

A Case study of Undergraduates' Perception on Generic Skills acquired from the University Education

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Abstract - Undergraduates' perception on the knowledge and skills they acquired from the University education is a determining factor to measure their satisfaction of the entire university education. This research is oriented on analyzing the perception of the undergraduates' generic skills that they acquired throughout the University education. The research was conducted as an online survey where a sample of 62 final year undergraduates from a State University was distributed with the online questionnaire. Identifying the relationship between the generic skills (10 skills) which is the independent variable and overall perception which is the dependent variable. The results of the study reveal that undergraduates have a high perception on computer literacy, ethical sensitivity & acting morally, prioritizing/planning & decision-making, and negotiating/Teamwork so that the University education has led them to enhance those generic skills. Multiple regression analysis reveals that the generic skills such as Prioritizing and planning of work, Applying subject knowledge, Ability to cross-culturally, and Negotiating and teamwork are significantly affecting on undergraduates' overall perception on generic skills they acquired by the University education.

Keywords – Undergraduates, Generic Skills, Education

I. INTRODUCTION

Aim of any Degree Program is to produce academically and professionally competent personals to the relevant industry. The academic procedure of the University or the curriculum of any degree program will orient on designing the graduate's profile to be sharpened with knowledge, skills, and attitudes. Competencies or the skills inculcated in the graduates' profiles decide the employability of the students.

Undergraduates' and graduates' perception on higher education is measured by many scholars and researchers especially focusing the areas such as competencies, skills, employability, industry perspective of the graduates, gap analysis of education and industry, etc.

Harvey, Locke, and Morey (2002) defined employability as the ability to acquire, keep, and excel at a job. Further, they point out that Employability is about making closer links between education and the world of work. Students are more diverse but so are higher education institutions and graduate career opportunities. In response, institutions are developing a variety of ways of enhancing students' employability [1].

Wang & Tsai (2014) states that employability is measured in both aspects of personal competency and job competency. Personal competency is concerned as the career planning and development skills and core skills. Job competency refers to specific employability, including fundamental competency (work attitude and personal attributes) and Functional competency which is consisted of two subcategories such as Leadership competency and professional competency (professional management skills and technical skills) [2].

Numerous studies have discussed the relationship between core skills and a successful career (McCabe, 2008[3]; McCabe & Savery, 2007[4]; Pool & Sewell, 2007[5]).

Employability will be determined by a broad range of skills/competencies. Many scholars have introduced and defined the employability skills or the competencies in different angles. i.e: Core skills, generic skills, process skills, metacognition (cognitive skills),

Ruben (2007) has focused on seven elements which are essential to establish and maintain an outstanding HEI. The framework is constructed on the integration of approaches to assessment, planning, and improvement. The evaluation areas used to define excellence in higher education are (i) Leadership, (ii) Purposes and plans, (iii) Beneficiaries and constituencies, (iv) Programs and services, (v) Faculty/staff and workplace, (vi) Assessment and information use, (vii) Outcomes and achievements (Ruben, 2007, as cited in Brusoni et al., 2014) [6].

According to Finch et al. (2013), graduate employability is affected by five high-order skills, these factors include Soft-skills, Problem-solving skills, Job-specific functional skills, and Pre-graduate experience. They investigated 17 factors that influence graduate employability through the subjective perspectives of employers when they consider engaging new graduates [7].

Today, the business environment is much competitive and challengeable where the generic skills are more required to achieve the success of any business organization. Thus, employers now focus on adaptation, cost reduction, increased productivity, and new markets, products, and services. The employability of the graduates will be determined by the generic skills they inculcated in their graduate profiles. Flexibility, team spirit, initiative, adaptability. innovative, problem-solving, capacity to deal, service-oriented, to make decisions, take responsibility, and communicate effectively, making information and social skills are some of the prominent and timely important generic skills.

Proficiency in the broad range of generic skills has become the main requirement for the modern worker. Catering to the industry requirements, shaping the graduates' profile with generic skills will lead to the integrity of higher education and employability of graduates. Therefore, it is essential to analyze the undergraduates' perception on generic skills they acquired from university education.

