The perception of students or graduates and their parents are not given as much consideration. Not only is there a lack of research on both the perception of employers and graduates, but it is also found to be contradictory (Donald et al, 2017; Tymon, 2013).

While some show that undergraduates realize the worth of skills development in higher education (Hart Research Associate, 2015), others do not (Rae, 2007). Research has highlighted the gap in terms of quality of graduates against the requirements of employers and the jobs in the market (Yorke, 2004). To address the gap between perceived education and graduate employability, it is crucial to form relevant partnerships which focuses on informed curricular design, implementing quality assessment practices and establishing networks as well as engaging students and provide mentors. (Ferns et al., 2019). Employers and HEIs should integrate and collaborate through Work-Integrated Learning (WIL) so future graduates can meet the industry needs and reduce the skill gap such as critical thinking, problem-solving and teamwork (Hart Research Associate, 2018; Jackson & Bridgstock, 2021).

In Pakistan, it has been argued that educational system is producing graduates irrelevant to labour market or failing to develop necessary skills in graduates (Farooq, 2011). The blame lies with the HEIs who are required to instill employability skills in graduates, and they are failing at imparting knowledge that is relevant to the market (Boden & Nedava, 2010). Despite the increase in research articles and universities, the quality of education and research in Pakistan remains subpar. Tarar (2006) has highlighted that until the pre-university education in Pakistan is improved, there can be no improvement in the higher education. Due to lack of quality education, employability of graduates is negatively

affected. Memon (2007) points out that due to insufficient curricula, poor quality teaching methods and ill-equipped laboratories, the quality of graduates is on the decline. Therefore, it is crucial to study the important skills that are required in the labour market for business and social science graduates in Pakistan and what enhancements are necessary to develop employability skills among Pakistani graduates of business and social sciences.

1.1 Problem Statement

Employees entering the labour market devote four years to their education and professional development. Institutions of higher education release graduates into the job market assuming that they are well-equipped to succeed professionally and personally. However, there are major concerns over the quality of graduates and the mismatch of skills. Employers all over the world have expressed that recent graduates lack employability skills, and a gap exists between outcomes of higher education and the needs of job market and employers. This impacts the graduates' earning potential and career success along with poor performance, low productivity, and excessive training at workplace. Therefore, for improvement in higher education and workplace performance, it is crucial to analyze the employability skills development.

A pragmatic approach allows the researcher to address the research objectives and questions through multiple methods and strategies associated with qualitative and quantitative research (Creswell, 2007). Integrating qualitative and quantitative methods helps to assort different views, providing a holistic view of the research, enriches our understanding while opening new avenues for further research (Teddlie & Tashakkori, 2009). To the best of the researcher's knowledge, most studies in Pakistan have targeted a

single university and one-sided approach by analyzing either only the employers' outlook or the graduates' perspective (Raza & Naqvi, 2011; Siddique et al., 2021). Furthermore, using a mixed-method approach in analyzing graduate employability skills is extremely limited and not carried out recently. It is evident from the existing literature that to understand the gap between higher education and employability in Pakistan, perspectives from both graduates and employers are required.

1.2 Research Questions

1. What skills and factors are most important for business and social sciences graduates supposed to acquire from their degree?
2. What do graduates think about the quality of education that they have?
3. Are employers satisfied with graduates' skills?
4. What can be done to integrate employability skills in the higher education context?

1.3 Research Objectives

This study aims to:

1. To identify the most important competencies that organizations require of business/social science graduates and the factors that affect employability
2. To evaluate whether graduates are satisfied with the skills they have
3. To evaluate employers' perception of graduates' employability skills

4. To explore how graduates' employability skills can be improved in the higher education context

1.4 Definition of Terms

1.4.1 Employability Skills

Defined as “a set of achievements that makes graduates more likely to gain employment” and enables an individual to succeed in their jobs which ensures benefits for not only the individual but the workforce and economy (Yorke, 2006). These include skills, understandings as well as personal attributes. Jackson (2013) suggested that employability skills, also known as “professional, technical or specific, generic, key, and nontechnical skills,” increases the readiness of graduates for job market.

1.4.2 Employers

The immediate supervisors, recruiting staff members or human resource members who are responsible for the selection, hiring, supervising and evaluation of graduates.

1.4.3 Communication Skills

Includes verbal, written and listening skills that allow effective interaction with individuals and groups to integrate and convey information (SCANS, 1992)

1.4.4 Specific Skills

Also referred to as hard or technical skills and comprises of skills needed to carry out specific tasks, such as working with software and equipments (Laker & Powell, 2011)

1.4.5 Interpersonal skills

These skills refer to the ability of employees to work well with others and relate to other people effectively (SCANS, 1992)

1.4.5 Generic Skills

Generic skills are identified as critical thinking, problem solving, interaction skills and creative thinking (NCVER, 2003)

1.4.6 Professionalism

The conduct and behaviour of an employee in a workplace, includes responsibility, maturity, ethics, attitude (SCANS, 1992)

1.5 Significance of Research

The study aims to add to the literature on graduate employability by providing new insights and requirements of job market in Pakistan using both the graduates' and employers' perspectives. The research sheds light on the lack of employability skills development due to the existing deficiencies in the higher education system and career development in universities which the universities can utilize to redesign and improve curricula and career services. The research highlights what specific skills are promoted in the labour market. Therefore, it can help to bridge the gap between education and skills development. Students would be better informed of the employability demands of the job market. It would contribute towards the smooth transition from academia to job market. Lastly, employers

would benefit in future recruitment and reduce training cost. Thus, the research is of practical significance to students, HEIs, and employers.

1.6 Organization of the Study

The organization of this thesis is as follows. Chapter 2 covers the review of the literature. Findings of previous studies are discussed, and employability skills are identified. Chapter 3 explores the graduate employability theories and develops the theoretical framework. In Chapter 4, the research methodology applied is discussed. It covers the research design, sampling, data collection and the data analysis. Chapter 5 explains the findings of the quantitative analysis. Results of both graduates and employers are explained. Chapter 5 also covers the qualitative findings. In Chapter 6, the results are discussed thoroughly in view of the research objectives and compared with the previous literature. Chapter 7 gives a summary of the dissertation by concluding the research. It highlights the limitations and provides directions for future work and policy recommendations. Appendix A contains the Graduate Survey whereas Appendix B comprises of the Employer Survey.

Chapter 2

Literature Review

The first strand of the literature review relies on the human capital theory to explain the linkage between employability and higher education which enables skills development. As per the theory, higher education benefits the economy as a whole by producing productive and skilled graduates. Wide range of literature on employability have used the human capital theory to explain the relation between education and employment (Donald et al., 2017; Farooq, 2011; Jackson & Bridgstock, 2021). Investment in education results in increased chances of employability, better wages and improved well-being. Existing literature based on the human capital theory has found that there is a link between higher education and employment, however, critics have labeled the theory too simple to explain all the factors behind employability (Anderson & Tomlinson, 2021). Other developments in literature that followed the human capital theory are also highlighted in this chapter. Finally, the factors and skills that affect employability found in existing literature are later discussed.

2.1 Higher Education & Employability

The Human Capital Theory lays a simple relationship between employability and education and training (Becker, 1962). The theory states that by investing in education and training, an individual is able to acquire skills and knowledge and his productivity increases leading to increased employability and higher salaries (Becker, 1962). Hence, this theory relies on

the fact that there are professional benefits that an individual attains due to his education. The theory claims that at the start of a professional career, the highest rate of return for both the workers and the company are due to investing in education and training. However, the theory of human capital does not state that there is any causal relationship between length of schooling and income. Hillage and Pollard (1998) described employability as being able to secure entry into the labour market and obtain employment when needed. They focus on the value of being able to attract employers through the possession of skills and knowledge. Yorke and Knight (2004) add to this definition by describing employability as skills that increase the chances of getting hired. Higher education serves as one of the most importance sources for skills development and theoretical knowledge (Andrews & Higson 2008; Yorke & Knight, 2004). Pool and Sewell (2007) added that satisfaction and successful to the definition of employability and hence stating that employability refers to possessing a set of skills, knowledge, personal attributes that makes a job-seeker more probable in securing a job where they are satisfied and are able to succeed using their skill-set.

Clarke (2008) suggested that an individual's employability depends on learning and work environment and not only on individual characteristics. HEI academic program are expected to develop employability skills in order for the students to succeed in professional workplace and handles challenges efficiently. Rae (2007) identified a connection between HEI integration of personal and career development and individual learning. Academic management, institutional experience, expectations and behaviour of students are challenges faced in this integration. The study places importance on the need of interaction

between university students, faculty as well as employers. Using innovative learning methods, HEIs must refine curricular and extra-curricular activities (Rae, 2007). Two levels of integration are suggested. University and employers should coordinate at institutional level to increase employability development. Secondly, integration should be done at government policy level as mentioned by other reports in the HE system all over the world (Humburg et al., 2013; Jackson, 2013). Another study suggested similar propositions to meet the requirements of dynamic workplaces and adopted a triangular approach consisting recent graduates, faculty and human resource managers (Rosenberg et al., 2012). Their attitude and perception towards employability development and skills were examined. Taking into consideration 47 types of employability skills, significant differences were found regarding their perception of employability among the three stakeholders. The study concluded that there is a lack of communication among the three parties which needs immediate attention. Existing literature has highlighted that business schools should refine their curricular and co-curricular activities to produce desirable graduates (Andrews & Higson, 2008; Hernandez, 2009; Paranto & Kelkar, 2000). To increase employability skills, it is extremely important to establish collaboration and integration among the three groups. By applying pedagogical changes in academic curriculum, the value of education will increase and enhance graduates' employability development (Jackson, 2013 & Cheng, 2021). Improving student behaviour will ultimately result in more confidence and better decision-making skills. The study focuses on the importance of learning environment which impacts how students work together and helps them to perform better at their work environments. By enhancing independent learning and

employer engagement, graduates' employment experience can be positively affected (Ehiyazaryan, & Barraclough, 2009; Jackson, 2013).

In Pakistan, quality assurance persists to be one of the critical issues in higher education despite the establishment of quality enhancement cell by HEC. With regards to infrastructures, higher education institutes mainly lack building blocks, comprehensive and inclusive libraries, efficient ICT resources and laboratories which further hinders any work-based learning and innovative thinking (Haque et al., 2021).

Despite employment being a major issue for new graduates, the views and perceptions of graduates are relatively less represented. Tymon (2013) reports that effective outcomes of learning depend on the individual and thus, essential information can be obtained by understanding their perception and motivation. The study found that there is a disagreement among the perception of students and other parties regarding employability development initiatives. Students in different years of their academic program expressed that there is a lack of development programs that will enhance employability skills. Implementation of policies and practical learning should be done to boost student engagement should be a priority within universities. However, graduates are also expected to exhibit quality and meet the demands of their employers as employability becomes own's responsibility in the workplace (Nilsson, 2010). The integration of individual, university and organization is vital for the development of employability, and it is not the sole responsibility of individual, rather the collective management of these three stakeholders (Rae, 2007). Graduates' ability to put in effort and manage and develop employability reveals that technical and hard skills have less impact as compared to soft skills and personality attributes (Nilsson,

2010). The development of core skills in academic programs and learning environment is highly crucial. In a webinar conducted by Pakistan Institute of Development Economics, professors characterized the list of issues in Higher Education Commission. These included lack of funding, poorly designed undergraduate programs, scarcity of competent faculty, lack of autonomy, and eventuality of most educational policies on ruling governments (Haque et al., 2021). There is clearly an existing gap between the skills expected in labour market and the skills developed in universities (Ehiyazaryan, & Barraclough, 2009; Paranto & Kelkar, 2000).

