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Student's Readiness for Internship in FPA: KM Readiness Model Approach

Nur Wajihah Mohd Nawi, Nur Nabila Huda binti Aziz, Syahrizan bin Sahlan, Farahida binti Zulkefli, Asmah Awal (Dr.)

Faculty of Plantation and Agrotechnology, UiTM Melaka (Kampus Jasin) 77300 Merlimau, Melaka.

Abstract: According to Academic Information Management System (AIMS) of UiTM, it is compulsory for undergraduates of each faculty under UiTM to undergo a minimum of 8 weeks industrial training before graduation. Industrial training programme is a part of university's curriculum that can give opportunity for students to get exposed in the real workplace and professional practice. The students would be supervised by professional personnel in the certain period based on respective universities. In addition, the students need to follow all the procedures set by the faculty in order to pass the industrial training programme. The assessment of the student's performance would be assessed by the industry during this period of practical training. An industrial training program provides the real working experience for the students and reflects actively the hands-on activities based on the theories learned in the classes. But, the readiness of the students before undergoing this practical training need to be identified. It is importance to reflect the best performance of the students during the internship programme. This paper discussed about the significant of industrial training programme that is practiced by Faculty of Plantation and Agrotechnology and the readiness level of the students before going on the internship programme. The readiness of the students was measured based on three different components which are motivation, knowledge and working skills. This paper is written based on primary data analysis with the questionnaires as the data collection method. It is revealed that the FPA students are moderately ready before going for an industrial training programme based on three sub-factors of KM Readiness which are motivation, knowledge and skills. As a conclusion, the respondents were having a good motivation level, but it is not sufficient for knowledge and skills. Thus, it was suggested that several knowledge and skills workshops should be introduced to the students as preparation for their internship programme to enhance their readiness so that they can meet the expections

of employers in the industry.
Keywords : *Industrial Training, Internship, KM Readiness Model, Motivation, Knowledge, Skills*

INTRODUCTION

Recently, the unemployment rate for the Malaysian's graduates has been gradually increasing year by year. Until September 2019, the statistics illustrated that the numbers of unemployed graduates was 516,200 which was an increase of 2.2% from a year ago (The Star, 2019). There are several reasons of why the graduates are unable to find the job. One of the determinants for the graduates to be employed is through the internship program during their study period. An industrial training program provides the real working experience for the students and reflects actively the hands-on activities based on the theories learned in the classes. From the training program, the students can enhance their soft skills and competency level as a preparation before going into the job market. Currently, most of the students are incompetent especially in terms knowledge of the subject content and not well prepared before going through the industrial training which is totally opposite with the preferences of the industries. This research has been conducted to measure the readiness level of the students in Faculty of Plantation and Agrotechnology. KM Readiness Model has been used as a references in analyzing the results to measure the readiness level of students in for internship programme in FPA. Knowledge management (KM) readiness model is one of the measures that usually being used to analyse the knowledge level of the respondents towards certain subject matter. Knowledge management (KM) can also be defined as the process for acquiring, storing, diffusing and implementing both tacit and explicit knowledge inside and outside the organization's boundaries with the purpose of achieving corporate objectives in the most efficient manner (Magnier-Watanabe and Senoo, 2008). Knowledge Management (KM) can be easily understood by receptive attitudes of the members in an organization towards the efforts that will help to increase their knowledge. According to Farnaz Barzin Pour et, al. (2013) the key factors of KM model is knowledge structure, infrastructure and culture of the organization. JB Associates (2010), stated that there are several sub-factors of KM model which includes awareness,commitment, strategy, culture, knowledge application, skills and

motivation. The objectives of this research paper is to analyse the readiness level of the FPA students based on the components in 3 sub-factors in the Knowledge Management Readiness Model which were motivation, knowledge and working skills.

