**Examination of outcome-based learning and graduate employability: A Case Study of Bangladesh**

**Abstract:**

There is a growing body of literature on outcome-based learning and students’ employability. It is evident that the higher education policy fails to meet the requirement of rapidly changing society and employers’ expectations worldwide, resulting in a great gap between university education and employment. This study examines the outcome-based learning and graduate employability for identifying the existent body of literature and proposes future research agenda. This study aims to explore the relationship among students’ international mindsets, learning outcomes, students’ performance and student employability among Bangladesh Open University postgraduate (CEMBA/CEMPA/MBA/PMBA programs) students. The findings of this study illustrate the conceptual motivation for the argument of creating employability among the university students through student engagement and learning outcomes. Student engagement can also impact on the employability. However, according to the proposed conceptual model, learning outcomes of students can contribute to the core objective of university education, which is employability with mediating impact.

Keywords: Employability; outcome-based education; Bangladesh Open University.

**1. Introduction**

There is a growing body of literature exists on outcome-based learning and graduate employability already exists (Arkoudis & Doughney, 2016; Henderson & Trede, 2017; Jorre de St Jorre & Oliver, 2018; Lloyd & Griffiths, 2008; Peng, 2019; C. Smith & Worsfold, 2015; Sweetman, Hovdhaugen, & Karlsen, 2014; Tucker, Byrnes-Loinette, & Bodary, 2018; Warraich & Ameen, 2010; Whelan, 2017; Young & Keup, 2018). A major part of outcome-based learning for employability literature has examined work integrated learning in the light of graduate employability. Since both the objectives- outcome-based learning and work integrated learning- are focusing to the common goal of graduate employability, this study examines both as part of review literature. A part of work integrated learning is also outcome based learning (Schuster & Glavas, 2017). Work integrated learning can be explained as the combination of common effort from students, academic supervisors as well as industry (Raelin, 1997). The objective of work integrated learning is to incorporate industry experience for the students during their higher education period through work placement so that students get real life experience (Calvin Smith & Worsfold, 2014).

Higher education policy fails to meet the requirement of rapidly changing society and employers’ expectation worldwide, resulting in a great gap between university education and employment. This study aims to explore the relationship among students’ international mindsets, learning outcomes, students’ performance and student employability among Bangladesh Open University postgraduate (CEMBA/CEMPA/MBA/PMBA programs) students. The main objective of this study is to examine the mediating role of learning outcomes on employability of Bangladesh Open University Postgraduate Students (CEMBA/CEMPA/MBA/PMBA programs). This study only focuses the School of Business of Bangladesh Open University (BOU) especially Master of Business Administration (MBA) program, Commonwealth Executive Master of Business Administration (CEMBA) and Commonwealth Executive Master of Public Administration (CEMPA) program and the Professional Master Business Administration (PMPA) for sample selection and result accumulation.

The following paper is presented in additional four chapters. Chapter 2 presents literature review followed by methodology in Chapter 3. Analysis of the collected responses and focus group discussions are presented in Chapter 4. Finally, the conclusion, implication and limitations are presented in Chapter 5.

**2. Literature Review**

**2.1 Overview of Bangladesh Open University**

Since its founding in 1992, Bangladesh Open University (BOU) has provided distance education. Every Bangladeshi citizen can attend this university at any time, and students can study there while staying anywhere in the world. The only public university that uses an open and distance learning method to deliver academic programs is Bangladesh Open University. With the help of its 12 Regional Centers (RCs), 80 Sub-Regional Centers (SRCs), and 1550 Study Centers (as of December 2021), it has a nationwide network that enables it to bring a wide range of distance learning programs right to the doorsteps of students in various regions. Students can use their home as their campus and incorporate studying into a flexible, self-determined schedule thanks to this. BOU presently has 1550 study centers spread across the nation that provide 83 academic programs. BOU now offers 83 programs (64 formal programs and 19 non-formal programs), with the assistance of 6 academic schools. In total, there are 672859 students and 24067 teachers or tutors (as of December 31, 2021).

## 2.2 Research Framework

A conceptual framework has been developed based on the literature review as presented in Figure 8 which shows the independent variables (student engagement) that includes six relationships such as higher order thinking, course effort, collaborate learning student facility, interpersonal engagement and campus support. The present study proposes employability as the dependent variable and learning outcomes as the mediating variable. This mediating construct were identified through literature review and are consistent with the objective of the study. Moreover, the three research questions mentioned in chapter one has been used to design the conceptual framework. This study has developed several hypotheses based on the study’s research objective in order to determine the relations that exist between student engagement and employability.