2.2 Employability Skills

Finch et al., (2013) identified 17 employability skills and grouped the factors into five categories. Employers value soft skills such as interpersonal communication and problem solving the most. Graduates are suggested to show their problem-solving skills and interpersonal skills during recruitment. The employability factors identified by Finch et al., (2013) are in line with Paranto and Keller (2000) employability skills. These factors include leadership skills, interpersonal skills, professionalism, written communication, creative thinking, problem solving, technical skills, knowledge of software, verbal communication, listening skills and other factors such as degree reputation and job specific skills. Paranto and Kelkar (2000) identified eighteen skills to evaluate from the literature and found that business and organizations' employers in the United States value generic or core skills such as interpersonal skills and leadership the most. Employers were found to be more satisfied with employees who possessed creativity, critical thinking, interpersonal

and leadership skills. These skills fall under “generic” or “core” skills and the importance of such skills is a common theme throughout the literature (Andrews & Higson 2008; Hernandez-March et al, 2009; Finch et al, 2013)

A study based on employers’ perception conducted in Spain explored the competencies required by the private sector companies (Hernandez-March et al, 2009). Employers put great emphasis on technical field-specific knowledge along with interpersonal skills. However, they found that higher education is too theoretical which has created a gap between the university learning and the real-world workplace. Graduates entering the labour market find it harder to apply theoretical knowledge in workplace settings. Similarly, Hart Research Associates (2015) identified oral communication, teamwork skills, critical thinking and ethical decision-making as important learning outcomes among graduates and employers in the United States. This study took into account both the perception of students and employers. Employers place more importance to the employability skills instead of the undergraduate major.

Leadership skill was identified as the most important skill that impacts job performance by the three parties (Rosenberg et al., 2012). Similar to the previous conclusions, interpersonal skills were given a very high rating by the graduates and the faculty (Humburg et al., 2013; Paranto & Kelkar, 2000; Rosenberg et al., 2012). Human resource managers and graduates also gave a higher rating to basic numeracy and literacy. There was a mutual response to the need for graduates to have additional training and possess work ethics and professionalism. In the competitive labour market, graduates who are well prepared will perform better at their job and meet the company’s expectations as well as compared to

graduates who are less prepared (Rosenberg, et al., 2012). Jackson (2013) found that Australia students place effective teamwork and communication skills as the most important competencies. Lowest rating of importance was given to using technology and analyzing data. On the other hand, international students gave the highest rating to self-awareness and problem solving. In another study conducted by Jackson and Chapman (2012), the findings revealed that Australian academics assign greatest importance on the development of core skills such as critical thinking, decision making, problem-solving and other skills namely professionalism and work ethics. On the contrary, UK academics placed more importance to developing confidence, emotional intelligence, teamwork and communication. In four European countries, Austria, UK, Slovenia and Romania, employers felt that graduates lacked sufficient expertise and verbal communication while attending HEIs (Andrews & Higson, 2008). Employers expected business graduates to possess hard business skills along with soft interpersonal skills and the graduates valued hard business skills as well (Andrews & Higson, 2008; Paranto & Kelkar, 2000). Employers expressed that currently graduates are not prepared well whereas the students felt confident about their preparedness for job market (Hart Research Associates, 2015).

Skills identified in existing literature that are used in this study include technical skills, software usage, ability to adapt to technology and subject-related knowledge that are grouped as hard or specific skills. Communication skills include writing, speaking and listening skills. Work ethic and professionalism fall under personal attributes. Generic skills creative thinking, problem-solving ability, self-confidence, experience of project

based learning and critical thinking. Teamwork and leadership skills are grouped with interpersonal skills.

2.3 Prior Experience

The human capital theory states that the chances of employment increases once individuals have invested in training/employment. Employers prefer graduates who have done internships and work-integrated learning (WIL) or community-based projects (Jackson & Bridgstock, 2021). In Pakistan, despite the increase in universities, the quality of graduates remains below standard. Employers expressed their concern about the employability skills of graduates and were not satisfied with Pakistani university graduates regarding to their professional, core and interpersonal skills (Raza & Naqvi, 2011). Work experience makes graduates more desirable in the labour market and it is considered as a vital signal for recruitment (Andrews & Higson, 2008; Humburg, 2013; Jackson, 2013). Employers prefer graduates who have done internships or participated in field-projects and project-based learnings (Hart Research Associate, 2015). This was supported by Ehiyazaryan and Barraclough (2009) in their study. The real-world experience along with work-based learning are proving to be crucial in development of employability among students. Students learn better and feel motivated when the subject is taught using real-life business scenarios. Business graduates rated the usefulness of internships and placements higher than graduates in creative industries (Jackson & Bridgstock, 2021).

2.4 Existing Gap in Literature

While studies in foreign countries have identified the importance of skills requirement for business graduates, a comprehensive study is needed in Pakistan to assess the employability skills requirement among business and social sciences graduates, and this study aims to fill the gap. Studies in Pakistan have adopted a one-sided approach in Pakistan by evaluating either the employers' perspectives or the graduates' perspectives (Raza & Naqvi, 2011). Thus, there is a need to incorporate graduates' perception and evaluate whether graduates are satisfied with their skills development in HEIs and their perception on skills requirement once they join the labour market. By doing so, universities and policymakers can focus on skills development that are required in the real market and lessen the gap between the supply of skills and the demand in the job market. This study aims to fill the gap in literature by providing new insights by shedding light on the perspective of the two stakeholders by adopting a mixed-method design. To further explain and explicate the linkage between employability and education for this study, theoretical framework is discussed in Chapter 3.

Chapter 3

Theoretical Framework

The theory of human capital (1962) states that individuals with higher education invest more in job training, individuals who have had better schooling and possess better ability are likely to engage more in job training as compared to other individuals. The theory states that there is a positive relationship between higher education and employment. As per the human capital theory, education increases skills and abilities which enhances one's job performance. Critics have pointed out that it is debatable whether length of education or experience are strong predictors of successful employment. Moreover, the theory is mostly focused on educational investment than other forms of skills development (Anderson & Tomlinson, 2021). Another criticism of this theory includes the fact that it does not take into account personal qualities, experiences and capacities of individuals, whether all individuals might have different perceived value of education (Van Der Merwe, 2010).

To further clarify employability and the factors affecting it, Knight and Yorke (2002) developed the USEM model in which they state that employability depends on blend of personal qualities, key skills and understanding of one's capacity. USEM model stands for Understanding, Skills (subject-specific and generic), Efficacy beliefs (and self-theories generally), and Metacognition (including reflection). The USEM model was the first model in employability research that theorized employability in newer dimensions such as skills, subject understanding, meta-cognition and individual qualities. Pool and Sewell (2007) criticize the USEM model as lacking empirical evidence and being impractical because its

complexity makes it difficult for students and parents to understand it. CareerEDGE model is an alternative model. It works by combining the core factors of USEM, and employability skills models but simplifies the framework by bringing clarity.

The theoretical grounding this study employs is the human capital theory, integrating it with the contemporary CareerEdge model. Pool and Sewell (2007) introduced the CareerEDGE model as an alternative model to other employability frameworks. It works by combining the core factors of USEM model and employability skills models but simplifies the framework by bringing clarity. Pool and Sewell (2007) present CareerEDGE model as a summary of pertinent elements included in the employability process. The framework illustrates how five lower order factors allow students to reflect and evaluate experiences. These factors include career development learning, experience, degree subject knowledge understanding and skills, generic skills, and emotional intelligence. Employability is a result of multifaceted interaction with social concepts such as self-esteem, self-efficacy, and self-confidence.

The CareerEDGE model suggest that higher levels of self-efficacy, self-confidence and self-esteem are developed through reflection and evaluation of students' experiences of the lower tier factors. Therefore, it is essential that HEI provide students with opportunities to develop the lower order factors. These make up crucial linkages to employability. This study focuses on the lower order four factors that are vital to ensure employability, emotional intelligence is not included in the scope of this study.

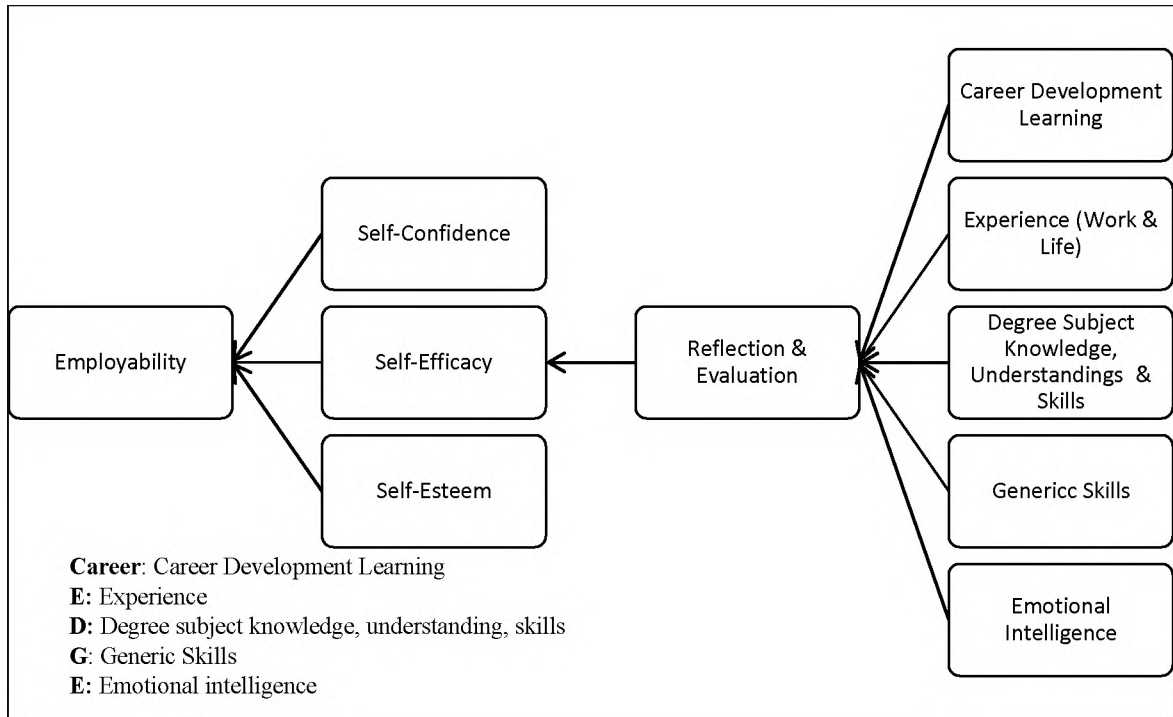


Figure 1 CareerEdge Model

Source: Adapted from Pool & Sewell (2007)

3.1 Components of the CareerEDGE Model

3.1.1. Career Development Learning

It is defined as being “..concerned with helping students to acquire knowledge, concepts, skills and attitudes which will equip them to manage their careers, i.e. their lifelong progression in learning and in work” (Watts, 2006, p2). The ability to write a constructive curriculum vitae (CV), filling out job applications or how to conduct yourself professionally in an interview are all parts of this component in the model. Students can make informed decisions when they are given proper guidance and support that enables

them to be self-aware and avail opportunities both locally and globally. Career development learning is crucial as students have to be well-prepared to enter a highly competitive graduate job market. Activities in Career development learning enables students to become more motivated and self-aware so they can choose an occupation that suits them best. They will also learn how to find opportunities in the market. Students may gain good degrees and possess those skills required by the employers but only when students are able to articulate their skills and understanding to employers, they will be able to reach their career potential (Law & Watts, 1977).

3.1.2 Degree Subject Knowledge, Understanding and Skills

Anyone pursuing higher education is motivated to enter a specific program to gain in depth-knowledge of a subject and attain a degree signaling higher qualification. Individuals who are better qualified have better employment opportunities as compared to the ones who do not have higher, better qualifications (Johnes, 2006). According to graduate studies, two-thirds of vacancies for graduates are open to graduates from any discipline and one-third of vacancies for graduates are related to understanding and skills. However, it is important to realize that graduates will be judged by employers on how strongly they completed their degree courses (Humburg et al., 2013). Degree related skills that are specific skills include technical skills, adapting to technology, subject related knowledge and knowledge of softwares.

