Role of Higher Education in the Development of Generic Competencies for Job Market: Perception of University Graduates

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ARTICLE DETAILS

ABSTRACT

The quantity of higher education is rapidly increasing, but the quality is still questioned about provision of generic competencies among graduates. In order to increase employability of graduates the universities are making efforts to equip graduates with skills and capabilities to integrate them in the job market. The principle objective of the current study is to investigate the perceptions of university graduates about the role of higher education in the development of generic competencies for job market. A quantitative survey research design was used. The total 510 graduates were selected through convenient sampling technique from three public universities. The collected data were analyzed with the help PSL-SEM. The results showed the higher education developed generic competencies among graduates partially, hence not fulfilling the need to actual extent which is required in the job market.

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1. Introduction

Higher education plays an important role in the economy of any country which aims to prepare such professionals which may satisfy the demand of the job market. In addition, it is a big source of providing the competent professionals that can mold an underdeveloped nation toward progress, prosperity and technology driven economy. The term competencies developed in higher education can be defined as, knowledge, skills, or attitude that enable individual to efficiently perform the actions of a specified profession after graduation (Chyung et al., 2010). There are two types of competencies; specific and generic. Specific competencies are those which are related to a particular field while generic competencies are common and necessary in every field. In literature, researchers have also identified important generic competencies which are being demanded in the job market. According to Field (2017), higher education should enable the graduates to work efficiently, perform well under pressure, work productively with others and adapt challenging situations. In the same perspective, another study
describes that the graduates must be able to work cooperatively with others, adaptable the situation, creative and good communicator (Velasco, 2012). In addition, Crebert, et al., (2004) described, the communication, problem solving, creativity and ICT competencies are needed in the current job market. Whereas, Armstrong (2003) quoted that these competencies are (1) communication, (2) result based, (3) customer focuses, (4) team work, (5) leadership, (6) planning and organizing, (7) work awareness, (8) flexibility, (9) adaptability, (10) interpersonal and problem solving.

The probability of employability can be raised by developing generic competencies among graduates which helps them in market through formal and informal learning activities (Harvey, 2002). However, to achieve sustainable job market there is increasing demand of graduates with more generic competencies. These competencies are oral and written communication, ICT, problem solving and adaptability, creativity and team work. These generic competencies, enabled the graduates to graduates face the new challenging situations successfully. The brief preview of these generic competencies is as below.

1.1 Oral and Written Communication Competencies
Oral communication is the capacity to convey one’s message or thought in a appropriate tone and style by using proper words following the grammar rules of a particular language. While, written communication means writing documents clearly and precisely in a meaningful way following grammar rules and styles of the particular language. Oral communication requires the ability of listening and comprehend while written communication requires the ability of reading comprehensively. The good oral and written communication are most significant competencies for getting and sustaining jobs (Maes, 1997). The practitioners were of the view that in order to fulfill the need of good communication the higher education can be an effective channel for the graduates (Gray, 2010).

1.2 Problem Solving and Adaptability Competencies
The problem solving is a step by step processes of transformation the problematic conditions through comprehensive thinking (Martz & Brown, 2017). Hence, it can be depicted that problem solving is the ability refers to the logical thinking to find out some suitable solution of the desired goals and take practical actions for the achievement of that goal. In addition, Higher education is supposed to create problem solving competency among the graduate in order to enable them to find out the workable solutions of the problem which a firm may face in market.

1.3 Creativity Competency
In recent decades, the innovative and creative workforce acquiring an important place in the market due to constructive and comprehensive thoughts to cope with the new emerging challenges at the workplace. To achieve this purpose, Universities are encouraging the students to take part in innovative and creative activities in order to develop them into potential candidates for the job market in future (Comunian & Gilmore, 2014).

1.4 ICT Competencies
The ICT has changed this world into a digital global village. Therefore, to achieve the international compatibility in the work environment, the demand of competency at the work place has increased. Consequently, the computer education as subject are incorporated in graduate programs and pedagogy with CAI (Computer Assistant Instructions) are initiated to develop the ICT competencies among the students (Ashfaq & Abbas, 2018).

