

Student Learning Satisfaction and Employer Satisfaction Congruence: Evidence from Brunei Darussalam

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Abstract. Brunei Darussalam, as a thriving Asian economy, has been contributing to economic development in ASEAN for more than three decades. Some experts believe that nascent educational infrastructure poses a serious threat to the sustainable supply of employable talent that could fulfill organizational needs and expectations. Yet in effect, it is surprising to find that current literature remains largely deficient in studies that present an insight on how organizations rate the fresh talent being offered by universities in Brunei Darussalam. Responding to such knowledge void, the study examined. To address this knowledge gap, the study explored factors that shape dual satisfaction of future workforce. The study analyzed data from 1048 student self-reports from 6 universities with a diverse student profile and 454 employer self-reports from private and public sectors with a diverse employer profile. The analysis of this study shows that students and employers are mostly satisfied. A set of recommendations are formulated based on the results of the study.

Introduction

In Brunei, higher education institutions play a significant role in improving student success rates and enhancing students' marketability in the job market. The *long-term development framework Brunei Vision 2035* makes education and human capital development key priorities. Globally, universities use different investigative tools to assess and measure student feedback and implement various strategies to improve the quality of life of university students. Unfortunately, Brunei has not yet carried out student satisfaction and employer satisfaction survey at the national level to gauge student learning and development and employer voice. Therefore, research into Brunei undergraduate university students' and employers' satisfaction are of great significance to the development of Brunei higher institutions. Consequently, this study aims to explore the main factors that affect the dual satisfaction. Specifically, it will explore the following research questions.

- 1) What does analysis of each factors show on student overall learning satisfaction?
- 2) Are there any significant differences between student background characteristics and institutional characteristics related to the student's university experiences?
- 3) What does detailed analysis of each factor show in employer satisfaction in hiring decision?
- 4) Are there any significant differences between what the employer perceives as important in hiring decision and what the university graduate perceives?
- 5) Are there any significant differences between job competencies perceived by employers and university graduates?.

Quality has become a matter of vital importance in today's higher education. Student satisfaction is a critical element in the quality of higher education today, so it is important to pay particular attention to quality in education. Higher education develops skills that lead to organisational efficiency, which improves productivity and stimulate economic growth [1]. However, universities should not have rigid ideas about what students should learn, and what skills students should develop. Different students have different talents and different ambitions, and the labor market has many dimensions. There is no "one size fits all" in demand for graduates. A greater diversity of skills, competencies, and experience will allow

graduates to function efficiently and successfully in the labor market and broader society. The ability to communicate effectively and work in teams is especially important in work; employers actively seek graduates who are adept problem solvers [2]. Graduate employability has moved to the forefront in the agendas of higher education institutes. Such that, the ILO resolution concerning youth employment, adopted at the International Labour Conference (86th ILC 1998), recognises in its preamble that “in many countries young people particularly between the age of 15 and 24, are finding it increasingly difficult to enter the labour market and that this constitutes not only a threat to social peace but also an obstacle to the development of the individual and to that of society as a whole” [3]. Indeed, the youth constitutes a vital part of the human capital of the nation and defines a country’s potential labor supply. From a social and political point of view, the youth is a social group of particular importance, being the most vocal and engaged group of people. There is a two-way relationship between education and the labor market. The education system supplies the labor market with an educated labor force for the national economy, while the labor market – mainly through the wage structure of occupations – transmits signals on the types of qualifications expected from the education system. The role of training in insertion or reinsertion into the labour market is widely recognised.

Therefore, if higher education is to be understood as a driver of economic growth, the relationship between institutions and employers must necessarily be understood in the forefront of political agendas. This is reflected in the increasing pressure exerted on HEIs, from policy-makers and employers both, to prepare students fit-for-purpose on the labor market. It is ‘no longer enough just to be a graduate, but instead an employable graduate’ [4]. For students too, employability has become a priority and one of the main reasons for pursuing higher education [5]. In this case, employability is a ‘multi-faceted’ characteristic of the individual, who must strive to obtain the skills and attributes he/she deems necessary in the job market—that is the ‘achievement (and potential) dimension’. Higher education is then but one vehicle for the development of employability. Wash [6] stated that ‘capabilities and competencies will measure top candidates for current and future jobs’ and that communication and presentation skills are required for about 40% of all positions. These communication skills include critical thinking, problem-solving, interpersonal communication, an appreciation of diversity, an ability to negotiate through individual differences, innovation, and creativity [7]. The skills gap necessitates investigation as to whether the students know what attributes to ‘sell’ so they can become marketable, hireable, and able ultimately to contribute to the productivity of the economy [8]. Given this, employers and academics should work together to make instruction meaningful and relevant to workplace need so that there is an alignment between employer’s needs, student’s skills, and higher education responsibilities.