3.1.3 Generic Skills

These are referred to as core skills or key skills as well. In this model, generic skills are representing those skills that can be transferred, in higher education or workplace. (Bennett et al., 1999). Employers not only want graduates with subject specific skills and knowledge but prefer graduates who possess generic skills. Existing literature has identified number of generic skills that the employers want and expect from their graduates. Some of these skills are listed as creativity, ability to work with and manage others, time management, problem-solving ability, decision-making, creative thinking, and willingness to learn (Humburg, et al., 2013; Yorke, 2006; Yorke & Knight, 2004)

3.1.4 Emotional Intelligence

Goleman define emotional intelligence as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (Goleman, 1998, p 317). Yorke and Knight (2004) claim that emotional intelligence is one of the aspects of personal qualities. Existing research has shown that individuals with greater levels of emotional intelligence are likely to achieve more and have higher motivation. Furthermore, they are able to build stronger relationships and enjoy career as compared to those people who have lower levels of emotional intelligence (Cooper, 1977). Students, employees, and employers will all benefit if emotional intelligence is enhanced through teaching and learning. As research has shown the academic and career success of people who have higher emotional intelligence, it is vital to take it into account of graduate employability (Pool & Sewell, 2007).

3.1.5 Experience (Work and Life)

Research has shown that employers are likely to prefer graduates who have had work-experience or participated in project-based learning. The work experience allows graduates to apply the relative knowledge and enhances their employability (Yorke and Knight, 2004). Integration among employers and HEI can prove crucial in the promotion of work-related learning (Rae, 2007). All over the world, studies have pointed out that individuals who have work experience are likely to get employed as compared to graduates who do not have prior work-experience. There is a need to recognize the life experiences of graduates as well that leads them into pursuing higher education. Thus, it is critical to guide students how to develop employability skills through their life experience and work experience by incorporating them in academic courses (Rae, 2007; Humburg et al., 2013).

3.1.6 Reflection and Evaluation

Students will be able to realize their potential only when they reflect and evaluate on their learning experiences. Students must reflect and evaluate on their employability development, so they know what they need to work on to further enhance their skills (Pool and Sewell, 2007). Students should be offered personal development planning in HEI that allows them to reflect and evaluate their experiences. Such programs can increase self-awareness of employability skills, understand transferable skills and avail opportunities (Moon, 2004).

3.1.6 Self-efficacy, Self-confidence, Self-esteem

The third level consists of these three factors which are crucially linked with employability development. Employability is achieved with these three social concepts. Social factors are vital for career development. Supporting environment in HEI helps students to attain skills and encourages them to develop these three social competencies (Pool & Sewell, 2007).

The indication by CareerEDGE of an effort to operationalize employability as a concept is the first of its kind as throughout the history of employability research this is that the model is ripe for quantitative analysis (Pool & Sewell, 2007). This will provide space to generalize the findings. This had not been done before because all the existing studies were either qualitative in nature or secondary research based which constricted the applicability of the findings.

Despite being a success CareerEDGE model has its inadequacies. Smith, et al., (2014) believed that the model has a limited application because of it being a mere snap-shot view of employability. In spite of all the criticism CareerEDGE model describes the concept of employability comprehensively and the model itself is widely recognized and accepted (Smith, et al., 2014; Pool & Sewell, 2007).

Chapter 4

Research Methodology

4.1 Research Design

This study is employing a mixed-method design. To develop a comprehensive understanding of the issue, both quantitative analysis and qualitative analysis are conducted to analyze the perception of graduates and employers. Mixed-method allows researchers to address the research objectives in an appropriate matter through collecting and analyzing both qualitative and quantitative data (Creswell, 2014). The advantage of mixing close-ended quantitative data and open-ended qualitative data allows researcher to understand the research problem and while quantitative approach supports to derive objective findings, qualitative data can provide depth to the study by providing deeper insight (Teddlie & Tashakkori, 2009). In an explanatory sequential mixed method, the researcher first carries out the quantitative research and analyzes the results, and then conducts the qualitative research to build on the quantitative results and examine them in more detail (Creswell, 2014). In this study, initial quantitative data results are further explained with qualitative data.

4.2 Quantitative Research

Researchers use experiments and surveys as a part of inquiry strategies in a quantitative approach. According to Creswell (2007), statistical data has to be yielded through data collection. Struwig and Stead (2001) state that quantitative research design is focused on representativeness and thus, aims to generalize the results stating that these methods

studied by the researcher focuses attention on measurement and amounts of the features/traits exhibited by people and events. A quantitative research method allows the social behaviour and perspective to be quantified (Rahman, 2020). Adopting a quantitative method allows the researcher to investigate the research questions in this research such as which skills are most important, the extent to which graduates, and employers are satisfied and which steps can enhance employability by providing numerical data. A quantitative design is adopted to collect data from large number of subjects and to analyze the data statistically. Quantitative designs are widely used to study a cross-section of a population which in this case will be employers in different organizations and recent graduates.

4.2.1 Population & Sampling

Two sampling techniques, probability and non-probability sampling, are used in conducting research. In representative or probability sampling, each individual in the population under study has a known probability of getting selected in the sample for the research (Creswell, 2007). Whereas when the probability of a person being selected is not known, it is defined as non-probability sampling. Survey and experimental research designs are usually linked with probability sampling (Struwig & Stead, 2001).

The population for this research comprises of employees and employers in different organizations of Pakistan. To obtain a large set of data, different work occupations are chosen. Graduates who have completed their undergraduate degree and are currently working or have previously worked in an organization are chosen to be part of this study. The criteria for the employers selection is that all employers must be involved in the recruitment process through choosing candidate, interviewing them and supervising the

new hires under them. Purposive sampling is used to obtain data. The graduates' perception on employability skills resulted in a response of 372 graduates. The sample consists of recent graduates who have completed at least 16 years of education and are employed or have worked in those organizations. 71 employers responded on the employers' perception on employability.

4.2.2 Data Collection

In this study, the use of surveys in most of the literature is best suited to this type of research. The aim of the study is to bring forth the point of view of the respondents which is aided by questionnaires to help the respondents answer in a more orderly way so as to satisfy the goals set by the study.

Questionnaires are be used as a means to gather data. The questionnaires comprise of two components for the two populations. The first and second questionnaires are for employers and the graduates respectively. The questionnaires are sent to respondents online as it is cost-effective and eases the process of data entry. Two questionnaires are be adopted using skills identified in the literature (Paranto & Kelkar, 2000; Rosenberg et al., 2012).

Furthermore, the survey method is used as it allows to generate empirical data (Kelley, et al., 2003). Due to the short span of time, survey research through digital platform allows to gather information from a large number of subjects that are representative of the population. This ensures that the results can be generalized to the larger population. Data was collected through online platforms, E-mail and by distributing surveys from July 2021 to January 2022.

4.4.1 Descriptive Analysis

Using SPSS Software, descriptive statistics of the data are calculated comprising frequency distribution and measures of central tendency. Descriptive statistics summarizes the data and provides a simple interpretation of data in a meaningful way.

4.4.2 Statistical Analysis

Data is analyzed using SPSS Software. To study and examine the association between the variables of employability, factor analysis is carried out. This method is able to identify the number of factors in the instrument used and the correlation among these factors (Worthington & Whittaker, 2006). The aim is to determine the smallest number of common factors that will account for the correlation. For a good factor analysis, the Kaiser-Meyer-Olkin (KMO) test is carried out which tells the magnitude to which a correlation matrix contains factors (Kaiser, 1960). A value of 0.6 or higher is considered to be adequate for a good factor analysis (Tabachnick and Fidell, 2001). Factor analysis is useful when a large data set is available that has multiple items from questionnaires, and it helps to categorize variables into meaningful constructs (Rummel, 1988). The researcher relies on the theories relating to the study to understand the factors that are formed and the researcher selects the criterion which is most suitable. The eigenvalues are used to determine the number of factors to retain. (Kaiser, 1960).

It is vital to ensure validity and reliability of the survey instrument used in research. Validity refers to whether the research design is conducted satisfactorily. By testing the external validity, which is associated with sampling procedures, it is evaluated whether the

study's results can be generalized to other people and settings. Reliability of survey instrument is tested using Cronbach's alpha. (Struwig & Stead, 2001).

4.3 Qualitative Research

A qualitative research design is used for understanding the context and meaning individuals or groups assign to a social or human problem (Creswell, 2014). It provides descriptive and detailed information and helps to converge information from different sources. Qualitative research design is used so participants can openly share and express their views which helps to gain as much data as possible. Thus, in this study, the research objectives such as identifying factors that influence the hiring of graduates, the perspective of employers on most important skills and their satisfaction level can be analyzed in-depth as qualitative research design helps the researcher to address the research objective by understanding participants' opinions and experiences (Rahman, 2020).

4.3.1 Population & Sampling

For qualitative research, convenience sampling method is adopted. Researcher contacted 14 employers in telecommunications, banking, technology and construction company from an easily accessible pool. The selected candidates were assured of confidentiality and anonymity. However, out of the 14 employers, 6 agreed to participate in the study.

4.3.2 Data Collection

Interviews were conducted from February 2022 to March 2022. Interviews were recorded and transcribed, with the exception of 3 employers who expressed their unease. In these cases, extensive notes were taken, and full details were transcribed as soon as interview

was over. These interviews lasted longer as detailed notes had to be taken during the interview. The duration of the other interviews is 25 minutes.

The employers chosen are responsible for recruitment in their companies, ensuring that they have the knowledge and experience to be part of the study. Two of the semi-structured interviews are conducted face-to-face, whereas the others are conducted online through video-conferencing platforms.

4.4.3 Thematic Analysis

Thematic Analysis is used to study patterns and themes that relate to the data, helps to add accuracy and meaning to the research. The qualitative findings are based on interviewing employers from different companies. Interviews are transcribed, openly coded, and are thematically analyzed (Grbich, 2007). Thematic analysis is used to “identity patterns and codes” which are used to construct themes.

Chapter 5

Results

5.1 Quantitative Findings

The purpose of this study includes identifying the competencies required in the job market, the satisfaction level of both graduates and employers and strategies required to enhance employability skills. Chapter 5 shows the results of the surveys through descriptive statistics, reliability tests and factor analysis to form factors. Graduates' perception on employability is explained first followed by employers' perception.

5.1.1 Graduates' Perception

The first part of the quantitative findings consists of the 372 business and social sciences graduates who are employed or have had a previous working experience. 57% of the respondents are male and 43% females. Table 1 shows the graduates' major they opted for in their degree at HEI. 26.6% of the graduates have a major in Economics, followed by Marketing (14.5%), Business Studies (13.2%) and Finance (11.3%). Table 2 represents the type of organization the graduates are working in. 35.8% of the graduates are in the services sector whereas 14.5% graduates are employed in the private sector.

Table 1*Graduates' Major in Degree*

Major	Frequency	Valid Percent
Accounting	28	7.5%
Finance	42	11.3%
Business Studies	49	13.2%
Economics	99	26.6%
Development Studies	30	8.1%
Marketing	54	14.5%
Management	36	9.7%
Public Administration	2	0.5%
Human Resource	32	8.6%
Total	372	100.0%

Table 2*Graduates' Type of Organization*

Type of Organization	Frequency	Valid Percent
Service	133	35.8%
Non-Profit Organization	50	13.4%
Government	51	13.7%
Professional	52	14.0%
Semi-Government	8	2.2%
Financial	16	4.3%
Private	54	14.5%
Other	8	2.2%
Total	372	100.0%

Table 3 shows that 57.8% of employees felt that they were prepared after graduating to enter the job market. 21.5% felt that they were not ready while 20.7% were uncertain on their preparedness. Graduates were asked whether practical training or work experience was required to complete their degree. 59.9% graduates informed that there was no practical training required to complete their degree while 37.9% were required to do practical training to get their degree. 2.2% of graduates were unsure about the practical training.

Table 3

Preparedness of Graduates & Practical Training Requirement

Item	Maybe	No	Yes
Preparedness of graduates	20.7%	21.5%	57.8%
Practical Training Required for Graduation	2.2%	59.9%	37.9%

To address research objective 4, graduates were asked what changes HEIs need to incorporate in order to provide a smooth transition to labor market. Table 4 shows that graduates regard providing support to graduates after obtaining degree as the most important (M=4.52) followed by establishing relation between graduates and employees. Facilitating graduates through placement offices and career development services is considered an important step to increase employability among graduates. Graduates also feel that the curricula is not practical enough and practical courses should be included (M=3.93). Introducing project-based learning can help develop the required skills. With a mean of 3.77, work placement holds least importance among graduates.

