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EFFECTIVENESS OF LEARNING THROUGH VIDEO CLIPS AND LEARNING IMPROVEMENTS AMONG BUSINESS STUDENTS

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Abstract: *Learning is important for students to build their foundation of knowledge that they can utilize in their future career. Learning through videos is considered effective tools for many students, the topic was well reviewed by many researchers. This paper is going to explore the learning effectiveness of video in teaching business related topics and will also include suggestions to improve teaching using video clips. Indeed, the results show that learning through video are perceived as effective by students*.

Keywords: *Video Learning, Effectiveness, Business Students*

Introduction

Learning is important for students to build their foundation of knowledge that they can utilize in their future career. Learning through videos is considered effective tools for many students, the topic was well reviewed by many researchers. Kay (2012) found out that video is indeed good at improving student's learning. Apart from Kay, other studies also revealed that video is indeed good to support students in learning (Ljubojevic, Vaskovic, Stankovic and Vaskovic, 2014; Hsin & Cigas, 2013).

Literature Review

Ljubojevic et al. (2014) conducted a research based on inclusion of video clips into lectures and impacts on students' test results, and it seemed it did affect the result in a positive way. Based on the same study, students performed better if video clips were included in the mid-session of the lecture. In another setting by Hsin and Cigas (2013), they also found out that more students passed the course after having video clips as part of the course. López, Ferrando and Fabregat-Sanjuan (2016) also found out that students thought that video clips to be the most useful item as an efficient tool in improving learning.

Kay (2012) did a thorough research on learning effectiveness through videos. She found one that video based learning did bring benefits in understanding, learning motivation, improving study habits and better grades. In a nutshell, inclusion of video clips in learning does have positive learning outcomes.

Brame, assistant director of Center for Teaching in Vanderbilt University (2016) stipulated that in order to create effective video-based learning, she listed out a few suggestions to improve video based learning. These are her suggestions;

1. Displaying key information (signaling).
2. Segmenting the video clip into smaller pieces (segmenting)
3. Elimination of extraneous information (weeding)
4. Matching the process of both audio and visual channel to convey information (matching modality)
5. Making materials that are relevant for a particular class.

In addition, Bell and Bull (2010) also mentioned that teacher need to actively participate in controlling the video session such as pausing, asking questions, replaying key segments and assessing understanding. If teachers are not around to control of the video clip, understanding may be hampered (Bell & Bull, 2010).

In another research by Zhang, Zhou, Brigss and Nunamaker (2006), they also found out video did play a role in satisfaction level of learners towards e-learning. In a nutshell, few studies as indicated above already identified the effectiveness of learning via video, this paper is going to explore the learning effectiveness of video in teaching business related topics and will also include suggestions to improve teaching using video clips.

Research Methodologies

The researcher is conducting this research via questionnaire. In particular, Google Form will be used as the main tool in soliciting answers from students. Students can answer in anytime and anywhere as Google Form can be accessed in any Internet browser such as Chrome and Safari either via mobile devices or desktop computers. However, for this paper, the researcher is only focusing on learning effectiveness.

Respondents are different groups of business students in university or colleges, they can come from diverse business streams such as accounting, business management, entrepreneurship, human resource, marketing etc. This paper is served as an explorative research to gauge basic effectiveness of video learning and therefore the sample is still small but the researcher intended to collect more than 30 responses from students.

For the current paper, the researcher is going to analyse the learning effectiveness of video learning using descriptive statistics such as mean and percentage. The paper may be further improve in future to include inferential statistics such as comparison of learning effectiveness among different genders, programmes or even job status.

Findings

Based on the Google Form's response page, the researcher collected 53 responses from students. Refer to Table 1, respondents are mostly female with 62.26% (n=33) and 37.74% male (n=20). All respondents are young adults below 31 years old in which percentage of students below 26 years old is 98.11%. Forty four (83.02%) of respondents are currently studying bachelor degrees and while only 9 (16.98%) are studying master degrees.

Table 1: Demographics of Respondents

	Details	**Number**	**%**
Gender	Male	20	37.74
	Female	33	62.26
Age Groups	18-20	20	37.74
	21-25	32	60.38
	26-30	1	1.89
Degree Level	Bachelor	44	83.02
	Master	9	16.98

From Table 2, video clips are seemed good to explain topic/concepts to students, vast majority of students (68%, n=36) agree on this matter with mean score of 3.85. Similarly, video clips are good to help the students to understand topic/concept, again the mean score is 3.83 and 68% of students agree on video clips enhance their understanding. Learning through video also makes the topic more interesting, about 77% of students agree on this and with mean score nearly at 4 (3.96). While it seems to be the lowest mean score on video clips enriches the topic that lecturer is teaching, this variable is still near to 3.8 with nearly 70% of students agree on this matter. Last but not least, students think positively about video clips can link to relevant topics that the lecturer taught with mean score of 3.81 and again about 68% of students agree on this benefit.

Table 2: Video Learning Effectiveness

Variable	Strongly Disagree (1)		Disagree (2)		Moderate (3)		Agree (4)		Strongly Agree (5)		Std. Dev	Mean
	No.	%	No.	%	No.	%	No.	%	No.	%		
Explain A Topic/Concept	0	0.00	3	5.66	14	26.42	24	45.28	12	22.64	0.84	3.85
Understand The Topic/Concept	0	0.00	4	7.55	13	24.53	24	45.28	12	22.64	0.87	3.83
Makes The Topic/Concept More Interesting	0	0.00	3	5.66	9	16.98	28	52.83	13	24.53	0.81	3.96
Enhances/Enriches The Topic That The Lecturer Taught	0	0.00	3	5.66	13	24.53	29	54.72	8	15.09	0.77	3.79
Think About Related Issues Of The Topic That The Lecturer Taught	0	0.00	2	3.77	15	28.3	27	50.94	9	16.98	0.76	3.81

Improvements on video learning are presented in Table 3. Video clips should display key information to students, high percentage of students (about 85%) agree on this matter with mean score of 4.21. Besides, video clips should be segmented to help the students to understand topic/concept better, about 77% of students agree on this (Mean=4.04). In order to make learning more effective, students also agree that video should eliminate extra information (Agree %= 64.16, Mean=3.91). Next variables are video should use proper audio (i.e. sound) and visual (i.e. image) that are relevant to the topic, both variables' mean scores are above 4 (Audio Mean =4.04; Visual Mean =4.21). Lastly, students think positively about video clips should be displayed during middle of a class session with mean score of 3.89 and about 72% of students agree on this matter.

Table 3: Improvements On Video Learning

Variable	Strongly Disagree (1)		Disagree (2)		Moderate (3)		Agree (4)		Strongly Agree (5)		Std. Dev	Mean
	No.	%	No.	%	No.	%	No.	%	No.	%		
Display key information	0	0.00	0	0.00	8	15.09	26	49.06	19	35.85	0.69	4.21
Segmenting the video clips into small parts	1	1.89	0	0.00	11	20.75	25	47.17	16	30.19	0.83	4.04
Eliminate of extra information	0	0.00	3	5.66	16	30.19	17	32.08	17	32.08	0.93	3.91
Video should use proper audio channel (i.e. sound) that is relevant to the topic	0	0.00	1	1.89	14	26.42	20	37.74	18	33.96	0.83	4.04
Video should use proper visual channel (i.e.	0	0.00	0	0.00	10	18.87	22	41.51	21	39.62	0.74	4.21

picture or image) that is relevant to the topic												
Video should be displayed during middle of a class session	0	0.00	4	7.55	11	20.75	25	47.17	13	24.53	0.87	3.89

Conclusion and Suggestions

All in all, it's clear that students perceive the benefits of learning through video clips especially in understanding, enriches the teaching topic and even makes the topic more interesting. The overall finding is definitely consistent with previous research by López, Ferrando and Fabregat-Sanjuan (2016), Kay (2012), Ljubojevic et al. (2014) as well as Hsin & Cigas (2013) that video in teaching does improves student's learning capability.

As suggested by Brame (2016), video clips need to display key information and divided into smaller parts and this may improve learning through video clips, as shown in Table 3, students agree on these two improvements. Similarly, most students also agree that elimination of extra information in video is good. Besides, they agree that right audio and visual channels are good for video learning and video can be more effective to learn if it is played middle of the class. In addition, teacher's involvement in controlling the video will make the video teaching more meaningful as they can pause, ask questions and even replay key segments of the video clips (Bell & Bull, 2010).

However, this research did not include performance as dependent variable for measuring video learning effectiveness, perhaps this can be used in the future for measuring video learning effectiveness. And the sample size can be further increased to give more thorough views of learning effectiveness through video clips.

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OUTPUT COMPETENCY ASSESSMENT OF INTERNATIONAL STUDIES GRADUATES IN VIETNAM

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Abstract: *The curriculum of International Studies (IS) is designed to include the fields of economy, politics, culture, society... to help students accumulate multidisciplinary knowledge. Program learning outcomes (PLOs) of the training program also clearly show the requirements to be achieved after graduation. Graduates of IS can work in many different fields. And the output competencies (Ocs) of graduates in addition to meeting the output requirements is also shown through the degree of achievement of the requirements of each job position. The OCs of IS graduates is determined based on the degree of achievement of the requirements of the output standards (OSs) and corresponding job positions on the basis of self-assessment and assessment of employers. The assessment of the OCs of graduates is to determine the level of students' satisfaction after graduation for each job position, and evaluate the correlation between academic results and working capacity. This is the basis for affirming the training quality of IS with the society, adjusting the training process, and ensuring the training quality to suit the labor needs.*

Keywords: *output competencies, International Studies, job position, assessment of the output competency, working capacity.*

Introduction

When Viet Nam implements the policy of multilateralization and diversification of relations and pays attention to international integration in many fields. Regional and international economic integration is essential, but first of all, international language, cultural, political and economic barriers must be removed. In that context, International Research or IS should be considered as a basic science with an important role in training and fostering high quality human resources for the integration strategy. take the initiative. The country's international economy meets the diverse needs of society.

In some countries around the world such as the United States, European countries, Australia, Japan, China, Thailand, Korea, Indonesia, Malaysia ... IS are relatively strong. IS is a combination of many sciences to ensure students are trained with international and regional knowledge, practical skills and autonomy in work. In Vietnam, IS was officially established in 1995 at University of Social Sciences and Humanities, Viet Nam National University, Hanoi.

In the research of author Pham Quang Minh (2012), IS began to be noticed in the mid-1990s and thrived in both size and locality in the early 2000s. Opportunities and challenges of IS in Vietnam, the importance of International/ Regional Studies, the situation of IS in the country. The author affirmed the importance of bringing IS into the national university training system and pointed out the opportunities and challenges of the discipline in Vietnam. For IS, students have extensive training in area study (Europe, Asia, Africa, Australia, North America, Latin America), international relations, international research and development.

On the basis of training program and PLOs of IS, graduates of IS can work in many different types of businesses with diverse job positions. Students have the ability to work foreign affairs in central and local diplomatic agencies, international cooperation departments, unions, security and defense agencies, media, press, and representatives in Foreign agencies, international organizations, domestic and foreign non-governmental organizations, different types of businesses, joint venture agencies. IS 's students have responded well to diverse job positions with international and foreign factors.

The studies of Gloria Rogers (2003), Stephen Adam (2006) have introduced the concept of PLOs as "*a statement of what the learner is expected to know, understand or can demonstrate at the end of the time. of the learning process*", the assessment of the learning outcomes (LOs) of students is through the knowledge, skills, and attitudes that students achieve after the learning process. The author Le Duc Ngoc (2010), Nguyen Quang Viet (2017) or the Ministry of Education and Training (2015) also introduced the concept "*Output standard is the minimum requirement for knowledge, skills, attitudes and responsibilities. career tasks that learners achieve after completing the training program, are committed by training institutions to learners, socially and publicly announced together with guaranteed performance conditions*". Thus, the output standard is the commitment of the school to the society in terms of knowledge, skills, attitudes, and behaviors after completing the curriculum.

Scientists have carried out research and defined competency models comprise knowledge, skills and attitudes so that competency is establised through training on the basis of human being's natural qualities (Bloom et al., 1956). In addition, psychology divides competency into different categories including general competencies, core competencies and technical competencies (Dave, 1975; Duc, T. K., 2013), of which general and core are the most fundamental to develop technical competencies. Technical competencies refer to specific competencies in certain fields (Klein, 2007; Duc, T.K., 2017).

Through research on the professional competencies system, the core is the system of human skills. These skills are formed and developed through training and practical career / work practice. Learners through training to form and develop knowledge, form and develop intellectual skills, action skills contribute to the formation and development of personality, creating professional attitudes and values of each individual. (Tran Khanh Duc, 2013; Mulder, 2014; Volkwein, 2003; Walker, 1996).

According to Rychen (2004, p.7) "Professional competencies are the ability to meet the required job results or to do the successful job performance".

According to Winch and Foreman-Peck (2004) "Professional competencies consist of actions, knowledge, values and purposes in order to change the contexts".

Professional competencies are capacities to use all the necessary knowledge, skills, attitudes that are needed for the successful job performance and can be split into cognitive competencies and non-cognitive competencies (Erpenbeck, 1998; John Muller, 2005; Kirkpatrick, 1998; Nordenfelt L, 2008).

According to the Accreditation Board for Engineering and Technology (ABET, 2000), OCs is the degree to which expectations are met after completing a course through the identification of capabilities. This determination adopts predetermined standards, which are considered as PLOs of a discipline or curriculum.

According to the studies of Kumpikaitė A. M. R. V., Ribeiro H. N. R. (2012), Robert L. Katz, (1974), Volkwein, J.F. (2003) argued that the output capacities were the ability to absorb and apply knowledge, skills, and attitudes to problems in order to achieve the highest efficiency but at the lowest cost of resources. This depends on the ability to handle the work of each individual in different contexts or also known as working capacity.

OCs is the result of students applying knowledge and skills trained in a specific professional activity, in order to evaluate the OCs of graduates, it is necessary to evaluate the system of knowledge and skills for each career requirement of each specific job position.

In conclusion, the output competency assessment is a process of measuring, gathering evidence and making comments about a student's (competencies system) capacity at the time of graduation achieved in to what extent compared to the PLOs. For this reseach, the author assesses the graduates' OCs on the basis of building OCs frameworks and results of OCs are done through self-assessment of graduates, assessment of the employers, and student LOs.

Research Purposes

The purpose of this reseach is to evaluate the output capacities of IS graduates to determine the degree of student achievement, the correlation between employers and their working capacity graduates. In addition, the study gives recommendations for students to choose suitable jobs as well as to equip themselves with the necessary knowledge and skills during their studies at university.

Research design and methodology

Research Design

Designing a set of evaluation tools including 10 competencies criteria: NL1: General cognitive competencies; NL2: Intensive cognitive competencies; NL3: Competencies to apply professional professional knowledge; NL4: Competencies to perform professional activities; NL5: Core working competencies; NL6: Information and communication technologies competencies (ICT); NL7: Communincation and languages competencies; NL8: Self-control competencies; NL9: Responsibility competencies; NL10: Law enforcement competencies and 43 indicators are the manifestations of the capacity to survey enterprises' opinions on the level of responsiveness of the labor force of the mathematical engineering students and the self-assessment of the mathematical engineering students. The indicators are rated on a scale of 1 to 5 respectively: Weak (W), Ordinary (O), Credit (C), Distinction (D), High Distinction (HD).

Surveys of 584 IS' graduates from 4 universities (University of Social Sciences and Humanities - VNU Hanoi; University of Foreign Languages Studies - Hue University; University of Foreign Languages Studies - UD; HCMUT) and 584 employers, respectively. In Ha Noi, Ho Chi Minh City, Da Nang, Hue, there are IS' graduates have been working for 6 months after graduation (during the years 2017, 2018 and 2019).

Research Methodology

Analyze, synthesize, systematize and generalize the contents related to training programs, PLOs, OCs, compare OSs of international training programs to determine the fundamental competencies of the output capacities of IS graduates; Interview management staff, lecturers of IS, measurement and evaluation experts in education to determine the OCs framework of international graduates; Questionnaire survey with two types of questionnaires for graduates and employers to determine levels of performance manifestation.

The assessment of the OCs of IS graduates is conducted through employers' opinion surveys and self-assessment of international graduates. Analyzing the correlation between the results of capacity assessment. Using excel, SPSS, AMOS software to analyze the research results; Evaluate the reliability of the scale, assess the correlation, evaluate the criteria to determine the OCs of their international graduates.

Results and Discussions

The reliability of the scale is presented in Table

Table 1. Reliability Statistics

Cronbach's Alpha	Toolkit	Competencies (NL)									
		1	2	3	4	5	6	7	8	9	10
Value	,878	,746	,908	,834	,873	,857	,757	,880	,906	,891	,841

According to the surveys with recruiters, the reliability of the scale (Cronbach's Alpha coefficient) is 0.878 and the Cronbach's Alpha coefficient of all items is >0.6 (Trong, H., & Ngoc, C. N. M., 2008) so that all the observed items are all accepted and employed in analyzing the subsequent factor.

Job Positions of International Studies Graduates

IS graduate have the ability to analyze international events; be able to apply specialized knowledge to research issues of Vietnam's foreign policies as well as international, regional and international relations issues; capable of effectively implementing professional skills: communication skills, leadership skills, presentation skills, administrative document editing skills, event organization skills, relationship skills public, receptionist skills, negotiation skills, foreign affairs skills,... Because they have been trained in many disciplines, can work in many different fields after graduation. Survey results are shown in Table 2.