RESEARCH METHODOLOGY

This research has been using cultural questionnaires method to assess the KM (Knowledge Management) readiness of the respondents. According to Farnaz Barzin Pour et al. (2013), one of proposed methods in KM readiness assessment is OCI questionnaire. This questionnaire has been utilized by many organizations as an economic reliable tool. The questionnaires has been designed based on Likert Scale structure, consisting of the scale from 1-7. There were two types of scale measurement starts from 1 (very strongly disagree), 2 (strongly disagree), 3 (disagree), 4 (undecided), 5 (agree), 6 (strongly agree), 7 (very strongly agree). Another scale of measurement is multiple choice questions, which basically used to measure the knowledge level of the respondents. The questionnaire were divided into 3 different sections which are Section A (demographic information), Section B (Sub-Factors of KM Readiness Model – Motivation, Knowledge and Working Skills) and Part C (Dependent Variables – Readiness of the Respondents). There were two methods for the distribution of questionnaires, manually (using papers) and through electronic medium which is google forms. The respondents were from two different levels of programs which are AT110 (Diploma in Planting Industry Management) and AT220 (Bachelor (Hons.) Technology and Plantation Management. The questionnaires were distributed for two semester sessions Semester 2 (2017/2018) and (Semester 1 2018/2019) for each program Diploma (AT110) and Bachelor Degree(AT220). The total number of respondents for was 128 respondents from Semester 4 and 67 respondents from Semester 4 for AT110 and AT220 respectively. Convenience sampling method was used in this research study. The duration of the practical training for both programmes was 8 weeks which were done during their semester break on the Semester 2 and Semester 4 for AT110 programme, meanwhile, it is Semester 3 for AT220 programme.

2.1.1 Theoretical Framework

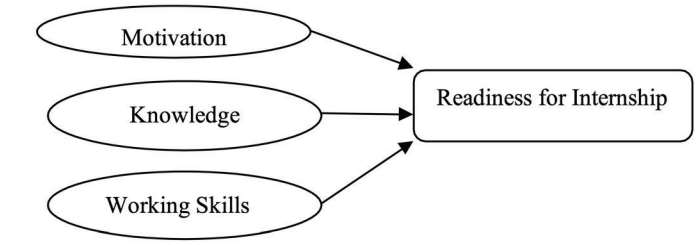

Figure 1: Framework for the Research Study

Figure 1 above showed the theoretical framework for this research study, it implies the relationship between the three (3) sub-factors (motivation, knowledge and working skills) of KM Readiness Model that was focused in this research towards the readiness level of FPA students for internship programme.

RESULTS AND DISCUSSIONS

The questionnaires were firstly developed and constructed, and being distributed to 10 respondents as pilot study. Next, the Cronbach alpha value was computed based on the results. It was found that Cronbach-alpha value is 0.67, thus, restructure of the questionnaires items were done. Next, the adjusted questionnaires were distributed as a pilot study again to obtain new value of Cronbach-alpha. The new Cronbach-alpha value is 0.87 which means that the restructed questionnaires is much more reliable and will be used to be distributed to the sample of this study.

3.1 Demographic informations of the Respondents

The first part of the results discussed on the demographic information of the respondents. The demographic information discussed includes gender information, academic performance of the students and the parent's occupation industry as these items related with the readiness of the respondents for their industrial training program.