Methodology

Research Context

The name Brunei Darussalam translates to ‘The Abode of Peace’. Brunei is situated on the northern coast of Borneo in Southeast Asia. The standard of living and quality of life is high in Brunei; benefits like free healthcare, free education, subsidized housing, and the lack of an income tax, alongside one of the highest per capita incomes in the world all point at the extent of progress in Brunei. The Brunei Darussalam National Education System for the 21st Century (SPN21) aims to produce citizens who are committed and able to contribute to the future growth, prosperity, and stability of Brunei Darussalam [9]. The *Brunei Darussalam’s Long-Term Development Plan 2035* outlines the government’s goals for the national education system to prepare Bruneian youth for employment and instil MIB as a system that guides one’s way of life. It can be said that Brunei recognises the need to continue adjusting the education system and ensure that students have the knowledge, skills, values, and attitudes that are required in the twenty-first century [10]. This study focuses on two main approaches to dual satisfaction, i.e. the customer-oriented approach and product-oriented approach. The customer-oriented approach focuses on identifying student needs, expectations, and experiences, versus performance. On the other hand, the product-oriented approach focuses on creating a high-quality service and enhancing student personal development. Both approaches have multiple dimensions regarding the dual satisfaction and consider the student as the most critical stakeholder in the university.

Theoretical Framework

This study explores dual satisfaction, student overall learning situation, career development process by exploring the views of key stakeholders from students, and employers from various perspectives. This study has four specific purposes. Firstly, it considers the overall situation and the key factors affecting dual satisfaction in Brunei Darussalam. Secondly, it finds out the differences of students' background, institutional characteristics, student experiences, and student career development. Thirdly, it explores the current status and the factors of employer satisfaction in Brunei. And then to identify between skills needed by employers and the skills possessed by university graduates.

To achieve the purposes above, this study uses the Input-Environment-Output (IEO) model theory [11] and student involvement [12] to guide the research and further explore the best educational environment to make students more comfortable in campus life, talent cultivation, and future career development. Astin model is divided into three sub-areas: 1) Input, 2) Environment, and 3) Output. According to Astin [11], the three arrows demonstrate the relationships among three different variables. The IEO model deals with the most issues in higher education assessment and evaluation including student learning satisfaction, employer satisfaction, and other outcomes.

Participants and Procedures

The target populations for this research study were university students in various academic disciplines at four public universities and two private universities in the Brunei Darussalam, pursuing degrees at the time of data collection. Brunei currently has six higher learning institutions, namely Universiti Brunei Darussalam, Universiti Teknologi Brunei, Universiti Islam Sultan Sharif Ali, Kolej Universiti Perguruan Ugama Seri Begawan, International Graduate Studies College, Laksamana College of Business in Brunei. Out of these six institutions, four are national public universities: UBD, UTB, UNISSA, and KUPUSB. IGS and LCB are private colleges [13]. In this study, 1,200 questionnaires were distributed, and 1121 copies were returned. The return rate was 93.4%. Out of these, 1048 were complete and usable. Employers in the public government sector and the private sector in Brunei are a representative sample of employers who have employed graduates (1st-degree graduate) from six universities in the last two years. In this study, a total of 500 employers' questionnaires was distributed to the medium and small enterprises in Brunei, and 482 copies were recovered. The response rate was 96.4%, the active rate was 94.2%, and there were 454 useful surveys.

Factors of student satisfaction included gender, age, year of study, the field of study, universities, university academic grades, pre-university academic grades, health condition, monthly expenditure, accommodation, nationality, parental income, parental occupation, parental education, parent status and number of siblings. Moreover, the characteristics of respondents as factors of employer satisfaction included the type of company, the nature of the company, the size of the company, the total number of graduates, the position of graduates, the salary of graduates and whether the employers are willing to provide training opportunities. The study used SPSS 21 for data analysis, as well as mean analysis, variance analysis, and other methods for testing. Both quantitative and qualitative methods were employed to collect data. Two main research instruments were used in this study. The first was the survey questionnaire. Two questionnaires were used: the student learning satisfaction survey and the employer satisfaction survey. The second was the interview. Again, there were two distinct types of interview, one designed for students and one for employers. The quantitative data collected were analyzed using SPSS Version 21. The student satisfaction questionnaire was used to measure the current level of student satisfaction and find out the differences between student characteristics and institutional characteristics. The employer satisfaction questionnaire was used to identify gaps between the employer's and the student's perceptions of skills, abilities, and competencies that are needed to get hired and meet changing industry trends in various professions. Interviews in this study were conducted to supplement survey results by getting an in-depth understanding of the experiences of students with their university environment. Interviews with the employer were conducted to assist Bruneian universities to prepare students for the work environment and to better serve the needs of the company or industry.