Table 2. Statistics Of Job Positions Of International Studies Graduates

TT	*Region*	*Ha Noi*		*Hue*		*Da Nang*		*Ho Chi Minh*		*Total*
	Job Positions	*Quantity*	*Rate %*	*Quantity*	*Rate %*	*Quantity*	*Rate %*	*Quantity*	*Rate %*	
1	Translator and Interpreter	5	3,0	6	10,0	9	4,2	5	3,5	4,3
2	Editors	0	0,0	2	3,3	0	0,0	1	0,7	0,5
3	Youth Union Staff	1	0,6	0	0,0	0	0,0	0	0,0	0,2
4	External Relations Officer	**20**	**11,8**	4	6,7	**26**	**12,1**	**14**	**9,9**	**11,0**
5	Teaching Officer	15	8,9	4	6,7	17	7,9	11	7,8	8,0
6	Administrative Staff	**31**	**18,3**	**14**	**23,3**	**33**	**15,4**	**36**	**25,5**	**19,5**
7	Business Staff	**20**	**11,8**	6	10,0	**30**	**14,0**	**14**	**9,9**	**12,0**
8	Research Staff	3	1,8	0	0,0	0	0,0	4	2,8	1,2
9	Communication Officer	16	9,5	1	1,7	9	4,2	8	5,7	5,8
10	Consultant Staff	4	2,4	3	5,0	9	4,2	7	5,0	3,9
11	Social Staff	1	0,6	0	0,0	0	0,0	8	5,7	1,5
12	Tourguides	15	8,9	5	8,3	23	10,7	12	8,5	9,4
13	Accountants	1	0,6	2	3,3	3	1,4	1	0,7	1,2
14	Receiptionists	**37**	**21,9**	**13**	**21,7**	**55**	**25,7**	**20**	**14,2**	**21,4**
Total		**169**	100	**214**	100	**60**	100	**141**	100	100

Graduates of IS of 3 cohosts (2013-2017, 2014-2018 and 2015-2019) of the 4 regions all have the right job position. However, there are cases where there is a small percentage is accounttants who are not in the right training discipline, accounting for the rate ranging from 0.6-3.3% (corresponding 1-3 graduates).

In terms of each institution, in Hanoi, the highest concentration of jobs is Receptionist, accounting for 21.9%; Administrative staff accounted for 18.3%, both of the External Relations

Officer and Business staff accounted for 11.8%; the remaining positions ranged from 0.6% to 8.9%, with no Editor position.

In Hue, the main job positions are Administrative staff, accounting for 23.3%; Receptionist accounts for 21.7%; the remaining positions ranged from 17% to 10%; there is no Social Staff, Youth Staff and Researchers.

In Da Nang, the main job position is Receptionist accounting for 25.7%; Administrative staff accounts for 15.4%; Business staff accounts for 14%; External Relations Officer 12.1%; other positions ranged from 1.4% to 10.7%; does not have the position of Editor, Youth Union Staff and Research Staff.

In HCM, the main positions are Administrative staff, accounting for 25.5%; Reception accounts for 14.2%; External Relations Officer and Business staff together accounted for 9.9%; other positions ranged from 0.7% to 8.5%; there is no position as a Youth staff.

The overall assessment of all 4 regions shows that the employment rate is highest in the two position which is Receptionist position, accounting for 21.4%; Administrative staff accounts for 19.5%. The lowest employment rate is the position of Youth Union Staff 0.2% and Editor 0.5%.

The working environment of graduates of IS in Vietnam has many similar characteristics. Job positions of them also have many similarities, focusing on a number of positions such as Receptionist, Administrative Officer, External Relations Officer, Business Officer.

The Results of The Output Competencies Self-Assessment of International Studies Graduates

Graduates self-assess their OCs according to 10 competencies with 43 capacity manifestations built from the content of the OCs framework of international graduates, on a scale of 1 to 5, similar to corresponding to 1: W, 2: O, 3: C, 4. D, 5. HD. Survey results are shown in Table 3.

Table 3. Output Competencies Self-Assessment Results

Competencies	**Expression**	**Result of evaluation (%)**				
		Weak	*Ordinary*	*Credit*	*Distinction*	*High Distinction*
NL1	KT1_1	0,2	0,5	43,3	54,5	1,5
	KT1_2	0,2	0,5	42,5	54,6	2,2
	KT1_3	0,5	0,5	42,6	54,3	2,1
	KT1_4	0,5	0,9	40,9	55,1	2,6
	KT1_5	0,2	0,5	44	52,9	2,4
NL2	KT2_6	-	0,5	45,2	52,9	1,4
	KT2_7	0,3	0,2	47,6	51,5	0,3
	KT2_8	0,3	0,2	45,7	52,9	0,9
	KT2_9	0,3	0,3	43,2	55,3	0,9
	KT2_10	0,2	0,3	44,5	53,8	1,2
	KT2_11	-	0,5	49,1	48,3	2,1
NL3	KN1_12	0,3	0,3	48,6	50,3	0,3
	KN1_13	0,3	0,5	45,9	51,9	1,4
	KN1_14	0,3	0,5	49,3	49,7	0,2
	KN1_15	0,5	0,3	44,7	53,9	0,5
	KN1_16	0,5	0,3	47,4	51,2	0,5
NL4	KN2_17	0,2	0,9	46,4	51,2	1,4
	KN2_18	0,2	0,5	41,3	57,2	0,9
	KN2_19	0,2	0,9	42,6	55,3	1,0
	KN2_20	-	1,0	44,5	53,1	1,4
	KN2_21	-	0,9	41,6	55,7	1,9
	KN2_22	-	1,0	45,9	50,5	2,6

NL5	KN3_23	0,3	2,4	38,5	53,4	5,3
	KN3_24	0,2	2,4	44	49	4,5
	KN3_25	0,5	2,4	44,5	47,3	5,3
	KN3_26	0,7	2,1	44,2	47,6	5,5
	KN3_27	0,5	2,7	44,3	48,5	3,9
NL6	KN4_28	0,2	2,9	46,7	45,9	4,3
	KN4_29	0,2	2,2	46,1	48,5	3,1
	KN4_30	0,2	1,4	43	52,4	3,1
NL7	KN5_31	0,3	1,2	47,4	49	2,1
	KN5_32	0,3	0,7	39,6	55,3	4,1
	KN5_33	1,4	4,5	43	44	7,2
	KN5_34	0,3	1	46,4	46,7	5,5
NL8	TD1_35	0,3	0,7	38,7	56	4,3
	TD1_36	0,9	0,3	44,9	49,7	4,3
	TD1_37	0,5	0,3	43,5	49,1	6,5
NL9	TD2_38	0,3	0,7	43,7	52,2	3,1
	TD2_39	0,3	0,7	46,1	50,7	2,2
	TD2_40	0,7	0,3	45,5	50,3	3,1
NL10	TD3_41	0,5	2,1	37	55,1	5,3
	TD3_42	0,5	3,1	43,7	44,7	8
	TD3_43	0,7	3,4	36,3	53,3	6,3
	Average	**0,4**	**1,2**	**44,0**	**51,5**	**2,9**

(Coded indicators: KT: Knowledge; KN: Skill; TD: Attitude)

The results showed that the percentage of graduates who self-assessed the manifestations of competencies: W is 0.4%; O is 1.2%; C 44%, D is 51.5% and HD is 2.9%.

The Results of The Employers' Assessment of The Output Competencies of International Studies Graduates

Employers rated output of IS graduates is shown in Table 4.

Competencies	**Expression**	**Result of evaluation (%)**				
		Weak	*Ordinary*	*Credit*	*Distinction*	*High Distinction*
NL1	KT1_1	0,3	0,3	48,6	50,3	0,3
	KT1_2	0,3	0,5	45,9	51,9	1,4
	KT1_3	0,3	0,5	49,3	49,7	0,2
	KT1_4	0,5	0,3	44,7	53,9	0,5
	KT1_5	0,5	0,3	46,4	51,2	0,5
NL2	KT2_6	-	0,5	45,2	52,9	1,4
	KT2_7	0,3	0,2	47,6	51,5	0,3
	KT2_8	0,3	0,2	45,7	52,9	0,9
	KT2_9	0,3	0,3	43,2	55,3	0,9
	KT2_10	0,2	0,3	44,5	53,8	1,2
	KT2_11	-	4,1	36,6	54,8	4,5
NL3	KN1_12	-	1,4	42,8	50,5	5,3
	KN1_13	0,2	6,7	39	47,3	6,8
	KN1_14	0,9	7	34,6	47,1	10,4
	KN1_15	-	2,7	44,5	46,4	6,3
	KN1_16	1,4	1,2	29,3	57,5	10,6
NL4	KN2_17	-	1,4	40,4	54,5	3,8
	KN2_18	-	0,9	44	50,9	4,3
	KN2_19	-	1,5	40,8	53,8	3,9
	KN2_20	-	0,9	38,7	56,2	4,3
	KN2_21	-	0,5	40,8	54,8	3,9
	KN2_22	-	3,4	37,7	55,1	3,8

NL5	KN3_23	-	0,7	40,1	51	8,2
	KN3_24	-	0,3	39,9	55	4,8
	KN3_25	-	0,5	39,9	55	4,6
	KN3_26	-	0,7	38,9	57,4	3,1
	KN3_27	-	1,2	38,4	56,2	4,3
NL6	KN4_28	-	1,7	40,2	53,9	4,1
	KN4_29	-	1,7	45,9	48,6	3,8
	KN4_30	-	1,9	43,8	49,7	4,6
NL7	KN5_31	0,2	0,2	36,6	58,6	4,5
	KN5_32	-	0,3	36,5	58,2	5
	KN5_33	0,5	1,4	37,2	54,8	6,2
	KN5_34	-	0,3	36	60,3	3,4
NL8	TD1_35	4,8	14,6	33,2	28,1	19,3
	TD1_36	5,1	18	30	27,9	19
	TD1_37	1,4	15,6	30,8	33,9	18,3
NL9	TD2_38	3,8	15,8	31,5	30,3	18,7
	TD2_39	3,9	16,6	31,7	28,1	19,7
	TD2_40	2,7	14,2	32,5	32,4	18,2
NL10	TD3_41	3,8	14,7	28,8	30,1	22,6
	TD3_42	2,2	15,1	26,4	32,5	23,8
	TD3_43	6,2	10,4	25,2	32,5	25,7
	Trung bình	**0,9**	**4,2**	**38,9**	**48,5**	**7,4**

The average results of employers assessing OCs showed that the highest rate was D 48.5%; C 38.9%; HD 7.4%; O 4.2% and W 0.9%.

The results of the employers' OCs assessment are different from those of graduates, the manifestations evaluated by the graduates have the similarity rates of the highest and lowest levels. Employers rated NL8: Self-control competencies; NL9: Responsibility competencies; NL10: Law enforcement competencies have a rate different from the remaining competencies.

Compare the Average of Output Competencies' Graduates by Job Position

Comparing the OCs of job positions with the number of graduates from 20 staffs or more shows that the graduates who self-rated in the Translator and Interpreter have the highest OCs; the second is the Teaching Officer and Receptionist; third is the positions of Business Staff, Communication Officer, Consultant; the fourth is External Relations Officer, Tourguides, and the last is the Administration Staff.

The most appreciated employers is the position of Communication Officer; the second is the Consultant, the third is the External Relations Officer, the Guide, the Receptionist; the fourth is the Instructor, the Business Officer, the fifth is the Administrative Officer, the lowest is the Translator and Interpreter.

Table 5. Compare the Average of Output Competencies' Graduates by Job Position

Average of output competencies	*Job position*														*Average*
	Translator and Interpreter	Editors	Youth Union Staff	External Relations Officer	Teaching Officer	Administrative Staff	Business Staff	Research Staff	Communication Officer	Consultant Staff	Social Staff	Tourguides	Accountants	Receiptionists	
Assessment of employers (a)	3,51	3,46	3,35	3,59	3,57	3,52	3,57	3,66	3,63	3,60	3,67	3,59	3,68	3,59	3,58
Self-assessment of graduates (b)	3,68	3,69	3,56	3,55	3,58	3,50	3,56	3,48	3,56	3,56	3,50	3,55	3,62	3,58	3,56
Difference (a)-(b)	- ***0,17***	- ***0,23***	- ***0,21***	0,04	- ***0,01***	0,02	0,01	0,18	0,07	0,04	0,17	0,04	0,06	0,01	0,02
Self-assessment of graduates (Number of graduates)															%
Ordinary	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0,51
Credit	4	0	0	20	10	39	20	3	7	6	2	16	2	28	26,88
Distinction	21	3	1	44	37	74	50	4	25	17	7	37	5	97	72,26
High Distinction	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0,34
Assessment of employers (Number of graduates)															%
Ordinary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Credit	12	1	1	21	11	39	27	0	11	7	1	21	1	37	32,53
Distinction	13	2	0	41	36	73	42	7	23	16	8	33	5	85	65,75
High Distinction	0	0	0	2	0	2	1	0	0	0	0	1	1	3	1,71

From the results in Table 5, it shows that, the OCs of the position of Translator and Interpreter, Editor, Youth Union Officer, Teaching Officer is assessed by employers lower than self-assessed graduates. the level ranged from -0.23 to -0.01 points. The remaining positions have a higher rating of graduates than employers, ranging from 0.01 to 0.18. Although the assessment results are different but not too large in each job position, the average ranges from 0.23 to 0.18.

Graduates who self-rated as HD accounted for 72.26%, higher than employers (65.76%), the D self-assessed by graduates accounted for 0.34%, lower than employers (1.17). %), the good rate of self-assessed graduates accounts for 26.88%, lower than that of employers (32.53%) and graduates self-assessed the Ordinary rate is 0.51%, employers do not have assess the output conpetencies of the Ordinary.

Proving that the assessment of OCs by job position have different between the two assessment subjects. Graduates rated the position of Translator and Interpreter as the highest, while employers rated the position the lowest. The number of self-assessed graduates is also different from employers' assessment of each different job position.

Comparing results of assessment of each pair of competencies against 10 competencies of two groups of subjects is shown in Table 6.

Table 6. Compare the Results of Graduates Output Competencies Self-Assessment with That Of Employers

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SV_NL1 - DN_NL1	,05959	,47843	,01980	,02071	,09847	3,010	583	,003
Pair 2	SV_NL2 - DN_NL2	-,01295	,13531	,00560	-,02394	-,00195	-2,312	583	,021
Pair 3	SV_NL3 - DN_NL3	-,09384	,68362	,02829	-,14940	-,03828	-3,317	583	,001
Pair 4	SV_NL4 - DN_NL4	-,04817	,58585	,02424	-,09578	-,00055	-1,987	583	,047
Pair 5	SV_NL5 - DN_NL5	-,08562	,67083	,02776	-,14014	-,03110	-3,084	583	,002
Pair 6	**SV_NL6 - DN_NL6**	**-,03546**	**,69184**	**,02863**	**-,09169**	**,02077**	**-1,239**	**583**	**,216**
Pair 7	SV_NL7 - DN_NL7	-,11173	,67677	,02800	-,16673	-,05673	-3,990	583	,000
Pair 8	SV_NL8 - DN_NL8	,16082	1,11668	,04621	,07007	,25158	3,480	583	,001
Pair 9	SV_NL9 - DN_NL9	,09966	1,09301	,04523	,01083	,18849	2,203	583	,028
Pair 10	**SV_NL10 - DN_NL10**	**,01896**	**1,13854**	**,04711**	**-,07358**	**,11149**	**,402**	**583**	**,688**

With the assumption that H0 is the average value of SVNL=DNNL, the comparison results show that from NL2 to NL7 the Mean value of SV<DN, self-evaluate comptencies of graduates is lower than that of employers, fluctuate from -0.9384 to -0.01295. The NL1, NL8, NL9, NL10 have the Mean value of SV > DN, and graduates evaluate higher than employers, fluctuate from 0.05959 to 0.16082.

According to Table 6, the value of Sig. <0.05 for pairs of NL1, NL2, NL3, NL4, NL5, NL7, NL8, NL9, it means that the OCs assessed by employers is different from produced by graduates. evaluate. The value Sig. of NL6, NL10> 0.05 so non difference between the graduates student's assessment and the employers. From this result, we analyze the next index to evaluate the OCs of graduates.

Discuss the Output Competencies of International Studies Graduates

Compare the Output Competencies with Learning Outcomes of International Studies Graduates

According the results of self-assessment and employers' OCs assessments compared with the LOs of IS graduates.

Table 7. Paired-Samples T Test Between the Output Competencies of International Studies Graduates and Learning Outcomes

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	QuydoiXLHT[1] - QDSVXLNL	-,52911	,56712	,02347	-,57520	-,48302	-22,547	583	,000
Pair 2	QuydoiXLHT - QDDNXLNL	-,50514	,67035	,02774	-,55962	-,45066	-18,210	583	,000

QuydoiXLHT: Conversing of study cumulative GPA according to Regulation 43/2007/QD-BGDDT August 15th, 2007 the Minister of Education and Training
QDSVXLNL: Conversing of the results of self-assessment output of graduates
QDDNXLNL: Converting the result of employers assess the output competencies of graduates

For the results assessed by employers and self-assessed by graduates with Sig. = 0.000 <0.05 so there is a difference between the two groups. Specifically, the results show that the average value of the LOs < OCs assessed by employers and self-assessed by graduates.

Cross-comparison of the OCs self-assessment results of graduates, the employers assess and the LOs show that one graduate has average' learning outcome which the employers assess competency outcomes are rated HD. There are 04 O graduates, but employers rate the OCs with D, details are shown in Table 8.

