

INNOVATION IN ENTREPRENEURSHIP EDUCATION THROUGH COMPETITION BASED LEARNING ROLE: STUDENTS' PERSPECTIVE ON THE ENHANCEMENT OF SOFT SKILLS

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Abstract

Purpose: The objective of the study is to critically analyze the impact of entrepreneurial competitions on the soft skills of Omani students.

Design/methodology/approach: Purposive sampling methodology was adopted to perform the study. A sample of 125 students was selected among the 450 students from various Higher Education Institutions (HEIs) who participated in the entrepreneurship competition. The questionnaire was distributed two times to the students before and after the competition and 110 fully completed questionnaires only were taken into the research study. Using SPSS, statistical tests like non-parametric chi-square test, t-paired sample test, and Kolmogorov-Smirnov test were carried out the results were interpreted.

Findings: The findings of the empirical study suggest that competitions have a positive impact on the students' soft skills and their mindset after participating in the competitions. The study also confirmed that competition is an encouraging affair that makes the students learn new skills and new developments in the business fields. Further, the study also confirmed that competition makes it easy to explore the labor market in the area of requirements.

Research limitations/Implications: HEIs should motivate and encourage students to participate in various entrepreneurial competitions inducing a spirit of entrepreneurship among the young students to enhance their soft skills for self-sufficiency and to identify the potentialities vested within them.

Social implications: The study suggests that to improve the entrepreneurial mindsets of young students, and universities. Originality/Value Only a very few have examined the role of entrepreneurship education in developing soft skills through competition-based learning in Oman. Our study includes selected students from HEIs of Oman the study can further be extended to all the HEIs across Oman.

Keywords: *Entrepreneurship Education, competition-based Learning (CBL), Entrepreneurial Competitions, Students' Soft skills, Omani Entrepreneurs, Innovation.*

INTRODUCTION

Entrepreneurship makes a powerful impact on the economic development of a country (Khan, 2014). Lukić (2012) defined entrepreneurship as a way to develop the ability of the individuals' ideas to be converted into action. Entrepreneurship is a tool for self-development which provides a foundation to establish social/commercial activities and thus Government encourages entrepreneurship (Directorate-General, 2008; Lindh & Thorgren, 2016; Roche, 2014).

In most developing countries where innovation and entrepreneurial skills are inadequate to sustain development, Entrepreneurship Education (EE) becomes an effective tool to build the infrastructure. EE was defined as enhancing the abilities of students to run a business as well as being creative in their thinking (Ashmore, 2006). EE has not only become a powerful tool to increase economic growth but also an important source of wealth innovation (Huber, Sloof, & Van Praag, 2014; Rauch & Hulsink, 2015). EE boosts students' confidence/capacity to venture into a start-up (Dakung, Orobias, Munene, & Balunywa, 2017). Though EE is growing worldwide, the key educational and didactical issues remain and there is a need for strong intellectual foundations (Fayolle, 2013). EE seeks to propose people to become responsible for economic development and the universities are the primary sources that need to formulate modules for the same (O'Connor, 2013). EE has become essential in Arab countries to meet the market demand and to develop students' beliefs, values, and attitudes to build an alternative force of employment (Holmgren et al., 2005; Kirby & Ibrahim, 2011). Though, EE equips students with entrepreneurial skills, attributes and behaviors (Egerova, Ludvik, & Mičák, 2017), Al Buraiki & Khan (2018) claimed that EE will save small and medium enterprises (SMEs) from becoming sick and excel successfully in their ventures, the young budding entrepreneurs need to have sufficient soft skills.

Most of the universities do not fully support the students to build their capacity and are not training them to be creative (Abou-Warda & Roberts, 2016). In fact, universities usually provide theoretical courses with little practical exposure (Hasan, Hasbullah, Purnama, & Hery, 2016). The role of technology and its implementation also makes a big difference in their

learning pattern (Al Shibli, Abushakra, & Khan, 2018). Furthermore, industries are not active in funding, to train the students to become entrepreneurs due to the weak linkage between the university and industries (Goby & Eroglu, 2011). This linkage can be enhanced through conducting competitions among the communities such as Business plan competitions, start-up competitions, etc. to develop their skills.