Results

Determinants of Student Learning Satisfaction

Table 1 shows the overall learning satisfaction of undergraduate students including mean, standard deviation and weighted percentages for students' satisfaction. As seen below, the overall learning satisfaction (77.51%) indicates that the majority of the students were satisfied with their particular educational experiences. Peer relationship, library resources and university facilities were rated top three, while lecturer guidance, teaching methods and administrative services were rated as lowest.

Table 1 Determinants of student satisfaction

Subscale	M	S.D	% SAT	Rank
Peer Relationship	5.2 9	.92	85.73	1
Library resources	5.2 8	.94	85.62	2
University Facilities & Policies	5.0 7	.85	81.35	3
Course curriculum	4.9 3	.79	78.52	4
Accommodation	4.9 2	.90	78.37	5
Administrative Services	4.8 1	.80	76.27	6
Lecturer Teaching	4.6 0	.64	71.98	7
Lecturer Guidance	4.5 8	.73	71.68	8
Overall Learning Satisfaction	4.8 8	.71	77.51	

Note. N= 1048, M=Mean, SD= Standard Deviation, % SAT= Percentage Satisfaction

Student vs. Employer: Competencies and Hiring Determinants

In Table 2, students score GPA/Grades highest in hiring decision, followed by the performance in the interview and working experience. The lower scores from students are resume, major/discipline, and university attended. These scores contrast with the employer's ranking, which shows that employers are most concerned about graduated students' major/discipline, followed by the performance in the interview, and resume. Relatively insignificant to employers are the GPA/Grades, working experience, university attended, and recommendation. Performance in the interview rank number 2 on both sides; both students and employers regard this variable as important. The reasons for the significant differences in perceptions around the hiring decision between the two parties are related to the differences in workplace need, business and economic development, social environment, and industry policy.

As seen in Table 2, there are significant differences between job competencies perceived by employers and university graduates. Student confident/satisfaction with overall job competencies have a weighted percentage of 76.74%, while the employer satisfaction with overall job competencies has a weighted percentage of 83.05%. This indicates that employers are more satisfied with the skills of recently graduated employees than the expectations of students. The results of this study indicate that compared to job competencies, student underestimates their competence. This can conclude that Brunei universities produced good quality and readiness for market university graduates. Students are most confident in their personal abilities, followed by interpersonal competencies. Students and employers both give professional competencies the lowest rank. On the other hand, employers are most concerned with interpersonal skills, followed by personal abilities. Moreover, in the ranking of 24 essential work skills by students and employers, students consider problem-solving skills, leadership skills, and communication abilities to be

the top three most important skills, followed by commitment, collaboration, flexibility, self-confidence, time management, and being a role model. The top three skills fall under professional competencies. Employers consider communication abilities, problem-solving skills, and commitment to be the top three most important skills, followed by self-confidence, leadership, time management, and creativity, knowledge of specific computer applications, attendance, and specific technical expertise. The first two skills are professional competencies, and the third falls under personal abilities. Table 2 also shows the competency ranking by students and employers. It can be observed that students consider interpersonal competencies to be the most important, followed by professional competencies and personal abilities, while employers are more concerned with professional competencies and least concerned with interpersonal skills (for details see Appendix 1).

Table 2 Student-employer congruence ranking matrix

Variables	Student	Employer
Determinants of hiring decisions		
GPA/Grades	1	4
Performance in the interview	2	2
Working experience	3	5
Recommendation	4	7
University attended	5	6
Major/Discipline	6	1
Resume	7	3
Competency Ranking		
Professional Competencies	3	1
Interpersonal Competencies	1	3
Personal Abilities	2	2

Note. N=1048 (Student), N= 454 (Employer)

Discussion

The main findings of the independent samples t-tests and one-way ANOVAs are discussed hereafter. First, there insignificant differences with regard to gender and study major, where male students show higher satisfaction than female students with regard to library resources, study environment, student services, accommodation, university policies and facilities. Students who live on campus show higher satisfaction than off-campus students that reflect better accommodation and learning environment in Brunei, a view similar to Astin [14]. This could be due to more opportunities to interact with their peers. Further more, students aged below 21 show higher than other age groups. In other words, younger students are more satisfied and perceive more positive experiences in university. The highest satisfaction by UTB, compared to others indicate superior teaching practices, employment opportunities, advanced technology facilities, social responsibility, inclusiveness, and management policies. More recently, the same university attained 4-stars in the QS Star ratings. Second, high-grade students showed high satisfaction low-grade students, consistent with the results of Astin's IEO model [15]. Furthermore, healthier students reported higher satisfaction, which suggest that universities should focus on improving students' health by encouraging the students to get involved in extra curriculum activities. Students with a monthly expenditure of \$351 to B\$500 have higher student satisfaction than the other students, which means that having more money to spend does not necessarily guarantee high satisfaction. Surprisingly, the students who spend the most each month do not have high satisfaction. Third, students with affluent parents demonstrated high satisfaction, which implies that student satisfaction might be linked to the quality of life and standard of living. Additionally, students whose parents are public/government officials are more satisfied than other students whose parents work in other fields. Students who live in the Tutong district are more satisfied than students who live in other districts, which may be related to living facilities, service provision, and education in specific cities. Moreover, students whose parents are both