Table 8. Cross-Comparison of Output Capacities and Graduation Ratings of International Studies Graduates

ĐVT: SVTN

Ratings of learning outcomes			Self-assessed by graduates				Total
			HD	D	C	O	
O	Assess of employers	C		0	3	3	6
		D		4	7	0	11
		HD		1	0	0	1
	Total			5	10	3	18
C	Assess of employers	C		97	60		157
		D		204	79		283
		HD		6	1		7
	Total			307	140		447
D	Assess of employers	C	1	18	5		24
		D	1	81	2		84
		HD	0	2	0		2
	Total		2	101	7		110
HD	Assess of employers	C		2			2
		D		7			7
	Total			9			9
Total	Assess of employers	C	1	117	68	3	189
		D	1	296	88	0	385
		HD	0	9	1	0	10
	Total		2	422	157	3	584

The two-level difference between the output results compared to the LOs:

- There is 01 O graduate student rated HD by the employer, this is the receptionist position at a resort in Danang. Graduates themselves also evaluate their output ability as HD. After verification at the employer, it shows that the graduate has good working capacity and satisfies the requirements at the job position. Therefore, the output results assessed by the employer do not depend on the LOs of this graduate. In addition, the graduate themselves are also confident in their own abilities even though their LOs are not good. However, the assessment rate of the high difference between the OCs and the LOs only accounts for 0.17% of the total evaluated graduates.

- There are 04 O graduates who are rated as D by employers and self-assessment is D. Including 02 graduates from the University of Education - HCM (01 graduate working as a receptionist and 01 graduate working as an administrative officer) and 02 graduates from UFLs - UDN (with 01 graduate working as a receptionist and 01 as a media officer). These graduates are highly appreciated for their ability to perform professional activities, their ability to communicate, and other competencies are also highly appreciated.

- There are 10 graduates with O self-assessment, employers rated 7 D and 3 C. Only 03 graduates with O self-assessment, accounting for 0.51%.

The one-level difference between the output results compared to the LOs:

- With LOs are C: self-assessments and employer rated D accounting for 34.9% (204 Gs); assess of employers are D and self-assessments are C accounting for 16.6% (97 Gs); self-assessments are D and assess of employers are 6 Gs (1,0%); self-assessments are C, assess of employers are D 79 Gs (13.5%),

- With D LOs: self-assessed C is 7 (1.2%), HD 2 (0.34%); assess of employers 18 (3.08%), HD is 2 (0.34%).

- With HD LOs: self-assessment HD 2 (0.34%); self-assessment and employers rated D 296 (50.7%); self-assessment D, employers rated C 117 (20%); self-assessment C, employers rated D at 88 (15%), self-assessment C, employers rated C 68 (11.6%).

The OCs assessment results are similar to the LOs:

Graduates of C level: self-assessment and employers rated the Cresdit as 60 accounting for 10.27%; Graduates with D self-assessment and D students rated as D as 81, accounting for 13.86%. the similarities accounted for 24.13%; the results were not similar, accounting for 75.87%. This proves that the OCs assessment does not depend much on LOs. Self-assessment and employers evaluate the graduates' output higher than the LOs assessed by lecturers.

KMO's Test and Exploratory Factor Analysis (EFA)

In order for conducting the exploratory factor analysis, data collected must meet the conditions from KMO Test and Barlett's Test of sphericity. Bartlett's Test is used to check the hypothesis H0 that there is no correlation in variables in the whole and the KMO coefficient (KMO measure of sampling adequacy) is employed to check if the sample size is suitable for the component analysis. According to Trong, H., and Ngoc, C. N. M., (2008), Sig. of Bartlett's Test <0,05 allows for rejecting the hyphothesis H0 while Sig 0.5<KMO<1 indicates that proceeding the component analysis is proper.

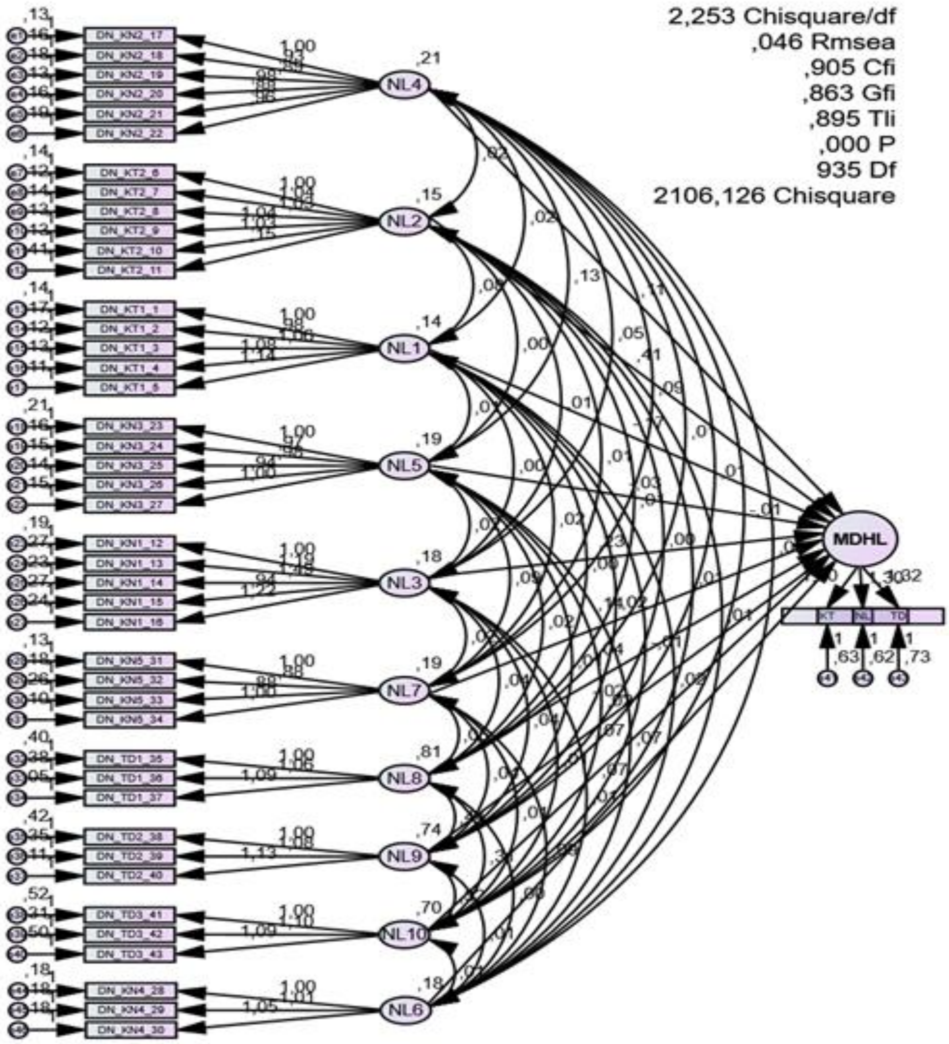
Table 9. Results Statistics of KMO Test for Assessing Professional Competencies

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,886
Bartlett's Test of Sphericity	Approx. Chi-Square	12687,781
	df	903
	Sig.	,000

According to the results, the KMO measure of sampling adequacy reaches 0,866 (>0,5) and Sig. of Bartlett's Test 0,000 (<0,5). This proves that there is correlations within the competencies and it is totally suitable for the factor analysis.

The suitability test of the model assessing the professional competencies of IS graduates: As a result of testing the suitability of the model assessing the professional competencies of IS graduates, the satisfaction level of recruiters shows the idicators CMIN/df=2,253<3;CFI=0,905>0,9; GFI=0,863>0,8; TLI=0,895<0,9; p=0,00; RMSEA=0,046<0.05 are all good and acceptable (Hu&Bentler (1999) và Hair et al. (2010)). Thus this model is considered to be proper for doing research and evaluating the professional competencies of IS graduates.



(MDHL: The level of satisfaction)

Figure 1. The Model Assessing the Output Competencies of International Studies Graduates

Through the Confirmatory Factor Analysis (CFA), all the indicators are in the threshold demonstrating the good correlation between the competency groups.

The level of satisfaction of employers with the OCs of IS graduates is assessed by 3 groups of factors, satisfaction in applying knowledge, skills and attitudes in work.

Table 10. The Level of Satisfaction of Employers with The Output Competencies of International Studies Graduates

Rating level	*The level of satisfaction (%)*			*Average (%)*
	Appropriate knowledge	Proficient skills	Good attitude	
Totally disagreeing	0,3			0,1
Disagreeing	3,8	9,9	8,2	7,3
Partially agreeing	27,9	32,5	23,5	28,0
Agreeing	44,5	44,0	41,3	43,3
Totally agreeing	23,5	13,5	27,1	21,3

According to the results in Table 10, the proportion of partial agreeing accounts for 28%, the proportion of agreeing with 43.3% and totally agreeing is 21.3%. There are still many employers who do not agree with the knowledge, skills and attitudes of IS graduates. Due to the fact that the survey shows that there are many graduates working in positions that do not fully utilize the professional knowledge of the IS training program, most graduates work in the position of Administrative ministries, Business officers are job positions that combine the knowledge of the IS training program and the professional knowledge in the business. In addition, there are some graduates who work temporarily before looking for another job, only working to experience, so they do not have a good working attitude, and have not satisfied employers.

In summary, the results of the competencies assessment are correlated with the LOs, correlated with the satisfaction level of employers. In which there are some negative correlation capacities, one weak correlation capacity, the remaining capacities are positively correlated with the LOs of IS graduates.

Conclusion

Research to compare OSs of IS training programs applied to enrollment corhost 2013-2017, 2014-2018 and 2015-2019. Basically, the OSs have the same content, with 3 main contents: Knowledge, Skills, and Attitudes. The LOs have in common is the requirement that graduates have to acquire knowledge of economics, politics, culture and society related to Vietnam and the world; Specialist knowledge should achieve international relations, about world history and culture-civilization, about economics and international law, on continents, about foreign relations of Vietnam, about the profession. management and external communication; requirements on skills to apply international knowledge expertise to work, to achieve general skills in ICT, foreign languages, and soft skills; meeting the requirements of personal ethics, professional ethics and social ethics.

From the OSs, on the basis of consultation with experts in IS, the author has built the competency framework of international graduates with 10 competencies with 43 manifestations of IS graduates. The self-assessment of the OSs of graduates and employers' assessment showed that IS graduates study to work in 14 popular job positions. In which, the position with the highest number is receptionist 21.4%; administrative staff 19.5%.

The OCs by each job position shows that the results range from 3.5 to 3.69, equivalent to the conversion rate classified as Good. Demonstrates that the number of graduates who self-assess themselves at 4 and 5 is relatively higher than the rest.

The OCs of international graduates are determined by demonstrating competencies on the basis of standard outcome requirements and assessed by themselves and by employers where graduates are working. The assessment is made objectively among the subjects, there is a difference between the capacity results of the male and female group. The results of the OCs rated by employers higher than self-assessed graduates.

The assessment of the OCs is the process of implementing to confirm the learner's competency with the published OSs in order to create conditions for learners to self-identify, confidently find jobs and self-employment. Evaluation results allow lecturers to make conclusions about whether or not learners have any competencies. Ensure that these competencies must be included in the matrix of forming the OCs of the learner to meet the OSs of the training program. This study has identified the competency of IS, learners are able to work in similar positions. The result of OCs affect students' performance after graduation. Therefore, it is necessary to carry out capacity assessment activities to promptly adjust the training program to ensure students with the necessary competencies after graduation.

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Abstract: *The changing educational landscape of Philippine education in the past decade poses challenges to the implementers of the curriculum innovations – the teachers. Consequently, this has put more pressure on the teacher education institutions (TEIs) to produce quantity of quality teachers. From this context, this paper examines the technological, pedagogical, and content knowledge (TPACK) confidence level of pre-service teachers in selected Philippine teacher education institutions. The TPACK Model has been a very useful framework for academic stakeholders to understand and measure the level of technology integration in teaching and learning. Using a 64-item self-diagnostic questionnaire designed to measure the dimensions of TPACK in terms of learning experience and practice, and assessing the responses of 187 graduating pre-service teachers from selected Philippine TEIs, the data suggest that the pre-service teachers are fairly confident with the learning experience they get from the TEIs and that by using these experiences they frequently demonstrate the acceptable teacher competency and standards. Furthermore, the levels of TPACK confidence of the secondary and elementary pre-service teachers significantly differ from each other such that the former are more confident with their learning experience and practice. Data also show that there is a significant relationship between the quality of learning experience and the ability of the pre-service teachers to demonstrate the core competencies of TPACK. Hence, teacher education institutions must consider innovating their curriculum through training, subject-focused pedagogical modeling, and subject-specific technologies.*

Keywords: *technological pedagogical content knowledge, pre-service teachers, Philippines*

Introduction

The recent curricular changes in the Philippine basic education, brought about by K to 12 Reform, ASEAN Integration, globalization, and demand of the 21st-century learners, call for competent, efficient, and effective teachers. Moreover, today's young generation of teachers, despite being digital natives themselves, are challenged with the use of technology (Urbani, Roshandel, Michaels, & Truesdell, 2017). As articulated in the Philippine Professional Standards for teachers (Department of Education Order No. 42, s. 2017), it is expected that a beginning teacher should have a strong understanding of the subject in terms of content knowledge and pedagogy while demonstrating skills in positive use of the information communications technology (ICT) to facilitate the teaching and learning process.

In an ICT rich classroom with a diversity of 21st-century learners, the beginning teachers find teaching as an overwhelming task and, more often than not, lead to the feeling of ineffectiveness (Scherer, 2012). It is also pointed out in several studies that a balanced combination of the technological, pedagogical, and content knowledge of the pre-service teachers had not been attained (Tanak, 2018; Ogan-Bekiroglu & Karabuz, 2017; Cacho, 2014; Papanikolaou, Gouli, & Makri, 2013; Hsu, 2012, Messina & Tabone, 2012; Cox, 2008) contributing to difficulties in dealing with the challenges of the teaching and learning process.

The success of these beginning teachers in the teaching profession is a reflection of the kind of teacher training provided by their respective teacher education institutions (TEIs). Hence, it is imperative for TEIs to establish a scheme of monitoring and evaluating not just their outputs (graduates) but also the processes (learning experience and internship/practice) that have been included in the teacher training (Philips, Koehler, Rosenberg, & Zunica, 2017). One such measure that gauges the effectiveness of the processes is the technological, pedagogical, and content knowledge (TPACK) framework.

Based on the stated premises, the study aims to assess the technological, pedagogical, and content knowledge (TPACK) confidence of the pre-service teachers from selected Philippine teacher education institutions. Specifically, it aims to:

1. determine the profile of the pre-service teachers;
2. determine the pre-service teachers' TPACK confidence level in terms of the learning experience and extent of practice;
3. compare the elementary and secondary pre-service teachers' TPACK confidence levels;
4. correlate the pre-service teachers' learning experience and extent of the practice in relation to TPACK.

The study used a descriptive (comparative, correlational) design. One hundred eighty-seven graduating pre-service teachers were randomly selected from teacher education institutions in Batangas City, Batangas, Philippines. A 64-item self-diagnostic questionnaire was construed based on the TPACK survey developed by Schmidt, et a. (2009) to measure the TPACK confidence level of the pre-service teachers in terms of the learning experience and practice, and was administered in the last semester of their teacher training. The data gathered were analyzed using frequency count, percentage, weighted mean, independent samples t-test, and Pearson's coefficient of correlation. Interviews with selected key informants were used to get more data on specific dimensions of TPACK.

Literature Review

The TPACK Framework

The technological pedagogical and content knowledge (TPACK) model has been a very useful framework for academic stakeholders to understand and measure the level of technology integration in teaching and learning (Koehler & Mishra, 2009). Years following its development, many educators and leaders proposed ways on how to measure the dimensions of TPACK using self-diagnostic questionnaires (Cacho, 2014; Chai, Koh, & Tsai, 2011; Baran, Chuang, & Thompson, 2011; Archambault & Barnett, 2010; Schmidt, et al., 2009; Graham, et al., 2009), interviews and focused discussions, observations, and/or documentary evidence (Hsu, 2012; Koh & Divaharan, 2011; Jang & Chen, 2010; Figg & Jaipal, 2009). However, many argued that the delineation among the seven domains is not clear (Archambault & Barnett, 2010; Graham, et al., 2009); hence, more empirical-based studies are needed to validate the constructs for TPACK.

The following are the seven domains of TPACK model (Koehler, 2012).

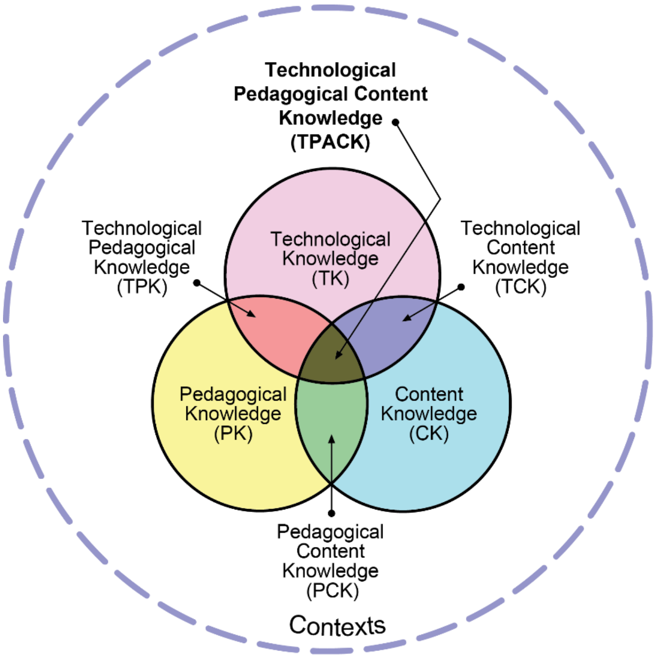

Figure 1: Dimensions of the TPACK Model

Source: tpack.org

Content knowledge refers to the knowledge about the subject matter to be learned or taught. Pedagogical knowledge refers to deep knowledge about the processes and practices or methods of teaching and learning. Technology knowledge refers to ways of thinking and applying technology, tools, and resources. Pedagogical content knowledge refers to the use of applicable pedagogy in teaching specific content. Technological content knowledge refers to the influence and restrictions of technology and content on each other. Technological pedagogical knowledge refers to the understanding that positive change can occur when a particular technology is used in teaching and learning. Technological pedagogical content knowledge is the seamless interplay of all three concepts (Koehler & Mishra, 2009).