1.5 Team Work Competencies
The current era is the era of collaborations and cooperation, to enhance the firm performance. The sustainability in economic sector is not possible without the team work approach because it is helpful for raising the human potentials to deal and handle different societal and directorial tasks (Hodges & Burchell, 2003). Therefore, the workforce with such competencies are highly demanded in the job market. Thus, university education is supposed to supply the highly skilled workforce who can perform as good team members in future.
Therefore, to make the higher education up-to the level of the current demands of competence development, many reforms have been taken in higher education system world widely. Keeping in view this purpose, European countries are following Bologna system of higher education which is signed by 46 European countries (Little & Arthur, 2010). The main aim of bologna declaration was to maintain European higher Education area in global context by retaining the quality of relevance, ensuring the competencies among graduates that lead them toward working lives and making system more general than before. Similarly, in Pakistan the HEC (Higher Education Commission) is responsible to ensure the quality of higher education by assisting higher education institutions to function as an engine for economic development of society.

Relevance of higher education to the economy is included in strategic plan of HEC in Pakistan. The higher education commission in action plan of 2015, also realized the importance of competencies compatible with the rapidly changing global economy and emphasized on the skilled based market-oriented education. Though HEC has recognized the importance of competency development yet Pakistan is still facing problems in this regard as the government of Pakistan is spending only 0.3% of GDP on higher education which is considered lowest on world average of education expenditure (HEC, 2005). This problem is also due to the main focus of university teachers are still on memorization without due considering of practical competencies like critical, problem solving, time management and ICT abilities which are need of 21\textsuperscript{st} century (Hoodbhoy, 2009). Consequently, the unemployment ratio among graduates is high. Therefore, there is need to study/investigate that how far university education is developing the generic competencies among the university graduates keeping in view the job market demand.

Therefore, this study is focused to investigate the university students’ perception of their generic competencies developed during their higher education and the level of their belief that to what extent these generic competencies would enable them to get job after their graduation.

2. Research Methodology

The current study was descriptive in nature and the quantitative survey research design was used. A 7-points Likert scale were developed to measure their perception about their generic competencies (Oral communication, written communication, team work, ICT, creativity, problem solving and adaptability) which are being producing higher education for job market and the dependent variable “Belief to find job” after their graduation. These scales were adopted from Andleeb (2015). The questionnaire was validated through expert opinion after that the instrument used for pilot testing. A pilot test was conducted on the 265 graduates which were selected from two faculties (Social science and behavioral sciences) of university of Sargodha. Reliability of the research instrument was ensured by the Cronbach Alpha in the pilot testing. After pilot testing, deletion of some items was made to ameliorate reliability. The Alpha values are as below.

| Variables                        | No. of Items | Alpha Coefficient |
|----------------------------------|--------------|-------------------|
| 1 Belief of finding job (BFJ)    | 1-6          | .754              |
| 2 Oral communication (OC)        | 7-14         | .886              |
| 3 Written competencies (WC)      | 15-23        | .893              |
| 4 Problem solving and adaptability(PS) | 24-35   | .917              |
| 5 Critical Thinking skills (CS)  | 36-45        | .905              |
| 6 Team work (TW)                 | 46-55        | .934              |
| 7 Info & Communication Tech skills (ICT) | 56-62 | .895              |

A multi sampling technique was used for representative sample. At the first stage, four public universities, the University of Sargodha, University of Gujarat, GC University of Faisalabad, and Islamic University Bahawalpur were selected through purposive sampling technique. The inclusion criterion for these universities was to target the population of agrarian and industrial regions. At the second stage, four departments (Education, Economic, Psychology and Political sciences) from the faculty of Social and Behavioral Sciences were selected from four sampled universities. A Sample of
five hundred and ten (510) graduates (10% from each department of all universities) was selected conveniently from these public universities.