Based on the findings of earlier studies, the conceptual model as illustrated in Figure 1 depicts the conceptual motivation for the argument of creating employability among the university students through student engagement and learning outcomes. Student engagement can also impact on the employability. However, according to the proposed conceptual model, learning outcomes of students can contribute to the core objective of university education, which is employability with mediating impact.

**Mediating Variable**

**Employability**

**Student Engagement**

* Course effort
* Collaborative learning
* Higher order thinking
* Interpersonal engagement
* Student faculty interaction
* Student support services

**Learning Outcomes**

**(((**

**Dependent Variable**

**Independent Variables Dependent Variables**

Figure 1: Research framework

## 2.3 Hypotheses Formulation

This study’s hypotheses depend on the statement that sound Student engagement have a direct effect on employability of Bangladesh Open University post graduate students. According to the conceptual framework, student engagement matched with employability The results may or may not support the hypotheses. The following sections describe the hypotheses proposed for this study.

*H1: Course effort is positively related to* *learning outcomes*

*H2: Collaborative learning is positively related to learning outcomes*

*H3: Higher order thinking is positively related to learning outcomes*

*H4: Interpersonal engagement is positively related to learning outcomes*

*H5: Student faculty interaction is positively related to* *learning outcomes*

*H6: Student Support services is positively related to learning outcomes*

*H7: Course effort is positively related to* *employability*

*H8: Collaborative learning is positively related to employability*

*H9: Higher order thinking is positively related to employability*

*H10: Interpersonal engagement is positively related to employability*

*H11: Student faculty interaction is positively related to employability*

*H12: Student Support services is positively related to employability*

*H13: learning outcomes is positively related to employability*

*H14: The effect of student engagement towards course effort on employability is mediated by learning outcomes.*

*H15: The effect of student engagement towards collaborative learning on employability is mediated by learning outcomes.*

*H16 The effect of student engagement towards higher order thinking on employability is mediated by learning outcomes.*

*H17: The effect of student engagement towards* interpersonal engagement *on employability is mediated by learning outcomes*

*H18: The effect of student engagement towards Student faculty interaction on employability is mediated by learning outcomes*

*H19: The effect of student engagement towards Student Support services on employability is mediated by learning outcomes*

## 3. Research design and Methodology

A research design has the framework to be used as a guide for collecting and analyzing data to conduct research. In particular, it outlines details or the needed procedures formulate and achieve answers to the research problems (Mc Daniel & Gates, 2010; Zikmund et al., 2013). This study customs both qualitative and quantitative approaches. In the qualitative approach, research in the form of extensive literature reviews and focus group discussion with the respondents were conducted. After the qualitative phase, the quantitative phase consisted of field research, collecting data from 316 Learners through online by using self-administered questionnaires.

## 3.1 Population and sample size

The population of this study comprises of the Post graduate students of Bangladesh open University. The population of the current study is 871 students, who are enrolled in a total of four postgraduate programs at Bangladesh Open University's School of Business. About 37% of current CEMBA/CEMPA, MBA, and PMBA students are included in the study.

On the sample size, Saiful et al., (2011), suggested that an applicable sample size is within 30 to 500 respondents. According to Cohen’s (1975) rule of thumb, 260 is the minimum size for samples in a PLS-SEM analysis for 8 arrows directed at one construct (Hair et al., 2014). Hair et al. (2010) explained that a big sample is needed because smaller samples are not as stable for the purpose of estimation when carrying out a test on a research model by utilizing the SEM. Nevertheless, no consensus has been arrived at among scholars on the adequate sample size for SEM. For instance, William and Holahan (1994) suggested 100 as an adequate sample size. According to Hair et al. (2012), a researcher must take into consideration the distribution of data, methods of estimation, complexity of models, missing data, as well as the quantity of the average variance extracted (AVE) when determining the SEM analysis’ sample size. A sample size of between 150 and 400 is needed and proposed when the estimation is based on maximum likelihood. In short, the more complex models with more variables and items require a larger sample size. As a result, the sample size in this study is 316, as recommended by Hair et al (2012).

Generally, calculation of sample size does not necessarily result in the representation of the population; it depends on the process used in the selection of the elements (Hair et. al., 2012).