Teacher Preparation and TPACK

In many studies concerning teacher preparation and technology integration, it was evident that the pre-service teachers' expertise had significantly improved when proper TPACK implementation was carried out and modeled (Lehtinen, Nieminen, & Viiri, 2016; Koh & Divaharan, 2011; Cox, 2008). Accordingly, teacher education institutions should focus not only in technology used but also on the learning outcomes that support technology including pre-service teachers' self-confidence and efficacy (Bekiroglu & Karabuz, 2017), and the formation of structures, habits, and expertise in the teacher education institutions that are conducive for developing TPACK (Voogt & McKenny, 2015)

Discussions and Conclusion

Profile of the Respondents

Table 1 shows the profile of the pre-service teacher respondents. Majority of the pre-service teachers were female (n = 166, 88.8%) with average age of 21.5 years old (SD = 2.33 years old). Moreover, majority of respondents were elementary pre-service teachers (n = 127, 67.9%) from the local government-operated college (n = 90, 48.1%) and attending on a fulltime basis (n = 167, 89.3%) with complete academic units (n = 167, 89.3%).

Table 1. Description of the Pre-service Teacher Respondents

Profile Variables	frequency	%
Type of TEI		
Autonomous Private University	27	14.4
Local College (Government)	90	48.1
Private College	70	37.4
Age		
16-19 years old	27	14.4
20-23 years old	139	74.3
24-27 years old	16	8.6
28 years old and above	5	2.7
Mean (SD)	21.5 years old (2.33 years)	
Sex		
Male	21	11.2
Female	166	88.8
Program		
Elementary	127	67.9
Secondary	60	32.1
Academic Status		
Regular Student (w/ complete academic units)	167	89.3
Irregular Student (w/ incomplete academic units)	20	10.7
Student Type		
Full-time Student	167	89.3
Working Student	20	10.7
Total	187	100.0

Pre-service Teachers' Learning Experience and Practice of TPACK

Table 2 shows the TPACK experience and practice of the pre-service teachers from the selected teacher education institutions. It can be gleaned from the table that the pre-service teachers were fairly confident (M = 3.97, n = 187) with their learning experience. This suggests that the learning experience and opportunity in their teacher training had been enough for them to understand the proper integration and interplay of the TPACK in their respective disciplines. Accordingly, the pre-service teachers were able to frequently practice and apply TPACK in their internship (M = 3.92, n = 187). Having the right understanding of the TPACK in their teacher training increases the pre-service teachers' TPACK confidence throughout their teacher training; thus, the pre-service teachers will be able to correctly and effectively demonstrate the acceptable teacher competencies not only in their internship but also in the in-service (Lehtinen, Nieminen, & Viiri, 2016; Karatas, Tunc, Yilmaz, & Karaci, 2016).

Table 2. Pre-service Teachers' TPACK Confidence Level

TPACK Dimensions	Learning Experience		Practice	
	Mean	Interpretation	Mean	Interpretation
Technological Knowledge	3.71	Fairly confident	3.70	Frequently
Content Knowledge	3.94	Fairly confident	4.00	Frequently
Pedagogical Knowledge	4.03	Fairly confident	3.92	Frequently
Pedagogical Content Knowledge	4.02	Fairly confident	3.99	Frequently
Technological Content Knowledge	3.95	Fairly confident	4.06	Frequently
Technological Pedagogical Knowledge	4.01	Fairly confident	3.67	Frequently
Technological Pedagogical Content Knowledge	3.97	Fairly confident	3.92	Frequently

Note: 1.00-1.49, not confident at all/not at all; 1.50-2.49, slightly confident/rarely; 2.50-3.49, somewhat confident/occasionally; 3.50-4.49, fairly confident/frequently; 4.50-5.00, very confident/almost always

Results also show that the pre-service teachers were particularly confident with their pedagogical knowledge (M = 4.03, n = 187), pedagogical content knowledge (M = 4.02, n = 187), and technological pedagogical knowledge (M = 4.01, n = 187). However, the learning experience along these dimensions did not translate much into practice. It can be noted that the content knowledge (M = 4.00, n = 187) and technological content knowledge (M = 4.06, n = 187) were more frequently practiced than the other dimensions of TPACK. This gap implies that although teachers possessed the technological, pedagogical, and content knowledge, they have not equally and functionally combined the knowledge for teaching (Handal, et al., 2013; Hofer & Harris, 2012; Doering, et al., 2009).

Comparison of the Pre-service Teachers' TPACK Learning Experience and Practice

It can be gleaned from Table 3 that there is a significant difference in the TPACK learning experience of secondary and elementary pre-service teachers, $t(185) = 4.74$, $p < 0.001$. The secondary pre-service teachers (M = 4.28, SD = 0.63) were more confident than the elementary pre-service teachers (M = 3.82, SD = 0.60) as regards their learning experiences related to TPACK. The findings indicated the difference in the kind of learning experiences the two groups are receiving.

Table 3. Comparison of the Pre-service Teachers' TPACK Learning Experience

TPACK Dimensions	Program	Mean	SD	t-value	df	p-value
Technological Knowledge	Secondary	4.11	0.64	4.57	185	<0.001
	Elementary	3.52	0.60			
Content Knowledge	Secondary	4.29	0.54	6.08	185	<0.001
	Elementary	3.77	0.55			
Pedagogical Knowledge	Secondary	4.33	0.50	5.39	185	<0.001
	Elementary	3.88	0.55			
Pedagogical Content Knowledge	Secondary	4.31	0.61	4.42	185	<0.001
	Elementary	3.87	0.63			
Technological Content Knowledge	Secondary	4.33	0.54	6.15	185	<0.001
	Elementary	3.77	0.60			
Technological Pedagogical Knowledge	Secondary	4.32	0.56	5.18	185	<0.001
	Elementary	3.85	0.58			
Technological Pedagogical Content Knowledge	Secondary	4.28	0.63	4.74	185	<0.001
	Elementary	3.82	0.60			

Note: Independent variable – Program of Study (secondary pre-service program, elementary pre-service program.); t-value is significant at 5%

It should be also noted that secondary pre-service teachers significantly differ with the elementary pre-service teachers in the other dimensions of TPACK measured in terms of the related learning experiences. In the interviews with the pre-service teachers, it was revealed that the differences noted in the TPACK dimensions were attributed to the availability of resources and teaching models for TPACK with respect to their program of study. More TPACK related learning experiences and resources were available for secondary pre-service teachers than the elementary pre-service teachers.

Table 4. Comparison of the Pre-service Teachers' TPACK Practice

TPACK Dimensions	Program	Mean	SD	t-value	df	p-value
Technological Knowledge	Secondary	4.02	0.59	4.57	185	<0.001
	Elementary	3.57	0.64			
Content Knowledge	Secondary	4.23	0.53	3.52	185	0.001
	Elementary	3.91	0.61			
Pedagogical Knowledge	Secondary	4.32	0.50	6.39	185	<0.001
	Elementary	3.72	0.63			
Pedagogical Content Knowledge	Secondary	4.34	0.46	5.87	185	<0.001
	Elementary	3.82	0.60			
Technological Content Knowledge	Secondary	4.39	0.52	5.22	185	<0.001
	Elementary	3.91	0.60			
Technological Pedagogical Knowledge	Secondary	3.83	0.55	2.55	185	0.011
	Elementary	3.60	0.59			
Technological Pedagogical Content Knowledge	Secondary	4.31	0.48	6.38	185	<0.001
	Elementary	3.74	0.60			

Note: Independent variable – Program of Study (secondary pre-service program, elementary pre-service program); t-value is significant at 5%

It can be noted in Table 4 that there is a significant difference in the TPACK practice of the secondary and elementary pre-service teachers, $t(185) = 6.38$, $p < 0.001$. The secondary pre-service teachers ($M = 4.31$, $SD = 0.48$) practiced TPACK more frequently in their daily teaching during internship than the elementary pre-service teachers ($M = 3.74$, $SD = 0.60$). Moreover, there is also a significant difference in the secondary and elementary pre-service teachers' practice of other TPACK dimensions. An interview with the pre-service teachers revealed that the TPACK practice had been influenced by their previous experiences in the courses that they had taken in their teacher education institutions and further strengthened through field experience in the internship. The results emphasized the important roles of both the teacher education institutions and the laboratory or cooperating schools in honing and developing the TPACK practice of pre-service teachers. More specifically, the learning opportunities offered by these two important stakeholders should complement each other to clarify inaccurate preconceptions as well as the practice of the pre-service teachers (Nordin, Davis & Tengku Ariffin, 2013).

Correlation between Pre-service Teachers' TPACK Learning Experience and Practice

Table 5 shows that there is a significant, positive relationship between the pre-service teachers' TPACK learning experience and extent of the practice, $r(185) = 0.69$, $p < 0.001$. The results affirmed the fact that the pre-service teachers in their final year in the teacher education institutions showed significant improvements and preparedness due to experiences that they gained in the different education courses and during their internship or fieldwork (Khalid, Karim, & Husnin, 2018).

Table 5. Correlation Factors between TPACK Learning Experience and Practice

TPACK Dimensions	r	p-value
Technological Knowledge	0.55	<0.001
Content Knowledge	0.58	<0.001
Pedagogical Knowledge	0.66	<0.001
Pedagogical Content Knowledge	0.53	<0.001
Technological Content Knowledge	0.60	<0.001
Technological Pedagogical Knowledge	0.44	<0.001
Technological Pedagogical Content Knowledge	0.69	<0.001

Note: Pearson's r is significant at 5%

Indirectly speaking, the respondents' teacher education institutions have provided them with quality learning experiences that enriched their knowledge and skills for adopting and integrating technology effectively. However, it is best for pre-service teachers to exert purposeful efforts to reflect on and evaluate their TPACK confidence as regards to technology integration (Cacho, 2014; Mims, 2004).

Implications of the Study

Due to the significant differences noted in the pre-service teachers' TPACK learning experience and practice as well as the significant positive relationship between these important aspects of teacher education training, the teacher education institution should further strive to improve their teacher education curricula by including trainings focused on TPACK (Messina & Tabone, 2012), subject-focused pedagogical modeling, and subject-specific technologies (Tanak, 2018). The teacher education institutions should also adopt other assessment methods to fully gauge the progress of pre-service teachers.

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POLITICAL PARTY DIPLOMACY AND "BELT & ROAD" INITIATIVE---TAKE SOUTHEAST ASIAN COUNTRIES AS AN EXAMPLE

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Abstract: *In the five years since the construction of the "Belt and Road", the "China Program" has been provided in the reform of the global governance system, which has been supported and understood by more than 100 countries and international organizations. However, some countries along the line and the international community have public opinion noises and even concerns. General Secretary Xi Jinping proposed to establish a new type of political party relationship and build a multi-level political party cooperation network. The article takes the party diplomacy of China and Southeast Asian countries in 2014-2018 as an example, and finds that China and Southeast Asian countries have a strong inter-party relationship, a wide range of objects, and mutual The characteristics of mutual learning and mutual learning play an important role in the "Belt and Road" and the collective chorus of Southeast Asian countries. Therefore, China can think from the path of building a "precise communication" platform, constructing a new type of political party relationship, and improving the party's diplomatic talent mechanism, and helping the "Belt and Road" initiative to go deeper and deeper, and bring together powerful forces to promote the building of a community of human destiny.*

Key Words: *Belt & Road Initiative ; Southeast Asian countries ; Political Party Diplomacy ; Party Politics*

Introduction

2018 is the fifth anniversary of the construction of the "Belt and Road". As a century project, from initiative to action, concept to practice, from point to line, from line to face, all aspects, multi-field development, more than 100 countries and The support and understanding of international organizations, the UN resolutions, the APEC Leaders' Declaration and other important documents frequently refer to the significance and role of the "Belt and Road" initiative. However, the "Belt and Road" involves many countries along the route and has a wide range of extensions. Some countries have doubts and even worries. At the same time, there are many distortions in the international community, such as "Chinese Club", "Chinese Marshall Plan", "China Debt Trap", Therefore, how to improve mutual understanding and elimination of international public opinion on the "One Belt, One Road" misunderstanding with the countries along the line has also become the most important and important point in the solid promotion of the "Belt and Road" construction. As an important part of all-round and multi-level diplomacy, party diplomacy has unique advantages. It can transcend the differences between different countries' social systems and ideological differences, and promote the problems and challenges faced by political parties in the "Belt and Road" construction. The collision and exchange of ideas will enhance political mutual trust and close friendly exchanges with the countries along the “Belt and Road” and create a good external environment for the “One Belt, One Road” construction.

On December 1, 2017, the Central Foreign Liaison Department held the "High-level Dialogue between the Communist Party of China and the World Political Parties", bringing together leaders from nearly 300 political parties and political organizations in more than 120 countries around the world to build a community of human destiny and build together. The theme of a beautiful world: the responsibility of political parties, the political parties and political organizations of various countries have conducted extensive exchanges and reached many consensuses. In this context, we will promote political party diplomacy with countries along the “Belt and Road” and play an important political leading role. “Build a new type of political party relationship based on new international relations, seek mutual benefit, mutual respect, mutual learning and mutual learning, and build various forms. "Multi-level political parties exchange and cooperation network" to promote the smooth flow of trade, financial communication, policy communication, facility connectivity, and people's hearts and minds to build a strong force for building a community of human destiny.

Case Analysis

Southeast Asian countries are an important part of China's neighboring diplomacy and an important geographical factor affecting the security of China's periphery. It is an important fulcrum of the 21st Century Maritime Silk Road. With the establishment of the Association of Southeast Asian Nations (ASEAN), regional integration is accelerating, and the “ASEAN Voice” of the international community is becoming more and more important. Therefore, selecting Southeast Asian countries as a case sample and treating Southeast Asian countries as a whole is not only a diplomatic strategy to serve China's “periphery is the primary”, but also a new perspective for studying the politics of Southeast Asian countries. It is also a more pragmatic push for the “Belt and Road Initiative” initiative. It will benefit more new people in the wider countries along the route.

Party Political Situation in Southeast Asian Countries

Southeast Asian countries, including Myanmar, Vietnam, Brunei, Laos, Cambodia, Malaysia, Thailand, Singapore, the Philippines, Indonesia, East Timor and other 11 countries, except East Timor[2], are the 10 ASEAN countries. The earliest “native political parties” organizations in Southeast Asia are mainly various interest social groups, including local groups with religious and ethnic nature, associations expressing dissatisfaction, and informal groups reflecting the gathering of various social and intellectual groups[3]. Looking back at Southeast Asia over the past 50 years, the construction of Southeast Asian countries mainly includes revolutionary parties, military-led political parties, and various political parties that emerged in pursuit of democracy. Mainly after the Second World War, it was established in various countries in Southeast Asia (the late independence of East Timor), from 1965 to the 1980s, and after the end of the Cold War[4]. From the one-party to the multi-party development, emerging political

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[3] Ruth T. McVey：The Rise of Indonesian Communism， Ithaca， N. Y. : Cornell University Press， 1965; Akira Nagazumi， The Dawn of Indonesian Nationalism: The Early Years of the Budi Utomo，1908 -1918，Tokyo: Institute of Developing Economies， 1972; Deliar Noer， The Modernist Muslim Movement in Indonesia， 1900 - 1942， Singapore: Oxford University Press， 1973.

[4] Yiwu Wang (translated by Hongjuan Wu): "Parties and Countries in Southeast Asia", Southeast Asian Studies, No. 4, 2012.

parties emerged in large numbers, Southeast Asian countries. The process of political party diversification and democratization has developed rapidly, and the party system has entered a new stage of development[5]. The party system of Southeast Asian countries is mainly divided into a one-party system and a multi-party system. Except for Vietnam (the Communist Party), Laos (People's Revolutionary Party), and Singapore (People's Action Party), the one-party system is implemented, and the rest is a multi-party system. Due to the complex ethnic and religious conditions and the diversified cultural forms, Southeast Asian countries are still growing and developing their party system quality and efficiency. The diversification of political parties in Southeast Asian countries is an opportunity and a challenge for China's neighboring diplomacy. The CCP treats the Southeast Asian political parties equally, regardless of the big party and the small party. It has established good inter-party relations with the political parties in Southeast Asia and provides a good foundation for bilateral or multilateral development of Chinese-speaking Southeast Asian countries.

Political exchanges between China and Southeast Asian political parties

In the five years since the implementation of the “Belt and Road Initiative”, high-level visits, cadres, study visits and youth exchanges in Chinese-speaking Southeast Asian countries have been frequent (see Table 1 for details). The CCP has conducted effective exchanges and cooperation with Southeast Asian political parties in an open manner, especially The convening of the "High-level Dialogue between the Chinese Communist Party and the World Political Parties" in 2017 demonstrated the vitality of the CCP, explained the destiny community and the beautiful world that the human world needs, how to build a community of destiny between China and Southeast Asia, and how to cooperate among political parties. How to lead the political party relationship with new international relations, and more prominent mutual understanding and openness and tolerance. In addition, the CCP and Southeast Asian political parties have also strengthened exchanges between China and Southeast Asian countries through the Asian political parties meeting, the Asian political parties Silk Road special cooperation meeting, the Boao Forum for Asia, the China-ASEAN Expo and other rich and diverse political parties. Close friendly cooperation.

