Article

# Access to Higher Education: The Source of Graduate Employability and Wellbeing

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## Abstract

*Access to higher education has been the subject of considerable debate among policy makers and academicians. But the concept lacks empirical evidence regarding its impact upon students and societal outcomes. This study provides empirical answer to the research question: how do access to higher education and teachers' support relate to graduates' self-perceived employability and psychological wellbeing? The data were collected from 520 students of bachelors and master's programs in rural campuses of an oldest University of Pakistan and analyzed through Structural Equation Modelling (SEM) using AMOS and SPSS software. Results reveal that access to higher education and teachers support are positively related with self-perceived employability of graduating student with little or no difference among gender. Whereas, teachers support also contributes to psychological wellbeing of the students. The impact of access to higher education on psychological wellbeing was insignificant. This study provides implications for universities, policy makers, and human resource management professionals regarding enhancement of graduate employability.*

**Keywords:** access to higher education, psychological well-being, self-perceived employability, teachers' support

## Introduction

Globally, reforms are made to rationalize the education system and improve access to higher education by improving colleges, synergizing them with high

schools and universities at lower and upper levels of education ladder respectively (Kazis, Vargas, & Hoffman, 2004). Discussions were held as to which type of education is preferred on the basis of its effectiveness in the successful transition of youths to labor market (Teichler, 2009). Since decades, policy researchers have been keen to discuss the relationship of higher education with employment and subsequently with economic development and elimination of social disparities (Teichler et al., 1996, p. 3). The debate also took into considerations the imbalance between the demand for labor and number of graduates produced by universities each year. As there is slower growth for former and greater for the latter; this situation of mismatch also triggered the interest of identifying potential problems and finding their solutions.

Governments across the globe are making heavy investments in provision of higher education in order to prepare their youth for joining the labor market and to contribute to social justice (Tomlinson, 2008) or increase economic wellbeing. Qenani, MacDougall, and Sexton (2014) argue that such heavy investments made by individuals and governments warrant that these must contribute towards the employability of graduates upon their graduation.

Pakistan is a developing economy, rich in terms of human and natural resources, but it lacks capacity to exploit those opportunities. Pakistan is also rare of its kind in terms of its young population with more than 68 percent people below the age of 30.4 years, but only 5.1% of the people aged 17-23 years have access to higher education (Planning Commission Government of Pakistan, 2011).

As per the data available on the Higher Education Commission of Pakistan's website, girls' enrolment in 2003-2004 was 42.22% as compared to 57.7 % males. Female enrolment though having an increasing trend is still far less than that of males (Batool, Sajid, & Shaheen, 2013). As per report published by the Ministry of Education, Pakistan, 70 % of males are educated as compared to 47% females (Ministry of Education Pakistan, 2013). Apart from gender disparity, Pakistan experiences regional disparity with more resources and facilities dispensed to urban areas as compared to rural areas where 73 percent of the population resides. Rural areas lack infrastructure in terms of access to health and education which gives rise to immigration of masses towards urban areas for a better life. Disparity in access to higher education prevails at gender and regional levels. Analysis of Pakistan

Social and Living Standards Measurement data 2007-2008 reveals that only 5% females from rural Sindh are enrolled in public sector universities / HEIs of tertiary education (Asghar & Zahra, 2012). To address these disparities, University of Sindh Jamshoro (UoS), an oldest University of Pakistan established seven campuses in rural areas of Sindh to improve access to higher education.

There is limited research available on a link between access to higher education and self-perceived employability in Pakistan. A study of Bachelor's degree students of business administration from three universities of UK studied expectations and perceptions regarding employability. The results revealed a modest future employability (Rothwell, Herbert, & Rothwell, 2008). Costea, Amiridis, and Crump (2012) that the major concern of contemporary HRM will be to prepare future generations for the recruitment to organizations.

## Literature Review

### Access to Higher Education

The concept of access to education is interpreted differently by different authors, academic practitioners and government officials nationally and globally. Some authors simply argue that the ability to participate may be regarded as access. Getting through the school gates may be one measure to determine access to education, but it is not sufficiently valid and meaningfully measurable. If a student in a class has a feeling of insecurity or is hungry he/ she may not be in a position to concentrate fully on what is being taught. It is agreed that there are so many factors which ensure and enable access to education in its true sense. Some authors argue that provision of equal and equitable opportunities, additional resources, and support mechanism to remove educational barriers are key factors to determine access to higher education.