Competitions provide opportunities to students of multiple disciplines to become creative and it is easier to train the students as well. In Germany, the policy-makers launched 'Start-Up Competitions' (SUCs) with the objective of maximizing start-up activities and enhancing the skills of the budding entrepreneurs (Barrows & Tamblyn, 1980; Becker, 2001). Although business plan competitions mainly seek to construct start-ups, the competitions offer a variety of skills such as self-confidence boosting, networking opportunities, the tendency of risk-taking, etc. the primary goal is to enrich soft skills.

In Oman Higher Educational Institutions (HEIs) have introduced EE for a long time but the students were not encouraged to participate in entrepreneurial competitions and thus there is the need for the study to know whether the students in HEI of Oman really lack in soft skills.

REVIEW OF LITERATURE

Burguillo et al. (2011) described Competition-based learning (CBL) as an experience together with Collaborative-based Learning to motivate the students and increase the performance of learning. Burguillo (2010) developed a competition based course to match specific objectives with the intention of practical training for the students which helped them besides routine lectures to develop their soft skills. Issa, Hussain, and Al-Bahadili (2014) claimed that the Competition-Based Learning (CBL) is preferred by the educators over the Project-Based Learning (PBL) as the CBL model provides motivation, self-esteem, practical experience, and team dynamics. CBL is a more productive and enjoyable approach to teach combining the theories of social psychology and classroom practice (Johnson & Johnson, 1998). Business plan competitions promote entrepreneurship and enhance the skills of the participants more precisely the soft skills (Cheosakul, 2015). Grefenstette, De Jong, & Spears (1993) organized and put forth the competition-based learning procedures using competition based techniques called genetic algorithms to simplify the CBL. Blazauskas, Limanauskienė, & Kersienė (2012) introduced a framework and confirmed that competition based social learning provides strong motivation for the learners. The entrepreneurship educational environment provides opportunities to adopt a competitive behavior in the regional and national innovation systems (Dif, Bourane, & Benziene, 2019). Entrepreneurial initiatives need a high level of interactive skills and competitions to inflict such skills and students' motivation (Yu, Han, & Chan, 2008). Marques (2016) proved that the ideas and business plans competitions are important instruments to encourage the entrepreneurial spirit and inherit skills in an academic environment. Students from the competing group proved to have better overall learning efficiency, business and marketing skills than those from the non-competing group (Worm & Buch, 2014). Qureshi, Saeed, & Wasti (2016) proved that the interventions during a business plan competitions impact the relationship between the personality, intellectual capital, entrepreneurial skills of the participants and their entrepreneur identity aspiration of the participants. Russell, Atchison, & Brooks (2008) confirmed that the business plan competitions offer major enhancement opportunities to improve EE & the required soft skills which is the prime missing factor for their entrepreneurial development. Dettmer (2005) highlighted that accepting defeat is the best way to become a successful learner and it is possible only through CBL. Sukiman et al. (2016) emphasized the need for a hybrid set of soft skills required by the learners and identified that problem-solving attitude and creative thinking as the most acquired skills through CBL especially for entrepreneurial students. Al-Shibi, Abushakra, & Khan (2018) confirmed that the use of technology has improved the skills and the way of learning among the students of HEIs. Stanne, Johnson, & Johnson (1999) confirmed through competition, students gain interpersonal relationships, social support, and self-esteem and Tjosvold et al. (2006) confirmed the impact of motives and strategies on the constraining effectiveness of competition. Clark et al. (2015) explained about an annual innovation competition which engages industrial partners to work with students through mentoring and judging. Carroll (2013) confirmed that the competition drastically increases the excitement and anticipation of the students. Lei et al. (2016) confirmed that competition adopted in learning effectively guides the students to fully understand the concepts and processes with sufficient competency makes them participate in group-consultation. Vandercruysse et al. (2013) demonstrated that though the competition is not very much related to students' learning, enriches their skills and capabilities and make the students to perceive the environment as a learning environment.