Table 1 The Fifth Anniversary of the “Belt and Road Initiative” (2014-2018) Came to China and The Political Parties in Southeast Asia[6]

Country / years	Malaysia		Singapore		Laos		Vietnam		Myanmar		East Timor		Thailand		Brunei		Philippines		Indonesia		Cambodia		Total	
	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C	G	C
2014	2	3	1	0	4	3	5	3	2	9	0	1	0	2	0	0	1	2	3	2	4	8	22	33
2015	2	4	1	0	3	6	5	7	2	9	1	1	0	1	0	0	0	1	1	4	2	8	17	41
2016	4	4	0	0	4	4	7	6	2	8	0	1	2	1	1	0	1	1	1	4	3	8	25	37
2017	1	3	0	0	4	9	3	7	1	3	0	1	0	1	0	1	0	3	0	0	2	6	11	34
2018	0	5	0	1	4	6	2	13	2	8	0	0	1	0	0	1	3	1	0	2	2	7	14	43
总计	9	19	2	1	19	28	22	36	9	37	1	4	3	5	1	2	5	8	5	12	13	37	89	188
	28		3		47		58		46		5		8		3		13		17		49		277	

(Source: <<Communication of the Communist Party of China>>2015/2016, Contemporary World Press; 2017, 2018 is the political statistics of the official website of the Central Ministry of Foreign Affairs)

[5] Anna Guo: "Research on Party Diplomacy in Contemporary Chinese-speaking Southeast Asian Countries", Master's Thesis of the Diplomatic Academy, 2016.

[6] G stands for East China to visit Southeast Asian countries， C represents Southeast Asian countries to visit China

China and Southeast Asian countries have good geopolitical advantages, geo-economic complementarity, the same roots of geo-culture, and tens of thousands of Chinese overseas Chinese. Strengthening cooperation and exchanges between China and Southeast Asian countries is conducive to the realization of the "Asian Dream". "World Dream." China and the southeastern countries exchange political parties, give play to the advantages of political parties, and close bilateral and multilateral political parties' dialogue and cooperation, enhance political mutual trust, economic integration, and humanities, absorb the experience of governing the country in Southeast Asia, and realize the modernization of state governance and governance systems. We will promote the "One Belt, One Road" initiative to effectively link with the development strategies of Southeast Asian countries, pragmatically promote the construction of the "Belt and Road", realize the common development of China and Southeast Asian countries, and work together to build a community of destiny between China and ASEAN.

The "Characteristics" of the "Belt and Road" Construction on Party Diplomacy

Party diplomacy is an important part of China's overall diplomacy, different from other forms of diplomacy of the government and parliament. It is "developed by the ruling party of sovereign state or an international political party organization, aimed at legal parties and political organizations of other sovereign countries or international political parties, and is intended to promote the development of relations between countries or promote the proper settlement of international affairs[7]. Not only include the ruling party, but also the opposition parties and political organizations and social groups with political and political backgrounds. The party has a wide range of contacts; party diplomacy generally precedes the ruling party's economic and trade exchanges and humanities exchanges. Effective communication, and effective dialogue with opposition parties, legal small parties, etc., to enhance understanding, "accurate dissemination", and strong hierarchy; at the same time, political party diplomacy has official and semi-official features, which can be formal or informal. The realization of other diplomatic forms that cannot or cannot be carried out in foreign affairs, etc., is complementary. The characteristics of political party diplomacy, as well as the status of officials and the people, have an irreplaceable role in promoting relations between countries and have a constructive role in the construction of the "Belt and Road".

Objectivity: Cooperation and Networking, All Parties Singing

As a pioneer and promoter of inter-state relations, party diplomacy can not only lay a foundation for the development of diplomatic relations between countries, but also play a role of "accurate contact" for promoting the development of close partnerships between the countries, build a platform for exchanges, and grasp the different trades of different countries. Development policy, cooperation with political parties to promote economic and trade cooperation, foster a good environment for economic and trade cooperation in the country, lead economic and trade cooperation between countries, conform to the continuous deepening trend of international division of labor in the era of globalization, integrate resources, complement each other, and achieve mutual benefit and win-win, because "people and Between people, between political parties and political parties, and between the state and the state must be mutually beneficial, and no one can be harmed. If either party is harmed, cooperation will not

[7] Hongjun Yu: "Party Diplomacy with Chinese Characteristics", Social Science Literature Publishing House, 2017 edition, p. 25.

be maintained." [8]Party diplomacy does not directly participate in "doing things," but in order to achieve greater national interests and pursue positive economic and social development goals, it can make full use of diplomatic resources, achieve economic interaction, exert economic effects, and open up "political diplomacy." The new form of economic and trade activities sings. First, through high-level visits, the business and industry circles follow up and directly promote cooperation; the “One Belt and One Road” “21st Century Maritime Silk Road” was proposed in Indonesia, followed by Xi Jinping’s successive visits to Vietnam and Laos. The Philippines, Cambodia, Indonesia, Malaysia, etc., effectively communicated China's development strategy, development path and bilateral interconnection and reached a series of cooperation to promote the construction of the “Belt and Road” in the ASEAN region and deepen the pragmatic cooperation between China and ASEAN. Second, through political party forums, to resolve differences through consultations, and carry out economic and trade cooperation and exchanges, such as the Asian Political Parties Forum and the Asian Political Parties Conference, actively match and bridge, and promote economic and trade partnerships to deepen and pragmatic; Third, local party organizations visited, established sister cities, and established inter-regional cooperation mechanisms. As of October 15, 2018, 199 pairs of sister cities (provincial states) were established in 71 provinces (or states, etc.) and 128 cities in 10 Southeast Asian countries[9]. The fourth is to send a delegation of the Chinese Communist Party to investigate the national conditions of the countries along the route. Through the delegation to understand the national conditions, social conditions and economic and trade development of the countries along the line, it will help the foreign investment cooperation of Chinese enterprises.

Economic cooperation and interaction promote the pragmatic deepening of economic and trade cooperation in the country through this important bridge of state party exchanges. This is also one of the important themes for political parties in the new era to carry out foreign work. Party diplomacy provides good conditions for foreign investment “introduction” in introducing the country’s economic development, investment environment, economic policies, laws and regulations, introducing foreign companies’ capabilities to foreign countries, and realizing “going out” to build bridges for Chinese enterprises. Come to "go out" and "going out". The construction of “One Belt, One Road” can also take advantage of the multi-platform of political party diplomacy to allow more Chinese enterprises to “go global”, gain wider market prospects, and attract more foreign capital “introduction”, relying on foreign capital and technological advantages. To achieve the redistribution of production factors and promote innovation drive.

Hierarchy: High-Level Communication, Strategic Docking

Party diplomacy handles inter-state relations from a political height and a strategic overall situation, and through interaction with other countries, conforms to the general trend of globalization, and the characteristics of world politics, and breaks through the "prisoner's dilemma" formed by the anarchic nature of the international community. Countries understand each other, know the national development strategies of other countries, and avoid misunderstandings and frictions between countries due to mistrust. Party diplomacy first communicates with the top leaders of the ruling party, grasps the overall direction, and grasps the overall situation. Through the communication and exchanges between the top leaders of the ruling party, they exchange views and opinions on domestic and international issues of

[8] Zedong Mao: "Mao Zedong's Diplomatic Selected Works", Central Literature Publishing House, 1994 edition, p.164.
[9] China Friendship Cities Federation: Sister City Statistics, http://www.cifca.org.cn/Web/index.aspx.2018-10-15.

common concern, resolve differences, form a broad consensus, and lay a political foundation for the long-term stability and healthy development of political relations and inter-state relations. Secondly, it will give full play to the advantages of party diplomacy as a "being a man" and conduct friendly exchanges with other legitimate political organizations and political groups (including political think tanks, people's organizations, social organizations, etc.), such as opposition parties and legal small parties, and establish an effective information exchange mechanism to carry out ideas. Communicate with feelings, lay personnel, public opinion and political preparation for the development of the country, and prevent the influence of foreign party changes on state relations. Since the 18th National Congress of the Communist Party of China, the central leadership collective with General Secretary Xi Jinping as the core has attached great importance to dealings with other political parties and has actively led a delegation to visit Southeast Asian countries. It has traveled to most countries in Southeast Asia, and many countries have visited many times and visited the country. Political parties, political organizations, academia, and the media all-round communication and exchanges have strengthened the understanding and recognition of the party's development philosophy, development policy, and specific practices in Southeast Asian countries. At the same time, it has also actively established a number of political party exchange platforms, such as holding high-level dialogues with world political parties, playing a positive role in party diplomacy, and promoting more exchanges and cooperation through political party exchanges.

In the construction of the “Belt and Road”, we can use the formal and informal high-level communication of political party diplomacy to reach a certain political consensus with other political parties in the “Belt and Road” aspirations and actions, and to link with the development strategies of the countries along the line, so as to jointly promote the “Belt and Road” "Building effective landing. Such as Brunei "2035 Hongyuan", Indonesia "Global Ocean Point", East Timor "2011-2030 Development Strategy", Vietnam "2030, Vision 2045 Vietnam Ocean Economy Sustainable Development Strategy" and ASEAN "Interconnected Master Plan 2025" "Cambodia's "2015-2025 Industrial Development Strategy", Laos' "Change of Landlocked Country to the United States", Thailand's "Eastern Economic Corridor" and other "One Belt, One Road" initiatives are highly integrated with the development strategies of these countries or organizations along the Belt and Road. "Docking, seeking the greatest common denominator of cooperation, deepening cooperation and exchanges, and pushing the construction of the "Belt and Road" together, and exploring a new path for building a community of human destiny and building a beautiful world.

Complementary: Mutual Learning And Mutual Learning, And Also Officials And People

Under the background of the great changes in the international situation and the acceleration of globalization, the political vitality of political parties depends on their ability to adapt to the world, national conditions, party conditions, and changes in the people's sentiment. A political party must be invincible and must learn and summarize other political parties. Lessons learned, building a car behind closed doors, and relying on the original concept of governing the party cannot be permanent. When a foreign party is in contact with it, if it finds that the party has no new ideas, [10]it will inevitably be reluctant to make deep contacts and will also affect the development of the party's inter-party relations. Political party diplomacy is formal and informal. It can also be a ruling party or an opposition party. It can also be a political organization or a people's group. It determines the flexibility of the two countries' exchanges.

[10] Wei Wang and Liming Zhao: "Several Premise Issues in the Study of Party Diplomacy", Journal of China Youth University for Political Sciences, No. 1, 2008.

For example, the formality can be based on the experience of the two countries in governing the party. Exchanges, such as China's political system, political party system, the party's ability to build governance, anti-corruption system, and advanced party education, learn from each other, humbly and sympathize, enhance political understanding, and deepen understanding. Through party diplomacy, we will form a radiation effect, enhance mutual understanding among the people, close non-governmental exchanges, and expand the "friend circle." Informality can be used to strengthen the exchange of young political talents through the exchange of political parties between the two countries, such as the Asia-Europe Youth Organization Leaders Forum, the Boao Asia Youth Forum, the Asian Youth Leaders Forum, etc., through direct dialogue and frank communication among young politicians. It is conducive to expanding consensus, innovating cooperation mechanisms, promoting political development of political parties, and consolidating the political foundation of future state relations. In addition, the political parties play the role of political party communication and promote cultural exchanges and cooperation between political parties, such as cultural exhibitions, film exhibitions, calligraphy and painting exhibitions, etc., which embodies the Chinese Communist Party's ruling philosophy and traditional culture, and closes the exchanges and interactions between the people of the country and promotes the people's participation in the Chinese Communist Party. The understanding and recognition of the ruling concept. On the other hand, other forms of diplomacy, such as government diplomacy, are discussed in many formal issues, and when there is "tension", it is not conducive to forming a consensus and deepening cooperation, so that we can give full play to the party's diplomatic "being a man" advantage, and also to the government and the people. Eliminate misunderstandings, mutual benefit and win-win.

The construction of the “Belt and Road” requires formal and informal and official and semi-official political parties to promote diplomacy, enhance the understanding of the country's governance experience along the line, learn from each other and improve their party's ability to govern; need to play the role of young politicians Inheritance and promotion, such as through various forums and humanities exchange activities, to enhance understanding and deepen friendship with young people in Southeast Asian countries, and to promote exchanges between universities, think tanks and civil society, so as to closely maintain relations with people along the line, enhance mutual trust and deepen understanding. To create a good public opinion and public opinion basis for the “Belt and Road”.

Chinese political party diplomacy and government diplomacy, parliamentary diplomacy, and public diplomacy constitute a diplomatic system with a big country with Chinese characteristics. It is in terms of party politics and state relations. Promote inter-state policy communication and commonality among the people. At the same time, party diplomacy in the new era will bring economic partnership into a strategic vision, and provide a platform for trade, technology, and capital for inter-state and inter-firm trade, financing, and facilities to provide pragmatic information. And recommend partners to provide guarantee for the smooth operation of the “Belt and Road” strategy.

The "Effect" Of Party Diplomacy on The Construction of the "Belt and Road"

In 2013, General Secretary Xi Jinping proposed the "One Belt, One Road" great initiative, aiming to actively develop economic and trade cooperation with countries along the route through the "One Belt, One Road" road of peace, the road to prosperity, the road to openness, the road to innovation, and the road to civilization. The partnership of humanities exchanges promotes political mutual trust, economic integration, and cultural tolerance among the countries along the line, and jointly builds a community of interests, destiny and responsibility. The “Belt and Road” construction is an open and inclusive cooperation platform and global public products jointly created by all parties. It adheres to the principle of sharing and sharing, so as to achieve policy communication, common people, smooth trade, financial communication, and facilities as a common goal. play the effect of "1+1>2". "Five links" is the main content of the "Belt and Road" construction, namely, pragmatic cooperation in key areas such as interconnection, capacity cooperation, trade and investment, as well as a variety of humanities exchanges along the line of inspiration to achieve economic and cultural prosperity.[11] Under the new situation, the Communist Party of China's party diplomacy is constantly adapting to new changes and giving full play to the unique advantages of party diplomacy. The first is to promote the orderly and free flow of economic factors along the line, the efficient allocation of resources, and the deep integration of markets. To achieve economic integration, promote trade smooth, finance and implement China Unicom; second, promote humanities cooperation and exchanges in tourism, education and culture along the line, enhance non-governmental exchanges and deepen friendship, realize humanities and inter-personal communication, and promote popular communication; Enhance political mutual trust," to promote trust through communication, build trust with interests, increase trust with credit",[12] promote policy communication, and let the ancient Silk Road renew its vitality in the new era and benefit the people along the line.

Economic Integration: Party Diplomacy Is an Important Guarantee for Smooth Trade, Financial Financing, And Implementation of China Unicom.

Trade is the focus of the “Belt and Road” construction. The smooth trade also provides an important resource allocation platform for the “Belt and Road”. The trade resources of all countries are orderly, free and efficient. To achieve deep market integration, trade barriers and trade protectionism need to be resolved. Establish a tariff negotiation mechanism, build a free trade zone, innovate trade forms, enhance trade efficiency, and create a good trading environment. Capital finance is mainly financial cooperation and is also an important guarantee for the promotion of the “Belt and Road” project, including the Asian monetary system, investment and financing. The system, the credit system, etc., also involve the exchange of local currency, the scale of settlement and scope, the coordination of financial supervision and the crisis management mechanism; the facility is a “bridge” for “One Belt, One Road” cooperation, not only including roads, bridges, and ports. Other modern transportation facilities, including oil and gas pipelines, power grid pipelines, and telecommunications networks, involve issues such as national sovereignty and security along the route. The “Belt and Road” involves a large number of countries and a large population. Trade is unimpeded, finance and finance, and facilities are linked to trade policies, financial policies, sovereignty and security of different countries. These policies and project promotion require political parties to carry out various forms of exchanges. On the basis of establishing a sound communication mechanism, respecting national sovereignty and security, and conducting bilateral cooperation on trade, infrastructure investment, and financial support and exerting the main role of the ruling party’s policy formulation, political parties in various countries will reach consensus on these areas and promote political and economic After the promotion of politics, political and economic integration. Because political parties not only pay attention to political gains, but also pay attention to the development of the country.

[11] Important Articles of the "One Belt, One Road" International Cooperation Summit Forum, People's Publishing House, 2017, p. 77.
[12] Rihua Wang: "Chinese Traditional Inter-State Trust Thoughts and Its Enlightenment", World Economy and Politics, No. 3, 2011.

In the five years since the implementation of the “Belt and Road”, China and 11 countries in Southeast Asia have signed economic and trade cooperation agreements and customs cooperation agreements to promote trade. As of 2017, the total trade volume between China and Southeast Asian countries exceeded US$500 billion, reaching US$514.82 billion, a year-on-year increase. 13.8% is expected to exceed $550 billion in 2018. China has also initiated the establishment of the Asian Infrastructure Investment Bank and the Silk Road Fund and has increased its capital several times. The “Silk Road Fund” has reached US$4 billion. At the same time, the Asian Financial Cooperation Association has been established to increase financial support and improve financial risk supervision. In advance, modern transportation facilities such as the Yawan High-speed Railway, the Sino-Myanmar Oil and Gas Pipeline and the Vietnam Light Rail Project are being formed, and land, sea and air passages and information highways are being formed. The achievement of these achievements is inseparable from the important guarantee mechanism of party diplomacy, because the relationship between the ruling parties in Southeast Asia is related to whether a stable and sustainable business environment can be provided.

Humanities Intercommunication: Party Diplomacy Is an Important Thrust for The Communication of The People.

