

Role of University Preparation of Students' Perceived Employability and Professional Competencies

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Abstract

The present research examines the effect of professional competencies of students on perceived employability including the relationship between perceived employability and professional competencies of postgraduates from public and private universities. The study was based on quantitative research following the positivist paradigm of the research. Furthermore, this study was carried out on a sample of 300 hundred post graduates including males (n= 150) and females (n=150) using the multistage technique. Data was gathered through a survey using the Perceived employability Scale (Rothwell & Arnold, 2007); and Gutierrez's community college student survey (Gutierrez, 2012). Statistical analysis (T.TEST, ANOVA, Pearson 'r' and regression) was formulated using SPSS and AMOS. The study revealed substantial differences between the opinions of male and female postgraduates from public and private universities. This research study also explored the positive relationship between perceived employability and the professional competencies of university postgraduates. Furthermore, results demonstrated the positive effects of professional competencies on the perceived employability of university postgraduates. Research implications suggested that universities should work for the improvement of employability skills and professional competencies so, that postgraduates may become more competent. Additionally, the proactive partnership between universities and government agencies should be strengthened to cope with the workplace challenges faced by postgraduates.

Keywords: Perceived Employability, Professional Competencies, and Postgraduates research Implications, Statistical Analysis.

JEL Classification: I20, I23

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1. Introduction

In the present age, universities are shifting their paradigms from traditional aspects of teaching and learning towards economies, building communities, and leadership patterns (Hussain & Malik, 2014). During the past decade, the internationalization of higher education and the rapid growth of students in this sector has increased the competition in the job market. Education plays a vital role in the development of human capital that subsequently brings about the establishment of harmonious communities and sound economies (Sohail & Daud, 2006). Consequently, higher education institutes are reshaping their curricula and teaching processes, furthermore, enhancing the professional competencies of their faculty as per the conditions of the job market. That is why students are eager to get admission in those institutes, which are truly responsive to these requirements (Saunders & Zuzel, 2010).

Employability is determined by properties in terms of skills, knowledge, and attitude. Furthermore, the way these assets can be assessed and organized, demonstration of these assets to managers, and the situation inside which the people work personal circumstances and labor market. Knight and Yorke (2001) reveal the conception of employability includes professional skills, subject expertise, and personal qualities. Unfortunately, sometimes people or researchers confuse the term employability with employment and entrepreneurship (Dacre Pool & Sewell, 2007; Yorke, 2004) simply employability means getting hired by employers, or having knowledge, set of expertise and personal attributes help an individual to decide and secure employments which let the individuals be successful and satisfied (Williams et al., 2015).

Managers, employees & professionals agree to the point, that developed professionals are required, who should be good in knowledge, skills, and abilities, to manage the requirements of the current scenario and increased the competition according to the needs of national and international levels. Unemployment is crucial in Pakistan at all levels. Due to this high ratio of unemployment, human resources are affecting a lot, and incomes are depressed. Such economic situations also affect the family lives and emotions of these affected persons.

Ibad (2019) stated that competencies are requirements of individuals to complete required tasks, which reflect what a person knows and is capable of. Generally, competencies stand as unified and combined mechanisms of knowledge, attitudes, and skills. Competency consists of skills, understanding, values, attitudes, and behaviors that remain obligatory to accomplish the desired results in a certain task or activity (Morris et al., 2013). These are professional terms that covers some specific skills and knowledge for specific job positions and the generic term focuses on psychological and social abilities that influence an individual workplace behavior (Miller et al., 2012).