Thus, the total number of respondents is 316 from three Post graduate programs of school of Business. The survey was conducted between August, 2021 and October 2021. There are 112 CEMBA/CEMPA students among them, with participation rates for Chittagong and Dhaka of 50 and 62 student, respectively in addition to that a total of 107 MBA students from the university's various study centers participated in this study. The participation is as follows for MBA program: 40, 30, 10, 15, and 12 students from Dhaka, Chittagong, Rajshahi, Khulna, and Sylhet, respectively in this study. In addition, 97 students of PMBA program took part in the survey, with 50 students from Gazipur and 47 students from Dhaka. When there are 316 student respondents, we cease receiving responses from the respondents. Since the data was complete and accurate, no exclusion was necessary. Table 1 shows the study center wise respondents.

Table 1: The respondents for the primary data collection

|  |  |
| --- | --- |
| **Program Name** | Study Centre wise respondents |
| **CEMBA/CEMPA** | |  |  | | --- | --- | | Dhaka | 62 | | Chittagong | 50 | |
| **MBA** | |  |  | | --- | --- | | Dhaka | 40 | | Chittagong | 30 | | Rajshahi | 10 | | Khulna | 15 | | Sylhet | 12 | |
| **PMBA** | |  |  | | --- | --- | | Dhaka | 47 | | Gazipur | 50 | |
| **Total Respondents** | **316** |

For Qualitative analysis, we conduct focus group discussions. The focus group discussion (FGD) construction is listed in Table 2.

Table 2: Demographic distribution of respondents for FGD

|  |  |  |  |
| --- | --- | --- | --- |
| Study Centre Name | No. of FGD | Attendance | Program Name |
| Dhaka | 3 | 30 | CEMBA/ CEMPA, MBA &PMBA |
| Chittagong | 2 | 20 | CEMBA/ CEMPA & MBA |
| Rajshahi | 1 | 10 | MBA |
| Khulna | 1 | 10 | MBA |
| Sylhet | 1 | 10 | MBA |
| Gazipur | 1 | 10 | PMBA |

For the section on the literature review, the secondary source has been widely consulted. The references section at the end contains citations for all of the secondary sources referenced in this report.

**3.2 Focus group discussion**

The focus group discussion (FGD) is an extension of the study where we examined the factors of employability of different postgraduate programs of School of Business, Bangladesh open University. Respondents’ profile is generally used to present the main characteristics of the samples. This section gives the demographic information of the respondents which includes the gender of the respondents, age of the respondents, nationality of the respondents, education level of the respondents and professions.

**4. Analysis**

## 4.1 PLS-SEM Analysis Results

In Partial Least Square Structural Equation Modeling (PLS-SEM) analysis, the PLS measurement model gives the values of reliability test, validity test and path coefficient along with the coefficient of determination. In structural equation model based partial least squares analysis, all the variables are usually connected in one figure that shows the direction of relationship (path coefficient) between exogenous and endogenous variables. The Figure 2 below shows the hypothesized model generated through smart PLS software version 2.0M3.