RESEARCH METHODOLOGY

The research study was carried out using a well-defined questionnaire containing the soft skill factors based on the above review of the literature. Purposive sampling methodology was adopted to perform the study. The students from various HEIs who participated in the organized entrepreneurship competition were considered for the population of the study. A sample of 125 students was selected among the 450 students who participated in the entrepreneurship competition. The questionnaire was containing 3 parts, viz. Soft skills perception of the students before the competition, soft skills perception of the students after the competition and the general opinion of the students on their skills. The questionnaire was distributed two times to the students before and after the completion and 110 fully completed questionnaires only were taken into the research study. The

collected data were tabulated and using SPSS, statistical tests like non-parametric chi-square test, t-paired sample test, and Kolmogorov-Smirnov test were carried out the results were interpreted to make a conclusion.

RESULTS

Table 1: Soft Skills Perception of the students before participating in Competition

| # | Statement | SD | D | N | A | SA | χ^2 | p-value |
|----|---|-------------|-------------|-------------|-------------|-------------|----------|---------|
| 1 | I can cope up with emergency situation | 3 2.7% | 41 37.3% | 47 42.7% | 9 8.2% | 10 9.1% | 75.455 | .000 |
| 2 | I can identify and resolve the issues in a scientific manner | 15 13.6% | 52 47.3% | 24 21.8% | 14 12.7% | 5 4.5% | 59.364 | .000 |
| 3 | I can maintain Professional and ethical responsibilities | 11 10.0% | 27 24.5% | 27 24.5% | 34 30.9% | 11 10.0% | 19.818 | .001 |
| 4 | I can explore the labor market in the area of requirements | 12 10.9% | 27 24.5% | 30 27.3% | 33 30.0% | 8 7.3% | 23.000 | .000 |
| 5 | I can prepare a technical report on my own | 16 7.3% | 33 27.3% | 33 9.1% | 17 24.5% | 11 31.8% | 19.273 | .001 |
| 6 | I can make (bilingual) verbal salutations | 16 14.5% | 24 21.8% | 34 30.9% | 23 20.9% | 13 11.8% | 12.091 | .017 |
| 7 | I can express my opinion and suggestion freely | 13 11.8% | 20 18.2% | 34 30.9% | 27 24.5% | 16 14.5% | 13.182 | .010 |
| 8 | I can understand the economic, cultural and social issues | 12 10.9% | 32 29.1% | 28 25.5% | 18 16.4% | 20 18.2% | 11.636 | .020 |
| 9 | I can effectively manage and can be a leader | 11 10.0% | 32 29.1% | 29 26.4% | 19 17.3% | 19 17.3% | 13.091 | .011 |
| 10 | I believe – I have the ability to work in different cultural environments | 13 11.8% | 37 33.6% | 22 20.0% | 20 18.2% | 18 16.4% | 14.818 | .005 |
| 11 | I am confident that I can work independently | 13 11.8% | 27 24.5% | 31 28.2% | 25 22.7% | 14 12.7% | 11.818 | .019 |
| 12 | I have learned new skills and keep abreast of the new developments in the business fields | 20 18.2% | 12 10.9% | 32 29.1% | 26 23.6% | 20 18.2% | 10.182 | .037 |

From table 1 that the p-value is less than .05 for every statement, which clearly indicates that there is a significant relationship between the statements and the choices of the respondents before the respondents participate in the competition.