According to the 'employability survey 2018', 85% of employers were not satisfied with the performance of fresh graduates. Furthermore, 22% of graduates fail to get employment in any organization; this could be to the lack of employability skills (Ahmad et al., 2019). Recent research reveals that 74% of Pakistani graduates wish to join employment as a career path after completing their graduation (Samo & Mahar, 2016). But there was a significant difference found among the information skills and technical skills of graduates (Hussain & Malik, 2014). These graduates lack soft and technical skills, such as creative thinking, leadership, foreign language, and communication. Competencies are also important to assess as these are also required by employers (Hussain et al., 2010). Evidence suggested that people having good education with job-related skills have a higher level of perceived employability (Brungardt., 2011). There is a lack of knowledge that fosters the perceived employability of postgraduates (Rothwell et al., 2008). Continuous learning is linked with employability and employability depends on shift of expertise, being adaptable to workplace demands, and ability to adopt new skills other than career moves in the same organization or varied organizational context (De Cuyper et al., 2008). Even though, various studies focus on competencies and employability (Nauta et al., 2009; Scholarios et al., 2008). Universities are observed as a major source for the job market to supply well-mannered and trained workers for workstations (Bakari et al., 2017).

Graduates are the scientists, artists, leaders, thinkers, and innovators of the future. So, the competencies are essential for equipping graduates with professionalism that is necessary to successfully navigate their careers in learning, working, and living. Graduates use and develop professional competencies, whenever they encounter challenging and unfamiliar situations. Employers rely on employees to increase their competitiveness because the quality of graduate's ability and output influence the overall performance of the organization and its outcome (Pang et al., 2019).

This research will make valuable contributions, as employability has important implications and numerous potentials for multiple research streams. First, the researcher identifies an apparent theoretical gap in previous research concerning that, some of the previous theories are found to be important and a foundation admirable recognition. However, an investigation in term of perceived employability linked with professional competencies and theoretical development is necessary (Morris et al., 2013; Zahid et al., 2019) previous theoretical model need to embrace more contemporary research in perceived employability and professional competencies will provide a stronger theoretical base. Second, there is a population gap, this population segment has been under-researched in prior literature because prior research was not focusing on postgraduates and regarding the lack of skills (Saher & Hussain, 2019).

1.1 *The objective of the study*

The main purpose of the research is to:

1. Identify the relationship between perceived employability and professional competencies of university postgraduates.
2. Explore the effects of perceived employability on professional competencies of university postgraduates.

2. *Literature review*

2.1 *Definitions and dimensions*

Employability is often defining as the probability of getting or keeping a job, hence employability seems to be directly linked with regional and national economic conditions. Employability is referred to as a process of learning, achievement, and potentials of graduates to acquire a job. There is a need to bring employability into practice, so, graduates can develop their knowledge and skills to be productive in the job market and society (Romgens et al., 2019).

Graduates' perceptions regarding their jobs after graduation are called perceived employability. Their perception is based on their skills, field of study, university ranking, and trends and conditions of the job market (Bakari & Hunjra, 2018). The concept of employability has been stated in several contexts in literature, as per in different studies employability exploring, how individuals or graduates would enter the labor market. There are many interpretations of employability in the literature that can be reduced to the following constructs. According to the graduate, employability is obtaining a job, as per the student's point of view, employability is being developed by their experience of education (Maxwell et al., 2010). Accordingly, scholars will nurture their employability in ways and means that reproduce their situations by the optimism that they will be proficient graduates who have autonomy in their competence to describe what they are pursuing to attain, take active or proper action, carry on obtaining from practices, aware and work effectively with others, both individually and in connection with others, in a different and changing society (Tang, 2019).

2.2 *Theoretical expositions*

Review of employability gives multiple meanings because the theory of employability is difficult to identify. Employability is linked with several factors that contribute to this idea knight and York (2004) that employability is a multidimensional concept, all about the workplace and the capability to be hired, or the ability to preserve employment, maintain employment, and get new hiring if required. Perception of employability is changing day by

day, in the past employers was more responsible for job security, training and development, career development and helps their employees in problematic situations, and employees were more dedicated to their associations (Forrier & Sels, 2003). The modern view of employability is centered on a psychological contract that develops hope in employees to uncover opportunities in a challenging environment with a more variety of skills. The present situation of the workplace creates a more destabilized employment relationship from the past because now employees are responsible to secure successful employment on their own (Finn, 2000). Employment is a necessary part and indicator of recovery for many people, conversely, they face significant barriers, notable stigma, and discrimination. Employment plays a crucial role in the lives of people it connects people to their communities, gives a structure to daily life, status, and the resources to do things they value. Paid employment is still considered to be stressful (McQuaid & Lindsay, 2005). Scholars from higher education institutes are supposed to gain certain potential and skills, for instance, problem-solving skills and team working after experiencing their learning process of higher education (Graduate employability: employer's perception survey, 2018). Over the past decade, it is emphasized by the researchers or practitioners that, set of soft skills comprising of the abilities to solve problems, communicate effectively and collaborate in higher education institutes (Chamorro et al., 2010).