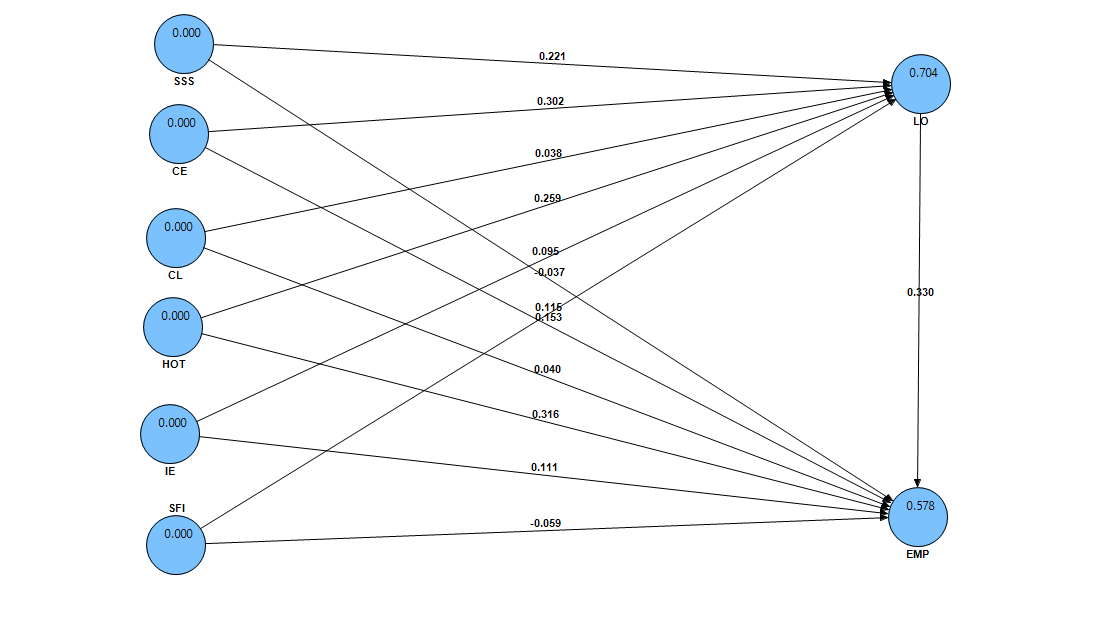


Figure 2: hypothesized model generated through smart PLS

As shown in Table 3, the square root of the AVEs exceeds the highest correlation between that construct and the other constructs, providing another support of discriminant validity (Chin 1998; Fornell & Larcker, 1981) of the constructs in this study.

Table 3: Inter-constructs correlations

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **CE** | **CL** | **EMP** | **HOT** | **IE** | **LO** | **SFI** | **SSS** |
| **CE** | **0.808** |  |  |  |  |  |  |  |
| **CL** | 0.651 | **0.880** |  |  |  |  |  |  |
| **EMP** | 0.653 | 0.504 | **0.738** |  |  |  |  |  |
| **HOT** | 0.711 | 0.540 | 0.685 | **0.866** |  |  |  |  |
| **IE** | 0.511 | 0.449 | 0.499 | 0.487 | **0.864** |  |  |  |
| **LO** | 0.757 | 0.621 | 0.694 | 0.702 | 0.561 | **0.792** |  |  |
| **SFI** | 0.594 | 0.685 | 0.446 | 0.482 | 0.474 | 0.613 | **0.879** |  |
| **SSS** | 0.582 | 0.562 | 0.465 | 0.477 | 0.515 | 0.655 | 0.554 | **0.882** |

## 4.2 Coefficient of determination (R2)

The coefficient of determination (R2) value indicates how much variation in endogenous variable is caused by the exogenous variables. The present study has got a R2 value of 0.704 for LO which indicates that the Learning Outcome is influenced by the independent variables by 70.40%; and 0.578 for Employability which indicates that the Employability of graduates is influenced by the independent variables by 57.80%. As a rule of thumb, a R2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can be respectively described as substantial, moderate, or weak (Hair, Ringle, & Sarstedt, 2011; Moosbrugger et al., 2009). The present study has got a R2 value of 0.704 for LO which is very close to substantial effect and a R2 value of 0.578 for EMP which falls in the moderate effect range.

## 4.3 Structural model for hypothesis testing

Having assessed the measurement model for reliability and validity, the next step is the assessment of the structural model. In the structural model of PLS analysis, hypotheses testing can be done. Here the path coefficients, t statistics, p values and errors are considered. A hypothesis is said to be accepted if it is significant at 5% level (t value >1.96 or p<0.05) (Henseler & Fassott, 2010). Table 4 shows the findings of the structural model for hypotheses testing.

Table 4: Findings of the structural model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hypothesized Path** | **Path coefficient** | **Standard Error** | **T Value** | **P Value** |
| CE->LO (H1) | 0.301 | 0.069 | 4.257 | 0.000 |
| CL-> LO (H2) | 0.038 | 0.064 | 0.592 | 0.554 |
| HOT->LO(H3) | 0.259 | 0.071 | 3.649 | 0.000 |
| IE-> LO(H4) | 0.095 | 0.057 | 1.643 | 0.101 |
| SFI -> LO(H5) | 0.115 | 0.046 | 2.485 | 0.013 |
| SSS -> LO(H6) | 0.221 | 0.061 | 3.613 | 0.000 |
| CE->EMP (H7) | 0.153 | 0.075 | 2.036 | 0.042 |
| CL-> EMP (H8) | 0.040 | 0.061 | 0.658 | 0.510 |
| HOT->EMP(H9) | 0.316 | 0.077 | 4.097 | 0.000 |
| IE-> EMP (H10) | 0.110 | 0.050 | 2.201 | 0.028 |
| SFI -> EMP (H11) | -0.058 | 0.057 | 1.013 | 0.311 |
| SSS -> EMP(H12) | -0.037 | 0.068 | 0.547 | 0.584 |
| LO->EMP (H13) | 0.329 | 0.087 | 3.757 | 0.000 |

The smart pls 2.0M3 was used for testing the structural estimates of the constructs of this study for hypotheses testing. Result demonstrates the findings of structural model for hypotheses testing. The findings support Hypothesis (1) one as the path coefficient value (0.301) is significant at 1 percent (P, <0.01) level. So, CE positively influences the LO of graduates. Hypothesis (2) two is rejected because the path coefficient value (0.038) is insignificant (t-statistic, 0.592; P> 0.05). Therefore, the findings indicate that CL doesn’t significantly influence the LO of graduates. Hypothesis 3 is supported because the path coefficient of HOT with LO is significant (path coefficient, 0.259; t, 3.649). Figure 3 also shows the PLS structural model output.