3. Analysis and Results

The main objective of the current study was to investigate the role of generic competencies developed during the students’ graduation for developing their belief of getting job in the job market. There were six independent variables in terms of six generic competencies and “Belief of finding job” (BFJ) as dependent variable. Therefore, following hypotheses were generated:

H1: There is significant effect of Critical thinking skills on the belief of students to find the job after graduation.
H2: There is significant effect of ICT skills on the perception of students to find the job after graduation.
H3: Oral communication skills developed in higher education significantly affect the students’ belief of finding the job.
H4: There is significant effect of Problem solving and adoptability skills on the perception of students to find the job in the job market.
H5: There is significant effect of Team Work skills on the perception of students to find the job in the job market.
H6: There is significant effect of written communication skills on the students’ belief of finding the job.

In addition, to study the effect of gender on the perception of the graduates about the role of higher education in developing the generic skills necessary for job market, the hypotheses H7 to H12 were tested in the structural model given in figure 2. Later, in the second stage, coefficient of determination, regression coefficients were computed in the structural model.

3.1 Measurement Model

This section discusses the data analysis and its results in a detail. Prior to the hypothesis testing, it is suggested by the various scholars in the field of PLS-SEM (i.e., Hair et al., 2019) that latent constructs’ factor loadings, composite reliability, convergent validity and discriminant validity must be ensured. The table 4.1 shows that all items of latent constructs are showing value above the threshold value of 0.60 recommended by the Hair et al., (2011). Items below than 0.60 were deleted from the model.
Furthermore, internal consistency was examined through the composite reliability that lies between 0.70 to 0.942 for all latent constructs in the measurement model. Therefore, the internal consistency was established in the current study. In addition, the convergent validity was ensured by examining the average variance extract (AVE). The threshold value of AVE is 0.50 as indicated by the various previous authors (i.e., Hair at al., 2019; Abbas et al., 2020; Lo & Tian, 2019). The results show that all constructs are well above the threshold level as AVE value for lies between 0.50 to 0.640 for all latent variables. Hence, convergent validity is also established for the current study.

| Variables                        | Items | Items Loadings | CR   | AVE   |
|----------------------------------|-------|----------------|------|-------|
| Belief of getting Job (BFJ)      | BFJ1  | 0.820          |      |       |
|                                  | BFJ2  | 0.838          |      |       |
|                                  | BFJ3  | 0.769          |      |       |
|                                  | BFJ4  | 0.811          |      |       |
|                                  | BFJ5  | 0.804          |      |       |
|                                  | BFJ6  | 0.755          |      |       |
| Critical thinking skills         | CS1   | 0.680          |      |       |
|                                  | CS2   | 0.745          |      |       |
|                                  | CS3   | 0.709          |      |       |
|                                  | CS4   | 0.769          |      |       |
|                                  | CS5   | 0.792          |      |       |
|                                  | CS6   | 0.793          |      |       |
|                                  | CS7   | 0.759          |      |       |
|                                  | CS8   | 0.726          |      |       |
To assess the discriminant validity, the HTMT ratio proposed by the Hensler et al., (2015) was employed. The Heterotrait-Monotrait ratio of correlations (HTMT) is a process for assessing discriminant validity in partial least squares structural equation modeling (PLS-SEM), which is one of the key building blocks of model evaluation (Guerra-Tamez et al., 2020). The Table 4.2 reveals that all values of the constructs show values less than 0.85 recommended by Hensler et al., (2015). It shows that all latent constructs of the current study are distinct from each other on empirical standards.