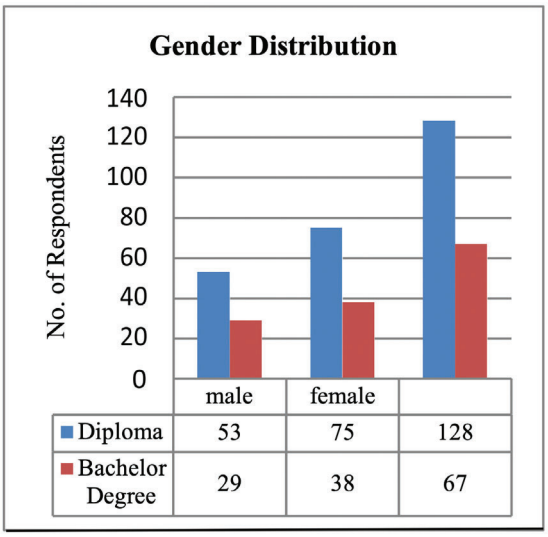

Figure 2: Gender Distribution of Respondents

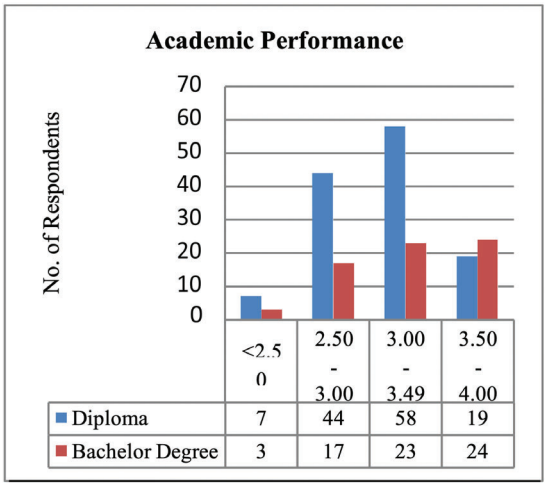

Figure 3: Academic Performance of Respondents

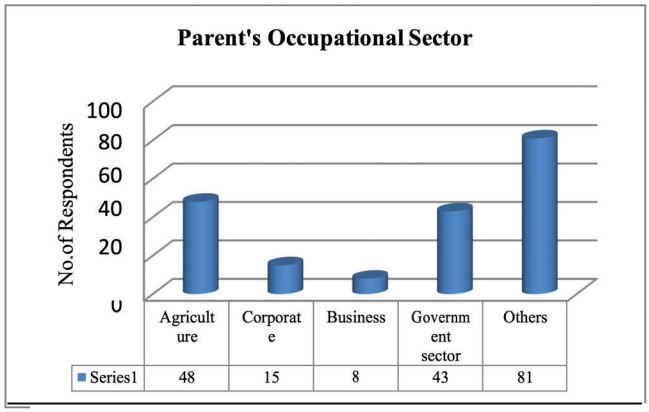

Figure 4: Parent's Occupational Sector of Respondents

Figure 2 above showed the gender distribution of the respondents from both of the programmes, AT 110 and AT220. Based on the results obtained, it was shown that the number of female respondents are slightly higher compared to male respondents. Thus, the results for the Knowledge Management (KM) readiness would reflects more on the female perspective compared to male. Meanwhile, figure 3 shows the academic performance of the respondents for both programmes. The academic performances were measured based on the CGPA (Cumulative Grade Point Average) performance of the respondents. It can concluded that for Diploma level, most of the students were having CGPA in the range of 3.00 until 3.49. On the other hand, for the Bachelor Degree programme, the academic performance is quite better since most of the students were having CGPA in the range of 3.50 until 4.00. This might be due to the higher enrollment standards that has been defined for Bachelor Degree programme. Next, figure 4 reflects the sectors of occupations for parent's respondents. It is important to discuss about the information of occupation sector for the parent's respondents since it might be related with the readiness of the respondents for their internship programme. Readiness of the students for their internship program might be affected by the sectors of their parent's occupation. Figure 4 presents the different sectors of occupation for the parents of respondents and it shows that agriculture sector is one of the top three (3) sectors included. The internship programme for Faculty of Plantation and Agrotechnology(FPA) , especially for the programme of AT110 (Diploma in Planting Industry Management) and AT220 (Bachelor

(Hons.) Technology and Plantation Management should be based on plantation/agriculture industry. Plantation industry mentioned includes any organization (public and private) that involves in the production of any agricultural products focusly,on the agricultural commodity in Malaysia, such as oil palm, rubber, paddy, cocoa, coconut, pineapple and other few future growing commodity agriculture crops. Thus, the readiness of the respondents should reflect that some of them already have their exposure in the agriculture/plantation activities starting from their parents.

3.2 Sub-factors of Knowledge Management (KM) Readiness Model

3.2.1 Motivation

According to McCord, R. (2013), the concepts of motivation is very broad consisting on 11 constructs includes of extrinsic and intrinsic motivation, identification with academics, attainment value, cost value, competence, utility value, self-efficacy, interest , expectancy , achievement, and instrumentality. Selection and shortening of the reliable and related motivation constructs has been done. Thus, the applicable and related motivational contructs has been defined for this research study which involves seven (7) constructs only which are extrinsic, intrinsic, interest, attainment value, cost, identification with academics and self efficacy.