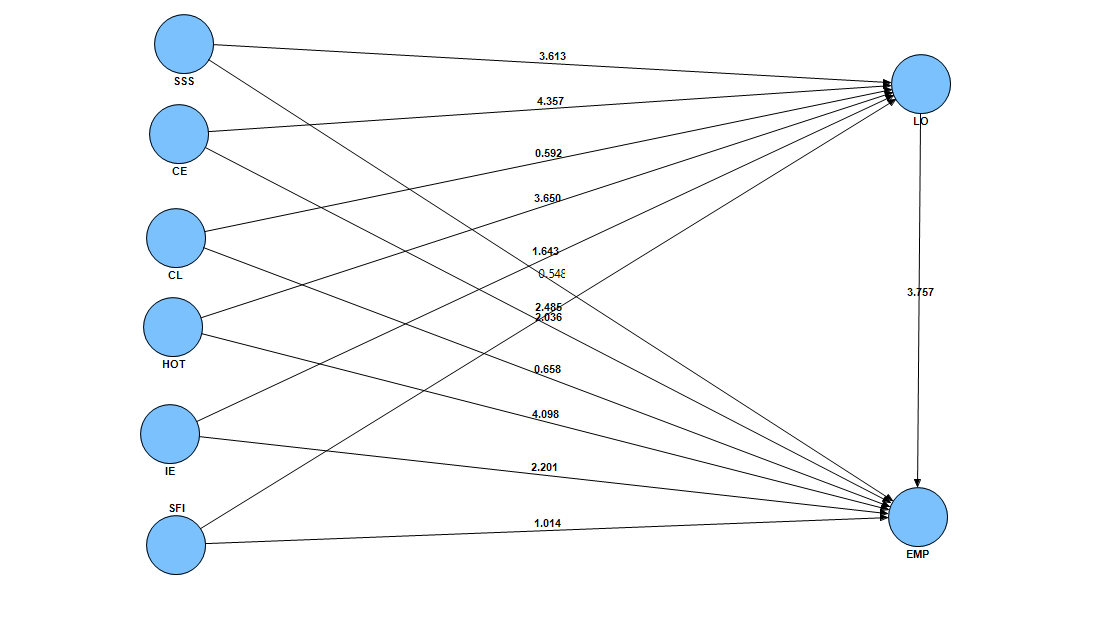


Figure 3: Structural Model output

Again, the findings don’t support hypothesis H4 because IE is insignificantly correlated with LO (path coefficient, 0.095; t-statistics, 1.643). Hypothesis five (H5) is also supported since the path coefficient value (0.115) is positive and significant (t-statistics, 2.485; p<0.01). So SFI is an important predictor of the LO of graduates. Findings also support hypothesis six (H6) because the path coefficient value is 0.221 which is significant also (t-statistics, 3.613; p<0.01). So SSS positively influences the LO of graduates. Findings also support hypothesis seven (H7) since the path coefficient value (0.153) is significant (t, 2.036; p<0.05). Hypothesis eight (H8) is not supported since the path coefficient value (0.040) of CL with EMP is insignificant (t-statistics, 4.097; p<0.000). Findings also support hypothesis nine (H9) since the path coefficient value (0.153) of HOT with EMP is significant (t, 2.036; p<0.05). Hypothesis ten (H10) is also supported as the path coefficient value (0.110) of IE with EMP is significant (t, 2.201; p<0.05). Hypothesis eleven (H11) is rejected as there is negative relationship (path coefficient, -0.058) between SFI and EMP and it is insignificant (t, 1.013). Hypothesis twelve (H12) is also rejected as there is negative relationship (path coefficient, -0.037) between SSS and EMP and it is insignificant (t, 0.547). Finally, hypothesis thirteen (H13) is supported because the relationship between LO and EMP is positive and significant (path coefficient, 0.329; t, 3.757)

## 4.4 Mediating effect Analysis

The present study was designed to test the mediating effect of LO on the relationship between student engagement constructs (Higher order thinking, Course effort, Collaborative learning, Student faculty interaction, Interpersonal engagement & Campus support) and employability of BOU graduates. Table 5 shows the findings of mediating effect test.