Table 4*Graduates on What Should Be Incorporated in Curriculum*

Item	Mean	SD
Run courses that are more relevant to the needs of enterprises	3.93	1.25
Include practical classes in courses	4.12	1.04
Include compulsory work placement experience as an integral part of the curriculum	3.77	1.00
Provide support to graduates after they have obtained their degree (facilitate]	4.52	0.92
Relations between graduates and enterprises	4.20	1.07

Table 5 represents the test results for Cronach's Alpha and KMO and Barlett's Test. The reliability coefficient is 0.928, indicating a good consistency of the items adopted. The KMO and Barlett's Test is carried out to check the suitability of data for detecting factors. The Barlett's test of sphericity shows whether the correlations in our variables are adequate for factor analysis. As the p value is less than 0.05, it confirms that there are enough correlations for factor analysis. Table 5 shows that as value is above 0.6, the sample is adequate to run factor analysis.

Table 5*Cronbach's Alpha & KMO and Barlett's Test*

Test	Value
Cronbach's Alpha	0.928
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.793
Bartlett's Test of Sphericity	1265.628
Approx Chi Square	.000
Sig	

To address research objective 1 and 2, descriptive statistics for perceived importance and satisfaction are shown in Table 6. Graduates rated critical thinking as the most important skill (M=4.34). Lowest importance is assigned to competencies required in specialization of area (M=3.26) followed by knowledge of word processing and spreadsheet software with a mean of 3.34. While problem-solving skills is rated highly in importance (M=4.00), graduates expressed most dissatisfaction with the development of the skill with a mean of 2.83 only. Graduates are most satisfied with their writing skills after graduation (M=3.94) and their speaking skills (M=3.73). While knowledge of word processing software is not considered important among graduates, they are content with their ability. Interpersonal skills are rated as the second most important competency required for employability (M=4.15) followed by business ethics (M=4.12). Graduates seem relatively satisfied with their interpersonal skills (M=3.54), however, graduates are dissatisfied with business ethics development (M=3.23).

Table 6*Importance & Satisfaction with Skills*

Skill	Mean Importance	SD	Mean Satisfaction	SD
Competency in specialization of area (accounting, etc)	3.26	0.87	3.34	1.05
Experience in dealing with real world problem (problem solving skills)	4.00	1.00	2.83	1.23
Technical Skills	3.42	0.79	3.31	1.19
Ability to adapt to changing technologies (computers etc)	3.46	0.89	3.35	1.03
Critical Thinking	4.34	0.74	3.48	1.12
Written Skills	3.42	1.13	3.94	1.22
Speaking Skills	3.86	1.12	3.73	1.20
Listening Skills	3.82	1.09	3.61	1.24
Creative thinking (innovative, new ideas)	4.04	0.98	3.44	1.31
Leadership Ability	3.80	1.03	3.17	1.16
Interpersonal Skills	4.15	1.01	3.54	1.22
Business Ethics	4.12	0.82	3.23	1.22
Professionalism	3.71	0.94	3.19	1.23
Knowledge of Word Processing Software	3.34	0.91	3.69	1.27
Knowledge of spreadsheet software	3.34	0.84	3.45	1.35

Table 7 shows the factor analysis and it is found that data can be structured into four components to further provide insights for research objective 1. Core skills are the generic skills that are required to succeed at any job (critical thinking, decision making, leadership skills, problem solving skills and interpersonal skills). Specific skills include technical

skills, specialization of area, spreadsheet and word software and the ability to adapt to changes in technology. Knowledge of database software is removed due to low factor loading depicting that it is not relevant for business and social science graduates. Personal attributes comprise of ethics and professionalism. Writing, speaking and listening skills form the fourth construct, communication skills.

Table 7

Factor Analysis & Mean Importance Score

Skill	Component			
	1	2	3	4
Technical Skills	0.963			
Knowledge of word-processing software	0.930			
Knowledge of spreadsheet software	0.911			
Ability to adapt to rapidly changing technology	0.904			
Competencies in specialized area	0.484			
Creative Thinking		0.836		
Interpersonal Skills		0.816		
Critical Thinking		0.758		
Experience in dealing with real world problems (problem solving skills)		0.739		
Leadership		0.707		
Speaking Skills			0.840	
Writing Skills			0.838	
Listening Skills			0.787	
Professionalism				0.809
Business Ethics				0.668

Table 8 shows the importance of skills rated by the graduates and the satisfaction level as per research objective 1 and 2. Specific skills are least important (M=3.37) whereas core skills have the highest score (M=4.07). Personal attributes (business ethics and professionalism) are also highly important (M=3.91). Despite core skills being most important, graduates are not satisfied after higher education in regards to gaining core skills (M=3.29). Graduates are least satisfied with personal skills (M=3.21). With a mean of 3.76, graduates are satisfied with their communication skills (writing, listening and speaking).

Table 8

Graduates Perspective on Importance & Satisfaction of Skills

Factor	Mean Importance	Std. Deviation	Mean Satisfaction	Std. Deviation
Specific Skills	3.37	0.75	3.43	0.99
Personal Skills	3.91	0.78	3.21	1.20
Core Skills	4.07	0.81	3.29	1.06
Communication Skills	3.70	1.01	3.76	1.14

5.1.2 Employers' Perception

The second part of the quantitative analysis comprises of employers' perception. 71 complete responses were received from the employers. 54.9% of the respondents were male whereas 45.1% female employers took part in the survey. Employers were asked what percentage of employees in their organization are from highly ranked universities of Pakistan (Table 9). 52.1% of employees claimed top universities' graduates make up 25-50% of the workforce. 29.6% stated that major proportion of employees are graduates of

universities with high reputation (50%-100%). Table 10 shows the type of organization the employers work in and Table 11 shows that 72% of the respondents are working in large organization (over 300 employees).

Table 9

Employers on Hiring from High Ranked Universities in Pakistan

Employees	Frequency	Valid Percent
0-5%	5	7.0
10-25%	8	11.3
25-50%	37	52.1
50-100%	21	29.6
Total	71	100

Table 10

Respondents' Type of the Organization

Type of Organization	Frequency	Valid Percentage
Banking	11	15.5%
Telecom	19	26.8%
Government	1	1.4%
Professional	3	4.2%
Financial	6	8.5%
Manufacturing	8	11.3%
Non-Profit	5	7.0%
Service	18	25.4%
Total	71	100.0%

Table 11*Respondents' Size of the Organization*

Employees	Frequency	Valid Percent
100-200	2	2.8
200-300	9	12.7
50-100	9	12.7
Over 300	51	71.8
Total	71	100

Table 12 sheds light on the factors that affect the recruitment process. Employers place highest importance on the reputation of the university graduates obtained their degree from (Mean = 3.55). As seen in Table 8, organizations prefer hiring from highly ranked universities. Another factor that affects the chances of being called up for an interview and getting hired is previous work placement and internship (Mean = 3.17). Importance of having studied abroad is rated the lowest by employers (Mean = 3.00).

Table 12*Factors Affecting Recruitment Process*

Item	Mean	Std. Deviation
Reputation of the university where they studied	3.55	1.53
Having studied/worked abroad	3.00	1.13
Work placement during studies	3.17	1.06

Table 13 shows the reasons behind employers facing difficulties in finding the right people for any given job. All the employers agreed that they have had difficulty in hiring the right people for any position. Among the reasons for difficulty in recruiting graduates, shortage

of candidates with the right skills for the job was the most frequently chosen answer (35.0%). Shortage of university graduates in a given field (21.7%) is the second most frequently chosen answer followed by shortage of candidates willing to be geographically mobile (15.0%). Marketing of job vacancies and adapting to work schedule are not significant hurdles in the recruitment process.

Table 13

Difficulties in Recruiting the Right Candidate

Item	Frequency	Valid Percent
Limited resources to allow adequate marketing of job vacancies.	6	5.0
Shortage of candidates with the right skills for the job.	42	35.0
Shortage of university graduates in a given field.	26	21.7
Shortage of candidates willing to accept the salary	6	5.0
Shortage of candidates willing to be geographically mobile	18	15.0
Shortage of candidates willing to relocate	14	11.7
Shortage of candidates willing to adapt to the work schedule.	8	6.7

Table 14 shows employers' response to what collaborations are required to enhance employability skills. Employers stated that including practical classes in curriculum is the most important (M=4.03). Facilitating graduates after they have completed their degree is rated as the second important change required (M=3.82). Least importance is given to including compulsory work placement (M=3.77).

Table 14*Employers on What Should Be Incorporated in Curriculum*

Item	Mean	SD
Run courses that are more relevant to the needs of enterprises	3.82	0.976
Include practical classes in courses	4.03	1.171
Include compulsory work placement experience as an integral part of the curriculum	3.77	1.161
Provide support to graduates after they have obtained their degree (facilitate]	3.89	1.214
Relations between graduates and enterprises	3.68	1.106

Employers were questioned on the industry-academia linkages to address research objective 4. The first item measured the response on cooperation with universities on curricula. Table 15 shows that 71.8% employers stated that they have never been involved in any discussion on designing curricula. Only 5.6% employers gave a positive response while 18.3% employers claimed the practice of engaging with universities is extremely rare. Second item measures the collaboration of organizations with university career and placement offices. 49.3% of employers said that their organization integrates with universities through their career and information services. 11.3% of employers said they have never participated in integration between universities and organization. 23.9% said the graduate recruitment through university career services happens very rarely. The third item determines whether employers and universities are engaging and integrating to provide a platform to students to learn about the trends and employability skills. 40.8% of employers have never taken part in any forum arranged by universities. Only 9.9% of

employers are actively participating and communicating with universities and the students. 28.2% of employers attend conferences and forums from time to time.

Table 15

Employers on Industry-Academia Linkage

Item	Never	Often	Rarely	Sometimes
Cooperation with universities in discussing and designing curricula	71.8%	5.6%	18.3%	4.2%
Recent graduate recruitment through university careers and information services	11.3%	49.3%	23.9%	15.5%
Participation in business forums and conferences organized by a university	40.8%	9.9%	21.1%	28.2%

To address quantitative research objective 1 and 3, employers rated the importance of skills and their satisfaction with the skills Pakistani graduates possess. Results are presented in Table 16. It can be seen that employers ranked interpersonal skills (M=4.30) and creative thinking (M=4.24) as the most important skills graduates should have. Critical thinking and problem-solving skills developed through experience in dealing with real problems are also important (M=4.18). Least importance by employers is given competencies required in specialized area (M=3.31), technical skills (M=3.32) and knowledge in spreadsheet software (M=3.32). While creative thinking is most important, employers are not satisfied with graduates' creative thinking (M=2.87). Similarly, employers are dissatisfied with graduates' ability to deal with problems (M=2.86) and their leadership ability (M=2.96). Employers are most satisfied with graduates' ability to adapt to changing technology (M=3.30). While professionalism has high importance

(M=3.9), employers are not much satisfied (M=3.07). Speaking (M=4.03) have high importance but a low satisfaction ranking for speaking (M=3.03).