Table 2: Soft Skills Perception of the students after participating in Competition

| # | Statement | SD | D | N | A | SA | χ^2 | p-value |
|---|--|-----------|-------------|-------------|-------------|-------------|----------|---------|
| 1 | I can cope up with emergency situation | 0 0% | 3 2.7% | 5 4.5% | 56 50.9% | 46 41.8% | 82.218 | .000 |
| 2 | I can identify and resolve the issues in a scientific manner | 0 0% | 4 3.6% | 7 6.4% | 48 43.6% | 51 46.4% | 70.727 | .000 |
| 3 | I can maintain Professional and ethical responsibilities | 2 1.8% | 5 4.5% | 19 17.3% | 40 36.4% | 44 40% | 68.455 | .001 |
| 4 | I can explore the labor market in the area of requirements | 0 0% | 0 0% | 15 13.6% | 35 31.8% | 60 54.5% | 27.727 | .000 |
| 5 | I can prepare a technical report on my own | 4 3.6% | 11 10.0% | 29 26.4% | 41 37.3% | 25 22.7% | 39.273 | .001 |
| 6 | I can make (bilingual) verbal salutations | 1 0.9% | 7 6.4% | 24 21.8% | 39 35.5% | 39 35.5% | 56.727 | .017 |
| 7 | I can express my opinion and suggestion freely | 0 0% | 8 7.3% | 24 21.8% | 24 21.8% | 54 49.1% | 40.255 | .010 |
| 8 | I can understand the economic, cultural and social issues | 7 6.4% | 8 7.3% | 14 12.7% | 31 28.2% | 50 45.5% | 61.364 | .020 |
| 9 | I can effectively manage and | 3 | 7 | 14 | 28 | 58 | 90.091 | .011 |

| | | | | | | | | |
|----|---|-----------|------------|-------------|-------------|-------------|---------|------|
| | can be a leader | 2.7% | 6.4% | 12.7% | 25.5% | 52.7% | | |
| 10 | I believe – I have the ability to work in different cultural environments | 8 7.3% | 10 9.1% | 21 19.1% | 22 20.0% | 49 44.5% | 48.636 | .005 |
| 11 | I am confident that I can work independently | 2 1.8% | 8 7.3% | 11 10.0% | 29 26.4% | 60 54.5% | 100.455 | .019 |
| 12 | I have learned new skills and keep abreast of the new developments in the business fields | 2 1.8% | 5 4.5% | 11 10.0% | 25 22.7% | 67 60.9% | 129.273 | .037 |

From table 2 that the p-value is less than .05 for every statement, which clearly indicates that there is a significant relationship between the statements and the choices of the respondents after the respondents participating in the competition.

A paired-samples t-test was conducted to compare the means of the students' skills level before the participation of the competition and the students' skills level after the participation of the competition.

Table 3: Paired Sample Statistics & Paired Samples Correlations

| Pair | Means | | Std. Deviation | | Std. Error Mean | | Correlation | Sig. |
|-----------------------------------|----------------|----------------|----------------|----------------|-----------------|----------------|-------------|------|
| | a _i | q _i | a _i | q _i | a _i | q _i | | |
| a ₁ & q ₁ | 4.32 | 2.84 | .690 | .953 | .066 | .091 | .652 | .000 |
| a ₂ & q ₂ | 4.33 | 2.47 | .756 | 1.029 | .072 | .098 | .236 | .013 |
| a ₃ & q ₃ | 4.08 | 3.06 | .959 | 1.167 | .091 | .111 | .405 | .000 |
| a ₄ & q ₄ | 4.44 | 2.98 | .693 | 1.133 | .066 | .108 | .278 | .003 |
| a ₅ & q ₅ | 3.65 | 2.76 | 1.053 | 1.180 | .100 | .113 | .509 | .000 |
| a ₆ & q ₆ | 3.98 | 2.94 | .958 | 1.221 | .091 | .116 | .321 | .001 |
| a ₇ & q ₇ | 4.13 | 3.12 | .996 | 1.217 | .095 | .116 | .426 | .000 |
| a ₈ & q ₈ | 3.99 | 3.02 | 1.208 | 1.278 | .115 | .122 | .612 | .000 |
| a ₉ & q ₉ | 4.19 | 3.03 | 1.062 | 1.252 | .101 | .119 | .486 | .000 |
| a ₁₀ & q ₁₀ | 3.85 | 2.94 | 1.284 | 1.287 | .122 | .123 | .611 | .000 |
| a ₁₁ & q ₁₁ | 4.25 | 3.00 | 1.024 | 1.212 | .098 | .116 | .503 | .000 |
| a ₁₂ & q ₁₂ | 4.36 | 3.13 | .965 | 1.342 | .092 | .128 | .581 | .000 |