II. OBJECTIVES

The major objective of the study is to analyze the undergraduates' perception on the generic skills they acquired from the University education.



The study was led by three specific objectives such as:

- (i) to determine the most significant factor/s (generic skills) affecting on undergraduates' high perception
- (ii) to determine the factor/s (generic skills) which are effectively addressed by the University education
- (iii) to determine the factor/s (generic skills) which should be addressed more effectively by the University education

III. METHODOLOGY

The research is based on a qualitative method where primary data was gathered based on an online questionnaire survey. The sample of the study was determined based on cluster sampling technique where all the departments of the Faculty of Arts from a state University, identified as clusters and out of them one Department was selected on convenience based sampling technique. The sample frame was consisted of final year undergraduates of a particular degree program of that selected department. The list of email addresses of the final year undergraduates was collected from the particular Department and the list was consisted of 62 undergraduates. All the undergraduates were distributed with a Google form where initially demographic data was gathered and secondly 10 process skills were measured based on Five-point Likert scale questions. The scale was designed as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The participants of the survey were allowed two weeks of the period for responding (from 11th – 24th of May 2020). At the end of the allocated period, 43 responses were gathered.

The generic skills measured in the study are (1) Computer literacy, (2) Commercial awareness, (3) Political sensitivity, (4) Ability to work cross-culturally, (5) Ethical sensitivity and Acting morally, (6) Prioritizing and Planning and Decision-making, (7) Applying subject understanding, (8) Coping with complexity, (9) Problem solving and Resolving conflicts, (10) Negotiating and Teamwork.

Initially, reliability analysis was conducted followed by the descriptive statistics to identify the level of the undergraduates' perception. Then correlation analysis and multiple regression were conducted in order to identify the most significant generic skills among the 10 generic skills. All the statistical tests were conducted using SPSS 16 version.

IV. RESULTS AND DISCUSSION

During the survey, out of 62 participants, 43 responses (with 69% response rate) were recorded, thus the non-respondent rate is 31% with 19 non-respondents. Gender distribution of the responses was recorded as 33% representing males and 67% representing females.

A reliability analysis reveals a high Cronbach alpha coefficient as 0.934 which indicates the high internal consistency of the gathered data.

The following Table 1 and Figure 1 show the level of the undergraduates' perception on 10 generic skills they acquired from University education. Each generic skill is belonging to one of the categories of mean scores. i.e.: 1-2.33 =low

perception, 2.34-3.66 = moderate perception, 3.67-5 = high perception.

Table1: Mean perception of the respondents towards generic skills

Factor No.	Generic Skills	Mean (\bar{X})	Standard deviation (SD)	Interpretation
1	Computer Literacy	4.00	1.18	High perception
2	Commercial Awareness	3.61	0.98	Moderate perception
3	Political Sensitivity	3.54	1.14	Moderate Perception
4	Ability to work cross-culturally	3.42	1.03	Moderate perception
5	Ethical sensitivity and Acting morally	3.86	1.08	High perception
6	Prioritizing and Planning and Decision-making	3.86	0.89	High Perception
7	Applying subject understanding	3.63	0.98	Moderate Perception
8	Coping with complexity	3.37	0.90	Moderate perception
9	Problem solving and Resolving conflicts	3.54	0.86	Moderate Perception
10	Negotiating and Teamwork	3.86	0.83	High Perception
	Overall	3.72	0.83	High Perception

Figure 1 indicates that students have a high positive perception on “computer literacy”, “ethical sensitivity and acting morally”, “prioritizing and planning and decision-making”, “negotiating and teamwork”.

