

## **Undergraduate Internship Program the Effectiveness and Improvement Focus**

**By**

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### **Abstract**

Internship program is an opportunity for students to gain practical knowledge and skills, as well as cultivate a personality on how to deal with the real working environment. As such, an effective internship program is essential to the career development of students. Finding from empirical review suggested that the questions of how the effectiveness of undergraduate internship programs (EUIP) should be reported realistically and how to identify and prioritize EUIP improvement are remains ambiguous. Hence, this research aims to incorporate multiple measures to assess EUIP for a business school in Malaysia. Additionally, the research also aims to identify and prioritize the EUIP improvement by the evaluation of focus index. Based on empirical finding, this research views EUIP from the perspective of personal, interpersonal and employment impacts that driven by the internship programmes. The research is quantitative based and focused on students from a business school in Malaysia. Structured questionnaire was distributed to 123 students who have completed their internship programmes in year 2020 and 2021, with 96 of them responded. EUIP is analysed via descriptive analysis by incorporating measures of importance and implementation level. Additionally, focus index for the 3 EUIP constructs are calculated to identify and prioritize improvement focus. Finding from the analysis result reveals that the average of EUIP for all the 3 constructs are above 80%, which is suggested as high level of effectiveness, while interpersonal impact is regarded by respondents as under-focused. The research contributes methodologically by outlining a new approach for the assessment of effectiveness as well as the identification and prioritization of improvement focus.

*Type of Paper: Empirical*

**Keywords:** Internship Programme Effectiveness, Focus Index, Interpersonal Impact, Personal Impact, Employment Impact.

## 1. Introduction

Institutes of Higher Education (HEIs) play an important role in advancing students to new frontiers of knowledge that meet the labor market's demands (Dickerson et al., 2004). Employers' expectation on graduates is now go beyond the traditional requirement of knowledge and skill, instead extended to the adoptability of graduates to the real working environment (Riera Prunera et al., 2017). Based on Kolb's experiential learning theory, students' adoptability to working environment involves a series of training and experimentation programs. Hence, undergraduate's internship programs become one of the main focus for HEI in order to boost graduates' employability (Abbasi et al., 2018).

Internship programs are opportunities for undergraduates to gain practical knowledge and skill, as well as cultivate personality on how to deal with real working environment. As such, an effective internship program is essential for undergraduates' career development. Within the context of Malaysia, the Ministry of Higher Education (MOHE) defines internship as the placement of students in an organization to undertake supervised practical training in a chosen industry, either abroad or within the country, within a specified period of time before they are awarded a Certificate, Diploma or Bachelor's Degree. According to the internship policy outlined by the MOHE, internship is a compulsory training program for all HEI students in the field of professional programs regulated and accredited by professional bodies, such as Engineering, Architecture, Quantity Surveying, Accounting, Law, Medicine, Pharmacy, Dentistry and nursing. Whereas, other programs such as business courses are suggested by MOHE as "deemed appropriate" to make internship as compulsory requirement prior to graduation. As such, empirical research on undergraduate internship program in Malaysia tend to focus on non-business-related programs (Kheng., 2017, Chan, 2020), the research on the EUIP for business related program is still lacking.

Beyond the context of Malaysia, review on empirical finding reveals that EUIP research instrument used by prior scholars were mainly assessed EUIP by a single set of scale, either the agreement level on the importance or implementation of EUIP. Conceptually EUIP measurement should reflect both importance and implementation level, hence the question of how EUIP should be reported realistically remains ambiguous. Hence, this research aim to assess EUIP of a business school in Malaysia by incorporating measures of both importance and implementation level.

Additionally, empirical review also found that prior studies on undergraduate internship tends to focus on exploring the success factors or determinates for internship success (Ivana, 2019), evaluate industry or students' satisfaction on internship, evaluate impact of internship on students career development, assess internship effectiveness from the perceived value of internship, students learning experience and supervisor's report (Hargert, 2009, Karim, 2019, Jawabri, 2017, Anjum, 2020), there is lack of study on the identification and prioritization of EUIP improvement needs. Hence, based on the concept of Focus Index (Kowang and Rasli, 2012), this research explore on which of the internship components need further improvement and how to prioritize the improvement focus accordingly. As such, the research aims to address two research objectives (RO), which are:

RO1: To assess the effectiveness of undergraduate internship program within a business school in Malaysia.