In late 2006, South African Institute, Social Surveys and the Centre for Applied Legal Studies (CALS) in household survey and interviews of caregivers and youth aged 16 to 18 defined access to education and its various dimensions. We have adopted their model with some modifications to suit the context of this study.

Table 1
*The Dimensions of Access to Higher Education*

| Dimension | Component | Sub-Component |
|---|---|---|
| Basic Access *(Getting through school gates)* | Contractual access: Institutional or contractual arrangements that enable basic access. | Schools adhering to contractual arrangement/ following regulations: What are the contractual arrangements with the school to allow for basic physical access? |
| | Attendance: Physical access to schooling | Initial enrolment and attendance: Gaining basic physical access to school |
| | | Consistent attendance Conversely absence, bunking etc. |
| Meaningful/ enabling access *(Enabling environment)* | Basic infrastructure and material resources | Basic infrastructure and material resources in school |
| | | Basic infrastructure and material resources outside school |
| | Human resources and support | Human resources and support in school |
| | | Human resources and support outside school (household or other) |

*Source: Meny-Gibert & Russel (2010)*

## Basic Access

Basic access refers to individuals getting through the school gates which include formal admission through procedures and attending classes regularly.

## Enabling Access

This dimension relates with the belief that there are certain conditional requirements necessary to enable and give meaning to access achieved through the initial admission of students in the schools. Those requirements are provided by the environment within and outside the institutions. It is mandatory whether material resources or human resources in the shape of teachers and other staff, which enable this access to higher education and add meanings to it are provided.

Therefore, this paper adapts the definition of access to higher education as "the ability of person getting and retaining the admission to higher institution, well equipped with all necessary human and material resources which may enable learner to translate this opportunity into getting education, skills, and capacities necessary for career development" (Bakari, Hunjra, & Saman, 2017).

## Self-Perceived Employability

Universities are regarded as a major source of human resource supply for the job market in the shape of trained and well-mannered future workers (Bakari, Hunjra, & Saman, 2017). Access to higher education to the people of deprived areas increases the potentials of universities and will surely add to economic development. A recent research of graduate students' entrepreneurial intentions reveals that 74% Pakistani graduates wish to join employment as a career path right after graduation (Samo & Mahar, 2016). This necessitates that scholars and practitioners need to understand graduates' perceptions regarding their future employability. Perceived employability is graduates' perceptions that they will get the job after graduation. This perception is based upon their skills, importance of the field of study, university ranking, labor market conditions and trends in the market (Rothwell, Herbert, & Rothwell, 2008; Rothwell, Jewell, & Hardie, 2009). It not only relate to the acquisition of employment, but how a person will be able to maintain the employment relationship with the organization by continuously adapting to the changes and updating their skills base (De Cuyper, Van der Heijden, & De Witte, 2011).

Yorke (2006) argues that the employability is the set of competencies which consists of knowledge, skills and attitudes considered integral to one's ability and entitlement to get a job. De Cuyper, Van der Heijden and De Widdt (2011) define employability as "the perception of employee which is developed through his analysis of labor market situation and his abilities." We have adopted this definition to study the perceptions of graduating students developed through their analysis of basic and enabling access to higher education; their prospect of getting skills in accordance with the labor market requirement; and their abilities to find a new job as per their degrees and qualifications.

## Subjective Wellbeing and its Determinants

The concept of wellbeing has been of great importance for researchers and policy makers which is, wellbeing is synonymous with happiness which was first measured by Wilson (1967). He measured happiness through 16 yes / no items having reliability of .87 and he found that youth with higher education, greater morale for jobs and optimism were among the happy people. According to Diener, Suh, Lucas, and Smith (1999) subjective wellbeing is defined as one's intellectual

and emotional assessment of his / her life as a whole. In these assessments, person reacts emotionally to life events as well as the extent to which he measures his satisfaction and achievements of life (Diener, Suh, Lucas, & Smith (1999). Wellbeing is a goal which people and governments aspire to attain and this concept is often coined with happiness.