The common heart is the social foundation of inter-state exchanges. It is a great project of popular people to promote non-governmental exchanges and deepen friendship. "The country's diplomatic ties are in the hands of the people, and the people's love is in the heart." The people's hearts and minds communicate through education, culture, science and technology and health through cultural exchanges, talent interaction, and youth exchanges to build a public opinion foundation for the construction of the "Belt and Road" and promote inter-state relations. Bilateral cooperation. More than two thousand years ago, the Silk Road was created from the birth of Europe and the Pacific Ocean. It was created by people of different languages and different cultures, constantly communicating and communicating, driving the exchange of different cultures and promoting history. The core element of the "One Belt, One Road" initiative of the new era is to inherit and carry forward the great spirit of the Silk Road, transform it into a fulcrum and link between the countries and people along the "Belt and Road", and create countless ancient land and maritime Silk Roads. Brilliant transformation into a new thinking and new path to create a community of responsibility, interests and destiny. Strengthen friendly exchanges between people along the line, enhance mutual understanding, mutual trust and dependence, promote the construction of “One Belt and One Road” infrastructure projects, smooth trade, and create a good investment environment. These require mutual trust and mutual benefit between the people of all countries. Party diplomacy not only pays attention to the high-level dialogue and communication between the ruling party, but also maintains friendly exchanges with opposition parties, legal small parties, people's organizations, and think tanks, and enhances political mutual trust between countries. At the same time, party diplomacy also builds various platforms for exchanges and dialogues along the line. People from all walks of life in the country have communicated and communicated through various channels to lay the foundation of public opinion. Party diplomacy also gives full play to the advantages of the people and the government, and exchanges experience with the various sectors of society, especially the young politicians, and learn from each other. Expanding the "friend circle"; in addition, through the diplomatic platform of the political party, through the form of foreign aid, aiding the construction of a large number of infrastructure projects, refugee support, etc., helping the poor areas of the countries along the line to improve production and living conditions, and promoting the people of the countries along the line to the "Belt and Road" Deeper cognition.

In the five years since the “One Belt, One Road” initiative, China and Southeast Asian countries have held academic seminars on cultural years and cultural exchanges, signed more than 10 tourism cooperation agreements (such as Malaysia and Cambodia), and established a Chinese-Indonesian Deputy Prime Minister-level humanities exchange mechanism, nearly 10 Cooperation in scientific research projects, establishment of high-efficiency think tank alliances, establishment of government scholarships for Chinese and ASEAN students, youth forums, volunteer services, film festivals, book fairs, etc., concluded visa-free or simplified visa procedures in different countries, and with more than 150 civil organizations in China and abroad The establishment of a "civilian organization cooperation network along the Silk Road" has expanded the friendly exchanges with the people along the line. These cooperation with the government continuously created a public opinion foundation for the construction of the "Belt and Road" and built a good cultural ecology and public opinion environment.[13]

Political Mutual Trust: Party Diplomacy Is An Important Tool For Policy Communication.

Policy communication is the political basis and security guarantee for the construction of the “Belt and Road”. It usually involves negotiating and exchanges, docking national development strategies, and researching medium- and long-term cooperation plans. It involves communication of sovereignty and security affairs, respects sovereignty, and all subjects are equal. Security cooperation environment; economic and trade cooperation platform exchange, trade, investment, finance, and personnel exchange and other policy communication; communication with legal policies and cooperation along the line, providing legal protection; public foreign policy communication, broadening the "Belt and Road" and "communication circle", We will gain more friendly forces and broad social support, and aim to develop regional cooperation on a larger scale, at a higher level, and at a deeper level, and form an open, inclusive, balanced, and inclusive cooperative structure. Policy communication is based on the consideration of national interests of inter-state relations. It is necessary to deepen the integration of interests, build a multi-level macro-coordination mechanism, dock development strategies, negotiate and resolve problems in cooperation, promote political mutual trust, and actively explore new modes of international cooperation. The construction of the “Belt and Road” requires first-level policy formulation at the national level, and then organically docks with the “One Belt, One Road” initiative based on the national development strategy, conducts bilateral or multilateral negotiations, explores a new model of cooperation, and conducts political, economic, and cultural development on this basis. The "five" and multi-field pragmatic cooperation in social, ecological and other fields has contributed to the "One Belt, One Road" landing. A political party is a social group with a specific political concept in a modern country. It has specific goals and ideologies. On the one hand, it formulates a specific policy agenda to achieve specific political goals and transforms its policies into a national will through certain legal forms. At the same time, it can also coordinate the relationship between social development and economic development and coordinate the development of different interests to achieve balanced development. The “Belt and Road” initiated dialogue and consultation on major issues and issues through party diplomacy, promoted strategic cooperation, and promoted the construction of the “Belt and Road”. On the other hand, political parties also have the function of integrating interests, which can effectively integrate the expressions or appeals of different classes and different interest groups in society and obtain a solid social foundation. This provides a stable and safe international environment and a broader

[13] "The Important Articles of the "Belt and Road" International Cooperation Summit Forum, People's Publishing House, 2017, pp. 91-95.

social support force for the “Belt and Road” construction. In addition, party diplomacy can also be used as a supplement to government diplomacy. Government diplomacy plays a "doing things" style, negotiating on a certain issue through official channels, and "failure" in government diplomacy. Party diplomacy can use "being a person" to supplement and promote friendly exchanges. To enhance mutual trust.

In the five years since the implementation of the “Belt and Road”, 11 countries in Southeast Asia and many regional international organizations have actively supported and participated in the construction of the “Belt and Road”. China has signed cooperation agreements with various countries in Southeast Asia and many international organizations and has also signed bilateral agreements with many countries along the route. Investment agreement. Pursuing is not to start a new stove, not to reinvent, but to achieve strategic docking, complement each other's strengths, and establish different levels of policy communication with countries along the line, such as the organizational framework, China and ASEAN summit, "Asia Development Forum" and other forms of dialogue, etc. All parties discussed and jointly built the “Belt and Road” to share the fruits of mutually beneficial cooperation.[14]

Party Diplomas Help The "Pathway" Of The "Belt and Road" Construction

The “One Belt, One Road” initiative has produced positive responses to the international political and economic order for five years and will continue. In the past five years, some of the “One Belt, One Road” infrastructure projects have been completed, new breakthroughs have been made in international capacity cooperation, financial support and policy guarantees have reached many consensuses, and the education, culture, tourism and other popular projects along the route have been effectively promoted, and China and related countries have been promoted. The understanding and friendship will enhance the understanding and support of the people of the countries along the route for the “Belt and Road” initiative. The construction of the "five links" has achieved good phase results. However, most of the countries along the “Belt and Road” countries are developing countries, some countries are unstable politically, and the differences between different parties are large. The change of party policies has brought huge risks to China’s investment in relevant countries; The comprehensive backgrounds of politics, economy, culture and religion in different countries are complex; the contradiction between the demand for urgent economic growth and the economic structure and industrial structure of the countries concerned along the line is likely to lead to multiplier risk, which requires us to implement the “One Belt, One Road” strategy. At the time, the study will work together on the political and legal environment of the countries concerned. Our party has long maintained regular contacts with more than 400 political parties and political organizations in more than 160 countries and regions in the world. Based on this advantage, we have played the role of political party diplomacy and contributed to the construction of the “Belt and Road”. Path effort:

Relying on The Platform Of "Precise Communication" Of Party Diplomacy, Let's Talk About "Chinese Story"

Party diplomacy itself has propaganda functions such as propaganda of the party's principles and policies, the policy agenda, and the ruling concept to gain wider understanding and support from the outside world. For example, the Chinese Communist Party participates in various international conferences, bilateral talks, etc., and will introduce the party's policy guidelines and positions and views on the current international situation to the international community,

[14] The Millennium Treaty, The Belt and Road, Connecting China and the World, p. 57, Xinhua Publishing House, 2017.

fully demonstrate the good international image of our party, and promote the stable development of relations between countries. On the one hand, political parties have ruling parties, opposition parties and other political organizations to promote political mutual trust and enhance understanding; on the other hand, they also use political parties as a communication platform, NGOs, academia, media, business and industry. Celebrities and celebrities have increasingly become important targets of party diplomacy, expanding the international "friend circle." An effective platform with a wide range of political parties and a large number of levels will surely be able to "precisely spread" the "CCP voice" and speak the "Chinese story." The countries along the “Belt and Road” have a large population and a large base. They need a correct “Chinese voice” to enhance understanding. Therefore, we must make good use of and rely on the platform of party diplomacy, and we can do the following work:

Play The "Leader Effect" And Enhance The Influence Of Communication

A party leader, such as the "locomotive", relies on him to generate a "scale" effect. The interaction and exchange between the high-level political party activities and the exchange of opinions can produce certain communication effects, but the audience is small. Scientifically, the voice of political parties can be effectively spread according to local conditions, and a larger and wider audience can be achieved. For example, since the party’s eighteenth, General Secretary Xi Jinping has published about 160 articles and signed articles in various media abroad. He has carried out China’s foreign policy and governance affairs and has achieved great results. He has taken the lead in singular effects and sang on stage. The new era "the good voice of the CCP."[15]

Play the role of "opinion leader" and "combination" attack

From the perspective of communication science, communication is open to the public, but there are some people in the general public's audience who often pay attention to events and news and pay attention to politics. It is easy to influence the people around them and form an "opinion leader" effect. To talk about the "Chinese story" needs to pay attention to the "precise communication" of "opinion leaders", especially the relevant national political figures, celebrities, celebrities, experts and scholars, etc., the first time "precisely" affects these "opinion leaders", using their "influence" and The immediacy and extensiveness of mass communication, "combination" attack, accurately affect the general public's perception and understanding of the "Chinese story."

Bring into play the role of the bridge between the "introduction" and "going out" of political party diplomacy and "fine" communication.

Party diplomacy can organize central delegations, local study groups, local friendship cities, and social groups to “go global”, interact with relevant national governments, social groups, think tanks, and the public, and listen to the “CCP voice” face to face. Foreign publics personally perceive China and eliminate deviations in information dissemination. In addition, through the “One Belt and One Road” seminars, youth forums, and special dialogue meetings, we can invite countries along the “Belt and Road” to participate in seminars, raise awareness, and arrange arrangements for inspections. The delegation visited the local site and experienced the changes in China in the new era. It can also play the role of the "Belt and Road" news alliance, invite foreign diplomatic envoys in China, journalists to visit central authorities and

[15] Xiubin Peng: "To tell the story of the Chinese Communist Party's governance of the country in the new era", "External Communication", No. 7 of 2018

local governments, and personally experience the effects of reform. In short, the role of "party" is used to create an international communication platform for "going out" and "bringing in".

Build A New Type of Political Party Relationship and Give Play to The Role of Political Parties in the "Political Leadership" Of New International Relations

President Xi Jinping pointed out that "the Chinese Communist Party and the world's political parties have a high-level dialogue" pointed out that "all political parties should conform to the trend of the times, enhance political mutual trust among different political parties, strengthen communication and close cooperation, and explore the establishment of seeking common ground while reserving differences, mutual respect and mutual understanding on the basis of building new types of relations. Learning a new type of political party relationship with each other".[16] On the one hand, it shows that the relationship between new international relations and new types of political parties promotes mutual influence. The relationship between countries is not only the relationship between political parties, but also the relationship between the two countries. It is necessary to consider inter-party diplomacy as far as international relations. On the other hand, the principle of the new type of party relationship is to seek common ground while reserving differences, mutual respect, mutual learning and mutual learning, with the goal of strengthening cooperation and promoting development. Political parties are the basic organization of the country's political life, playing an important political leading role, being a builder of world peace, a contributor to global development, and a defender of the international order. The development of the world today is mainly based on political parties. Whether it is the ruling party or the opposition party, it has an important impact on the national development strategy. Party diplomacy has always been an important part of international relations. "Inter-party relations between different countries have always been an important part of international politics. The great role of class parties in international politics is not only manifested in the international policies and inter-party activities of class parties. It is also because of its influence on the state's political power. [17]There are many political parties along the “Belt and Road” and a multi-party phenomenon in one country. This is also an important strategy for China's foreign relations in the new era and a new opportunity for China to further participate in and reconstruct the global governance system. We will build a new type of political party relationship, build a network of international political parties exchanges and cooperation in various forms and at various levels, and play a leading role of political parties in new international relations and bring together a powerful force to build a community of human destiny.

Broaden the Network of Political Parties, Expand the Scope of Exchanges, And Enhance The "International Radiation"

The fundamental political system of the National People’s Congress system and the new party system led by the Communist Party of China and the multi-party cooperation and political consultation led by the Communist Party of China are born and raised in China. They are the great political creations of the Chinese Communist Party and various democratic parties and non-party members. The significant contribution of political civilization is the characteristics and advantages of the Chinese political system. Although more and more countries and people are beginning to know and accept our political system, their influence and radiation are far from the Western political system. Far less. This requires broadening the cooperation network,

[16] Song Tao: "Working Together to Build a Community of Human Destiny: A Collection of High-Level Dialogues between the Chinese Communist Party and the World Political Parties", Contemporary World Press, 2018, p. 7.
[17] Shoude Liang, Yinxi Hong: The Theory of International Politics, Peking University Press, 2000 edition, p. 89.

strengthening the cooperation of political parties along the "Belt and Road" and enhancing the level of China's exchanges with the ruling parties of socialist countries, political parties in neighboring countries, large and small parties in developed countries, and multilateral parties in the country. The propaganda has made people at home and abroad understand that this multi-party cooperation is an advantage and characteristic of the Chinese political system, broaden the scope of communication and enhance international radiation.[18]

Give Play to The Advantages of Democratic Parties and Non-Partisanism, Highlighting "Chinese Characteristics"

China's democratic parties, non-partis parties and the Communist Party constitute a political consultation system for multi-party cooperation. They not only emphasize the leadership of the Communist Party of China, but also emphasize the promotion of socialist democracy. By participating in politics and deliberation, we can build consensus, gather wisdom, and gather strength to achieve wider and more Effective democracy is not only in line with China's reality, but also conforms to the excellent traditional culture advocated by the Chinese nation for the world, inclusiveness, and seeking common ground while reserving differences. This is also "Chinese characteristics." Since the founding of the People's Republic of China, they have participated in political party diplomacy, but the overall number is small. There are fewer foreign exchanges in the name of each democratic party. This is not conducive to the understanding of the Chinese political party system and democratic parties. Democratic parties and non-partis parties are participating parties. Their foreign exchanges have their own advantages. They can "speak with their own body" and explain their participation in the administration of state affairs and the world in the "One Belt and One" countries and the world. Participation in economic, social, and political supervision is more convincing, more able to show Chinese characteristics, and eliminate the prejudice of the international community on China's political system. At the same time, we can also play the role of the democratic parties and non-partis parties in the construction of the "five in one" of our country, and allow the democratic parties to participate in the diplomatic CCP's party diplomacy in their own name, or to visit separately, in order to promote the image of new parties and promote exchanges between political parties between countries. Enhance political mutual trust and build new international relations.[19]

Give Play to The Role of Local Party Committees, Enrich the Political Content of Political Parties, And Add "Regional Elements"

The new practice of China's governance of the country has been highlighted in the local government. How does the local government implement the central government's decision-making and deployment, and how to achieve development according to local conditions is the subject of more attention of the world's political parties, such as "precise poverty alleviation" work, anti-corruption work The "One Belt and One Road" domestic situation, the construction of Guangdong, Hong Kong, Macao and Dawan District, and the green ecological environment are more interested in political leaders and local friendship cities. This is also the forefront of the new era of governance and the hinterland of party diplomacy. . Therefore, constructing a new type of party relationship should also attach importance to the role of the local party committee, unite the foreign affairs of the local party committee and the work of the central

[18] Zemin Jiang: "A Speech at the Spring Festival Symposium of the Party Outside the CPC Central Committee", People's Daily, February 17, 1996

[19] Kejie Yu: "Some Thoughts and Reflections on Party Diplomacy", Contemporary World and Socialism, 2011, Issue 6

foreign affairs, give full play to the initiative and creativity of the local party committee, integrate the advantages, actively participate in the central party's diplomacy, and add "local elements". It is conducive to the central and local governments to demonstrate the combination of theory and practice "the CCP style." At the same time, after understanding the local characteristics, the relevant countries are also conducive to bilateral exchanges, strengthen cooperation and exchanges, deepen the pattern of local opening up and enhance the level of opening up to the outside world. The “One Belt, One Road” initiative coordinates the two major domestic and international situations, and local participation is also the righteousness.

Adhere To "People-Oriented", Play the Role Of "People" And Stimulate the Political Vitality of Political Parties

Regarding party diplomacy in the new era, President Xi Jinping clearly proposed a dual orientation: "The party's external work is an important front of our party and an important part of the country's overall diplomacy."[20] To clarify the party's cause as the starting point and overall goal of party diplomacy in the new era, we must also obey the overall national diplomatic situation. Through the new era of diplomacy, "grasping the political parties", building a new type of political party relationship, giving full play to the characteristics of the party's diplomatic "being a human being", "grasping the network", and friendly relations with the ruling parties, opposition parties, political organizations, people's organizations, ideological think tanks and the media. Circle of friends". In the construction of the “Belt and Road”, we need a versatile “one special and multi-energy”, need talent flow, strengthen exchanges, and need to expand the “friend circle” to gain more support and understanding. This also echoes the “characteristics” of party diplomacy and promotes along the line. The exchanges between national political parties need to adhere to the "people" as the basis and give play to the advantages of "people."