Continuous learning is linked with employability and employability depends on shift of expertise, being adaptable to workplace demands, and ability to adopt new skills other than career moves in the same organization or varied organizational context (De Cuyper et al., 2008). Even though, scholars or graduates underscore the importance of competencies and competency development (Scholarious et al., 2008) various studies focus on competencies and employability (Nauta et al., 2009). Competencies are well-known as activities carried out by employees or organizations to enhance or maintain an individual's career, education, and functional experiences (Forrier & Sels, 2003). An integrative style approach involving both organizations and individuals for developmental activities is known as competency development (Francis & Sandberg, 2000). The employability of workers is also considered important in terms of career development activities (De Vos et al., 2011). The positive association between perceived knowledge and job rotation and skill development improves the employability perceptions, as well as enhance specific knowledge domain and skills of individuals. Furthermore, it is assumed that the culture of any organization which is supportive of individuals and their development, positively affects employability orientation.

Several alternative models of employability have been developed by the researchers to obtain an understanding of graduates' employability, these models provide a clear picture of the interaction between various factors to understand employability (Harvey & Moorey, 2002; Knight & York, 2004). This research was focusing on the correlation between perceived employability, and the professional competencies of university students. There is no absolute understanding of what is meant by employability and the literature review explores this vagueness. Research considers the requirements of employers from graduates.

The review reflects the tendency of graduates' ongoing lobbying and attributes from the industry for universities to prepare graduates for the workplace.

Based on the literature review and research objectives the following hypotheses were formulated:

- H_{o1} Perceived employability of males will be different from female postgraduates.
- H_{o2} Professional competencies of male and female postgraduates will be significantly different.
- H_{o3} There will be a positive relationship between professional competencies and the perceived employability of males and females among different departments.
- H_{o4} There will be a relationship between perceived employability and professional competencies of postgraduates of universities.
- H_{o5} There will be a positive effect of professional competencies on the perceived employability of university postgraduates.

2.3 *Method*

The research is based on correlational design to address the research problem logically and explicitly. The positivist paradigm was followed in this research. The positivist paradigm facilitates quantitative researcher to employees' complex statistical data analysis technique that helps them to provide important insight regarding respective fields (Saunders et al., 2012). Quantitative research focuses on investigating the relationship among different variables of study (Saunders et al., 2012). In the present research study, the quantitative research approach enables the researcher to explore the extent to which professional competencies affect the perceived employability of postgraduates of different universities.

2.4 *Sample*

To assist in addressing the research objectives, a survey was conducted to explore the relationship between perceived employability and professional competencies of postgraduates in this study. University postgraduates (N= 300) were participating in this research study. A multistage proportionate random sampling technique was used to select the sample from the targeted population. In the first stage, three public and three private universities were randomly selected with the help of the HEC 5th ranking list, after selecting universities three departments (1=social sciences, 2= Hard sciences, 3= Natural sciences) were selected from each university on the second stage. In the third stage, postgraduates from each department

were selected based on the proportion to participate in the present research. 25 male and 25 female postgraduates were approached, 50 from each department based on the proportion of 150 from each sector, and data were collected after their informed consent. Table 1 indicates the demographics profile of postgraduates.

Table 1
Sample demographic of postgraduates (300)

Demographics	Characteristics	F	(%)
Gender	Male	150	50
	Female	150	50
Age	20-25	174	58.0
	26-30	126	43.0
Sector	Public	150	50
	Private	150	50
Department	Hard sciences	100	33.3
	Social sciences	100	33.3
	Natural sciences	100	33.3

The primary data collection technique was utilized in this study. A quantitative survey was employed for data collection purposes because employing appropriate statistical techniques can help to achieve good generalizability for the sample and questionnaire (Saunders et al., 2012). The sampling technique was used to deal effectively with access to data, time, and needed resources. The researcher had adapted two instruments on perceived employability and professional competencies for data collection. After piloting, the Reliability of the instruments was calculated.