Table 16

Importance and Satisfaction with Skills

Skill	Mean Importance	SD	Mean Satisfaction	SD
Competency in specialization of area (accounting, etc)	3.31	1.17	3.03	1.18
Experience in dealing with real world problems	4.18	0.88	2.86	1.05
Technical Skills	3.32	1.17	3.07	1.03
Ability to adapt to changing technologies (computers etc)	3.42	1.17	3.30	0.99
Critical Thinking	4.18	0.99	3.01	1.13
Written Skills	4.01	1.17	3.08	1.08
Speaking Skills	4.03	1.15	3.03	0.91
Listening Skills	3.86	1.20	2.79	1.12
Creative thinking (innovative, new ideas)	4.24	0.93	2.87	1.08
Leadership Ability	3.93	1.02	2.96	1.05
Interpersonal Skills	4.30	0.96	3.13	1.13
Business Ethics	3.85	0.89	3.14	1.16
Professionalism	3.92	0.86	3.07	1.14
Knowledge of Word Processing Software	3.39	1.14	3.08	1.08
Knowledge of spreadsheet software	3.32	1.23	2.83	1.13

Factor analysis is carried out and shown below in Table 17. Four set of skills are formed as previously observed in graduates' results. Core skills, specific skills, communication skills and personal attributes are the four constructs formed. As seen in Table 14, critical

thinking, decision making, leadership skills, problem solving skills and interpersonal skills form the core skills. Writing, speaking and listening skills form the fourth construct, communication skills. Business ethics and professionalism are personal attributes while the rest of the items form the specific skills.

Table 17

Factor Analysis

Skill	Component			
	1	2	3	4
Creative thinking skills	0.914			
Interpersonal skills	0.845			
Experience in dealing with “real world” problems	0.812			
Critical thinking skills	0.802			
Leadership ability required in their job.	0.766			
Competencies required in their specialized area		0.935		
Technical skills		0.922		
Knowledge of word processing software.		0.78		
Ability to adapt to rapidly changing technologies		0.736		
Knowledge of database software		0.641		
Listening			0.905	
Speaking			0.883	
Writing			0.808	
Professionalism				0.824
Business Ethics				0.789

Table 18 shows that Employers have rated core skills as the most important set of skills that can affect employability (M = 4.17). Communication skills (writing, listening and

speaking) are second-most important set of skills (M = 3.97). Least importance is given to specific skills (M = 3.37). Table 18 also states the satisfaction ranking by employers. Employers are least satisfied with the communication skills and core skills of graduates (M=2.97). Employers are relatively satisfied with personal attributes (M=3.1) whereas specific skills has a mean of 3.0. Overall, employers are not satisfied with the quality of graduates. As per the employers' responses, graduates are lacking the necessary employability skills.

Table 18

Employers' Perspective on Importance & Satisfaction of Skills

Construct	Mean Importance	Std. Deviation	Mean Satisfaction	Std. Deviation
Core Skills	4.17	0.87	2.97	1.00
Personal skills	3.88	0.86	3.11	1.10
Communication Skills	3.97	1.09	2.97	0.95
Specific Skills	3.37	1.01	3.05	0.98

5.2 Qualitative Findings

In addition to the surveys, employers' interviews were conducted to further verify the findings. 6 employers participated in the study. Table 19 lists the details of the employers' designation and their organization.

Table 19

Respondents of the Interview

Respondent	Company	Position	Gender	Location
A	Telecommunication	Regional Manager Channel Enablement	Male	Faisalabad
B	Banking	Senior Officer Recruitment	Female	Lahore
C	Telecommunication	Human Resource Lead	Male	Multan
D	Construction	Senior Executive Operations	Female	Lahore
E	Telecommunication	Expert Talent Acquisition	Female	Islamabad
F	Telecommunication	Planning Manager	Male	Multan

Following are the themes that emerged from the findings:

1. University Reputation
2. Dissatisfaction on mismatch of skills
3. Prior work-experience/internships
4. Importance of core skills
5. Interaction between organizations, universities and graduates

5.2.1 University Reputation

The qualitative research objective 1 is to determine the factors behind the hiring decision of employers. One of the factors identified in this study is the reputation of the university. The recruitment process starts with candidates applying for the job by sharing their resume and CVs. An important check while selecting CVs of graduates is the university which they have obtained degree from. Graduates with degrees from top universities of the country are expected to possess better skills.

“During the hiring process, the first thing is to skim CVs, where recruiter definitely looks into the university of candidate & priorities accordingly.” (Employer D).

“One of the factors that affect recruitment process is the university. We have too many universities but only a few are considered top-notch. Due to shortage of jobs, we get many applicants for one position. So we choose candidates from top universities first. For any employer, a university with a good repute means that its graduates will have good communication skill and will be more professional.” (Employer C)

The priority of the organization is to hire from the top universities in Pakistan. All the employers expressed that there is a lot of competition in the job market and companies are always looking to hire from the top universities. However, they expressed that a foreign degree does not increase the chances of getting hired. Five out of the six recruiters gave high importance to university reputation.

“International firms only hire students from good and reputed universities. Those who graduate from not so reputable universities usually have to resort to small scale start-ups.”

(Employer E)

“The repute of the university has been one of the top priorities in my department. The higher management consists of highly qualified individuals with good educational background, so they are always looking for top universities’ graduates. In the last year, we hired four individuals in our department for entry-level positions and two of them were from Lahore University of Management Sciences. The other two from National University of Science & Technology and Lahore School of Economics. So, you can see that a degree from a good university has a high weightage. I would not say it’s a good practice because it is limiting, not all top universities students are the right fit.” (Employer F)

One of the Telecommunications employers had a different response towards the question. While reputation is necessary, students from low ranked universities are also hired due to their strong skillset. Recruiters do take into account other important factors such as skills, interests, and the desire to learn which can be assessed during the interview and through certificates and courses.

“When assessing a candidate, the reputation of their graduating university has a certain weightage as the quality of education received varies institution to institution. However, the candidate’s selection is not based on his academic prowess alone.” (Employer B)

5.2.2 Dissatisfaction with graduates' skills

To address qualitative research objective 3, employers were asked about their perspective on whether Pakistani graduates have the required skills to adjust in the labour market. All of the interviewees agreed that there is a mismatch of skills and demand in Pakistani market which causes hiring hurdles and dissatisfaction. Employers are concerned that business and social sciences students do not possess the relevant skills and knowledge that are required to succeed in the job market.

“Despite having educational knowledge, students have little to no knowledge of practical applications of concepts.” (Employer B).

“If you talk about Pakistani graduates, so the mismatch is there as our education system has very limited majors to offer in academic. On the other hand, professionally the job market has a lot to offer. So, when the candidates who are not well skilled as per the job's requirements, they find it hard to adjust. But once they gain some experience in the job market, they're all good to go.” (Employer A)

As per the employers, the job market and universities in Pakistan are in huge contradiction with each other. The universities do not provide graduates with skills that employers are looking for. University education is impractical and far from what is needed to become employable. Furthermore, the assessment system in Pakistani education system is based on rote learning and cramming rather than conceptual understanding and practical skills. Employers are least concerned with the abstracts of education. Employers assess how the personality of graduates can contribute in shaping an effective work environment and how the

intellectual competency and personal qualities can bring about practical benefits for the employer, firm and the economy.

“Most universities promote getting grades over actual learning. HEC needs to have a stricter criteria in entrance exams to encourage students to study harder to prepare themselves for the job market. Most students graduate from colleges and universities with high grades but face unemployment after due to not being prepared and they do not have the right set of skills then.” (Employer E)

“When we are interviewing candidates for any job, there’s always a human resource person present along with the line manager. So our main focus is to judge how the person does under pressure, his ability to think and handle tough situations. I think that graduates suffer more in the soft skills and communication category.” (Employer B).

A complete and fool-proof system of education makes sure that all the above-mentioned concepts, i.e. conceptual understanding, personal and professional achievements and personal qualities, are inculcated in graduates and that they become a part of their personality. A self-efficacious graduate takes up complications and obstacles head-on and works towards the disentanglement of such issues through the application of his/her skills, qualities and experience. Presenting this ability in front of the employer in a convincing manner helps make the graduate relatively more employable. However, possessing these skills is necessary but not sufficient. It is essential that the graduates also possess the ability to demonstrate and employ these abilities in real life. The practicality of these skills is an important part of becoming employable. One of the employers stated that in Pakistan, it is not just the higher education that is lacking but primary and secondary as well. A large

chunk of graduates fails to perform in this regard as education in Pakistan emphasize rote learning and academic competition rather than practicality of academic discourse. Academic experience should be able to enhance intellectual capabilities and problem-solving skills of graduates, but this aspect is lacking in higher education in Pakistan.

“Pakistan has so many universities, but we struggle to find the right candidate and the graduates struggle to find jobs. While I believe higher education needs massive improvements and changes, we need major changes in primary and secondary level as well. There is huge difference between kids in private schools and the way they communicate and develop skills and the ones who suffer in low quality schools. So this difference keeps on increasing, we only have a few good universities and graduates of these top universities get easily hired.” (Employer C)

“I have interviewed multiple people this year and I have noticed that graduates are sometimes unable to show the required skills, they are completely unaware on how to apply the knowledge in real and how to convince the employer they’re good at handling problems. We need individuals who are fast-paced and can handle pressure, which doesn’t come from books.” (Employer D)

5.2.3 Prior Experience

Addressing qualitative research objective 1, another factor that is identified that influences the hiring decision is prior experience. When considering whether experience is essential for fresh graduates, the responses varied a bit. Work experience allows individuals to gain skills or refine their skills and it also provides them an opportunity to apply their knowledge in practical. However, work experience is not the only criteria. Employers value education

and skillset as well. It is preferred to hire someone who possesses the right attitude and motivation even if the person does not have a past working experience. The whole aspect of the candidate is taken into account, which does not only include the education and job experience but also extra-curricular activities, courses, and the skills exhibited during interview.

“In my personal experience, I always hire fresh grads in the paid training/internee program where they can learn professional skills. Also, if they’re confused in selecting the right field, during the internship they can get the idea if this is something they want to pursue or not. If yes, then that’s the good chance to get trained & after the completion of training program, I instantly offer full time job to the candidates I trained.” (Employer D)

“For every candidate, first comes a bachelor’s degree. That’s the basic, you see. Work experience of 3-6 months is a plus if the field or key responsibilities are similar. That will give you an edge. However, even if internships give the exposure, once you’re hired, you go through proper training required for the current position. This is especially true if you are moving within companies, the process of learning never stops. I would prefer somebody who is very motivated to learn than someone with 1-2 internships.” (Employer F)

“Internships are not that significant; we hire fresh graduates without any experience too. However, if they have done internships in same industry, it gives them an edge because they will have some idea of the business.” (Employer A)

With the rapid emergence of online learning, employers now appreciate those candidates who have online courses certificates listed on their CVs as it shows the candidate’s desire

to learn and enhance their skill-set. Furthermore, gaining computer skills through online platforms is also beneficial as these days employers mostly expect candidates to have spreadsheet software knowledge.

“Internships in Pakistan are just not as organized as one must think, to be frank. People are not serious and by people, I mean the employers as well. They are too busy in their own work that they are able to give very less time to the internees, that’s what I have seen in a number of places. I am not saying this must be the case everywhere. Yes, internees get the exposure and interaction. But proper job training only happens when they are hired for a full-time position. Hence, I do not completely rely on work experience. However, I do get impressed when there is a bunch of extra online courses on the CV. Online learning is amazing and it gained huge success during the pandemic. It shows graduates are moving with the trend and are eager to learn.” (Employer C).

For some specific jobs, the level of education is not as significant as work experience. In cases such as hiring for sales, work experience gets the advantage over education. This is because the nature of the job requires to gain particular skills that can be attained through experience.

“For fresh graduates, internships should be compulsory, and internships should be relevant to the field of study. Internships are only three months, but it gives you an understanding of how a workplace functions, main concepts and functions about the department you are working in.” (Employer E)

“Prior internships allow the candidate to have a slight advantage as they have gained experience in a professional environment and are not completely unaware of the systems structure and behaviour of organizations.” (Employer B)

5.2.4 Importance of Core Skills

To address qualitative research objective 2, employers were asked which skills are most desired in the job market or workplace. Individuals working in human resources rated problem solving skills, handling problems, interacting with others and being inquisitive as extremely significant and playing a major factor in hiring of employees. All the companies mention on their job advertisement about requiring creative individuals and their ability to come up with solutions and be a team player. Employers state that the presence of academic skills is not a sufficient condition to ensure success in the workplace. Graduate that are relatively more knowledgeable in their subject face a hard time in getting employed if they do not possess the necessary soft skills to complement their academic discourse.