Wealth has been an important source of the positive outcome of peoples' lives (Argyle & Furnham, 2013). Traditionally money has been regarded as a sole source of prosperity and rich people are believed to be happier people. Therefore, a majority of authors have strived to find the role of money in well-being of society and individual. Cummins (2000) proposed that money has a greater relevance with happiness and subjective wellbeing as it is the source through which a person aspires to fulfill the basic needs. In his research, he applied homeostatic theory in which subjective wellbeing is the matter of narrow range confined to one's personality.

**Higher Education and Subjective Wellbeing**

United Nations as per its different conventions has established access to education and wellbeing as basic rights for human beings and has put the responsibility on the state to provide these basic rights to its masses (United Nations, 1989). In the past decade, a variety of researchers showed interest in the role of education in subjective wellbeing of students (Cockerill, 2014). Scholarship in this area has explored various determinants, causes and outcomes of subjective wellbeing in an educational environment (Konu, Lintonen, & Autio, 2002; Suldo, & Huebner, 2004; Wyn, 2007). There are contradictory results regarding the role of education in wellbeing as some authors argue that higher education may be a source of regret and depression in some individuals (Chevalier, & Feinstein, 2006; Roese, & Summerville, 2005). Other scholars acknowledge an indirect role of education in wellbeing through an increase in income and prestige (Helliwell, Layard, & Sachs, 2012; Helliwell, & Putnam, 2004). Jongbloed (2018) used data of more than 50,000 individuals form European Social Survey (2012) and found that access to tertiary education was positively and significantly related to subjective wellbeing measured as flourishing. There is a need to retest education and wellbeing link in other countries investigating its differential impact on employed versus unemployed individuals (Jongbloed, 2018).

## Perceived Employability and Wellbeing

Perceived employability is positively related to one's happiness and wellbeing. Higher perception of employability leads to positive evaluation of one's work situation, which may further lead to better health outcomes and wellbeing (Berntson, & Marklund, 2007). It is argued that individuals who perceive themselves employable in the future tend to be happier and report more mental health and wellbeing.

## Teacher Support

The transition from academic environment to labor market is important for youth as it has greater impact upon future career enhancement (Nurmi, Salmela-Aro, & Koivisto, 2002). Research suggests that the majority of students perceive the role of teachers instrumental to their educational development (Soutter, O'Steen, & Gilmore, 2012). A longitudinal study of 525 young adults having a mean age of 19.7 years studying in vocational educational and training schools of Switzerland found direct relation of teachers' support on career aspirations of students (Hofmann, Stalder, Tschan, & Häfeli, 2014). The study further suggested that teacher support can increase students' self-esteem and their perceptions regarding the school, which plays a major role in enhancement of perceived employability or career perception and further studies.

## Teacher Support and Self - Perceived Employability and Subjective Wellbeing

Graduate employability is not a stand-alone job. Social support which includes parent, teachers and friends contribute to not only employability of graduates, but it also enhances wellbeing of students (Rothwell, Jewell, & Hardie, 2009). Schnettler et al. (2015) conducted a survey from 347 students in Chile to investigate role of family support in terms of tangible and intangible support in the development of life satisfaction and subjective happiness. Results revealed that tangible family support provided in terms of economic resources were positively related to life satisfaction, whereas; intangible family support in terms of social support was related to subjective happiness. A study of 664 emerging Australian adults found that the youth who were more work oriented and having purpose in life were higher on self-perceived employability and life satisfaction (Praskova, Creed, & Hood, 2015).

Traditionally, a major focus has been given on the studies of primary and secondary education. Data regarding literacy ratios, gender disparity, enrolment ratios and all other indicators took primary education into account mainly due to its role towards public and social wellbeing (UNESCO, 2014). Very little focus has been given on research in tertiary education.

Literature in human resource management is rich with research on employability of current employees to get promotion in the same organizations or to get a new job. Very little research is available on the perceptions of employability of graduates in higher education; therefore, the need is felt to study self-perceived employability of the graduates of newly established institutions where there was no other higher education facility (Grotkowska, Wincenciak, & Gajderowicz, 2015).