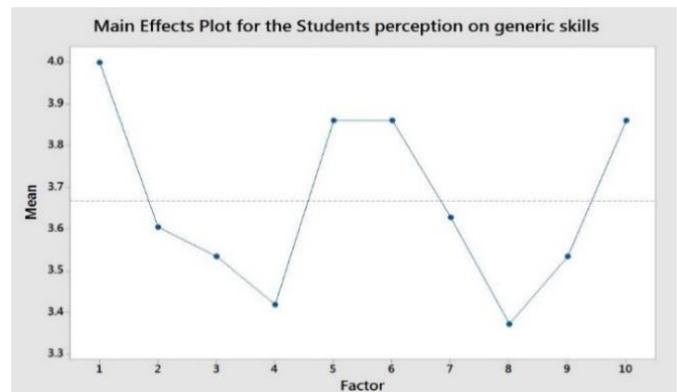


Fig. 1: Mean effect plot for the respondent's perception on generic skills

Spearman's rank correlation was used to analyze the strength of the relationship between generic skills and undergraduates' overall perception on generic skills. As the findings in Table 2, there was a significant correlation among all categories with the undergraduates' overall perception.

The multiple regression with the stepwise method was used to investigate the undergraduates' perception on generic skills according to 10 generic skills across the undergraduates' overall perception. The result of this analysis showed that four of the generic skills were significantly associated with undergraduates' overall perception such as “Prioritizing and Planning”, “Applying subject knowledge”, “Ability to work cross-culturally” and “Negotiating and Teamwork”.



Table 2: Correlation between ranks on generic skills and overall perception

Correlation between two variables	r	Sig.
Computer Literacy and Overall Perception	0.667	0.000
Commercial Awareness and Overall Perception	0.660	0.000
Political Sensitivity and Overall Perception	0.758	0.000
Ability to work cross-culturally and Overall Perception	0.615	0.000
Ethical sensitivity and Acting morally and Overall Perception	0.698	0.000
Prioritizing and Planning and Decision-making and Overall Perception	0.852	0.000
Applying subject understanding and Overall Perception	0.828	0.000
Coping with complexity and Overall Perception	0.752	0.000
Problem solving and Resolving conflicts and Overall Perception	0.601	0.000
Negotiating and Teamwork and Overall Perception	0.612	0.000

The strength of the four predictors was $R^2 = .888$, which implies the combined contribution of the four predictors of ‘Prioritizing and Planning’ competencies were the main predictor of undergraduates’ overall perception, while ‘Applying subject knowledge’ and ‘Ability to work cross-culturally’ were the second and third predictors respectively, and ‘Negotiation and Teamwork’ was the fourth. This means that the four predictors contributed 88.8% to students’ overall perception, with a significance of $p = 0.00 < 0.05$.

Table 1: Regression analysis of students' overall perception on generic skills

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error			
Constant	0.068	0.232		0.292	0.772
Prioritising and Planning	0.309	0.084	0.332	3.692	0.001
Applying subject knowledge	0.321	0.072	0.380	4.483	0.000
Ability to work cross-culturally	0.187	0.056	0.233	3.337	0.002
Negotiating and team work	0.170	0.071	0.171	2.397	0.022

V. CONCLUSION

Descriptive measures indicated clearly that each generic skill represents one of the categories of means score from high, moderate or low perception, in the undergraduate’s perspective.

Generic skills such as Computer literacy, Ethical sensitivity and acting morally, Prioritizing and planning, and Negotiating and Teamwork are the most preferable skills which are directly related to the undergraduate’s high perception according to their perspective.

The result of this regression analysis indicates that four of the independent variables (‘Prioritizing and Planning’, ‘Applying subject knowledge’, ‘Ability to work cross-culturally’ and ‘Negotiating and teamwork’) were significantly associated with undergraduates’ overall perception. This indicates that University education is currently addressed those generic skills in the curriculum. Prioritizing and Planning competency was the main predictor of undergraduates’ overall perception while Applying subject knowledge and ability to work cross-culturally were the second and third predictors respectively, and negotiation and teamwork was the fourth.

The study concludes that generic skills such as Computer literacy, Ethical Sensitivity, Applying Subject knowledge, Ability to work cross-culturally should be addressed at the university education more effectively in order to ascertain graduates’ employability.

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