**RO2: To identify and prioritize the EUIP improvement focus.**

## 2. Literature Review

### 2.1 Internship Program

Internship program refers to students' short-term attachment in an industry or organization to develop real-world practical skills (Bayerlein and Jeske, 2018) and to acquire real-world working experience, such as analytical, communication, teamwork and negotiation skills (Jogan, 2019). In the context of the business school studied, an internship program refers to the placement of students in industry or organizations for a period of at least 20 weeks. This is one of the mandatory academic requirements for students prior to graduation

### 2.2 Euip

Effectiveness is defined as the degree or capability to produce output that meeting the desired expectation or target (Isaias et al., 2020). An effective internship program not only should expose students to the real working environment that related to their field of study, and to enhance students' practical knowledge. Additionally, it should prepare students with the soft and hard skill that required and expected by labor market (Moghaddam, 2014; Richards, 1984). Hence, EUIP is viewed by prior scholars from multiple perspective. For instance, Hergert (2009) assessed the perceived value of the internship as measure for internship effectiveness. Karim (2019) incorporated students learning experience, evaluation of host company, supervisor's evaluation and soft skill gained as measure for EUIP. Meanwhile, Jawabri (2017) viewed internship effectiveness from the perspective of internship experience and satisfaction. Among the measures highlighted above, empirical review on EUIP reveals that the most common approach adopted by prior studies (Jackel, 2011, Moghaddam, 2014, Ivana, 2019, Karunaratne, 2019, Anjum, 2020) is to assesses EUIP via the impact of internship on students personal, interpersonal, academic, employment and civic awareness (Table 1)

**Table 1** Summary of EUIP Constructs used by Prior Scholars

	Jackel (2011)	Moghaddam (2014)	Ivana (2019)	Karunaratne et al (2019)	Anjum (2020)	Total
Personal impact	✓	✓	✓	✓	✓	5
Interpersonal impact	✓				□	2
Academic impact	✓		✓	✓		3
Employment impact	✓	✓		✓	✓	4
Civic engagement impact	✓					1

As refer to Table 1, personal, academic and employment impact are the most common measures adopted by prior scholar for the assessment of EUIP. Academic impact refers to the impact on students' awareness of the importance of acquiring new frontiers of academic knowledge that meet the demands of the labor market and being interested in the academic learning process post internship. However, within the context of business school that studied in this research, students are undergone their internship during the final semester, hence academic impact post internship is un-assessable in this research.

Civic awareness impact is the least common measure adopted by empirical research. Civic awareness impact refers the impact on the awareness and commitment to engage with community and society. In view with the scope of the internship program for the business

school is confined within industry, whereby engagement with society and community is beyond the scope, hence it is also not applicable for this research.

Empirical research shared consensus that internship program should prepare students with the required soft skill to adopt to the real working environment, such and communication and interpersonal skill (Anjum, 2020). Hence, on top of personal and academic impact, interpersonal impact is also formed part of EUIP measures adopted in this research.

### ***2.2.1 Personal Impact***

Personal impact refers to the effect of an individual's actions on another individual, which could be a positive or negative impact (Ivana, 2019). Internship programs allow students to work with individual beyond the academic domain (Marinas et al., 2018). Students need to deal with their industry supervisor, peers or colleagues, suppliers and customers who might demonstrate or share experience, skills, thoughts and values (Mihail, 2006). Personal impact of internship view change on individual value and actions from the positive perspective. Hence, EUIP of personal impact assesses the changes of students' personal value and characteristic post internship, such as perseverance in difficult tasks, recognizing personal strengths and weaknesses, being able to be productive at work, and feeling meaningful in personal achievement. A positive personal value and characteristic is crucial because it lead to a more authentic and fulfilling career and personal life (Ivana, 2019).

### ***2.2.2 Interpersonal Impact***

Interpersonal means relating to, or involving a relationship between people (Jackel, 2011). While interpersonal impact refers to the impact on the way an individual choose to conduct herself or himself when interact with others. Interpersonal impact is commonly measured in term of the ability to work cooperatively, to communicate effectively as well as the leadership skill and understanding others during the internship (Alnajjar, 2020). Naturally, conflicts might arise with interacting with other individual during internship, hence internship program provide a platform or opportunity for students to develop their interpersonal skills by understand and deal with people with diverse backgrounds (Beard et al., 1998; Alnajjar, 2020). Building good relationships and working well with others are important determinant for student's further career development.

### ***2.2.3 Employment Impact***

In a competitive job market, graduate with excellent employment competencies are perceived by employers have higher success rate in the workplace (Jung and Lee, 2016). Employers view graduates' hard and soft skill equally important. Hence. on top of the soft skill based personal and interpersonal impact, graduates' employment hard skill in term of practical skill and knowledge are another important measure for EUIP. Internship program enhances students practical and job-related skills by providing a platform for them to apply, practice, review and improve knowledge and skill they acquired from HEI (Hora et al., 2017). As such, in this research, EUIP in term of employment impact is assessed via the impact on professional technical skills and knowledge (Garavan et al., 2001; Narayanan et al., 2006).