Subjective wellbeing is a widely-discussed topic in the field of psychology, happiness studies, policy development and economics. Subjective wellbeing has been discussed so far with a variety of indicators like access to water, money, culture, ethnicity, economic growth, income, access to information technology and so on (Adewara, 2014; González-Gómez, Guardiola, & Garcia-Muñoz, 2009; Guardiola, González-Gómez, & Lendechy Grajales, 2011). A very little or no relationship of wellbeing with access to higher education has been studied. This study intends to fill this gap comprehensively.

Based on above propositions suggested by Praskova, Creed, and Hook (2015), we wish to test the following hypotheses:

H1: Access to Higher Education (AHE) has a positive significant impact upon Self-perceived Employability (SPE) of graduating students.
H2: Teacher support (TS) has positive significant impact upon self-perceived employability (SPE) of graduating students.
H3: Access to Higher Education (AHE) has a positive significant impact upon Psychological Wellbeing (PWB) of graduating students.
H4: Teacher support (TS) has positive significant impact upon psychological wellbeing (PWB) of graduating students.

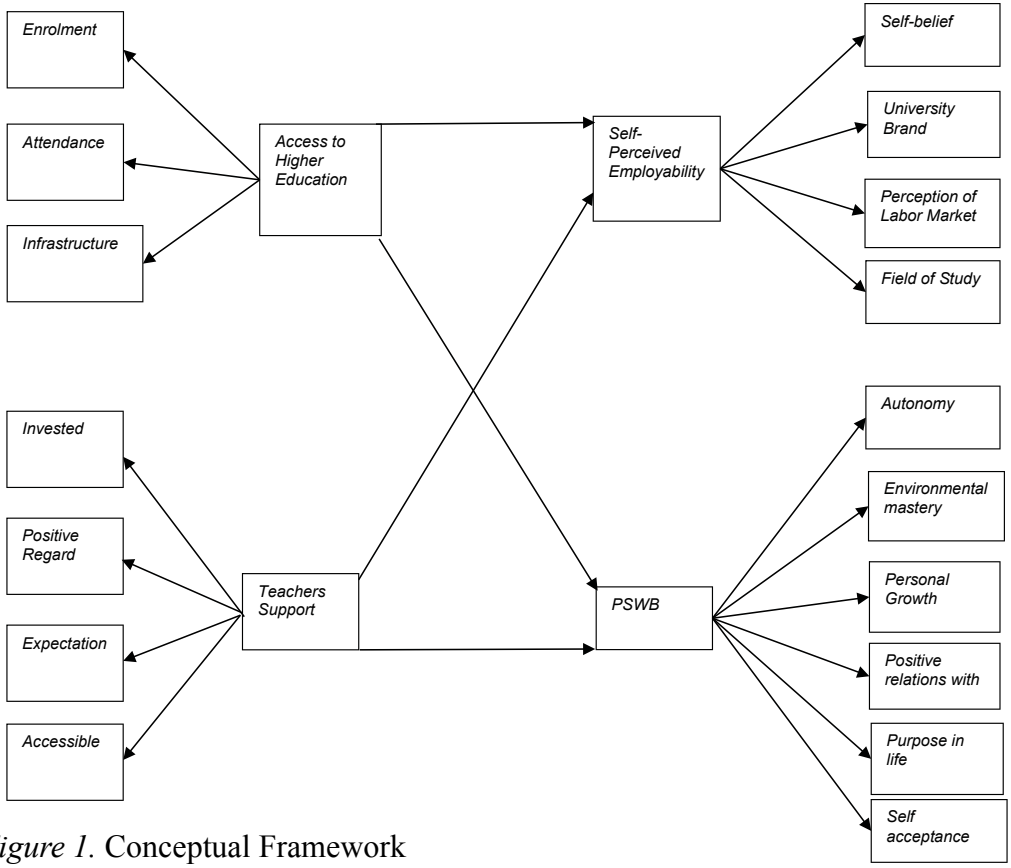


*Figure 1.* Conceptual Framework

## Methodology

This study collected data from graduates enrolled in newly opened campuses of the University of Sindh, Jamshoro. Two campuses were selected for this study, mainly because these campuses were at least 5-years old and one or two batches of graduates had passed out. Some of them had joined the workforce. Total of 520 responses were received out of 700 questionnaires distributed through online as well as through paper and pencil method. The convenience sampling technique was used to collect data (Cooper & Schindler, 2008). Out of 520 responses, there were 43% females and a majority of them were young adults in the age group of 18 to 25 years (83%). These students were studying business administration (51%), information technology (36%) and the rest were from English literature and computer science disciplines.