### Table 3. Discriminant Validity by HTMT

| BFJ | CS  | ICT | OC  | PS  | TW  | WC  |
|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     |     |     |     |

3.2 Discriminant Validity

To assess the discriminant validity, the HTMT ratio proposed by the Hensler et al., (2015) was employed. The Heterotrait-Monotrait ratio of correlations (HTMT) is a process for assessing discriminant validity in partial least squares structural equation modeling (PLS-SEM), which is one of the key building blocks of model evaluation (Guerra-Tamez et al., 2020). The Table 4.2 reveals that all values of the constructs show values less than 0.85 recommended by Hensler et al., (2015). It shows that all latent constructs of the current study are distinct from each other on empirical standards.
Belief of finding Job

| Skills                          | Coefficient of Determination |
|--------------------------------|------------------------------|
| Critical Thinking Skills       | 0.556                        |
| ICT Skills                     | 0.379 0.590                  |
| Oral Comm skills               | 0.630 0.754 0.517            |
| Problem Solving & Adaptability | 0.547 0.722 0.656 0.783      |
| Team Work skills               | 0.497 0.789 0.791 0.679 0.779|
| Written Comm                   | 0.586 0.792 0.738 0.827 0.759 0.755 |

3.2 Coefficient of Determination

The coefficient of determination denoted by $R^2$ is used to measure the variation in dependent variable explained by the independent variables or predictors. Therefore, for a structural model of multiple regression relations, $R^2$ is used as the measure to evaluate it. It measures the predictive power of the model which is consisted of given set of independent variables exerting the combined effect of the endogenous latent variable. In this way it can be said that $R^2$ mentions the likelihood of future variables/event which enhance the prediction of the endogenous variable. Its value varies from 0 to 1, which can be interpreted as 0% to 100% variation in dependent variable is explained by the predictors in a model or multiple regression analysis. The $R^2$ value is equal to 1 means a perfect fit of model, while value ranges to 0.75 is considered to be substantial and 0.5 is considered to be a moderate. However, if its value is less than or equal to .25, it shows that model is relatively weak in predicting the endogenous variable (Hair et al., 2011; Henseler et al. 2009). Here for this model, $R^2$ was calculated in table 4 to measure the total variance explained by the six generic skills on the perception of the students to find the employability.

| BFJ   | R Square | R Square Adjusted |
|-------|----------|-------------------|
|       | 0.351    | 0.343             |

The Table 4 unfolds the value of $R^2$ for the current study is 0.35 which is deemed to be a moderate and it can be assumed that the selected six generic competencies explained the 35% of the dependent variable of belief of the students to find the job.
3.3 Structural Model
The current study employed the bootstrapping method to examine the hypothesized relationships. The Figure 4.2 and Table 4.4 show the results of the hypothesis testing.

![Figure 2: Structural Model]

The results of the structural model show in the table 4.4. The hypothesized relationship of the conceptual model unfolds results for direct path and the indirect path with mix results. The first hypothesis $H_1$ shows the significant relationship between CS and BFJ ($\beta = 0.153 \ p<0.05$) thus accepted. Similarly, $H_3$ ($\beta = 0.312 \ p<0.01$) and $H_5$ ($\beta = 0.138 \ p<0.10$) also show significant relationship with BFJ, therefore both hypotheses were accepted. However, Direct path of $H_2$ ($\beta = -0.010 \ p>0.10$), $H_4$ ($\beta = 0.003 \ p>0.10$) and $H_5$ ($\beta = 0.049 \ p>0.10$) reveal insignificant relationship with BJF, hence rejected.
Table 4.4. Results of hypothesis testing