Strengthen the Construction of Political Party's Diplomatic Talents and Enhance the Party's Diplomatic Level

Since the founding of New China, political party diplomacy has achieved many achievements, and it is inseparable from the efforts and efforts of generations of diplomats. In the new era, we will build a new type of political party relationship. The party's diplomatic content is richer and wider, and in one aspect, it has become unable to adapt to the needs of the work and continues to be a large number of “all-rounders”, setting new standards for talent demand. It is necessary to have both professional level and national conditions of the country and related countries, and the lack of understanding of the national conditions of other countries is an important factor affecting the diplomatic vision. Therefore, we can take advantage of the talent cultivation advantage of the Ministry of Education's country research base, combine the national conditions along the “Belt and Road”, increase the training of talents, adjust professional facilities and training programs, achieve “order-based” training, and promote the professionalization of political diplomats. Adapt political party diplomacy to the development of new international relations.

Strengthening the Exchange of Talents Among Young Political Parties and Injecting Fresh Blood into Party Diplomacy

The youth political elite is the reserve team of future political talents and the continuous driving force of the country's political life. The participation of young politicians in party diplomacy is

[20] Song Tao: "Developing the Party's Political Leading Role and Creating a New Situation for the Party's Foreign Work", People's Daily, December 29, 2016.

a unique advantage of integrating youth diplomacy and party diplomacy. It can promote young politicians to the international arena, understand and enrich diplomatic knowledge, and enhance their diplomatic ability to deal with complex international issues. Through the establishment of the Youth Politics Forum, the World Peace Forum, the Youth Politicians and other diplomatic platforms, young politicians can directly exchange and exchange ideas, expand exchanges, reach consensus, and contribute to the friendly exchanges between the youths of the “Belt and Road” countries. To understanding. Young politicians are the new force of the future of the international community, and they are the political foundation for consolidating the future relations between countries along the line. The subject of future party diplomacy also promotes the political development of political parties.

Strengthen the International "Pro-China", "Yuanhua" And Other Network Accumulation, Expand The "Friend Circle" And Enhance the Party's Diplomatic Effectiveness.

The countries along the “Belt and Road” countries and even the wider political parties vary widely, with different political beliefs, political traits, and political preferences. The interaction between the party and the party and between the countries is the interaction between people. The heart and the heart communicate with each other, promote political party exchanges through human interactions, promote the development of relations between countries, and maintain a peaceful and stable environment. Party diplomacy has the characteristics of being both official and civilian. China's mining industry exchanges cultural, social, and political systems along the “One Belt, One Road” national education, and reached consensus on issues of common concern to achieve sustained and healthy development. Therefore, political party diplomacy should expand the object of contact with the "Belt and Road" countries, cultivate experts, media, academic circles, political parties and political organizations who understand and support the "Belt and Road" initiative, and accumulate a friendly force against China and sow the seeds of friendship. In order to bloom around the world.

Conclusion

The construction of the “Belt and Road” has become an important layout for our party's foreign cooperation in the new era. In the party diplomacy along the “Belt and Road” countries and the political parties in a wider range of countries, it is necessary to actively interpret the grand initiatives and great goals of the “Belt and Road” to the countries along the route. The political parties work closely together to eliminate the concerns among the countries, give play to the advantages of high-level exchanges of political parties, and play a role in political mutual trust, economic integration, and humanities, accelerate the rapid integration of the national development strategy and the “Belt and Road”, and promote the “One Belt and One Road”. "Policy communication, smooth trade, financial finance, facilities, and people's hearts and minds are one step at a time, and the results are captured one by one." Therefore, it is necessary to rely on the "precise dissemination" platform of political party diplomacy, to stress the "Chinese story"; to build a new type of political party relationship, to play the political leading role of political parties in new international relations; to adhere to the people-oriented principle, to play the role of "human being" in party diplomacy, to accumulate contacts, and to nurture youth Politicians, maintain the political vitality of political parties, do a good job of the "One Belt, One Road" collective chorus, build a "Belt and Road", share the fruits of mutually beneficial development, and pool strength to build a community of human destiny.

THE EFFECTIVENESS OF FOOD SECURITY DIMENSIONS ON THE GLOBAL FOOD SECURITY INDEX (GFSI) IN LANDLOCKED COUNTRIES

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Abstract: *Food security is an important issue that has been discussed all over the world. Achievement in food security is based on the Food and Agriculture Organization (FAO policy) and depends on four important indicators known as availability, accessibility, utilization, and stability. This paper examines the effectiveness of the food security dimension on Global Food Security Index (GFSI) in Landlocked Developing Countries. The static panel data was adopted using fixed effect model to measure the effectiveness of food security dimensions on GFSI. The findings of this study showed that food security dimensions played a very important role in affecting the GFSI in landlocked developing countries. An increase in food availability, food accessibility, food utilization and food stability was found to positively impact food security achievement in Landlocked developing countries.*

Keywords: *Food Security, Availability, Accessibility, Utilization and Stability*

Introduction

Food is among humans' basic needs for social development. Food can be defined as an element that people consume that provides nutrients such as carbohydrates, fats, proteins, vitamins, and minerals for the body. It originates from either plant or animal sources. Food absorbed by the body helps to produce energy and stimulate healthy growth. There are two types of nutrients and the first is micronutrients, which are needed in the human body in small amounts and contain vitamins and minerals. The second is macronutrients that contain carbohydrates, protein, and fats needed in large amounts by the human body. In the past, people traditionally acquired food through primitive hunting and farming methods. Today, humans' methods for food collection have changed considerably. Most traditional and primitive ways have become side lined by the introduction of intensive industrial farming and agriculture. Achievement in cultivation methods has also helped to substantially increase production capacity. Food is now a product supplied by industries operated by multinational industries and corporations.

Food is essential for survival, but the question of whether enough food is available for the people of the world is subject to population growth. If the availability of food is not sufficient to fulfil humans' basic needs, it can cause global food shortages and if unchecked could lead to major crises and present major challenges to humanity's food security. Factors such as climate change, natural disaster, overpopulation, food crisis, higher food prices, and diminishing resources have worsened the food shortage situation and have become global food security issues.

Background of Study

Food sufficiency is crucial to reduce the problem of undernourished and hungry people, especially in developing countries. The Food and Agriculture Organization (FAO) indicated that the global level of Prevalence of Undernourished (POU) is below 11 percent, while the total number of undernourished has increasing slowly where over 820 million people suffer from hunger, which is about one in every nine people in the world is suffer from hunger (FAO, 2019). Therefore, achieving sufficiency of food is very important to fulfil humans' basic needs globally and improve food security in developing countries.

Food security is one of the critical issues that have been seriously discussed in terms of prevention of malnutrition, hunger, and famine, especially in landlocked developing countries. Food security has been defined as a situation when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for productive and healthy life (USAID, 1992). FAO has identified four important indicators to measure the achievement of food security, namely food availability, food accessibility, food utilization, and food stability. Moreover, one or more of these three important indicators need to play their roles to improve food security in developing countries, which is to provide sufficient availability of food, easy accessibility of food, and utilization of food to sustain the achievement of food security, especially in developing countries (USAID, 1992). However, FAO has added food stability as additional indicators that playing an important role to sustained food security.

As mention previously, there are four important dimensions for measuring food security. Firstly, food security is based on the physical availability of food. All nations need to elucidate the availability of sufficient quantities of good quality foodstuffs. Food availability plays a critical role in providing the necessary nourishing elements to citizens of every country. This quantity of food is in the form of supplies through domestic production, stock levels, food imports, and food aids. Food security and human development have a strong relationship through food production (Conceicao et al., 2011). However, fully depending on food production to fulfil one's food needs is difficult to achieve due to resource constraints and climate change problems. Nevertheless, relying on both imports and food production can help countries improve and achieve food security (Magnan et al., 2011). Moreover, there is no strong relationship between food supply and food production (Wagstaff, 1982). This shows that food production is not the only indicator to solve food shortage and achieve food security, but food production and food imports need to play a simultaneous role in achieving food security in developing countries.

Additionally, sufficiency of food also depends on food aid. Food aid plays an important role to overcome famine and hunger, especially in developing countries. It can be classified into two categories where firstly, food aid is a key source for short-term emergencies, such as during earthquake, hurricane, drought, and war. Secondly, food aid is programmed to resolve deficiencies of food in the medium term. Food aid plays a vital role in emergency situations and also solves food shortage issues in long-term situations (del Ninno et al., 2007). There are several factors that have influenced the availability of food such as inappropriate agriculture knowledge, technologies and practices, unsuitable economic policies (pricing, marketing, tax, and tariff), lack of foreign exchange, inadequate agriculture inputs, population growth rates that offset increased production or imports, marketing and transportation systems that inhibit the cost-effective movement of food from source to need, and the inability to predict, assess, and cope with emergency situations, thus, interrupting food supplies, along with natural resource constraints and problems relating to the climate and diseases.

The next dimension is economic and physical access to food, concerning access to adequate resources for acquiring appropriate food for a nutritious diet. The physical and economic accessibility of food is important to individuals and families to achieve food security

(Kennedy et al., 2004). There are two types of food accessibility. Firstly, is physical food accessibility in terms of transportation, infrastructure, storage, transformation, and marketing of food commodities. Secondly, is the economic accessibility in terms of purchasing power and household income, which is considered the most important indicator affecting people's accessibility to healthy food. In addition, households also face accessibility constraints to individual food access including inadequate aggregate economic growth, lack of job opportunities, lack of incentives to become a productive participant in the economy, negative impact of national economic policies, inadequate training or job skills, and lack of income streams.

Food utilization also plays a key role in food security. Utilization is an important element of food security and is usually known as the way the body makes the most of various nutrients found in food. Furthermore, food utilization also shows that food is properly used through the employment of proper food processing and storage techniques, and adequate knowledge of nutrition and childcare techniques. Utilization has an impact on food security through adequate diet, clean water, sanitation, and health care to enable people to reach a state of nutritional well-being where all their physiological needs are met. Clean water and sanitation are very important in poor and developing countries to achieve a healthy life (Mara, 2003). The constraints to food utilization include nutrient losses associated with food preparation and inadequate knowledge and practice of healthy techniques. Based on sanitary and phytosanitary measures, sanitation services are very important to achieve food safety and food security (WTO, 1998).

Finally, the last dimension is food stability. There are three important indicators to measure food stability. The first is to measure the impact of food price on food security through food import channel. The second indicator is to measure the impact of land irrigation on food security through food production channel and lastly is the impact of political stability to food security in developing countries.

There is very limited evidence to prove and research done to determine that these four dimensions will influence food security improvement. The questions that arise from this issue include whether these four dimensions will benefit the Global Food Security Index (GFSI) in selected developing countries. The objective of this paper is to analyse the improvement of GFSI through food security dimensions' effectiveness in landlocked developing countries.

Literature Review

FAO has identified four important dimensions for improving food security at the national level. These dimensions are availability, accessibility, utilization, and stability. Food availability is one of four dimensions of food security and consists of food production, food imports, and food aid to fulfil the minimum requirement per capita. Food security and human development have a strong relationship through food production (Conceicao et al., 2011). Africa needs sufficient food supplies to feed 18 million additional people every year. These food supplies are essential to reduce undernourishment. Africa has a huge potential to increase food production, reduce the gap in crop yield, and decrease food insecurity problems. In addition, food production also has a huge impact on food security in China (Zhang, 2011). Zhang's study has revealed that China needs to feed 20% of the global population with its minimum resources, which consist of 5% of the world's water resources, 7% of the global arable land, and limited natural resources. Yet, with minimum resource production, China can supply a lot of food; in 1949 it supplied 200 kg per capita, an amount that doubled to 400 kg per capita in the 1990s. The increasing amount of food production has reduced hunger and famine in China. This situation follows a 250% population increase and a 450% increase in total grain production during the aforementioned period.

Recently, total cropland in China has increased marginally in certain areas, but land use for cropping areas has decreased from 0.18 hectare per capita in the 1950s to less than 0.10 hectare per capita today. Although the cropland area used has reduced, China's crop yield has increased systematically, and cropland productivity has improved a lot; this is the main reason for the increase in China's food production. The main problems that contribute to the fluctuation in grain and crop production arise from political decisions, land distribution, and ownership changes. However, improvements in crop production have a positive impact on food security in China and have reduced hunger and undernourishment.

Some studies have been conducted to help minimize the dependence on food imports and increase food self-sufficiency (Magnan et al., 2011). Achieving 100% food self-sufficiency is difficult for several reasons, including resource constraints and climate change problems. However, relying on both food imports and food production can help countries improve and achieve food security Magnan et al. (2011) have presented new models to capture the trade-offs between cereal production and high value crop (HVC) production at the national level. These models have been built due to high and volatile cereal prices, so the governments of food-importing countries must minimize their dependence on food imports and rely on self-sufficiency in terms of food production. National food security is reinforced, focusing on minimizing reliance on food imports, increasing food production, generating foreign exchange to encourage the production of HVCs for export, and ensuring appropriate market channels to market all foods. Poor farmers who do not have access to HVC markets are highly affected by increases in staple food prices. These farmers need to increase their own staple food production to counter higher prices, which means they must sacrifice land that has been used to grow fruits and vegetables. The World Bank's World Development Review has provided a new strategy to solve the poor farmers' problems by introducing a new strategy for accessing HVCs. With access to HVC markets, farmers can increase their cereal production by growing fewer staple crops and increasing HVCs. This strategy will increase farmers' income and raise their purchasing power of staple foods, despite rising prices.

Generally, certain countries will be classified as experiencing food insecurity when they face famine and hunger. Such countries depend not only on domestic food production but also rely on food aid and food imports as their main sources of food sufficiency. Moreover, there is no strong relationship between food supply and food production (Wagstaff, 1982). This shows that food production is not the only indicator to solve food shortage and food security problems, but food production and food imports must play a simultaneous role in overcoming food insecurity problems. Commonly, food shortage problems occur in low-income countries. Surprisingly, this current study has shown that middle-income countries are more dependent on food imports than low-income countries. Based on the Standard International Trade Classification, developing countries are classified as net food exporters of commercial food products such as coffee, cocoa, tea, spices, sugar, and tropical fruits and are also known as net food-importing countries because of their lack of staple food production.

Furthermore, Morrison (1984) has analysed the determinants and trends of cereal imports in developing countries. These determinants are based on structural long-term factors and short-term factors. The structural long-term factors are determined by the level of income per capita in those countries. A country classified as having a higher per capita income tends to have a higher cereal import per capita. Increases in Gross Domestic Product (GDP) per capita will raise the proportion of middle-class individuals; reduce the labor force in the agriculture sector because of increasing population migration to urban areas, and decrease food production because of ecological constraints, such as problems with irrigated land, drought, and landlocked countries. All these factors will contribute to the increasing demand for food imports to maintain domestic per capita food consumption.

The temporary, short-term factors that determine the changes in cereal food imports are caused by the instability of domestic food production, which is caused by climate change problems such as flood and drought. These situations lead to inefficiency of arable land, problems with irrigated land systems, and will cause a reduction in domestic food production and an increase in food imports to maintain the sufficiency of food. Dong and Veeman (1995) have agreed with Morrison (1984) and added that the increasing dependence on food imports is linked to three factors. The first factor is that an increase in income will cause an increase in demand for a better diet. Secondly, an increase in foreign exchange will cause an increase in food import demand, and lastly, dependence will be influenced by the relative cost of grain imports. However, a major contributor in determining food imports is a lack of domestic production and an improvement in diet, which is caused by an increase in income.

The second dimension of food security is accessibility, which is based on two important issues related to physical access in terms of paved roads and economic access in terms of purchasing power parity. These two issues play an important role in determining food accessibility to improve food security at the national level. The World Bank (1997) discovered that paved roads have a huge impact on the agriculture sector. For example, Chad has only 263 km of paved roads, 7% of which represents the main-priority road networks. However, only 37% of the main-priority road networks in Chad are in good condition, while 63% are inaccessible, due to significant damage caused by heavy vehicles during the rainy season. Hence, the major producers of grain in Chad must find ways to market their grains, because the country experiences six to eight months of rain every year, during which many of the roads are impassable. To overcome this problem, Chad’s government has minimized this deteriorating situation by imposing traffic restrictions on vehicles weighing more than 3.5 tons between May 1 and the end of the rainy season every year. According to World Bank report, improvements in market access in terms of paved roads have increased agriculture production, increased farmers’ income, and improved food security in Chad.

Furthermore, Breisinger et al. (2010) have also classified paved roads as an indicator of improvement in food security. These authors have emphasized the impact of alternative road investment plans on access to market and food security in their study. The improvement of market access by upgrading 20,000 km of unpaved roads to gravel roads could increase the determination to upgrade or build road networks that would connect most rural areas to urban areas via paved roads. Investing in roads is driven by three important criteria i.e. improving access to people living in areas of great food insecurity, the prevalence of food insecurity, and connecting secondary networks to secondary cities. Additionally, the total road network also plays a vital role in determining whether the countries are classified as having food security or food insecurity. Moreover, based on a comprehensive Liberian food security and nutrition survey in 2010, food insecurity problems are largely caused by low levels of investment in crop production, low education achievements, poor road networks, high price volatilities, and poor health infrastructure (World Food Programme, 2007).

However, Chen and Kates (1994) have found that economic access in terms of household income also plays a significant role in improving food security. These authors have classified food security as sufficient food production to feed the population. Measurements of undernourished individuals, who are classified according to their inadequate dietary intake, are based on household access by income, expenditure, or consumption. The achievement of food security does not highly depend on the availability of food but is based on a few factors such as income distribution, dietary needs, food losses, and waste.

Economic access in terms of household income as an indicator of improving food security is supported by Haddad et al. (1994). They examined suitable indicators for measuring food security and monitoring nutrition. This current study provides a new conceptual framework and identifies alternative indicators for measuring food and nutrition security. These alternative indicators for measuring household food security and nutrition comprise three important categories. The first category comprises the demographic variables, such as household size, migration, ethnicity, and age or gender of the individuals. Next, are the market access variables such as household income sources, changes and flows of income, access to credit, land ownership, and sales of assets. The third category consists of proximate determinants of household food security and preschool nutritional status. The proxy variables that have been used to measure pre-schoolers are birth order, mother's age at birth, prenatal education, and breastfeeding patterns.