**Tool**

Access to higher education was measured by using a 15-item questionnaire developed by (Bakari & Khoso, 2017). Cronbach's alpha (α=.86) was obtained. The basic foundation to use this scale was provided by two reports published in 2009 (Belyakov, Cremonini, Mfusi, & Rippner, 2009; Meny-Gibert & Russel, 2010). Both reports identified basic access and enabling access as two distinct but interrelated dimensions of access to education. Teachers' support was measured by using the scale of Metheny, McWhirter, and O'Neil (2008). This scale contains four factors and 20-items. This study obtained its reliability of α= 0.95.

A 16-item measure of Rothwell et al. (2008) was used to measure self-perceived employability. This scale also contains four factors such as perceptions of graduates regarding the field of study, the university, labor market and their own skills base. Cronbach's alpha for this study was α=0.90.

To measure the psychological wellbeing, 6-dimension scale of Ryff (1989) was used. There are different versions of this scale. This study adopted an 18-item version (α= 0.84) obtained by Bakari, and Khoso (2017).

## Findings

Before going to regression and correlation analysis and hypotheses testing, descriptive statistics were found to know the means and standard deviations of access to higher education (AHE), teacher support (TS), self-perceived employability (EMPL) and psychological wellbeing (PWB).

Table 2
*The Means and Standard Deviations of AHE, TS, EMPL and PSWB*

| | N | Mean | Standard deviation |
|---|---|---|---|
| Access to higher education | 520 | 3.7542 | .68033 |
| Teachers support | 520 | 4.1196 | .66963 |
| Employability | 520 | 3.5364 | .80918 |
| Psychological well-being | 520 | 3.8998 | .48049 |

Table 3 shows the means and standard deviations of independent and dependent variables. In general the means score of variables are greater than 3.5 and show that students under study are satisfied with what the facilities and opportunities they have received regarding access to higher education (Mean score = 3.75), they feel the teachers are supportive to them (Mean for TS, 4.11), they perceive on the basis of skill and competencies they achieve are sufficient for them to get employment in the future (Mean for EMPL = 3.53) and they enjoy satisfaction and contentment with their lives (Mean for PWB = 3.89).

Table 3
*Correlation Matrix*

| | **Employability** | **Psychological wellbeing** | **Teachers' support** | **Access to higher education** |
|---|---|---|---|---|
| Employability | 1 | | | |
| Psychological wellbeing | .640** | 1 | | |
| Teachers' support | .413** | .548** | 1 | |
| Access to higher education | .432** | .343* | .293* | 1 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4 indicates positive correlations between all variables of study. Correlation between employability and psychological wellbeing is strong having value of 0.640 greater than 0.5.value. All other correlations of employability are moderate (0.413 and 0.432 for teachers support and access to higher education respectively). Access to higher education is weakly positively correlated with psychological wellbeing and teacher support (0.343 and 0.293 respectively). All correlations are positive and significant at 0.01 level except correlation among access to higher education and teachers' support and psychological wellbeing which is significant at 0.05 level.

## Regression Analysis

Regression analysis was performed in two steps. In the first step, the impact of both the independent varibles on self-perceived employability was measured. In the second step, the impact of both the independent varibles on psychological well-being was measured through AMOS.

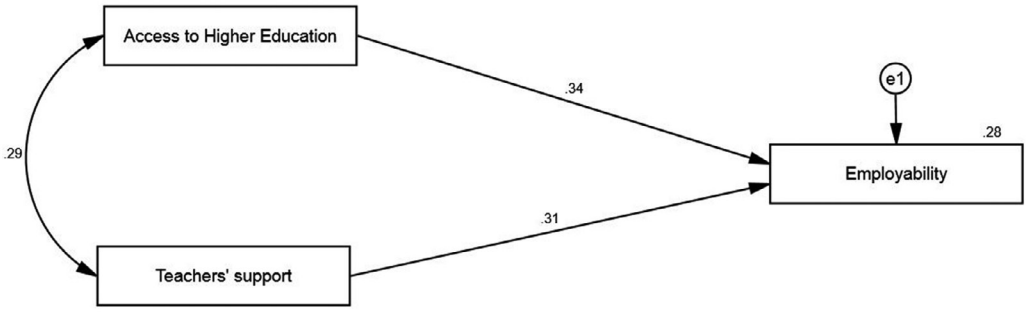


*Figure 1.* Direct effects of AHE and TS on employability

Table 4
*Direct Effects of Access to Higher Education and Teachers Support on Self Perceived Employability*