| Hypothesized Path | \( \beta \) | Standard Deviation | t-values | P values | Decision |
|-------------------|-------------|---------------------|----------|----------|----------|
| **Direct Paths**  |             |                     |          |          |          |
| H₁ CS -> BFJ      | 0.153**     | 0.076               | 2.010    | 0.045    | Accepted |
| H₂ ICT -> BFJ     | -0.010      | 0.037               | 0.272    | 0.785    | Rejected |
| H₃ OC -> BFJ      | 0.312*      | 0.068               | 4.595    | 0.000    | Accepted |
| H₄ PS -> BFJ      | 0.003       | 0.080               | 0.036    | 0.971    | Rejected |
| H₅ TW -> BFJ      | 0.049       | 0.075               | 0.659    | 0.510    | Rejected |
| H₆ WC -> BFJ      | 0.138**     | 0.075               | 1.838    | 0.066    | Accepted |
| **Indirect Paths** |             |                     |          |          |          |
| H₇ CS*Gen -> BFJ  | 0.085       | 0.070               | 1.213    | 0.225    | Rejected |
| H₈ ICT*Gen -> BFJ | -0.046      | 0.045               | 1.021    | 0.307    | Rejected |
| H₉ OC*Gen -> BFJ  | -0.080      | 0.067               | 1.200    | 0.230    | Rejected |
| H₁₀ PS*Gen -> BFJ | 0.009       | 0.079               | 0.115    | 0.908    | Rejected |
| H₁₁ TW*Gen -> BFJ | -0.050      | 0.077               | 0.653    | 0.514    | Rejected |
| H₁₂ WC*Gen -> BFJ | 0.089       | 0.072               | 1.228    | 0.220    | Rejected |

* p < 0.05; ** p < 0.05

In addition, indirect path with moderating effect of gender on the relationship between CS and BJF (\( \beta=0.0.85 \) p>0.10), ICT and BJF (\( \beta=0.0-0.046 \) p>0.10), OC AND BJF (\( \beta=-0.080 \) p>0.10), PS and BJF (\( \beta=0.09 \) p>0.10), TW and BJF (\( \beta=-0.050 \) p>0.10), WC and BJF (\( \beta=0.089 \) p>0.10) shows insignificant relationship, therefore rejected the all hypothesis. The moderating effect of gender could establish its moderating effect on the aforementioned latent construct as a moderator.

4. Discussion

The key rule of higher education is to develop competencies among graduates and to prepare them for job market. Therefore, the present study was aimed to investigate the role of higher education in the development of generic competencies i.e. Oral communication, written communication, creativity, teamwork, ICT, problem solving and adaptability. The result of present study also found that graduates had the perception that the critical thinking skills developed in graduation significantly enhance the belief of finding the job. Similarly, oral communication and written communication skills developed during higher education significantly ameliorate the belief of getting job competencies and job etc. The results of this study are supported with the evidence of Barnet study that the HE producing competencies among graduates regarding job market demand. The study of Kęstutis & Nora (2010) also revealed that graduates classroom make them competent enough to be successful in their professional career. Furthermore, the study of Singh & Singh (2008) demonstrated that the graduates had also positive perception about the development of competencies among them.

However, the findings of the study also showed that the problem solving and adoptability, teamwork and ICT skills showed nonsignificant effect on the perceptions of the students to get job after completing their degree. The results are aligned with the Nicolescu & Pun (2009) study, he found that the higher education system fulfilling graduates requirement of competencies but in this competitive edge, the employers and graduates expect more to sustain their existence. The researchers, such as, Lee Harvey (2010) also suggested that the competencies development-based education should deliver to graduates for attainment of competitive edge in job market. Furthermore, findings of the study confirm the viewpoint, partially explained in human capital theory which suggests that higher education have return in shape of economic development.

5. Conclusion and Recommendations

This study focused the belief of the students about role of generic competencies; i.e. Oral communication, written communication, creativity, teamwork, ICT, problem solving and adaptability
which higher education should produce among graduates to make them enable for job market. To explore this role of higher education and keeping in view the research objective of the current study, the research question raises that to which extent the higher education develops generic competencies among graduates to meet demands of job market? The results of the study found that the higher education is preparing graduates for labor market but, it is not developing as much extent of competencies as graduates expect keeping in view the demand of the job market. This is supported by the view of previous researchers work like Štimac & Simic (2012) and Abbas & Ashiq (2017), who documented that the expectation of graduates and other stake holders are more than actually received. It can be concluded basing on the findings of the study, revealed that the higher education in Pakistan is developing generic competencies like; Oral communication, written communication and critical thinking skills, which are significantly affect the perceptions of the graduates. Graduates were of the belief that these skills learned during graduation enabled them for the job market. However, the results of the study also showed that the other generic competencies like ICT, team work, problem solving and adaptability skills, did not significantly affect the perception of graduates with relevant to existing job market.