Table 1: Motivation items of questionnaires

Constructs of motivation	Items of questionnaires	Mean	Standard Deviation
Extrinsic (M1)	*The most satisfying thing to me would be to undergo the industrial training related with my field of study.*	5.3389	0.8127
	If I can, I want to get better grades in my internship program compared with my other classmates.	5.0046	0.7925
	I want to do well in my industrial training because it is important to show my ability to my family, friends, employer or others.	5.3346	0.5723
Intrinsic (M2)	*I prefer industrial training activities that really challenges me so I can learn new thing.*	5.4477	0.5572
	I prefer doing and learning the subject that arouses my curiosity, even if it is difficult to learn.	5.500	0.8213
	The most satisfying thing for me in this industrial program is trying to follow the training working schedule.	5.4567	0.1267
	When I have the opportunity, I choose to do the activities that I can learn from even if they don't guarantee a good results.	6.1052	0.4457
Interest (M3)	*I enjoy internship program very much.*	5.7467	0.5894
	I think that industrial training program is boring.	4.0035	0.9985
	I would describe industrial training program as very interesting.	5.1025	0.7725
Attainment Value (M4)	*I would put a lot of effort into my internhip program.*	6.1825	0.4421
	I would try very hard during my internship program.	6.0124	0.3521
	It is important for me to do well in my internship program.	6.5245	0.5421
Cost (M5)	*The amount of effort it will take to do well in the internship program is worthwhile to me.*	5.0213	0.7689
	The amount of time I spend for all the activities related to internship program keeps me from doing other things I would like to do.	5.2367	0.8973
	It is important to me to get good grades in industrial training.	5.5543	0.4327
Identification With Academics (M6)	*It is important to me to learn the related important inputs for plantation/agriculture during the internship program.*	5.4325	0.3267
Self Efficacy (M7)	*I believe that I will receive an excellent grade in internship program.*	5.6702	0.8790
	I'm confident I can understand the basic concepts for all activities in internship program.	5.6743	0.9213
	I'm certain I can understand the most difficult concepts related with the internship activities.	5.5532	0.9985
	I'm confident I can do an excellent job on the assignments and activities during internship program.	6.0987	0.4321
	I expect to do well in internship program.	5.5574	0.6792

Table 1 presents the items in the questionnaires based on seven (7) constructs of motivation. Each of the constructs represented by several items of questions which will then be summarized by obtaining the average value to assess the readiness level of respondents in the motivation aspect/ component. Based on the mean value of all questionnaire items, the value obtained for motivation is at the value of 5.5254 with the standard deviation of ± 0.6437. Overally, it can be concluded that the readiness in terms of motivation component for FPA students as the respondents is within the range of agree and strongly agree based each items of questions in the questionnaires. FPA students agreed that they were having a good motivation to undergo the industrial training/ internship programme. This might be due to the eagerness of the respondents to obtain the experience in real working environment which makes them feel excited and thus, increase motivation level.

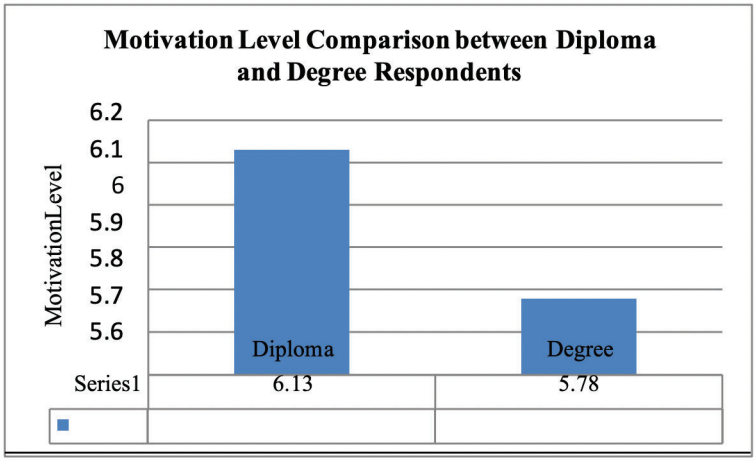

Figure 5: Motivation Level Comparison between AT110 and AT220 respondents
Notes: Scale of measurement : Likert Scale questionnaires with choice of answer.