It is observed from the above table 3 that there was a significant difference in the scores for the first skills statement with (mean = 2.84, SD= .953) and after the competition (mean = 4.32, SD = .690) with t (109) = 21.405, p = .000 (the t-value and p-value (2-tailed) can be seen from the below table No.4).

Table 4: Paired Sample Test

| Pair | Mean | Std. deviation | Std. Error Mean | Lower | Upper | t | df | Sig. (2-tailed) |
|-----------------------------------|-------|----------------|-----------------|-------|-------|--------|-----|-----------------|
| a ₁ - q ₁ | 1.482 | .726 | .069 | 1.345 | 1.619 | 21.405 | 109 | .000 |
| a ₂ - q ₂ | 1.855 | 1.124 | .107 | 1.642 | 2.067 | 17.307 | 109 | .000 |
| a ₃ - q ₃ | 1.018 | 1.173 | .112 | .797 | 1.240 | 9.104 | 109 | .000 |
| a ₄ - q ₄ | 1.455 | 1.246 | .119 | 1.219 | 1.690 | 12.242 | 109 | .000 |
| a ₅ - q ₅ | .891 | 1.112 | .106 | .681 | 1.101 | 8.406 | 109 | .000 |
| a ₆ - q ₆ | 1.045 | 1.288 | .123 | .802 | 1.289 | 8.514 | 109 | .000 |
| a ₇ - q ₇ | 1.009 | 1.200 | .114 | .782 | 1.236 | 8.819 | 109 | .000 |
| a ₈ - q ₈ | .973 | 1.096 | .104 | .766 | 1.180 | 9.309 | 109 | .000 |
| a ₉ - q ₉ | 1.164 | 1.185 | .113 | .940 | 1.388 | 10.299 | 109 | .000 |
| a ₁₀ - q ₁₀ | .918 | 1.134 | .108 | .704 | 1.133 | 8.489 | 109 | .000 |
| a ₁₁ - q ₁₁ | 1.245 | 1.127 | .107 | 1.033 | 1.458 | 11.593 | 109 | .000 |
| a ₁₂ - q ₁₂ | 1.236 | 1.108 | .106 | 1.027 | 1.446 | 11.701 | 109 | .000 |

It is clearly seen from table 4 that there was a significant difference in the skills before entering the competition and after participating in the competition. These results suggest that the competition really does have an impact on the students' skills i.e. when students appear for such entrepreneurship competitions, their skill level increases.

Table 5: One-sample Kolmogorov-Smirnov Ranking Test

| # | Statement | K.S-value |
|----|---|-----------|
| 1 | I can cope up with an emergency situation | .260 |
| 2 | I can identify and resolve the issues in a scientific manner | .277 |
| 3 | I can maintain Professional and ethical responsibilities | .231 |
| 4 | I can explore the labor market in the area of requirements | .325 |
| 5 | I can prepare a technical report on my own | .229 |
| 6 | I can make (bilingual) verbal salutations | .217 |
| 7 | I can express my opinion and suggestion freely | .300 |
| 8 | I can understand the economic, cultural and social issues | .253 |
| 9 | I can effectively manage and can be a leader | .304 |
| 10 | I believe – I have the ability to work in different cultural environments | .259 |
| 11 | I am confident that I can work independently | .315 |
| 12 | I have learned new skills and keep abreast of the new developments in the business fields | .354 |