Conclusively, among many other roles of higher education, the most important function is to produce workforce, according to demand of job market (Koda, 2011). Research indicates that the individuals were described pulses for business success and also considered as source of getting competitive advantages among competitors. With the help of competent personnel, a company can get breakthrough in job market and also can sustain competitive advantages (Crawford, 1991). Further, this fact puts great responsibility on Higher education system to develop competencies among graduates to become successful personnel in the job market.

The current study explored the relationship between higher education and labor market through generic competencies such as, oral communication, written communication, problem solving and adaptability, creativity, ICT and team work that are needed in every field of life. The study found that graduates had competencies but not according to that extent which is demanded in job market. Hence, there is immense need of revisions in curriculums and its implementation with true letter and sprite. Although, as a whole the universities are taking an active part to encourage graduates for the use of ICT for learning activities, as well as digital integration in their curriculum, however these are yet to be implemented effectively.

Therefore, due to this gap of graduate degrees and job market, the unemployment among graduates is increasing every year. To overcome this problem, the study suggested that universities should realize the worth of linkages with organization and outreach programs, and provide a platform where employers share experience-based knowledge and job market demands with graduates. It may help to minimize gap between graduates’ supply and employers’ demand.

The study found that higher education producing competencies among graduates partially, thus another solution to develop generic competencies is to offer internship programs. It may be a big source to enhance field competencies among graduates at great extent. In this way, the internship programs (linguistic, youth training program, work with professor, researcher or some remarkable institutes) can be helpful to aware graduates about job market demand.

In nut shell, graduates are considered as human capital and most valuable source for economic development of a country. A nation has physical, financial and technical resources, but without an educated and skilled human capital with generic competencies, it cannot achieve the development goals (Štimac & Simic, 2012). Thus, it is an essential need of the hour to enhance the generic competencies among students considering them the important human capital to overcome the problem of unemployment and to strengthen the economy.
References
Abbas, N., Abrar ul Haq, M., Ashiq, U., & Ubaid, S. (2020). Loneliness Among Elderly Widows and Its Effect on Social and Mental Well-being. *Global Social Welfare, 7*(3), 215-229. https://doi.org/10.1007/s40609-020-00173-5
Abbas, N., & Ashiq, U. (2017). Higher education and graduates’ career opportunities: An emerging challenge to Pakistan. *ISSRA Papers: A journal of Governance and Public Policy, 9*(1), 1-14. https://ndu.edu.pk/issra-papers/doc/ISSRA-Papers-2017-Issue-1.pdf
Andleeb, S. (2015). *Relationship between Higher Education and Job Market in Pakistan: A Student’s Perspective* [MPhil, University of Sargodha], Pakistan.
Arsmstrong, Michael. (2003). *People and Organization (Employee Reward)*. whistline: cromwell press trombridge.
Ashfaq, M. S., & Abbas, N. (2018). Uses of Mobile for Teaching and Learning, Effects and Influence Among Secondary Level Schools in Pakistan. *International Journal of Distance Education and E-Learning, 4*(1). Retrieved 14-03-2019, from http://irigs.iuu.edu.pk:6447/ojs/index.php/IJDEEL/index
Chyung, S. Y., Stepich D., & Cox, D. (2010). Building a Competency-Based Curriculum Architecture to Educate 21st-Century Business Practitioners. *Journal of Education for Business, 6*(81), 307-314, doi: 10.3200/JOEB.81.6.307-314
Crebert, G., Bates, M., Bell, B., Patrick, C. & Cragnolini, V. (2004). Developing generic skills university during work placement and in employment: Graduate perceptions. *Higher Education Research and Development, 23*, 147-165.
Crawford, Richard. (1991). *In The Era of Human Capital : The Emergence of Talent, Intellegent, and Knowledge as The world Wide Economics*. New York: Harper Collonies
Comunian, R., & Gilmore, A. (2014). From knowledge sharing to co-creation: paths and spaces for engagement between higher education and the creative and cultural industries. *Eburon Academic Press; 1*(1), 1-13.
Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications Ltd.
Gray, E. (2010). Specific Oral Communication Skills Desired in New Accountancy Graduates. *Business Communication Quarterly, 73*(40), 40-67. doi: 10.1177/1080569909356350
Guerra-Tamez, C. R., Dávila-Aguirre, M. C., Barragán Codina, J. N., & Guerra Rodríguez, P. (2020). Analysis of the Elements of the Theory of Flow and Perceived Value and Their Influence in Craft Beer Consumer Loyalty. *Journal of International Food & Agribusiness Marketing, 1*-31. https://doi.org/10.1080/08974438.2020.1823929
Hodges, D & Burchell, N (2003). Business Graduate Competencies: Employers’ Views on Importance and Performance In Faculty of Business. *Asia-Pacific Journal of Cooperative Education, 4*(2), 16-22.
Maes, J.D. (1997). A Managerial Perspective: Oral Communication Competency is Most Important for Business Students in the Workplace. *The Journal of Business Communication, 34*(1), 67-80.
Martz, B., Hughes, J. & Braun, F. (2017). Creativity and problem-solving: Closing the skills gap. *Journal of Computer Information Systems, 57*(1), 39-48.
Harvey, L. (2010). New Realities: The Relationship between Higher Education and Employment. Tertiary Education and Management, 6(1), 3-17. doi: 10.1080/13583883.2000.9967007
Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2-24. https://doi.org/10.1108/EBR-11-2018-0203
Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice, 19*(2), 139-152.
Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in
international marketing. In R. S. Rudolf & N. G. Pervez (Eds.), *New Challenges to International Marketing* (Vol. 20, pp. 277-319). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014