2.5 Perceived Employability

The perceived employability scale was developed by Rothwell and Arnold (2007). The general perception of postgraduates has been captured by selected measures. The questionnaire was based on a five-point Likert scale which ranges from strongly agree (5) to strongly disagree (1). The questionnaire was based on 16 items and its internal reliability was 0.88 after being piloted by the owner. While the Cronbach's alpha value of reliability measure for the current sample was .91 for overall items, .85 for factor one, and .88 for factor two indicating good consistency and reliability of the questionnaire (Ursachi et al., 2013).

2.6 Professional competencies

A scale based on professional competencies was developed by Gutierrez (2012). The general perception of postgraduates has been captured by selected measures. The questionnaire was not based on a five-point Likert scale. It was based on five parts including 27 items. The reliability of the instrument was 0.83 after being piloted by the author but now it was .83 which was indicating a good measure of reliability (Ursachi et al., 2013).

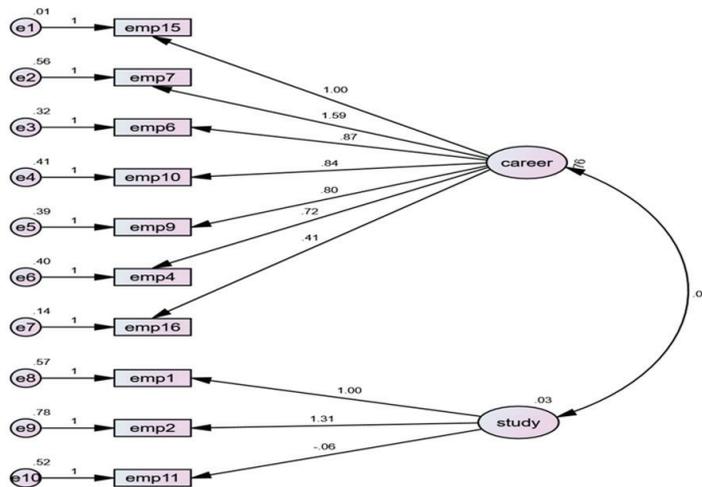
2.7 Procedure

Public and private universities were visited by the researcher to collect direct and honest responses from postgraduates. First, the research purpose was explained to respondents to simplify the queries. It was also explained to participants that the research was relevant to their studies and university preparation. A complete explanation was also provided regarding the questionnaire where needed. Additionally, it was also informed that data was collected only for academic purposes and anonymity of data would be maintained to get a good quality of responses.

2.8 Findings

For hypothesis testing, correlation and regression analysis using SPSS and Amos were applied to examine the correlational effects of professional competencies on the perceived employability of university postgraduates. 150 males and 150 females were participating in this study. 50 % of respondents were from Public sector universities and 50 % of respondents belong to private sector universities.

Figure 1: hypothesis testing correlation and regression analysis



CFA

A two-factor model is to be confirmed in the measurement portion of the model. We evaluated the assumptions of multivariate normality and linearity through SPSS 21. Using box plots, we observed no univariate and multivariate outliers. The sample size was 300, there was no missing data. The Comparative fit index (CFI)= .99, the Tucher-lewis fit index (TLI)= .99 and the RMSEA= 0.01. Those values are a good fit between the model and the observed data. Standardized parameters are provided.

Table 2
Goodness of fit indices of model

Model	df	p-value	TLI	CFI	RMSEA
Default model	53	.09	.99	0.99	0.01

Table 3
Perceived employability based on Gender

	Gender	N	Mean	Sig.	Df
Perceived Employability	male	150	56.5000	.000	298
	female	150	60.1000	.000	280.54

There was a significant difference in scores of males (M=56.5.9, SD=8.33) and females, (M=60.2, SD= 6.46). The research hypothesis “Perceived employability of male will be different from female postgraduates” was accepted. Results show that females have more Perceived employability as compared to males. The magnitude of the differences in the means (Mean difference= -3.6000, 95% CI: -5.29 to -5.29) was high.