“Even for business and social sciences graduates, you should have basic knowledge of your subjects. However, employers give more importance to other skills such as critical thinking, problem-solving, interpersonal skills.” (Employer A)

In fields such as sales and human resources, qualities that are desired in an ideal candidate include social and open, motivated and leadership. A person who has good social skills and is able to present and negotiate with people will be considered highly employable.

“Confidence and leadership are most sought after in my opinion. The ability to take orders but also take initiatives is a close second.” (Employer E)

On the entry level, generic/ soft skills are sole determinants of whether the candidate would get the job or not. Many fresh graduates start a job that has nothing to do with their academic experience. Businesses emphasized the role of generic skills. At an entry-level stage, many business and social sciences undergraduates get jobs that have nothing directly to do with their degree. It is considered more important that the graduate has the ability to manage daily operations, work in collaboration with teammates, can meet deadlines and has effective communication skills to communicate ideas into practical realities. It is considered essential for candidates to be able to work under pressure and to be able to meet challenges with utmost creativity and zeal. Such a motivation to do one's job is a sure determinant of progression in one's career.

“Communication skills, interpersonal skills. Business and social science graduates should be good at dealing with people, managing and working in teams. You will not be asked to write about theories in jobs. It is how you apply your learning and how you respond. It is more to do with your interpersonal skills, good writing skills and being confident.”
(Employer D)

“We hire a lot of social sciences graduates and most the jobs are not directly related to their discipline. But it's the interpersonal skills, the communication skills and ability to adapt that gets them going.” (Employer E).

Employers put great emphasis on interpersonal skills as one of the most desirable skills in graduates. Along with interpersonal skills, graduates are expected to have decision making skills and problem-solving skills.

“It is important for students to have strong interpersonal and communication skills. It is desirable for them to have the ability to effectively manage workload, have good organizational skills and decision making skill.” (Employer B)

“Interpersonal skills, writing and speaking English. Being able to communicate effectively, innovative thinking, teamwork and open to learning. I have interviewed quite many people in my vast experience, and I assess them over their ability to express, critical thinking, confidence and work ethic” (Employer F)

Conclusively, employers have consensus on the argument that candidates who are good at forming social relationships are more easily employed. Public relations are a common feature among street-smart people. These skills coupled critical thinking and sound analytical skills enable graduates to become problem solvers. Having technical knowledge is equally important. Employers believe that both types of skills carry weightage in making a person more employable. Academic skills help largely in the interview stage and daily operations, but soft skills are necessary for progression in one’s career. University disciplines have established a clear dichotomy between the two types. It is high time that every discipline includes teaching soft skills in their curriculum. Such a reorientation of academic discourse is necessary to align higher education with industrial needs and to enhance employability of candidates.

“Students who are more outspoken and street-smart are more likely to get a good job. Whereas those who may know the subject and the field better may be left behind due to their lack of confidence in most cases.” (Employer E)

Education is largely theoretical and so it fails to align graduates with job market requirements. However, the education of soft skills varies with disciplines. The faculty of technical subjects such as natural sciences or Information Technology do not pay adequate attention of teaching soft skills. They believe that the essence of the subject is enough for students to be adequately employable. Other disciplines are somewhat directly linked to job market requirements. These fields include business studies, economics, social sciences, etc. One of the employers pointed out that it varies from position to position. While some of the qualities such as work ethic and problem-solving skills can be applied to all jobs, employers would prefer graduates more technical knowledge of their subject and computer skills over interpersonal skills for some specific jobs.

“Most jobs require basic skills such as having good work ethic and while some jobs required individuals to have better interpersonal skills to improve interactions with customers, others would require individuals who know the subject.” (Employer C)

5.2.5 Interaction between Universities, Organizations and Graduates

To address qualitative research objective 4, employers were questioned on the initiatives companies and employers are taking and what improvements are required in HEIs for skill development. Job fairs allow organizations to reach out to and interact with individuals that are about to graduate and are either actively job hunting already or are about to start shortly. The organizations have a chance to understand what their pool of potential new recruits has to offer to them but also, they get to display their organization’s goals and expectations from their new employees. This exposure brings both parties together and allows them to align their expectations from each other. This also helps the job hunters discover and

explore the options they have however, job fairs only work as far as exposure is concerned. These interactions are not nearly enough to end with a successful recruitment.

“Organizations should have more interactive sessions with the students in universities, job fairs and internship placements can help students learn and develop interpersonal skills. It is important for students to get out of their comfort zone, getting exposure in a work environment can be really beneficial.” (Employer C)

“Collaborations will surely allow this transition to be smoother. Universities can cater to organization needs by arranging projects and/or internships, allowing students to closely observe management of businesses. If you see western countries, their industry-academia linkage is strong, but we are lagging behind” (Employer A)

Some of the top universities in the country have alumni networking events and job placement offers that are shared with university students and alumni. The networking events can help graduates to connect with alumni with prominent positions in both private and public sector. These interactions can provide insights on what skills are required in the job market.

“Networking is very important; you need connections, and it also broadens your vision. Universities should hold webinars and forums where employers interact with students and faculty members. I feel that most university in Pakistan do not even have career services and no guidance at all” (Employer D)

Trainee programs are an excellent starting point for both the organizations and new graduates as it provides both parties with an opportunity to explore their compatibility with

each other. The organizations get to work with new talent bringing fresh knowledge and a new perspective to the table. Whereas it gives fresh graduates an opportunity to train and get hands-on practical experience. Furthermore, there is also a safety-net present for both counterparts if their expectations do not align with each other.

“Trainee programs may allow a smoother transition. Further, regular seminars on the goals of a specific organization and its work environment will help students understand if they are suited for the job thus reducing employee turnover.” (Employer C)

A factor that should be considered in this case is the methods employers are using for job posting and hiring new talent are changing constantly, however job hunters are not updating their application methods and exploring the correct avenues. This leads to job hunters believing that no vacancies are available which is actually not the case. This gap between the two parties is what delays fresh graduates from getting jobs as they leave universities without any preparation. Hence, HEIs should ensure graduates have basic skills of well-written CVs, job hunting and utilizing online platforms.

“Some universities carry out job fairs which I think is good. Work placements are good option in the sense that they provide graduates with opportunity to learn how things work in a workplace and how you have to interact in teams. Faculty should keep students informed on how to write good resumes, build networks and use online job platforms.” (Employer E)

“Currently my organization does not directly communicate with any specific university for hiring. However, active recruitment is done through job fairs across the country. There is

still a long way to go, universities are following old teaching methods whereas job market is very different, we have been talking about the lack of quality graduates for so long that it's time HEC and HEIs should revise curricula and adopt good teaching practices in such a way that meets the demands of the job market.” (Employer B)

Summary of the themes identified are represented in Figure 2 below.

University Reputation	<ul style="list-style-type: none"> • Important check while skimming through CVs • Considered a signal of skills and professionalism
Dissatisfaction on graduates' skills	<ul style="list-style-type: none"> • HEIs are too theoretical • Lack of practical skills • Graduates suffer more in core & communication skills
Prior Work Experience	<ul style="list-style-type: none"> • Varied response, but prior experience does groom graduates • Quality of internships need to be improved to make them more effective • Graduates' motivation and eagerness to learn
Importance of core skills	<ul style="list-style-type: none"> • Academic skills are not sufficient to succeed • Critical thinking, problem-solving and interpersonal skills are highly rated. • Entry level jobs require display of core skills as their major is sometimes irrelevant
Integration between HEIs and organizations and graduates	<ul style="list-style-type: none"> • Job fairs and interactive sessions to engage students and employers • Internship placement or project-based learning to improve core skills • Career development services for professional guidance & support

Figure 2 Thematic Analysis Summary

Chapter 6

Discussion

6.1 Quantitative Study

The study has explored both graduates' and employers' perspectives on employability in Pakistan and identified the most important skills in the job market. The study confirms the importance of employability skills in the job market and the importance of 15 skills is evaluated in the research as per the research objective 1 and these skills are in line with previous studies (Finch et al., 2013; Paranto and Keller, 2000). As per previous literature, employers value core skills the most. Graduates who are currently employed or have had past working experience also highlighted that core skills are most important to secure a job. Among core skills, interpersonal skills along with creative thinking and critical thinking are demanded the most as highlighted in literature (Finch et al, 2013; Hernandez-March et al, 2009). Graduates and employers have rated subject-knowledge the least important for employability. Graduates rated personal attributes as second most important set of skills that are required for employability. The findings also indicate that employers and graduates place high importance to business ethics and professionalism which is similar to evidence provided by Jackson & Chapman (2012). Employers have rated university reputation as one of the most important factors that affect the hiring decision, followed by work experience. The graduates from higher ranked universities are at an advantage when they are entering the labour market (Pitan & Muller, 2020).

The research objectives 2 and 3 study were to determine the satisfaction level of the graduates and employers. Graduates are not satisfied with the development of skills such as business ethics and professionalism. The study found that 57.8% of graduates felt prepared to enter the labour market, however, they were not completely satisfied with their learning in higher education. While the scope of this study did not assess whether graduates are able to fully evaluate and reflect on their learning, previous studies have highlighted that only when students reflect on the skills, they need to develop will they be able to enhance their skills to succeed in the job market (Pool and Sewell, 2007).

As per the findings, graduates are not satisfied with the development of professionalism and business ethics which are grouped as personal attributes. Graduates expressed their satisfaction with their specific skillset. Similarly, employers are also satisfied with the specific skills of graduates, however, both the stakeholders have rated it the lowest important skillset. Employers are least satisfied with the core skills and communication skills of graduates. This finding is in line with previous studies where employers have stated that graduates suffer in core and communication skills, and they are dissatisfied with these skillsets (Alam et al., 2022; Raza & Naqvi, 2011; Paranto & Kelkar, 2000).

The research objective 4 was to discover the changes and initiatives that are required to enhance employability of graduates in Pakistan. Graduates believe that facilitating graduates after they have obtained their degree is of utmost importance, followed by establishing relation between organizations and graduates and including practical courses in the curricula. Graduates can be facilitated through recruitment drives, job postings, alumni networks, engagement in forums and seminars (Jackson & Bridgstock, 2021).

Employers believe that revising curricula by incorporating practical learning is the most vital. Employers have also placed importance on revising curricula as per the needs of the enterprises. Number of studies have pointed that for business and social sciences graduates, curricular and co-curricular activities should be improved to develop core skills (Ehiyazaryan, & Barraclough, 2009).

6.2 Qualitative Study

In this study, the research objective 1 was to determine different factors that determine the likelihood of getting hired by the employers. Employers regard high importance to the reputation of the university which is representative of professionalism and quality of graduates' skills. Evidence also confirms that the reputation of a school is highly likely to affect the prospect of being employed after graduation (Finch et al., 2013). It is found that employers believe that while some jobs require technical skills and grasp on subjects, for most business and social sciences graduates, interpersonal skills and communication skills are most important (Jackson, 2013).

Furthermore, the qualitative findings of this study suggest that employers expect graduates to enhance their skills through online courses and update their electronic profiles to meet the changing dynamics of the job market. Similar results were found in an American study (Hart Research Associate, 2015). Employers dissatisfied with core skills even though core skills are most important as per the findings. Raza & Naqvi (2011) had similar results of employers being unhappy with the quality of Pakistani graduates and Andrews & Higson's (2008) study also contributes to this finding as employers in European countries expressed that graduates lacked core and communications skills development. Similar to Hart

Research Associate (2015)'s findings, employers in Pakistan are displeased with problem-solving skills of graduates.

While employers in this study stated that higher education should provide a conducive environment for learning and grooming, some experts put emphasis on primary education for development of basic skills such as speaking, writing and ethics (Tarar, 2006). Employers' responses in the interview suggested that graduates are expected to show professionalism, however, it is not only the institution that plays part in developing individual characteristic but own capabilities to improve oneself also affects ethics and professionalism. This finding resonates with Tymon (2013) who suggests that learning outcomes vary among individuals. In contrast, Clark (2008) elaborated that university environment and relations along with work environment affects one's employability. Therefore, an integrated approach is needed where academic and institutional experience and individual learning aligns with employers' demands. It is also graduates' responsibility to put in the efforts to develop their employability skills (Rae, 2007).