Table 5: Findings of mediating effect test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hypothesized Path** | **Direct relationship** | **Indirect relationship** | T-value | P-Value | Mediation |
| CE->LO->EMP (H14) | 0.253 | 0.100 | 2.908 | 0.003 | Partial mediation |
| CL-> LO->EMP (H15) | 0.052 | 0.012 | 0.624 | 0.532 | No mediation |
| HOT-> LO->EMP(H16) | 0.399 | 0.084 | 2.614 | 0.008 | Partial mediation |
| IE->LO-> EMP (H17) | 0.141 | 0.029 | 1.387 | 0.165 | mediation |
| SFI -> LO-> EMP (H18) | 0.020 | 0.038 | 2.154 | 0.031 | Full mediation |
| SSS -> LO->EMP(H19) | 0.037 | 0.072 | 2.632 | 0.008 | Full mediation |

First of all, it is seen from the table 8 that the direct effect of CE to EMP is 0.253 while the indirect effect is 0.100 (CE->LO->EMP). On the other hand, the indirect effect is significant at 5% level (P, 0.003; t, 2.908). Therefore, LO mediates the relationship between CE and EMP of BOU graduates. It is a partial mediation because CE significantly influences EMP of BOU graduates. So hypothesis 14 is supported. Again the direct effect of CL to EMP is 0.052 while the indirect effect is 0.012 (CL->LO->EMP). On the other hand, the indirect effect is insignificant (P, 0.624; t, 0.532) and H15 is rejected. So there is no mediating effect of LO in the relationship between CL and EMP. H16 is supported as the indirect relationship (HOT-> LO->EMP) is significant at 5% level. It is a partial mediation because HOT significantly influences EMP of BOU graduates. H17 is not supported as the indirect relationship (IE->LO-> EMP) is insignificant (P, 0.165; t, 1.387). So there is no mediating effect of LO in the relationship between IE and EMP. The findings support H18 as the indirect relationship (SFI -> LO-> EMP) is significant at 5% level. It is a full mediation because SFI was found to be insignificantly correlated with EMP of BOU graduates. H19 is supported as the indirect (SSS -> LO->EMP) is significant at 5%v level. It is a full mediation because SSS was found to be insignificantly correlated with EMP of BOU graduates.

## 4.5 Qualitative analysis

### 4.5.1 Learning outcomes

A curriculum must be designed to achieve a set of possible outcomes from the participants of the program. This study explores both qualitatively and quantitatively for the examination of factors that are relevant for learning outcomes and which will moderate the employability of the students in their future. The results from the factor analysis demonstrates a clear connection of possible learning outcomes with student employability. This section demonstrates the qualitative aspects of the question we have asked to the students in order to gain knowledge how much effective the curriculum of BoU postgraduate programs is and the following outcomes have achieved from the FGD questionnaire.

In practical job environment, employees often take managerial decisions. This quality of managers must be built in during the student life. In a postgraduate program, it is expected that the curriculum is being designed to achieve such qualities. With respect to the BoU postgraduate programs, this has been identified that students think the program has been in line with the expectation. In line with the findings of factor analysis above, all participants have agreed that the analytical parts of postgraduate curriculum have been helping them either in the current form of role in their current organization or in their business. According to their own words:

“….. competition in the market has been rocketing every day. Ability to think critically and to decide based on analytical results are must to be the fast mover in this technology driven world. The postgraduate program of BoU has taught us how to analyze critically and how to use basic analytical tools.”

(Dhaka, CMBA, Stu.: 19)

Despite this overwhelming positive feedback from the FGD respondents in ‘critical thinking and analytical ability’, a few students have mentioned about the opportunity of improving the curriculum to enhance the current analytical parts of the syllabus. They think larger portion of curriculum should also cover practical case studies from Bangladeshi Market and more computerized problems to solve in simulation. In summary, an improvement in the curriculum both qualitatively and quantitatively in the area of ‘critical thinking and analytical ability’ should increase employability in the market. One student mentioned as-

“…we have learned a lot. But the analytical and real-life problem-solving part is not mentionable. It would eb better if we had learned more on analytical issues and case solving. Above all, real time data and analysis ability might increase our employability”

(Sylhet, EMBA, Stu.: 7)