Table 4
Professional competencies based on Gender

	Gender	N	Mean	Sig.	Df
Professional Competencies	Male	150	75.6133	.038	298
	Female	150	73.8400	.038	296.55

Statistics show that male respondents have more Professional competencies as compared to female respondents. So, the research hypothesis “Professional competencies of male and female postgraduates will be significantly different” was accepted. Because the magnitude of the differences in the means (Mean difference= 1.773, 95% CI: .094 to .094) was high.

Table 5
Two-way between-group ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2227.287 ^a	3	742.429	21.449	.000
Intercept	1191041.322	1	1191041.322	34408.847	.000
Gender	81.000	1	81.000	2.340	.127
department	1166.967	2	583.483	16.857	.000
Gender * department	.000	0	.	.	.

A two-way between-group analysis of variance was conducted to explore the effect of gender, and department on the level of perceived employability, as measured by the perceived employability scale. Table 5 shows that subjects were divided into three groups according to the department (Group 1: natural sciences; Group 2: hard sciences, Group 3: social sciences). The interaction effect between gender and departments was statistically significant, $F(2,296) = 16.8, p=.000$. There was statistically significant main effect for department $F(2,296) = 2.34, p= .000$; however, the effect size was moderate (partial eta squared = .12).

Table 6
Two-way between-group ANOVA

Gender	Department	Mean	Std. Deviation	N
Female	natural sciences	64.7400	4.32746	50
	hard sciences	59.4200	6.08139	50
	social sciences	61.0400	8.06848	50
	Total	61.7333	6.68733	150
Male	natural sciences	62.9400	5.58573	50
	hard sciences	68.1200	4.15830	50
	social sciences	65.4200	5.89393	50
	Total	65.4933	5.64587	150

Post hoc comparison using the Tukey HSD test indicated that the mean score for natural sciences ($M = 64.7$, $SD = 4.32$) was significantly different from the hard sciences ($M = 59.4$, $SD = 6.0$). Mean score for natural sciences ($M = 64.7$, $SD = 4.32$) was significantly different from social sciences ($M = 61.0$, $SD = 8.06$). The Research hypothesis 'There will be a positive relationship between professional competencies and the perceived employability of male and female among different departments' was accepted. All the departments were different at a significant level.

Table 7

Correlation between professional competencies and perceived employability

	Competencies Professional	Job Opportunity	Importance of Studies
Professional Competencies	1	.169**	.430**
Job Opportunities		1	.486**
Importance of Studies			1

***. P<0.01*, **. P<0.05*

Table 7 indicates a meaningful relationship between perceived employability and professional competencies based on Pearson ‘r’ because a relationship is a measure of association between two variables (Mukaka, 2012). Preliminary analysis was performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. The research hypothesis “There will be a relationship between perceived employability and professional competencies of postgraduates of universities.” was accepted. Because there was a positive and significant correlation at a moderate level (Mukaka, 2012) among the professional competencies and dimensions of the Perceived employability scale. Findings revealed that professional competencies are required to improve the perceived employability of university students.

Table 8

Effects of professional competencies on perceived employability

Variable	B	Std. Error	Beta	t	Sig.	95.0% CI	
						LB	UB
Professional competencies	69.717	3.681		18.940	.000	62.488	76.945
Job Opportunities	-.355	.286	-.052	-1.239	.216	-.917	.207
Importance of Studies	1.461	.135	.456	10.800	.000	1.195	1.726

***. P<0.01*, **. P<0.05*

Table 8 reveals that professional competencies predict the perception of participants related to the dimensions of perceived employability in a positive way and at a significant level. Statistics revealed that the research hypothesis “There will be a positive effect of professional competencies on the perceived employability of university postgraduates” was accepted. Results show that professional competencies are required for perceived employability.