While in the quantitative findings, graduates have given least importance to work placement and internships, employers pointed out in the interviews that work placements are necessary to help students learn the functions of a workplace. In Pakistan, the quality and effectiveness of internships is debatable as stated by even some employers. Hence, graduates do not believe internships help to enhance employability skills. Internships should equip students through intensive training and project-based learning rather than handing internees mundane tasks. However, in both the quantitative and qualitative findings, it is observed that most employers have regarded prior work experience and

internships important as they expose students to the working environment and can be a valuable experience to develop professionalism and interpersonal skills. It also helps to create professional contacts. During the recruitment process, employers prefer graduates who have work placements enlisted on their CVs. Employers' response on internships resonates coincides with other studies where employers over the world prefer graduates who have had experience in the job market or have gone through work-based learning and projects (Andrews & Higson, 2008; Hart Research Associate, 2015; Humburg, 2013; Jackson, 2013).

The research objective 4 was to discover the changes and initiatives that are required to enhance employability of graduates in Pakistan. As per the human capital theory, there is a direct linkage between education and employment (Becker, 1962). Investing in higher education results in human capital, making individual better informed and skilled as knowledge cannot be separated from the individual. The findings suggest that integration between higher education and employers is needed, and previous literature also emphasizes on the importance of integration between graduates, higher education institution and organizations (Alam et al., 2022; Donald et al., 2017; Humburg et al., 2013; Jackson, 2013). The results are in correspondence with the previous literature as graduates believe that HEIs should incorporate practical courses in the curricula, universities should engage with organizations and enhance accessibility and help develop skills through targeted programs. Employers stated that while Pakistan has large number of universities, the undergraduate programs are lacking the proper design needed to meet the requirements of jobs. Similarly, in previous studies, it has been pointed out that most universities in

Pakistan lack building blocks, laboratories, libraries and competent faculty (Alam et al., 2022; Haque et al., 2021). Employers believe that Pakistani education system is flawed with graduates having no idea how to apply theoretical knowledge in real life. Moreover, employers have suggested that we need to move our focus away from grades to practical learning. The Pakistani education system is based on rote memory to achieve higher grades instead of developing critical thinking and problem-solving skills (Raza & Naqvi, 2011). Previous studies have also suggested to revise curricula along with focusing on faculty development (Alam et al., 2022). The WIL and project-based learning should have evidenced output that graduates can utilize to demonstrate their skills to employers (Jackson & Bridgstock, 2020). Career development programs and WIL are essential in development of employability skills (Ferns et al., 2019; Hernandez-March et al, 2009; Ehiyazaryan, and Barraclough, 2009). Through the career development programs, students will be able to reflect and assess their skills development. Studies conducted in various countries have suggested that at government policy level, the focus should be on quality of graduates rather than the quantity (Humburg et al., 2013). Employers in this study pointed out that networking is also extremely crucial. (Ferns, et al., 2019). Through work placements, discussion forum and seminars, industry and academia can partner and collaborate to provide graduates a space to build contacts and handle graduates' queries. Clearly, there is a lack of coordination between employers and faculty in Pakistan.

Both the qualitative and quantitative findings confirmed that core skills are more important for business and social sciences graduates as compared to other skills. Employers place more emphasis on communication and interpersonal skills as opposed to academic

knowledge. University reputation is a major factor in hiring as per both the findings. Further research on evaluating teaching pedagogy and the effectiveness of career services in HEIs in Pakistan can reduce the skills gap. (Jackson, 2013; Paranto & Kelkar, 2000).

Chapter 7

Conclusion & Policy Recommendations

7.1 Conclusion

Business and social sciences graduates are entering the job market without being fully equipped with the necessary skills to get employed and succeed in a workplace. Employers have raised concern on the quality of the higher education as graduates are unable to meet the demands. The study considers the perspective of two stakeholders, graduates and employers, to determine the skills and their importance, the satisfaction level of both stakeholders and their perception on how employability skills can be developed through higher education. Data was collected on the employability through surveys and employers' interviews were conducted to further confirm the findings regarding the mismatch in skills and the necessary measures to be taken. Both graduates and employers are in accord in confirming core set of skills are more important to secure a job than specific skills. These skills consisting of critical thinking, problem-solving, creative thinking, leadership and interpersonal skills are valued in the workplace. The study has shed light on employers' perception of HEIs and graduates' dissatisfaction with the current education system. The findings are useful for Higher Education Commission, universities, organizations and university students. The integration between industry and academia is highly important, business and social science schools need to revise curricula and adopt new teaching methodologies that are in accordance with the requirements of the hiring managers. Employers, HEIs and HEC need to come together in a collaborative and proactive effort to make progress on these aspects.

7.2 Limitations & Future Research Recommendations

The study only takes into account business and social science graduates, therefore, the results on the importance of employability skills beyond these disciplines may not be generalized as other disciplines have different exposure and requirements. The study depended on graduates' self-assessment of skills, and it is assumed that individuals responded without any bias. To eliminate biased responses of employers towards their organizations and employees, anonymity and confidentiality was ensured. Future studies can explore a triangular approach including universities approach towards employability by evaluating the effect of universities' programs and career services on increasing employability skills.

7.3 Policy Recommendations

- Work Integrated learning (WIL) should be adopted by the higher education. Universities should support students in securing internships and given a considerable percentage of final grade should be allotted to completing internships. More weightage should be given to skill-based learning. Project-based learning, field-projects, internships are all important for successfully adopting WIL.
- Strengthen university and industry linkages. Initiatives such as Youth Internship Program are required on large scale. Industries should collaborate with universities through projects where students can have the opportunity to put their skills into practice. Such as students conducting research or a project on behalf of industry.

- Pakistani HEIs should enhance their teaching methods to be more experimental and in the field assessment that can particularly test the capability and potential of the candidate in reference to theoretical knowledge. This method will also induce greater research and intriguing abilities of the students who would learn the importance of applying the knowledge that they possess. This will also cater to the problem brought to surface by the employers related to their dissatisfaction of lack of important skills such as effective interpersonal communication, creative approach, critical thinking and self-initiative in some graduates.
- HEIs should develop career development plans for students in which students are able to reflect and evaluate their level of skills. HEIs in collaboration with HEC should devise alumni tracer studies to analyze employment trends and opportunities which would help guide all the stakeholders about the skills requirement and the educational needs.
- All universities should have career service offices that should provide a platform for engaging discussions, keeping students up to date with current trends and requirements, engaging and collaborating on programs that can enhance employability skills.
- With regards to employer satisfaction and expectations, HEIs should lay emphasis on characteristics that are the most significant to the employer yet have low satisfaction for example, critical thinking, creative thinking and leadership ability. Employers have highly encouraged and supported the use of a number of ways to increase involvement with HEIs which includes collaboration on research and innovation, work

placement opportunities for students, cooperation on curriculum design and study programs, cooperation with career services and centers and recruitment of graduates.

- Higher education departments should do assessments about the needs of the industry frequently and revise their approaches accordingly.

References

- Alam, M. J., Ogawa, K., & Islam, S. R. B. (2022). Importance of Skills Development for Ensuring Graduates Employability: The Case of Bangladesh. *Social Sciences, 11*(8), 360.
- Anderson, V., & Tomlinson, M. (2021). Signaling standout graduate employability: The employer perspective. *Human Resource Management Journal, 31*(3), 675-693.
- Andrews, J., & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher education in Europe, 33*(4), 411-422.
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of political economy, 70*(5, Part 2), 9-49.
- Bennett, N., Dunne, E., & Carré, C. (1999). Patterns of core and generic skill provision in higher education. *Higher education, 37*(1), 71-93.
- Boden, R., & Nedeva, M. (2010). Employing discourse: Universities and graduate 'employability'. *Journal of Education Policy, 25*(1), 37-54.
- Clarke, M. (2008). "Understanding and Managing Employability in Changing Career Contexts." *Journal of European Industrial Training 32*(4): 258–284
- Cheng, M., Adekola, O., Albia, J., & Cai, S. (2021). Employability in higher education: a review of key stakeholders' perspectives. *Higher Education Evaluation and Development*.
- Cooper, R. K. (1997). Applying emotional intelligence in the workplace. *Training & development, 51*(12), 31-39.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Creswell, J. W., & Clark, P. V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage

Donald, W. E., Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education, 44*(4), 599-614.

Ehiyazaryan, E. & Barraclough, N. (2009). Enhancing employability: integrating real world experience in the curriculum. *Education + Training, 51*(4), 292-308.

Farooq, S. (2011). Mismatch between education and occupation: A case study of Pakistani graduates. *The Pakistan Development Review, 53*1-552.

Ferns, S., Dawson, V., & Howitt, C. (2019). A Collaborative Framework for Enhancing Graduate Employability. *International Journal of Work-Integrated Learning, 20*(2), 99-111.

Finch, D. F., Hamilton, L. K., Riley, B. & Zehner, M. (2013). An exploratory study of factors affecting undergraduate employability. *Education + Training, 55*(7), 681-704.

Goleman, D. (1998). *Working with Emotional Intelligence*. Bloomsbury, London

Grbich, C. (2007). During data collection: Preliminary data analysis; Post data collection: Thematic analysis. *Qualitative data analysis: An introduction, 25-36*.

Hart Research Associates. (2015). *Falling Short? College learning and career success*. Washington DC: Association of American Colleges and Universities.

Hart Research Associates. (2018). *Fulfilling the American Dream: Liberal Education and the Future of Work: Selected Findings from Online Surveys of Business Executives and Hiring Managers*.

Haque, N., Hoodbhoy, P., Ahmad, A., & Khan, A. I. (2021). HEC Travails [Webinar]. Pakistan Institute of Development Economics. <https://youtu.be/R00YUNKQWXA>

Hernández-March, J., Del Peso, M. M., & Leguey, S. (2009). Graduates' skills and higher education: The employers' perspective. *Tertiary education and management, 15*(1), 1-16.

- Hillage, J., & Pollard, E. (1998). *Employability: developing a framework for policy analysis* (Vol. 107). London: DfEE.
- Humburg, M., Van der Velden, R., & Verhagen, A. (2013). The employability of higher education graduates: the employers' perspective. *European Union Commission: Research Centre for Education and the Labour Market*.
- Jackson, D. (2013). Student perceptions of the importance of employability skill provision in business undergraduate programs. *Journal of Education for Business, 88*(5), 271-279.
- Jackson, D., & Bridgstock, R. (2021). What actually works to enhance graduate employability? The relative value of curricular, co-curricular, and extra-curricular learning and paid work. *Higher Education, 81*(4), 723-739.
- Jackson, D., & Chapman, E. (2012). Non-technical competencies in undergraduate business degree programs: Australian and UK perspectives. *Studies in Higher Education, 37*(5), 541-567.
- Johnes, G. (2006). *Career interruptions and labour market outcomes* (Vol. 45). Manchester: Equal Opportunities Commission.
- Kaiser, H. F. (1960). The Application of Electronic Computers to Factor Analysis. *Educational and Psychological Measurement, 20*(1), 141–151.
- Kelley, K., Clark, B., Brown, V. & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal of Quality in Health Care, 15*(3):261-266.
- Knight, P. T., & Yorke, M. (2002). Employability through the curriculum. *Tertiary education and management, 8*(4), 261-276.
- Laker, D. R., & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human resource development quarterly, 22*(1), 111-122.