## **3. Research Methodology**

This research is quantitative based, the following sections summarize the research methodology adopted in this study.

### 3.1 Population and Sampling

The target respondents for this study are 184 students from a business school in Malaysia who completed their internships in 2020 and 2021. Based on Morgan and Krejcie sampling table, the research aims for a sample size of 123 students (Morgan et al., 1970).

### 3.2 Research Instrument

Empirical finding reveals that instrument used by prior scholars assessed the internship effectiveness with single set of scale, the agreement level on either the importance or implementation level of the effectiveness measure. However, the decision on which measure required further improvement cannot be judged pure based on either the importance or implementation level, instead is an inclusion of both, i.e., improvement focus should be placed on measure with high important level but low implementation level. As such, this research adopted a structured questionnaire to assess the agreement on the importance and implementation level for the three EUIP based on 5 points Likert scale, scale “1” represents “Not important” or “Not Implemented” and scale “5” for “Highly important” or “Highly Implemented”. The questionnaire consists of 15 measurement items (5 for each of the EUIP) that adopted from Jackel (2011). Additionally, there are 8 demographic related question. The questionnaire was formatted as google form, and the goggle form’s link was shared with the targeted respondents.

### 3.3 Analysis Tool

Skewness and kurtosis value were used as assessment of normality with the threshold value of +/-3. Furthermore, data reliability was assessed via Cronbach alpha with the threshold value of minimum 0.7 (Kowang and Rasli, 2012). Additionally, RO 1 and 2 were addressed by descriptive analysis (for RO1) and Focus Index (for RO2).

Focus index of a construct is the comparison of the implementation effectiveness versus the importance of the construct. While implementation effectiveness refers to the ratio between implementation level and importance level in term of percentage (Formula 1). To homogenise the unit of measurement between implementation effectiveness (ratio between 0 to 100%) and implementation level (Likert scale from 1 to 5), the comparison of both are made based on ranking (Kowang et al., 2012). For this research, the importance level and implementation effectiveness for the three EUIP measure will be ranked based on the mean score (i.e. from 1 (the highest) to 3 (the lowest)), and the ratio between the ranking number of importance level and implementation effectiveness reflect the focus index (Formula 2). Focus index of 1 suggest that the EUIP is focused at the correct level, additionally, focus index above 1 reflects it is “over focus”, and a focus index of below 1 is viewed as “under focus” (Kowang et al., 2012).

$$Effectiveness = \frac{Implemenetaion\ level}{Importance\ level} \times 100\%$$

#### Formula 1

To homogenise the unit of measurement between implementation effectiveness (percentage between 0% to 100%) and implementation level (Likert scale from 1 to 5), the comparison of both are made based on ranking (Kowang et al., 2012). For this research, the importance level and implementation effectiveness for the three EUIP measure will be ranked based on the mean score (i.e., from 1 (the highest) to 3 (the lowest)), and the ratio between the ranking number of importance level and implementation effectiveness reflect the focus index (Formula 2). Focus index of 1 suggest that the EUIP is focused at the correct level, additionally, focus index above 1 reflects it is “over focus”, and a focus index of below 1 is viewed as “under focus” (Kowang et al., 2012).

$$\text{Focus Index (FI)} = \frac{\text{Ranking number of Importance level}}{\text{Ranking number of Effective level}}$$

**Formula 2**

## 4. Analysis Results and Discussion

Link of questionnaire (in Google form format) was shared with 123 students from a business school in Malaysia who have completed their internships in 2020 and 2021. The students' contacts detail was obtained from the university internship program's coordinator. 78% of the students completed the questionnaire and none of the response with missing data, hence all the 96 responses are useable for further analysis.

### 4.1 Normality and Reliability Test.

Skewness and kurtosis value of data collected is range from -1.428 to + 1.503, which is within the threshold value of +/-3 suggested that data is normally distributed and could be proceed for descriptive test of mean. Additionally. Cronbach's alpha for the 3 EUIP constructs are above the threshold value of 0.7, which ranged from 0.709 to 0.875, this suggest that data is reliable and can be proceed for the subsequent analysis

### 4.2 Addressing ROI

ROI is to assess the effectiveness of undergraduate internship program from the perspective of personal, interpersonal and employment impacts. The implementation effectiveness is derived by calculating the ratio between implementation level and importance level in percentage as shown in Formula 1. The result of the EUIP is summarized in Table 2