Figure 5 reflects the comparison between motivation level of AT110 (Diploma in Planting Industry Management) and AT220 (Bachelor. (Hons.) Technology and Plantation Management). Although it can be seen there is that there is a difference in the motivation level of both programme respondents, but, the t-test analysis from SPSS software shows that it is not significant at 5% level of significance, with the p value is > 0.67. Thus, it

can be concluded that overally both of the programmes respondents were a having a good motivation to undergo the internship programme.

3.2.2 Knowledge

Knowledge consists of a body of truths that together express the truth of the world (Weinberger , 2012). There were two types of knowledge, which were procedural and declarative. Procedural knowledge is treated as know-how (skill and action knowledge) or tacit knowledge, and declarative knowledge as fact knowledge or explicit knowledge. Procedural knowledge is knowledge that cannot be easily scrutinized and is used to solve a problem rather than to describe what the problem is. Declarative knowledge is found in rule-based logic and is for describing a problem rather than providing skills for solving it (David Rooney et al, 2005). Although there were already a declaration of two different types of knowledge, this research study questionnaires for measurement of knowledge generalized the whole concept of it. The items of questionnaires within this knowledge measurement covered all the activities related with agriculture/plantation. The scale measurement for knowledge is based on multiple choice questions. Next, the questionnaires will be marked to assess the answers obtained. The calculation of the correct answers of questions would then be analysed to know the level of knowledge of the respondents as their preparation to undergo the industrial training programme. There were a total of 25 plantation/agriculture based questions included in the questionnaires.

Table 2: Scope of activities for crop cultivation

Scope of activities for crop cultivation	*Number of questions*
Seed selection	5
Lining/ / Site preparation	5
Cultural practices (maintenance process-fertilization, weeding, spraying)	5
Pests and diseases	5
Harvesting	5

Table 2 defined the scope of activities covered in the questionnaires to measure the knowledge level of respondents regarding the crops cultivation. The questionnaires cover general crops which already being covered in syllabus of courses taken by the respondents.

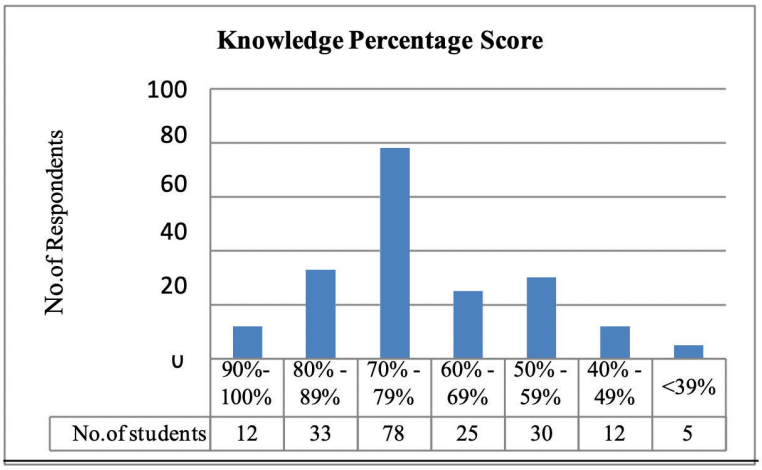

Figure 6: Knowledge Percentage Score of FPA Respondents
Notes: Scale of measurement : Multiple choice questions (The percentage score is based on the number of correct questions answered). * Significant at 5% significant level at the score of 70% - 79%.**