Another mentionable element of learning outcomes for postgraduate students of BoU is ability to communicate in written and oral form. Results from factor analysis reveal that BoU the curriculum of postgraduate program has module for communication. Students confirm that the ability of a student in communicating effectively significantly impact of employability. In practical job environment, student must do communication effectively and clearly. Students have confirmed that more reasonable and actionable module may be included in the postgraduate programs. As a participant mentioned-

“…what if we cannot express ourself. Maybe we have that knowledge and skill. But clearly sharing the ideas and feelings is a must in real job field. The question pattern should not be direct. If we can answer conceptual questions, we may have the opportunity to improve our writing skill. Similarly, oral skill should also be measured. A postgraduate syllabus must be developed in a way that student get to learn these skills which are of most importance in job field.”

(Dhaka, MBA, Stu.: 5)

### 4.5.2 Student Engagement

According to all respondents, student engagement is the basis of graduate quality development and eventually results in graduate employability. Among the other factors of student engagement, participants are mostly enthusiastic about interaction among the students in a class and interaction between students with faculty members. All participants have agreed that student engagement significantly impacts on students learning outcome as well as employability. Particularly, how comfortable students are in asking questions in the class and how they are connected with both faculty members and the peer groups are important for the quality of the student engagement. Some students have reported that a friendly relation with the faculty members helped them to engage with the course in the postgraduate program of BoU. As per students’ own word:

“…..The quality of student-faculty interaction is one kind of motivation for students. Some students want to learn from the teachers. But if they find the interaction complex or sophisticated, they hold back in asking the question. Moreover, the reception of students for a course mostly depends on the ability of a faculty whether he can engage his/her students with the topic.”

(Sylhet, MBA, Stu.:12)

“…. In some cases, students’ interaction among themselves is also very important. Students team spirit and ability to group themselves for problem solving help them to engage in the class more than before. If student engagement is an objective, improvement in the interaction quality must be improved. A cohesive interaction among the students boost students’ ability to engage in the class.”

(Dhaka, EMBA, Stu.:23)

Apart from the quality of faculty, students and curriculum, students have opined about the regional center environment. Participants are found to be positive for the significant impact of a reginal center of BoU with the student engagement. The facilities are provided now would have impact more among the students if the service quality of. The reginal centers be improved-as students are believing. All participants have reported a positive impact of well-designed regional study center on student engagement. Students have reported their complains about the current facilities and want to see that in future their observations are restored by the competent authority. One participant has reported-

“…the environment of a study center has great influence on students. A well equip facility always positively influence students to be engaged with the classes and with the lesson. BoU has clear limitation in providing well equip class room specially in the regional centers.”

(Chittagong, MBA, Stu.: 20)

### 4.5.3 Employability

Employability is an outcome from a number of inputs including student engagement and learning outcomes. Among many inputs, employability itself depends on three major issues: ability of the candidate to participate in teamwork either as the manager or a team member; whether the candidate has direct family responsibility for any dependent or elders or others; and the competition exists in the job market to get a reasonable and accepted job. These conditions are not dependent or linked to the external factors for example student engagement or learning outcome. These inherent qualities of employability not only emphasizes the quality of job market but also the internal quality of a candidate for being suitable for the job. For example, one student responded that the result and knowledge from a program cannot equip a candidate with the ability of working in a team or being the leader of a team. In the respondent’s word-

“….. I have learned a few theories and so many examples in the text book of organizational behavior course but did not realize that dealing with people would be thus hard and complicated to be in a team.”

(Sylhet, CMBA, Stu:23)

The urgency of employability raises when a candidate is burdened with responsibilities of underaged or overaged people/relatives of his/her family, the nature of employability faces difficulties since this burden never helps the candidate in exploring opportunities of employability. Studies have revealed that family burden reduces capacity on a candidate to explore opportunities and forces to be agree with any job that can be obtained quickly or easily. Candidates also fear to switch from one job to another job if family burden is there. Students value security over opportunities. The result from our FGD also depicts the same result. All candidates have agreed that employability gets negatively affected with the family burden. One of the candidates has stated that,

“…More than my knowledge and skill which I have achieved from my MBA program, my family responsibilities have forced me to get a job as quickly as possible.”