- Law, W. and Watts, A.G. (1977), *Schools, Careers and Community*, Church Information Office, London.
- Memon, G. R. (2007). Education in Pakistan: The key issues, problems and the new challenges. *Journal of Management and Social Sciences*, 3(1), 47-55.
- Moon, J. (2004), *Reflection and Employability*, The Higher Education Academy, York.
- NCVER. (2003). *Defining generic skills. At a glance*.
- Nilsson, S. (2010). Enhancing individual employability: the perspective of Engineering graduates. *Education & Training*, 52(6/7), 540-551
- Paranto, S. R., & Kelkar, M. (2000). Employer satisfaction with job skills of business college graduates and its impact on hiring behavior. *Journal of Marketing for Higher Education*, 9(3), 73-89.
- Pitan, O. S., & Muller, C. (2020). Student perspectives on employability development in higher education in South Africa. *Education+ Training*, 63(3), 453-471.
- Pool, L. D., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education+ Training*, 49(4), 277-28
- Poon, J. (2014), "Do real estate courses sufficiently develop graduates' employability skills? Perspectives from multiple stakeholders", *Education + Training*, 56(6), 562-581.
- Rae, D. (2007). Connecting enterprise and graduate employability: challenges to the higher education culture and curriculum. *Education + Training*, 49(8/9), 605-619.
- Rahman, M. S. (2020). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: A literature review.
- Raza, S. A., & Naqvi, S. A. (2011). Quality of Pakistani university graduates as perceived by employers: Implications for faculty development. *Journal of Quality and Technology Management*, 7(1), 57-72

- Rosenberg, S., Heimler, R., & Morote, E. S. (2012). Basic employability skills: a triangular design approach. *Education+ Training*, 54(1), 7-20.
- Rummel, R. J. (1988). *Applied factor analysis*. Northwestern University Press.
- Siddique, S., Ahsan, A., Azizi, N., & Haass, O. (2022). Students' Workplace Readiness: Assessment and Skill-Building for Graduate Employability. *Sustainability*, 14(3), 1749.
- Smith, C., Ferns, S., & Russell, L. E. O. N. I. (2014). Conceptualising and measuring 'employability' -lessons from a National OLT Project. In <http://acen.edu.au/2014-conference-proceedings/> (pp. 139-148).
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Struwig, F. W. & Stead, G.B. (2001). *Planning, designing and reporting research*. Cape Town: Pearson Education South Africa
- Tabachnick, B. G., & Fidell, L. S. (2020). *Using multivariate statistics*. Pearson.
- Tarar, N. O. (2006). Globalisation and higher education in Pakistan. *Economic and Political Weekly*, 5080-5085.
- Teddle, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.
- Tymon, A. (2013). The student perspective on employability. *Studies in higher education*, 38(6), 841-856.
- United States. Department of Labor. (1992). *Learning a Living: A Blueprint for High Performance: a SCANS Report for America 2000*. US Government Printing Office.
- Van Der Merwe, A. (2010). Does Human Capital Theory Explain the Value of Higher Education? A South African Case Study. *American Journal of Business Education*, 3(1), 107-118.

Watts, A. G. (2006). *Career development learning and employability*. York: Higher Education Academy.

Worthington, R.L. & Whittaker, T.A. 2006. Scale development research: a content analysis and recommendations for best practices. *The Counseling Psychologist*, 34(6):806-838

Yorke, M. (2006). *Employability in higher education: what it is-what it is not* (Vol. 1). York: Higher Education Academy.

Yorke, M., & Knight, P. (2004). *Learning, curriculum and employability in higher education*. Psychology Press.

Appendix A: Graduate Survey

Exploring how higher education can improve and increase its relevance to the needs of the labour market is extremely important. The aim of this questionnaire is to gain insight and understanding of students' perceptions about their education and preparedness when entering the job market. This information will help to identify the gap and help to enhance employability. The survey is for research purposes.

You are requested to answer the questionnaire below which should take 5-10 minutes.

Section 1: General

1. Name of respondent (optional):

2. Age

20-25

26-35

35+

3. Gender

Male

Female

4. Are you employed or have a past working experience?

Yes / No

If yes, please continue.

5. Name of organization:

6. Size of organization:

50-100

101-200

300+

7. Specialization of organization

Government

Non-Profit Organization

Service

Manufacturing

Professional

If other (Please specify):

8. Do you have an undergraduate degree?

Yes / No

9. Which university did you obtain your degree from?

10. What degree did you major in?

Section II Skills and Abilities

1. After obtaining your degree do you feel you were prepared enough to go into the workplace?

Yes / No

2. Practical Training

a) Was practical training required for a completion of your degree?

Yes / No

b) If you answered yes, please proceed to question (c); if you answered No proceed to question (3)

c) Do you think the practical training helped in preparing you for the workplace?

d) Do you think that Practical training would have helped?

(i) Please Circle a response between “1” and “5” on the left side of each skill listed below, indicating the level of importance of skills at some point between LOW (1) and HIGH (5).

(ii) Please Circle a response between “1” and “5” indicating the extent of your satisfaction with the higher education indicating your preparedness between VERY DISSATISFIED (1) and VERY SATISFIED (5).

Importance					Satisfaction					
LOW		HIGH				VERY DISSATISFIED		VERY SATISFIED		
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. Competencies required in their specialized area (accounting, marketing, etc.).	1	2	3	4	5
1	2	3	4	5	2. Experience in dealing with “ real world ” problems (problem-solving skills)	1	2	3	4	5
1	2	3	4	5	3. Technical skills (integrating a motor/technical skill, such as the use of a computer, with other abilities).	1	2	3	4	5
1	2	3	4	5	4. Ability to adapt to rapidly changing technologies (computers, etc.).	1	2	3	4	5
1	2	3	4	5	5. Critical thinking skills (ability to evaluate situations and generate appropriate decisions/solutions).	1	2	3	4	5
1	2	3	4	5	6. Written communication skills.	1	2	3	4	5
1	2	3	4	5	7. Speaking communication skills.	1	2	3	4	5

1	2	3	4	5	8. Listening skills.	1	2	3	4	5
1	2	3	4	5	9. Creative thinking skills (innovative, newideas).	1	2	3	4	5
1	2	3	4	5	10. Leadership ability required in their job.	1	2	3	4	5
1	2	3	4	5	11. Interpersonal skills (ability to work with others).	1	2	3	4	5
1	2	3	4	5	12. Business ethics (in accordance with formal or professional rules of right and wrong).	1	2	3	4	5
1	2	3	4	5	13. Professionalism (the conduct, aims, or qualities that characterize a profession).	1	2	3	4	5
1	2	3	4	5	14. Knowledge of word processing software.	1	2	3	4	5
1	2	3	4	5	15. Knowledge of spreadsheet software.	1	2	3	4	5
1	2	3	4	5	16. Knowledge of database software.	1	2	3	4	5

Appendix B: Employers Survey

Exploring how higher education can improve and increase its relevance to the needs of the labour market is extremely important. The aim of this questionnaire is to gain insight and understanding of employers' perceptions about the education and preparedness of the business graduates. This information will help to identify the gap and help to enhance employability. The survey is for research purposes.

You are requested to answer the questionnaire below which should take between 5 to 10 minutes.

SURVEY INSTRUMENT: EMPLOYERS

SECTION I: SKILLS

(i) Please rate the importance of skills in your organization.

Circle a response between "1" and "5" on the left side of each skill listed below, indicating the level of importance of skills at some point between LOW (1) and HIGH (5).

(ii) Please rate the level of satisfaction with graduates' employability.

Please Circle a response between "1" and "5" indicating the extent of your satisfaction between VERY DISSATISFIED (1) and VERY SATISFIED (5).

Importance					Satisfaction					
LOW		HIGH				VERY DISSATISFIED		VERY SATISFIED		
1	2	3	4	5		1	2	3	4	5
1	2	3	4	5	1. Competencies required in their specialized area (accounting, marketing, etc.).	1	2	3	4	5
1	2	3	4	5	2. Experience in dealing with “real world” problems (problem-solving skills)	1	2	3	4	5
1	2	3	4	5	3. Technical skills (integrating a motor/technical skill, such as the use of a computer, with other abilities).	1	2	3	4	5
1	2	3	4	5	4. Ability to adapt to rapidly changing technologies (computers, etc.).	1	2	3	4	5
1	2	3	4	5	5. Critical thinking skills (ability to evaluate situations and generate appropriate decisions/solutions).	1	2	3	4	5
1	2	3	4	5	6. Written communication skills.	1	2	3	4	5
1	2	3	4	5	7. Speaking communication skills.	1	2	3	4	5
1	2	3	4	5	8. Listening skills.	1	2	3	4	5
1	2	3	4	5	9. Creative thinking skills (innovative, new ideas).	1	2	3	4	5
1	2	3	4	5	10. Leadership ability required in their job.	1	2	3	4	5
1	2	3	4	5	11. Interpersonal skills (ability to work with others).	1	2	3	4	5
1	2	3	4	5	12. Business ethics (in accordance with formal or	1	2	3	4	5

					professional rules of right and wrong).					
1	2	3	4	5	13. Professionalism (the conduct, aims, or qualities that characterize a profession).	1	2	3	4	5
1	2	3	4	5	14. Knowledge of word processing software.	1	2	3	4	5
1	2	3	4	5	15. Knowledge of spreadsheet software.	1	2	3	4	5
1	2	3	4	5	16. Knowledge of database software.	1	2	3	4	5

Section II

Please encircle the statement that best describes your organization.

I. Approximately how many people are employed full-time in your organization?

50-100 100-200 Over 300

II. Approximately how many graduates does your organization interview annually?

0-5 10 -20 more than 20 Don't know

III. Approximately how many recent graduates are currently on your payroll?

0-2 3-6 7-10 11-20 More than 20 Don't know

IV. Approximately what percent of your annual new hires are graduates of top universities of Pakistan?

0-5% 10-25% 25-50% 51-100%

V. What is your relationship to the graduate(s)?

Employer Supervisor/Manager Other (please specify) _____

VI. Which of the following categories best describes your type of organization?

Government

Non-Profit Organization

Service

Manufacturing

Professional

Other (please specify)

VII. In which city is your organization located?

VIII. Please rank the top three areas in which your organization has hired graduates in the past (you can choose more than one option).

Accounting

General Business

International Business

Finance

Management

Economics

Marketing

Human Resource

SECTION III

RECRUITMENT & COORDINATION WITH UNIVERSITIES

1. Rate from 1 to 5 the level of importance of the following factors in the recruitment of recent university graduates (0 indicates not at all important and 5 very important).

- | | | | | | | |
|---|---|---|---|---|---|---|
| (1) The reputation of the university where they studied | 0 | 1 | 2 | 3 | 4 | 5 |
| (2) Having studied or worked abroad | 0 | 1 | 2 | 3 | 4 | 5 |
| (3) Work placement during studies | 0 | 1 | 2 | 3 | 4 | 5 |

2. Have you had any difficulties to recruit the right people for any given job?

- (1) Yes. Go on to question 2.1
- (2) No

2.1 If your answer to the previous question was “Yes”, state the main reasons. If necessary, choose more than one option.

- (1) Shortage of university graduates in a given field.
- (2) Shortage of candidates with the right skills for the job.
- (3) Shortage of candidates willing to be geographically mobile
- (4) Shortage of candidates willing to adapt to the work schedule
- (5) Shortage of candidates willing to accept the salary
- (6) Shortage of candidates willing to relocate

(7) Limited resources to allow adequate marketing of job vacancies.

(8) Other reasons. Specify _____

3. Assess the frequency with which you participate in activities involving cooperation with universities.

(1) Cooperation with universities in discussing and designing curricula

Never Rarely Sometimes Often N/A

(2) Recent graduate recruitment through university careers and information services

Never Rarely Sometimes Often N/A

(3) Participation in business forums and conferences organized by a university

Never Rarely Sometimes Often N/A

(4) Offer of work placements to university students

Never Rarely Sometimes Often N/A

(5) Research cooperation agreements and/or use of a university's technical services

Never Rarely Sometimes Often N/A

4. Rate from 1 to 5 the importance of the following actions by universities to enhance the employability of your graduate recruits (1 indicates unimportant and 5 very important).

(1) Run courses that are more relevant to the needs of enterprises

0 1 2 3 4 5

(2) Include practical classes in courses

0 1 2 3 4 5

(3) Include compulsory work placement experience as an integral part of the curriculum

0 1 2 3 4 5

(4) Provide support to graduates after they have obtained their degree (facilitate relations between graduates and enterprises)

0 1 2 3 4 5

(5) Others. Specify (open-ended)

Thank you for taking the time to complete this survey.