Figure 5 presents the summary of knowledge percentage score for the knowledge components questionnaires. It can be summarized that there is a significant difference in the knowledge score of respondents which most of the respondents score is in the range of 70% -79%. The data obtained was being analysed in SPSS software by using one-way Analysis of Variance (F-test) to assess the significant difference in the performance of knowledge percentage score for all the respondents. According to the results, it was found that there is a significant difference (where p-value is 0.035 which is less than 0.05 significant level) in the knowledge percentage score which shows that most of the respondents answer get 70-79% significantly. The results reflect that the knowledge level of FPA students is at moderate level. The reasons might be because the respondents were still in Semester 4 for both of the programmes, which might reflects the correlation of the knowledge with their semester level. It is believed that the knowledge level of FPA students would be increased as they can at least achieve 70% before graduating the programme.

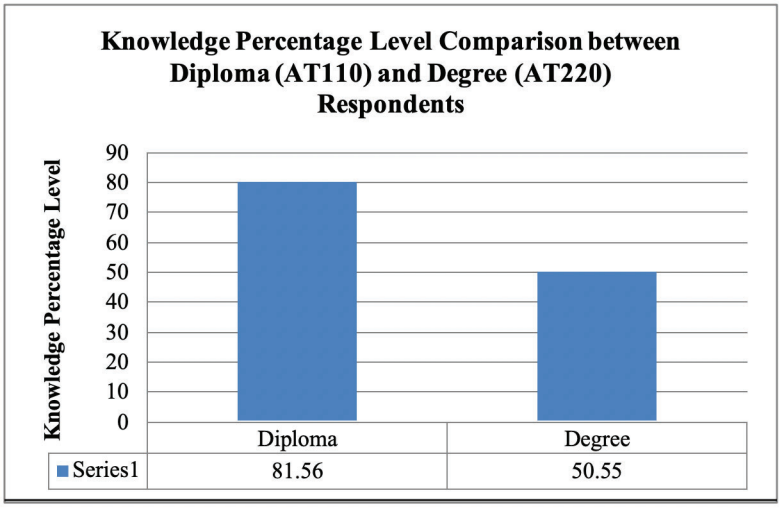

Figure 7: Knowledge Percentage Level Comparison between AT110 and AT220 Respondents
Notes: Scale of measurement : Multiple choice questions (The percentage score is based on the number of correct questions answered).
***** There is a ignificant difference at 5% significant level between the knowledge percentage level of AT110 and AT220 respondents**

Based on Figure 7, it was statistically proven through t-test at 5% level of significance that the knowledge level between the two programmes is not same. The AT220 respondents show higher knowledge level compared to AT110 respondents. This explains that, as the persons were pursuing higher learning level of programmes, thus, the knowledge in the subject matter studied also increased. The reasons might be also because of the AT220 respondents were already going through at least 3 series of internship programme. On top of that, the experience and knowledge learned helps a lot in increasing the percentage of knowledge level of AT220 respondents.

3.2.3 Skills

According to Gaëlle Pierre et al. (2014), there were three(3) broad measures of skills that were usually being assessed for a good human capital in an organization. The three skills includes cognitive skills, socio-emotional skills and job relevant skills. Cognitive skills are basically can be defined as the ability to understand complex ideas,

to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought. Literacy, numeracy, and the ability to solve abstract problems are all cognitive skills. Socio-emotional skills, sometimes referred to in the literature as non-cognitive skills or soft skills, relate to traits covering multiple domains (such as social, emotional, personality, behavioral, and attitudinal). Job-relevant skills are task-related and build on a combination of cognitive and socio-emotional skills. For this research, the skills based on the questionnaires distributed to the respondents covering three (3) different skills which are cognitive, socio-emotional skills and job-relevant skills. There were five (5) items of questions represented for each types of skills discussed.

Cognitive skills

The cognitive skills measured based on this research do not cover all the aspects of the broad concept defined. Based on the questionnaires distributed, the analysis of the items in the questionnaires were presented as in Table 3. It was found that the average value obtained by the scores of respondents based on cognitive skills is 4.6866 with the standard deviation of around ±0.5529. It reflects the results for cognitive skills from the view of respondents shows that they does not very sure of answering the questions related. Lower value of cognitive skills level also reflects there is still lack of skills based on problem-solving among the respondents from AT110 and AT220.