living are more satisfied than other students, most likely because of the care and support they receive from their parents.

For employer, there are insignificant differences among public/private sector and the relevance of qualification to the current job, but significant differences were found due to company size, number of graduate employees, salary, and training opportunities for graduates. Employer satisfaction was significantly higher in companies with more than 101 people than other smaller companies. Moreover, employer satisfaction was higher in companies with a high number of fresh graduates including recruits. Regarding pay, employer satisfaction was highest when the salary of new graduates was higher than B\$2501. The findings also show that employer satisfaction is highest when employees showed long-term working commitment for the company.

Conclusion and Implications

Based on results and findings, it can be concluded that higher education needs to focus on improving the lecturer guidance, lecturer teaching, administrative services facilitate and employability of student. Universities can set up or improve their professional development training centers and pay attention factors affecting student and employer satisfaction to improve the quality of higher education, cultivate the student's competencies/skills, improve teaching quality, and enhance the student's employability. Universities should aim to stimulate student interest and potential by engaging in innovative teaching methods and continuously strengthening pedagogical approaches. Universities can play a vital role in reaching out to employers by inviting employers to provide input on curriculum development through collaborations. Universities must work closely with industry to ensure that graduates are better equipped with specific job competencies required for employment. On the other hand, employers can consider offering students internship and mentoring opportunities, while collaborating with universities to integrate practical content. Besides low satisfaction with lecturer teaching and guidance among some students, universities are expected to focus on improving campus facilities, such as parking space, shuttle bus, rental bicycle, lockers, cafeterias, classrooms, security and others.

In essence, results suggest that students invest more time and effort on studies and grades and thus, universities should recognize the commitment of students by providing the best educators and facilities to allow the students to succeed beyond the students' undergraduate years. Partnerships with top global universities can pave way for better staff, as well as student exchanges. A holistic and multidisciplinary approach to education and personal development is integral in bringing Vision 2035 to fruition. Universities should have regular evaluations and timely feedback for its staff to promote the continuous improvement of the quality of education. In short, institutions of higher learning should, to the best of their abilities, improve the employability of students and support them in their career development. In terms of employability skills, there is a high degree of congruence between undergraduate students and employers, but at the same time, students must recognize that employers attach importance to the trust and dedication.

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Appendix 1: Detail information for Dual satisfaction Performance and Importance

Job-related Competnces and Skills		Importance		Performance Satisfaction	
		EI	SI	EP	SP
1	Communication abilities (speaking, writing, listening)	1	3	15	1
2	Problem solving skill/ Critical thinking	2	1	16	21
3	Ability to priorities task	13	19	22	15
4	Ability to organize and delegate tasks	15	14	23	18
5	Specific technical knowledge	10	16	18	20
6	Knowledge of computer application	8	11	10	23
7	Leadership/ Managerial skills	5	2	19	16
8	Comprehension of business practice	22	24	24	22
9	Overall quality of work and performance	24	23	12	24
10	Capacity for co-operation & teamwork/collaboration	19	5	3	19
11	Ability to work with people of different background	18	13	4	10
12	Being a role model	14	9	17	8
13	Networking skills	12	10	1	17
14	Time management	6	8	20	13
15	Personal presentation and grooming	16	20	11	14
16	Creativity and Innovative	7	12	13	7
17	Integrity	20	22	7	11
18	Attendance/Punctuality	9	15	21	12
19	Independency	17	21	6	9
20	Being flexible and adaptable	23	6	5	5
21	Dedication and Commitment	3	4	8	3
22	Accept feedback	21	18	14	4
23	Self Confidence/ Self esteem	4	7	2	2
24	Decision ability	11	17	9	6

Note: EI=Employer Importance SP= Student Self-confidence /Performance, SI=Student Importance, EP = Employee Performance,. Ranking from 1 (highest) to 10 (lowest).

Key:

1-9: Professional Competencies;

10-13: Interpersonal Competencies;

14-24: Personal Abilities.