| Variables | | | Coefficient | *p value* | Hypothesis support |
|---|---|---|---|---|---|
| Employability | <--- | Access to HE | .340 | .007 | H1 Accepted |
| Employability | <--- | Teachers'' support | .314 | .013 | H2 Accepted |

Table 5 shows the result of regression paths between independent variables i.e. access to higher education and teachers support, with dependent variable 'self-percieved employability'. Path hypothesized between access to higher education and employability; H1 is supported by the structural path shown in the figure and table above. Path shows that regression coefficient value is positive and significant ($\beta$=0.340; $p<0.05$). The second hypothesized path between teachers support and employability also shows positive and significant relationship ($\beta$=0.314; $p<0.05$).

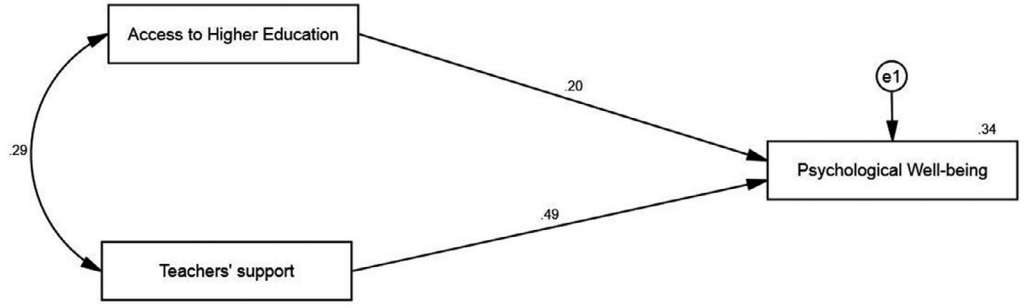


*Figure 2.* Direct effects of AHE and TS on well-being

Table 5

*Direct Effects of Access to Higher Education and Teachers Support on Psychological Wellbeing*

| Variables | | | Coefficient | p value | Hypothesis support |
|---|---|---|---|---|---|
| Psychological wellbeing | <--- | Access to HE | . 199 | .098 | H3 Not accepted |
| Psychological wellbeing | <--- | Teachers support | .490 | *** | H4 accepted |

Table 6 shows the results of regression analysis among access to higher education and teachers' support and dependent variable psychological wellbeing. Results reveal that path hypothesized between access and psychological wellbeing is not statistically significant ($\beta$=0.199; $p>0.05$). Whereas, H5 is accepted because regression path between teachers' support and psychological wellbeing is statistically significant and positive ($\beta$=0.490; $p<0.001$).

## Discussion

This research has been carried out to investigate the impact of access to higher education on self-perceived employability and psychological wellbeing of students. Access to higher education was measured through two major dimensions: basic access and enabling access. Basic access had two sub-dimensions: attendance and enrollment. Enabling access had two dimensions: the availability of infrastructure and human recourses (Teachers') support. Teacher support was measured as a separate variable. Four hupothesis were formulated. The first and second hypothesis were regarding the impact of access to higher education and teacher support on self-perceived employability. Both hypotheses were substantiated by regression analysis. The third hypothesis which proposed a positive and significant impact of access to higher education on psychological wellbeing was not proved due to insignificant value of regression path. This result can be explained in the light of two factor motivation theory presented by (Herzberg, 1969), which proposes that factors which are considered cruicial and basic are regarded as a matter of right, thus do not contribute towards motivation and are called hygines factors. In case of our operationalization of access to higher education, this study considered two dimensions, that is, basic access and infrastructure. Student might consider the infrastructure as integral part of their educational partnership, thus giving little importance towards enhancement of motivation and wellbeing. Therefore, there is a need to include other aspects of enabling access such as work experience, career

counseling and co-curricular activities as proposed by Pitan (2016). Moreover, World Happiness Report asserts that education has an indirect link to wellbeing through raise of income, increasing the chances of employability and providing secruity of job (Helliwell, Layard, & Sachs, 2012; Jongbloed, 2018).