(Chittagong, MBA, Stu: 14)

Above all, the existing competition in the job market also significantly impact of a candidate’s employability and ability to grow in the career. Besides the advantages in competition in the job market, the worse part always affects the candidates in the entry level and potential growth in afterward. Like our factor analysis, all the members who participated in the response agreed that existing level of job coemption negatively affects the possibilities in acquiring employability for the postgraduates of BoU. One participant has rightly stated that,

“…. How much I have learned from the program can only be traced once I get appointed. But, in Bangladesh, the number of candidates is always much higher than the number of opportunities. Over to that, nepotism and corruption always had a role in Bangladesh. To me, I do not blame the program alone. Existing job market has failed to appoint us all. Or the current education system is not rightly placed to target the actual number of available job opportunities. A total correction in the process both in the policy making for curriculum development as well as market analysis is the only solution.”

(Dhaka, CMBA, Stu: 21)

**5. Conclusions, Limitations and Recommendations**

The findings of this study reveal several potential research fronts. Future research should undertake the key aspects of underdeveloped areas of graduate employability and outcome-based learnings. Among others, the key areas of future research agendas are longitudinal research on entrepreneurship pedagogy; post-graduation (alumni) feedback; entrepreneurship focused rather job placement; cross-sectional (interdisciplinary) comparison rather small focus group studies and case studies; development of more practical and integrated assessment and reward system for examining the purpose of learning outcomes; active participation of employers in curriculum design; research based teaching and learning environment; last but not least, student satisfaction. Overall, work ethics, sustainable education and moral perspective of higher education have potential research gap.

The limitations of this study are three-fold. First, the unpredicted Covid-19 lockdown has abruptly derailed our plan of action to reach the targeted students and respondents due to the complete shutdown of the entire country. Hence, after waiting for a long period of almost 18 months, we had to collect the data online bases from the targeted respondents. However, when the lockdown condition has relaxed afterwards, we have managed to get the qualitative response from the participants of focus group discussions physically.

Second, the time constraint of this project was a major concern for designing, collecting, accommodating, validating, and finally summarizing the results of the respondents. Hence, the future research may consider comprising more time flexibility for such a rigorous work. Along the time constraints, financial constraints may also be added in this case. Since this study is a national issue and respondents have been selected nationwide, addition budget would be more realistic in the similar projects.

Last but not the least, the scope of this research may also be broadened in the future studies. Because of the time and money constraints as discussed before, the scope of this study has also been shortened and only 4 postgraduate programs were purposively selected for this study. This narrowed down of scope might not hampered the robustness of this study, yet a complete picture is missing.

The following recommendations may be proposed for the future studies:

* On a regular basis, the academic curriculum should be updated based on the feedback of the employers and alumni.
* Occasionally, some practical and physical sessions with industry practitioners so that students can get an opportunity to real-life interaction with the prospective employers beforehand the real market placements.
* Besides the classroom sessions alone, some specific lectures as part of the existing syllabus may also be taught by the industry practitioners to ensure what is actually being practiced in the job market.
* Industry-academia collaboration may be ensured and practiced based on case study and problem-solving projects.
* Some cocurricular activities in the form of student’s club or society may be introduced along with the academic degrees so that students get soft skills along with academic knowledge alone. For instance, communication skills, basic computer skills and most importantly negotiation skills.
* The existing curriculum may be enriched with more research work and creative learning modules.
* Active alumni and its operation are a must to get the inhouse news on the capacity and appropriateness of the existing curriculum of a program.
* Last but not the least, additional care in the continuous assessment (i.e., project-based assignment, internship, class tests, quizzes, presentations etc.) of the students may wider the scope of student learning and engagement environment.

The outcome-based learning and graduate employability are evidently progressing to meet the challenges of 21st century of higher education. Future research would seemingly improve the strength of identifying employer need more accurately and transmitting them to students through upgraded curriculum and outcome-based learning initiatives. The following practical implications may achieve from the results of this study:

* Higher education providers would create active partnership with appropriate graduate market or industry not only to ensure job placement but also to i) update the existing curricula which will achieve expected graduate attributes and ii) to receive regular update from the host employers about their students who has received the outcome-based learning.
* Universities would consider evaluating and reassessing their existing approach of graduate assessment. Since only a curriculum cannot ensure outcome-based learning, unjustified assessment quality may give false hope to the students as well as the stakeholders.
* Universities in developing countries would define their own curriculum based on their own need. Just copy and paste of an improved curriculum would not be a solution for any different contextual setting.
* Government must collectively examine the curriculum of higher education in a country and stabilize the economic factors to meet the expected employability through the outcome-based learnings.
* Finally, students should play their actual role in this context. Self-motivation for being a readymade worker for the economy should enrich their graduate skills more than an outcome-based learning system can expect.

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