3. Discussions

The findings of research hypothesis 1 reveal that, in public and private universities of the Lahore district, male postgraduates have less perceived employability than female postgraduates. Female postgraduates were more confident about their acceptability regarding the job than male postgraduates. According to Seher and Hussain (2019) male and female students have the same sense of perceived employability. Furthermore, results indicate that there is a significant difference between the scores of males and females’ respondents based on professional competencies. Because results of hypothesis 2 declare that male postgraduates have more confidence about professional competencies for the workplace than females. Since perceived employability and professional competencies based on sectors were the same. Both sectors were providing equal quality services because there was no significant difference between perceived employability and professional competencies based on sector. Seher and Hussain (2019), concluded that private universities were providing more quality services than public sector universities. Results based on Ho3 regarding two-way analysis of variance indicated that there is a significant difference among different departments. Participants from different departments have a different sense of perceived employability. Based on mean score difference findings indicates that postgraduates from the department of hard sciences ($M = 66.7$, $SD = 5.25$) shows high score, then natural sciences ($M = 63.8$, $SD = 5.05$) and social sciences ($M = 60.6$, $SD = 7.15$). According to these results, postgraduates from the department of social sciences were least on the sense of perceived employability, and postgraduates from hard sciences were on a high score. Postgraduates with better professional competencies will have a clearer idea about how to develop themselves. Furthermore, professional competencies help individuals to explore different possibilities at the workplace and exert control over their career which later enhance perceived employability (Forrier et al., 2015) professional competencies are beneficial for the personal and career development of postgraduates because these competencies make them adaptive for workplace behavior. Moreover, after applying Pearson’s r ’ results of hypothesis 4 declare that there is a strong positive correlation between perceived employability and professional competencies of postgraduates from public and private universities.

The findings of Ho4 based on dimensions of the Perceived employability scale declare meaningful and positive relationships at a moderate level. This is an indication that postgraduates who have more professional competencies are good in perceived

employability and fewer competencies affect the perception of postgraduates regarding employability. So, the postgraduates need more professional competencies to enhance their performance and proficiencies. Universities should focus on professional competencies because more professional competencies will help to improve the perceived employability which is required by the employers at the workplace. Findings urge HE providers to review and consider their strategies for developing professional competencies to ensure effectiveness at the workplace and postgraduates must have access to such opportunities. Universities should be aware of their postgraduates regarding the value of such competencies and development to face challenges of the workplace. Moreover, postgraduates must have the awareness for effective career transition.

Employers are undoubtedly in continuous search of employable postgraduates who are not only ready to demonstrate employability skills but are competent in using these skills to create a positive working environment for the overall higher performance of the organization. While employees are expected to maximize their potentials to become successful in their jobs, it is essential to ensure that what they do in the organization will lead to producing positive impact (Abas & Imam, 2016). So, universities should improve their expertise to polish their fresh graduates to be an employee in any organization without any obstacles.

3.1 *Practical implications*

Our world in this 21st century is a picture of a revolution of rising skills. The present age requires that we must have the required matching skills level of postgraduates of universities and the perceived employability skills requirement of workplace presently and for future. So, there must be a proactive partnership between universities and government agencies which should be strengthened. Secondly, the government should provide funds and infrastructure to practice these skills within campuses. Furthermore, higher education institutes should devolve their services to enhance employability skills and professional competencies in their students to become competent before entering the workplace. Universities can motivate teachers for strengthening employability and professional competencies by putting their energies into the welfare of students. Not only that universities should improve on-campus and off-campus training, but postgraduates can also devote their energies to learn, which is important at the workplace.

4. *Limitation and suggestions*

Empirical research has some limitations that need to be highlighted, so future studies will expand and improve the prior research findings. A nationwide study should be conducted in the future to assess the perceived employability and professional competencies of postgraduates of universities. Because there is a need to improve the aptitude of students, it will help produce professionals with more mentoring and a sense of achievement that will positively affect their perceived employability and professional competencies.

5. Conclusion

The present study expands the stream of previous research in perceived employability and professional competencies by showing the relationship between the perceived employability of postgraduates and professional competencies. Since, professional competencies enhance the perceived employability of university students, these competencies are also helpful in their practical routine at workstations for career development. So, postgraduates can improve their perceived employability for a better career by focusing on professional competencies. Since nowadays these competencies are required by the employers.

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