Hypothesis 4 proposed that teachers support increases students wellbeing. This is supported in the results. Findings of this hypothesis suggest that while making higher education accessible to the people, it should be noted that the institutions are fully equipped with the necessary infrastructure and well trained and motivated teachers. As results strongly support the importance of teacher support on both the dependent variables of study, the leadership of HEIs must therefore put emphasis on training and motivations of teachers.

## Implications

### Theoretical Implications

Despite the increased focus on higher education and heavy investments from public and private sectors, we could not find any empirical study measuring access to higher education on students' outcome. This paper has made an endeavor to quantify the approaches to research in higher education. This paper may also trigger further research in this area. Moreover, graduate employability has also been under the focus of global policy makers (Teichler, 2009), and research in this area in Pakistan it seems has not been done.

### Practical Implications

This study has some practical implications for different stakeholders ranging from leadership in universities to governments and from academic researchers to human resource management professionals. Universities should increase their scale of operation and devolve their services to the areas lacking access to higher education; this will increase the employability of graduates. The campuses which are already working in different areas can further enhance graduate employability through strengthening skills and motivations of teachers employed there. Welfare of teachers in these campuses will contribute to the welfare of students. Secondly, the Government should support such initiatives and provide funds and financial support for development of infrastructure, provision of computers, libraries and other recreational and educational facilities. This study also makes contribution

to the literature of the social sciences that intends to raise happiness among masses. This paper will also help human resources management professionals and researchers to identify potential employees and plan their future career goals and expectations.

**Limitations and Way Forward**

This study has some limitations. Firstly, this study is cross sectional in nature and design; therefore, causal relations between variables cannot be fully inferred. Though this study has collected data from the sample predominantly of students studying in the third year of their bachelor program, who are well aware of facilities and teachers support and free from the first impression bias (Rabin & Schrag, 1999), there is also the need for a longitudinal study to investigate graduate perceptions at different points in time.

Moreover, organizational support and social support may also contribute towards the development of employability and wellbeing. Psychological capital is also a major contributor to students' career aspirations (Luthans, Youssef-Morgan, & Avolio, 2015; (Bakari, & Khoso, 2017); therefore, this can also be studied as a moderator or a mediator.

Although, research has provided the empirical evidence of wellbeing achieved through access to different facilities, that is, access to water (González-Gómez, Guardiola, Garcia-Munoz, 2009; Guardiola, Gonzales-Gomez, & Lendechy Grajeles, 2011), access to basic services such as electricity and sanitation (Adewara, 2014) are few to be quoted here. Graham and Nikolova (2013) after analyzing cross sectional data pooled from Gallop Survey 2009-2011 found positive impact of access to cell phone, TV and internet on subjective wellbeing though with diminishing marginal utility. Therefore, our insignificant results regarding the impact of access to higher education on subjective wellbeing warrant further investigation.

Finally, this study has measured perceptions of students' employability which does not itself reveal the employability of students in actual terms. In other terms, this study did not measure any employability skills necessary for future employment. Therefore, there is need to first find what type of skills employers aspire to find in graduates and investigate the prevalence of these skills in graduates of Pakistani universities (Coetzee, 2014).

## Conclusion and Recommendations

This study has discussed the effects of decentralization of higher education upon the employability perceptions and psychological wellbeing of graduating students. The present study also measured the impact of teacher support in the development of employability and wellbeing. The results reveal that teachers support is pivotal for the development of employability skills and wellbeing in students. Students also perceive that the necessary infrastructure should be available at campuses so that they may get a better education.

The study measured the impact of self-regulatory processes like efforts one puts in his/her work, planning and strategies for career development and emotional regulations mediating the relationship between career calling and perceived employability and life satisfaction. This further necessitates the need to investigate the role of external forces like social support, teacher support and organizational support in the development of perceived employability and subjective wellbeing.

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