**Table 2** *Effectiveness of Undergraduate Internship Program*

EUIP	Importance Level (a)	Implementation Level (b)	Implementation Effectiveness (c) c = (b/a) X 100%
Personal Impact	4.451	4.069	91.41%
Interpersonal Impact	4.829	3.894	80.63%
Employment Impact	4.604	3.981	86.47%

Based on Table 2, the overall EUIP for the business school is above 80%, which is suggested as high level of effectiveness. Personal impact and employment impact scored the high effectiveness of 91.41% and 86/47% respectively, this reveals that the students viewed that the internship program that they have gone through has changed their individual value and characteristic for the betterment of their employability. This finding is in line with finding from Chan et. al., (2020) research that suggested internship program cultivate positive personal impact, boosted students' confidence level in their workplace and added value to students' employability. The notable finding is interpersonal impact is suggested by respondents as the most important EUIP, however with the lowest effectiveness of 80.63%. This finding echo research done by Fernald et. at., (2013) that suggested interpersonal skill is the most difficult element to foster due to it is not only dependent on the personal behavior and characteristic of the individual, but also the way an individual choose to conduct herself or himself when interact with others, and the behavior and response of the individual that you deal with. Interpersonal skill take time to build up and is based on the experience that gained when dealing with other. Internship by nature is a short-term attachment basis with limited job scope, perhaps, this

is one of the main reasons that restrain the development of students' interpersonal skill during internship.

#### 4.2 Addressing RO2

Focus Index analysis is adopted to address RO2, to identify and prioritize the improvement for EUIP. Table 3 summarized the ranking of importance level ranking (a), the effectiveness ranking (b) and the focus index (c) for the three EUIP constructs. Focus index of 1 represents an appropriate focus level, while index below 1 suggests as under-focused, and index above 1 is viewed as over-focused.

**Table 3** Focus Index

<b>EUIP</b>	<b>Importance Level</b>	<b>Importance Level Ranking (a)</b>	<b>Implementation Effectiveness</b>	<b>Effectiveness Ranking (b)</b>	<b>Focus Index (c) <math>c = a/b</math></b>
Personal Impact	4.451	3	91.41	1	<b>3</b>
Interpersonal Impact	4.829	1	80.63	3	<b>0.33</b>
Employment Impact	4.604	2	86.47	2	<b>1</b>

Based on Table 3, an interesting finding is respondents view EUIP of personal impact is over focused with Focus index of 3, in contrast interpersonal impact is regarded as under focus with focus index of 0.33. Additionally, employment impact which assessed the impact on students' practical skill and knowledge is suggested by respondents that it is focus at the correct focus level. The finding supports Bovill and Woolmer (2019) research which suggested that HEI always paying greatest attention to curriculum design to ensure that it match with the requirement as well as expectation from the labor market and industry. The effort is extended and covered internship program. Perhaps this explain why employment impact is viewed by respondents that it is focused at the correct level.

In addressing RO2, finding from this research prompts that interpersonal impact is only EUIP construct that under-focused, hence EUIP improvement priority should be placed on interpersonal impact. In this research, interpersonal impact is assessed from the perspective of students' ability to work cooperatively, to communicate effectively with others and understanding others, as well as students' leadership skill (Jackel, 2011, Alnajjar, 2020). A notable finding is communication and leadership skill scored the lowest implementation level among the 15 measures. Perhaps, the nature of internship which is short-term basis and students are attached as trainee has limited the students' opportunities to expose, practice and acquire their leadership and communication skill. Once of the possible solution is to improve student leadership and communication skill through action learning approach, whereby make it mandatory for students to initial and lead a mini project during their internship, and compile a project report in the end of internship as part of assessment components. This will expose the students with opportunities to manage a project in real working environment, which will ultimately enhance students' leadership and communication skill.

## 5. Conclusion and Future Research

An effective internship program should prepare students with the soft and hard skill that required and expected by the industry of labor market. Employers expectation on

undergraduates' competencies goes beyond academic performance and is continuously evolve. Hence, HEIs need to continuously review the effectiveness of their students' internship program, identify areas that required further improvement and prioritize the improvement action accordingly. The continuous internship improvement process should be complemented by a realistic approach on the assessment of effectiveness and identification of improvement focus. On top assessing EUIP and proposing the improvement focus for a business school in Malaysia, this research outlines a new multiple measures methodology for the evaluation of effectiveness and improvement focus. The approach contribute to the methodology of assessing effectiveness and improvement focus, the methodology can be used in future research on social science or management research to complement the approach of single measure effectiveness. Additionally, this research aimed for identifying improvement opportunity, as such it was concentrated on under-focused practices, without explore the over-focused constructs. Over-focused reflected as non-value added activities. Hence, future research could explore ways and approach to address the over-focused constructs.

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