Comparing the K-S Values shown in the above table 5, it can be seen that the statement 'I have learned new skills and keep abreast of the new developments in the business fields' (.354) ranks first amongst all the statements in relates to the skills they have gained through participating in the competition, followed by 'I can explore the labor market in the area of requirements' (.325) and 'I am confident that I can work independently' (.315), followed by 'I can effectively manage and can be a leader' (.304), 'I can express my opinion and suggestion freely' (.300) and 'I can identify and resolve the issues in a scientific manner' (.277).

Table 6: General Opinion of the students on the Graduate Skills

| # | Statement | SD | D | N | A | SA | χ^2 | p-value |
|---|---|------------|-------------|-------------|-------------|-------------|----------|---------|
| 1 | Graduates need more skills to fit in a job | 0 0% | 20 18.2% | 10 9.1% | 60 54.5% | 20 18.2% | 34.545 | .000 |
| 2 | Some graduates have the weakness of preparing scientifically | 0 0% | 25 22.7% | 32 29.1% | 40 36.4% | 13 11.8% | 14.291 | .003 |
| 3 | Graduates have no motivation to study | 10 9.1% | 28 25.5% | 25 22.7% | 27 24.5% | 20 18.2% | 9.909 | .042 |
| 4 | Grades of graduates do not reflect the efficiency of their performance skills | 8 7.3% | 10 9.1% | 5 4.5% | 12 10.9% | 75 68.2% | 160.818 | .000 |
| 5 | Graduates need professional guidance when joining work | 8 7.3% | 30 27.3% | 10 9.1% | 27 24.5% | 35 31.8% | 27.182 | .000 |
| 6 | The assessment level of competition is of reasonable and standard | 5 0% | 35 22.7% | 5 29.1% | 7 36.4% | 58 11.8% | 62.291 | .000 |
| 7 | Grades of graduates do not reflect the efficiency of their performance skills | 8 7.3% | 10 9.1% | 5 4.5% | 12 10.9% | 75 68.2% | 160.818 | .000 |

From the above table No.6 that the p-value is less than .05 for every statement, which clearly indicates that there is a significant relationship between the statements on the graduated skills and the choices of the respondents. Most of them agreed that the student does not possess the required skills to fit in a job and they have the weakness of preparing projects in a scientific manner. Most of them agree that the students do not have the motivation to study as the grades do not reflect the efficiency of their performance skills. Most of the respondents agree that the students require professional guidance while joining to work and the assessment level of competition is of a reasonable standard. Further, they also agree that the grades of the graduates do not reflect the efficiency of their performance skills.

DISCUSSION

From the above findings, it can be noted that competitions have a positive impact on the students' soft skills i.e. when students appear for such entrepreneurship competitions, their soft skills level increases, and bringing a change in their mindset. The changing mindset can be seen by their confirmation that they have learned new soft skills and keeping abreast of the new developments in the business fields after participating in the competition. They have also confirmed that they could explore the labor market in the area of requirements. They also said that they are confident and could work independently. They confirmed that they could effectively manage themselves and could become successful future leaders. They could express their opinion and suggestions freely and they could identify and resolve the issues in a scientific manner. They expressed the participation in the competition as an encouraging affair.

SUGGESTIONS

To improve the entrepreneurial mindsets of young students, universities & HEIs need to conduct and encourage the students to participate in various entrepreneurial competitions. This will, in turn, induce a spirit of entrepreneurship among the young students to enhance their soft skills so that they can support the sustainability of the national economy through innovative efforts. Competitions enrich the skills and the caliber of the students whereas fairly conducted competitions highly encourage the students' participation to build up the necessary soft skills for self-sufficiency and identify the potentialities vested within them.

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