Hoodbhoy, P. (2009). Pakistan’s Higher Education System, What Went Wrong and How to Fix It. *The Pakistan Development Review, 4*(48), 581-594.

Kęstutis, P., and Nora, P. (2010). Improvement of Generic skills Development in study programmes of higher education: The graduates viewpoint. *the quality of higher education, 7*(1), 108-131.

Koda, Y., Yuki,K., and Hong,Y. (2011). Cross-Border Higher Education for Labor Market Needs: Mobility of Public-Funded Malaysian Students to Japan over Years. *IICA Working Paper*(29), 1-44.

Little, B., & Arthur, L. (2010). Less Time to Study, Less Well Prepared for Work, yet Satisfied with Higher Education: a UK Perspective on Links between Higher Education and the Labour Market. *Journal of Education and Work, 23*(3), 275–296. doi: 10.1080/13639080.2010.484415

Lo, M. F., & Tian, F. (2020). Enhancing competitive advantage in Hong Kong higher education: Linking knowledge sharing, absorptive capacity and innovation capability. *Higher Education Quarterly, 74*(4), 426-441.

Nicolescu, L., & Pun, C. (2009). Relating Higher Education with the Labour Market: Graduates’ expectations and employers’ requirements. *Tertiary Education and Management, 15*(1), 17-33. https://doi.org/10.1080/13583880802700024

Singh, G. H., Singh, S. K. G. (2008). Malaysian Graduates’ Employability Skills. Journal. Unitare E-Jounral, 4(1), 15-45.

Stimac, H., & Simic, M. L. (2012). Competitiveness in higher education: A need for marketing orientation and service quality. *Economics and Sociology, 5*(2), 23–34.

Velasco, Manual Sles. (2012). More Than Just Good Grades; Candidates Perception about the Skills and Attributes Employers Seek in New Graduates. *Business Economics and Management, 3*(13), 499-517. doi: 10.3846/16111699.2011.620150