Table 3 : The score level of questionnaire items for cognitive skills measurement

Items of questionnaires	Mean	Standard Deviation
I am able to solve the problems arise from any situations easily	4.0131	0.9865
I would be able to think of how to learn on doing some works efficiently in a limited time given	5.5525	0.4670
I have a good solution on how to manage an agricultural farm efficiently with my own tactics of decision making	5.2243	0.5678
I intend to respond quickly on someone's quiry or questions to me.	3.0198	0.3214
I am able to make decisions based on problem-solving, although the information is not that complete.	5.6231	0.4217

Socio-emotional skills

According to Child Trends (2014), there were several broad measurements under socio- emotional skills which are self control, academic self efficacy, persistence and mastery orientation. There were also five (5) items of questionnaires representing the socio-emotional skills of the respondents for this research paper. According to the results obtained, it can be seen that most of the respondents are having a good socio-emotional skills. This is very important for all the respondents to achieve high level of socio-emotional skills because it is one of the most important skills as the graduates of plantation management industry program. The graduates later will eventually become a manager in various agricultural organizations which requires them to have a good socio-emotional skills to manage the human capital under their supervision. The average value of socio-emotional skills for the respondents is 5.6455 with the standard deviation of ± 0.4675 which reflects the average of a good skills of the respondents. The results for the questionnaire items in socio-emotional skills measurement were as in Table 4 below.

Table 4: The score level of questionnaire items for socio-emotional skills measurement

Items of questionnaires	Mean	Standard Deviation
I can be easily calm down although when I get upset during the working time.	5.7894	0.3567
I would again and again try to solve problems until it is completely solved.	5.1245	0.5692
I like to undergo undergo internhip programme because I know it is very interesting.	5.7432	0.2134
I would work harder in anything I do if to make sure of a good outcomes.	5.8972	0.5462
I am able to learn all the process and activities contained in the internship programme.	5.6732	0.6521

Job- Relevent Skills

Basically, in order to have some preparations before

undergo an internship programme, the students should have a set of basic job-relevant skills such as analytical skills, communication skills, computer skills, inter-personal skills, problem-solving skills, teamwork skills and many more. There were also five (5) related items of questions used in order to measure the job- relevant skills of the respondents and it can be seen that the average value obtained representing job-relevant skills is 4.8481 with the standard deviation of ±0.64696. Thus,it represents that the respondents is realized that they are having insuffiecient jo-relevant skills yet because their answer were in the range of unsure and agree with the statement mentioned.

Items of questionnaires	Mean	Standard Deviation
My communication skills in English and Bahasa Malaysia is very good.	3.5567	0.9941
I am very glad to become a leader in doing a group work.	5.5432	0.3479
My computer skills is very satisfying especially in all the softwares for working requirements.	4.5673	0.7864
I can make a good analysis based on derivation from any problems arise.	5.5748	0.4355
I am very competent in managing the farm and agricultural operations as it everything is under controlled.	4.9984	0.6709

Table 5: The score level of questionnaire items for job-relevant skills measurement

CONCLUSION

As a conclusion, the readiness of FPA students were measured and it can be analysed that the students were moderately ready for their internship programme based on the three-subfactors of Knowledge Management Readiness approach. Thus, based on each factors, it can be identified that the respondents from two programmes AT110 and AT220 FPA were lacking in two sub-factors of KM readiness management, which are knowledge and working skills. Specifically, it can be concluded that the motivation level for both of the programme level was very good showing that the respondents are very motivated to undergo industrial training. But, the knowledge level as a whole, just show moderately value with the score of mostly between 70-79% knowledge level percentage score. Meanwhile, the skills determinants, especially in cognitive skills and job revelant skills is just at moderate level. Thus, it would be recommended that the committe members of any organizations/ clubs within the faculty to develop some programmes that can enhance the knowledge and skills of the students before they undergo industrial training.

ACKNOWLEDGEMENTS

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