The next dimension of food security is known as food utilization and is based on the quality and safety of the food a person eats and how well people transfer it from food to nutrition and energy. Food utilization needs sufficient energy, essential nutrients, potable water, adequate sanitation, access to health services, proper feeding practices, and illness management. The World Food Programme (WFP) has identified some constraints in achieving food utilization, such as nutrient losses when preparing food, inadequate knowledge, and practice of health techniques and cultural practices that minimize the consumption of nutritious food. The United Nations has identified that nearly one billion people in the world have no access to clean water, and 2.6 million people globally do not have improved sanitation facilities. The impact of the lack of sanitation facilities and clean water has caused 925 million people to be categorized as chronically undernourished (Howard & Bartram, 2003).

Food and water are essential requirements for human survival. Improving the quality of water and sanitation is crucial in poor and developing countries to ensure healthy lives (Mara, 2003). Poor and developing countries need to meet their targets for improving water supplies and sanitation by 2025, whereby they need to provide access to water supplies for 2.9 billion people and access to improved sanitation for 4.2 billion people. Mara (2003) has found that all developing countries have simple, appropriate, effective, and affordable technologies to ensure access to a good water supply and improved sanitation services for the people, but this expenditures spent on other needs. Water supplies and sanitation improvement facilities do not depend only on government expenditures; these facilities are also financed by investment, specifically public health investment (Watson, 2006). This current study as investigated the impact of a project aimed to improve sanitation infrastructures on a U.S. Indian reservation in 1960. Sanitation investments benefit countries because they can reduce the cost of supplying clean water to households. In the U.S., such projects help reduce diseases such as waterborne gastrointestinal diseases and infectious respiratory diseases among Native American infants.

In addition, Hubbard et al. (2011) have designed a community demand-driven approach to estimate the development of sustainable water and sanitation infrastructure. The authors' aim was to illustrate the strategy used by the CARE Peru and Cardozo community to fulfil local demand for water supplies and to make some improvements to water and sanitation facilities. The study has shown that the project has implemented the community demand-driven approach to the water supply distribution system and has extended up to 1.3 km into the southern zone of Iquitos and connected with the "condominial" water system. This project has influenced all the households in Cardozo that are connected to the water supply system after the "condominial" water installation and sewage system. In addition, the good water distribution system reduced diarrheal disease by 37% among children younger than five years old between 2003 and 2004.

Finally, the last dimension of food security is food stability. The achievement of food security at the national level, especially in developing countries, presents a huge challenge because these countries face many constraints; for example, vulnerability with food price and land irrigation issues. Food price instability contributes significantly to food insecurity problems. Food prices have an impact on food security at the household and national levels. Many people in developing countries have spent more than half of their income on food to fulfil their dietary energy needs. When world food prices drastically increase, it impacts these people, who will have to cut back on the quantity and quality of the food they buy. This situation causes food insecurity, famine, and undernourishment. The International Fund for Agricultural Development (IFAD) has identified two periods of global food price increases. The first was from 2007 to 2008, while the second was from 2010 to 2011; both were higher than increases in the early 1980s.

Price stabilization is important for the improvement of food security and to solve problems related to higher food prices. Ahmad (1988) examined the rationale of price stabilization and its impact on food security. Moreover, his study developed a new approach to stabilizing food prices in Bangladesh. Some arguments have arisen about the validation of a theoretical position against price stabilization in Bangladesh. A rice price stabilization framework has been developed to mix public procurement, import, rationing, and open market operations to compress annual and seasonal prices. Price stabilization is used as an instrument for food security improvements and is crucial in reducing poverty and undernourishment in Bangladesh.

Myers (2006) has examined the cost of food price fluctuations in low-income countries. His study is linked to conventional welfare, where it measures the cost of food price vulnerability and its impact on economic growth and food security in low-income countries. This study has revealed that the cost of conventional welfare can be higher when fluctuations in food price have a negative impact on economic growth and causes a reduction in labor productivity and thus food security cannot be achieved. To overcome this problem, the author suggested a food price stabilization scheme to improve food security, welfare, and economic performance.

However, Wang (2010) found that food prices did not impact food security in China, because China had raised its residents' income the previous year. Increases in the retail food price index do not affect food security because of the concepts of income effects and substitution effects. Wang (2010) has conducted a study on food security, food prices, and climate change in China. The paper has determined the factors that influence food security, including the per capita disposable income of rural residents, the retail food price index, agricultural disaster area, sown area, and saving of urban and rural residents.

Another constraint that has an impact on food security is irrigation. Almost 195 million hectares of total irrigated areas are in developing countries because these countries still depend on irrigation systems to increase their food production. People in irrigated areas can derive direct benefits from increased crop intensities, improved yields, new technologies, and increased land values because of access to irrigation. In addition, people in irrigated areas can also enjoy indirect benefits of farm income increases, food price reduction, better nutrition, and increased clean water use for domestic purposes to ensure better health.

Besides, land irrigation is one of the indicators to measure food stability. Land irrigation is very important to increase food production and improve food security. Based on a previous study about irrigation and food security in the 21st century (Carruthers et al., 1997), this present study has found that irrigation plays an important role in increasing and improving food production. Some changes must be made in terms of expansion of irrigation areas and water supplies, with continuous improvement in the efficiency of existing water supplies usage. However, if improvements in irrigated areas cannot be achieved, land resources will be under increased pressure and the process of environmental degradation will be hastened. Irrigation and water development strategies cannot be achieved due to a lack of knowledge about the relationship among water scarcity, food production, food security, and environmental sustainability.

Moreover, Hassan et al. (2000) carried out a study on the trade-off between economic efficiency and food self-sufficiency using Sudan's irrigated land resources. Sudan has changed its food production strategy to be more dependent on the irrigation sector to improve the food supply, due to food shortages that occurred during the 1980s, which were caused by drought and reduced availability of food. However, this food shortage ended in 1989, when crop yields under irrigated systems increased significantly. Hassan et al. (2000) carried out a domestic resource cost analysis to examine whether the expansion in irrigated wheat production was more efficient than Sudan's irrigated land resources usage for cotton. The study results showed that expenditure on irrigated wheat production in Gezira to ensure food self-sufficiency reduced employment opportunities and impacted economic efficiency. Irrigation systems are important for countries that face drought and erratic rainfall patterns. Ghana is an example of a developing country that has this problem (Burney & Naylor, 2012). The agricultural sector is the main sector in Ghana, employing 86% of Ghanaians.

Model Specification

The FAO has identified four important dimensions of food security, which are availability, accessibility, utilization, and stability that play important roles in achieving food security, especially in developing countries. Nevertheless, the measurement is not directly through these four dimensions. Food availability is determined using food production, food import, and food aid. Besides, food availability measurement can also be based on food supply, which comprises food production, food import, and food aid. Meanwhile, purchasing power parity and road infrastructure are used to determine food accessibility. Next, for the utilization dimension of food security, the indicator to measure it is the population that can get access to clean potable water. The final dimension of food security is stability, where the measurements are based on political instability and corruption problem. The variable to measure the improvement of food security is based on the GFSI. The food security (FS) improvement model is shown as follows:

$$FS = f\left(FAVs, FACs, FUs, FSTs\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

The measurement for food availability (FAVs) is based on food supply (FSP) comprising of food production (FP), food import (FM), and food aid (FA). Purchasing power parity (PPP) and road infrastructure (RI) are used to measure food accessibility (FACs), while potable clean water (PW) is used to measure food utilization (FU). Finally, food stability (FST) is based on political instability (PSR) and corruption (CTN).

$$FAVs = f\left(FP, FM, FA\right) = FSP \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

$$FAVs = f\left(FSP\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3)$$

$$FACs = f\left(RI, PPP\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4)$$

$$FU = f\left(PW\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (5)$$

$$FST = f\left(PSR, CTN\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (6)$$

The proxy of food security (FS) at the national level is GFSI. The food security model is as follows:

$$\ln FS_{it} = \alpha_0 + \beta_1 \ln FSP_{it} + \beta_2 \ln RI_{it} + \beta_3 \ln PPP_{it} + \beta_4 \ln PW_{it} + \beta_5 \ln PSR_{it} + \beta_6 \ln CTN_{it} + \mu_r + \tau_t + \varepsilon_{it} \quad \ldots \quad (7)$$

Methodology

This paper has employed the country fixed effects model because this model is suitable to consider unobserved individual characteristics that are assumed to be correlated with the error term. The fixed effects model was used to analyse the impact of fluctuating variables over time and to determine the relationship between the predictor variable and the outcome variable. Each country has its own characteristics that may or may not influence the predictor variables.

Meanwhile, the random effects model is an alternative for the fixed effects model to estimate coefficients of time-constant exogenous variable. The difference between the fixed effects model and the random effects model depends on whether the unobserved individual effect represents the elements that are correlated with the regressors in the model, notwithstanding whether the effect is stochastic or non-stochastic. The random effects model is more suitable if the error term or the differences across countries are related to the dependent variable. Time-invariant variables can be included in the random effects model.

To identify which estimation was more suitable for this study, the Hausman test was run to choose between the random effects model and the fixed effects model. The null hypothesis of the test stated that there was no correlation between the individual effects and the explanatory variables. This implied that both random and fixed effects were consistent but only the random effect was efficient. Meanwhile, the alternative hypothesis stated that the individual effects were correlated with the explanatory variables, implying that only the fixed effects approach was consistent and efficient. Based on the Hausman test, the best choice for this study was the fixed effects model.

Data Description

The analysis was conducted by compiling balanced panel datasets from 27 landlocked developing countries for the period of 2012 to 2018. These datasets were obtained from the GFSI and FAO databases. The dependent variable was food security, whereby the proxy to measure food security was GFSI. Meanwhile, the independent variables were food supply index (FSP), road infrastructure index (RI), purchasing power parity (PPP), population with potable water (PW), political instability index (PSR), and corruption (CTN).

Empirical Results

Table 1 shows the empirical results for the fixed effects model. In examining food availability, the results have revealed that food supplies have a positive and significant impact on GFSI. This implies that higher food supplies will increase the availability of food and increase GFSI in landlocked developing countries. Increase in food supply, especially by increasing food production, food import, and food aid will help these landlocked countries improve food security and fulfil households' basic food needs.

The second set of factors represented food accessibility, which was divided into two categories, namely, physical access and economic access. The latter was proxies by purchasing power parity while the former by road infrastructure. The results revealed that purchasing power parity did not significantly increase GFSI. However, for physical access, road infrastructure positively and significantly influenced GFSI. Improvement in road infrastructure will help all farmers in landlocked developing countries to market their staple foods to fulfil households' basic needs and secure food.

The next dimension of food security is utilization. It was identified that percentage of population with access to potable water was positively significant in increasing GFSI. Safe and readily available water is important for public health, whether it is for drinking, domestic use, food production or recreational purposes. Improved water supply will improve food security and can boost countries' economic growth and contribute greatly to reduction of poverty and undernourishment.

Table 1: The Impact of Food Security Dimensions on The Global Food Security Index (GFSI)

Dependent Variables / Independents Variables	GFSI
Food Availability	
Food Supply (FS)	0.0034**
Food Accessibility	
Road Infrastructure (RI)	2.9201***
Purchasing Power (PPP)	–0.1767
Food Utilization	
Potable Water (PW)	0.2229**
Food Stability	
Political Instability (PSR)	–0.0865***
Corruption (CTN)	–1.5954***
Intercept	30.3604***
Observation	189
Countries	27
R-square	0.9125
F-Test	38.53***
Breusch & Pagan Lagrangian multiplier	368.25***
Hausman fixed	27.53***

*, **, and *** significant in 10%, 5%, and 1%, respectively

The final dimension of food security is food stability. According to the results, political stability and corruption were the indicators to measure food stability and it showed that political stability and corruption were negatively significant in impacting GFSI. Thus, an increase in political instability and corruption will reduce GFSI.

Conclusion

In conclusion, food security is a crucial issue for national development and poverty alleviation and has been the main goal for many international and national organizations. The United States Agency International Development (USAID) has defined food security based on four important dimensions of food security i.e. food availability, food accessibility, food utilization, and food stability. Sufficient quantities of food for all individuals within a country is known as food availability. Food availability consists of food production, food import, and food aid and is also known as food supply. Next, is food accessibility, which ensures that all individuals have access to adequate resources to get sufficient food to fulfill nutritional needs. There are two types of access namely physical access in terms of road infrastructure and economic access in terms of purchasing power. The next dimension of food security based on USAID policy is known as utilization, whereby food utilization is in term of improved in water supply very important to sustained food security and boost economic growth. Finally, improvement in political stability and decreasing in corruption problem will enhanced food security in landlocked developing countries.

This study has shown that food availability in terms of food supply gives a positive impact on food security through GFSI. Next, is food access, whereby increase in purchasing power and improvement in road infrastructure will increase economic and physical access plus directly giving a positive impact to GFSI. Moreover, food utilization in which achievement in potable water in terms of water used will improve food utilization and food security in developing countries. Finally, stability in terms of politics and reduction in corruption will improve GFSI in landlocked developing countries.

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THE LINKAGES BETWEEN AGRICULTURAL INPUT, CLIMATE CHANGE AND FOOD PRODUCTION IN LEAST DEVELOPING COUNTRIES

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Abstract: *Food is among the basic human needs for social development. Sufficiency of food depends not only on domestic food production but also on food imports and food aid. However, all countries need to increase their food production to fulfil domestic sufficiency so they will not be too dependent on food imports and food aid. According to Neoclassical production theory has identified five important factors that impact food production: raw materials, machinery, labor, capital goods, and land. However, this study focuses only on land factors, and these factors are divided into three important elements: irrigation land, fertilizer, and climate change. Besides that, this paper also adopted two important control variable namely labor and capital formation. This paper examines the linkages between agriculture input, climate change and food production in least developing countries. The static panel data was adopted using fixed effect and the findings of this study showed that fertilizer, land irrigation and capital formation in agriculture sector positively significant give an impact to food production in least developing countries.*

Keywords: *Food Production, Fertilizer, Land Irrigation*

Introduction

Food insecurity, is a situation in which people do not have adequate physical, social or economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2010). These situations can cause undernourishment when caloric intake is below the Minimum Dietary Energy Requirements (MDER). The MDER defines the amount of energy needed to maintain a minimum acceptable weight for one's attained height.

Generally, there are two types of food insecurity. The first is chronic food insecurity, which is a long-term or persistent situation that occurs when people are incapable of meeting their minimum food requirements at all times. Chronic food insecurity is caused by a long-term poverty problem, lack of assets, and insufficient access to productive and financial resources. This problem can be overcome with long-term development such as improving education and increasing access to productive resources, in order to raise the ability to meet minimum food requirements and reduce poverty. The second type of food insecurity is transitory food insecurity and is a short-term, temporary situation. The availability of food is reduced because of short-term shocks and fluctuations in domestic food production, food prices, and household income. To achieve food security, affected countries must strive to reduce poverty, increase cognitive and physical development, raise productivity, and promote economic growth.

Food insecurity began during World War II due to a limited supply of food, which led to higher food prices and then led to a food crisis. Since then, global food crises are major challenges to food insecurity, the fluctuations in the food price impact food-importing and food-exporting countries. Increasing food prices have a negative impact on food imports because of the higher cost of the import bill. A higher import bill will reduce food imports and increase food deficits, which gives rise to food security problems (United Nations, 2011).

Food Security and Food Production

Insufficiency in food production has been classified as a transitory food security problem. Food production is insufficient due to population increases, especially in least-developed countries. The Food and Agriculture Organization (FAO) has determined four important input resources for food production – land and irrigation, labour, Capital, and fertilizers. The first input resource for food production is known as the land irrigation area. Irrigation plays an important role in increasing food production and sustained food security throughout the world (Mukherji & Facon, 2009). According to Hasnip & Hussein (1999), 40% of total world food crops are produced through irrigation systems, and another 60% is produced through rain-fed agriculture. However, the highest marginal productivity in crop production is through irrigated agriculture, compared to rain-fed agriculture systems.

Moreover, irrigated agriculture has evolved significantly, where according to figure 1.1 below shows that arable land equipped for irrigation in least developing countries increased from 19,032 thousand hectares in 2010 to 19, 724 thousand hectares in 2016. There have been many challenges in the irrigation sector, including a lack of adequate water maintenance and a decrease in technical support (Carruthers et al., 1997). Although certain least developing countries have many river basins and irrigation canals, this has not increased the availability of water for irrigation, especially in the agriculture sector. In addition, more countries are facing severe water shortages because of higher costs of agriculture irrigation systems, which raises the food price index accordingly (Nhundu & Mushunje, 2010). This situation is critical for success in the near future. All North African countries are already facing acute water shortages and are importing half of their grain (UNEP, 2011). Better and improved water management is the only way to improve food production; otherwise, the prospects of increasing food security are remote.

Irrigation undoubtedly contributes significantly to global food security. The World Bank and United Nations Development Programme (UNDP) estimates show that improved irrigation could be extended over an additional 110 million ha in least developing countries, producing enough grain for 1,500-2,000 million people where more than half of future increases in crop production are expected to come from irrigated land. There are two types of known irrigation systems, namely large-scale and small-scale irrigation. Most of the least developing countries are engaging in small-scale irrigation systems, as they are more affordable than those of large-scale systems, but are still capable of increasing food production. Water harvesting is one of the small-scale techniques of collecting runoff rain water for irrigation purposes and has significantly improved both the yield and reliability of agricultural production. This method has proved successful in Sudan and Kenya. Additionally, the use of low-lift pumps and treadle pumps also provides other linkages of water distribution from domestic use to irrigation.

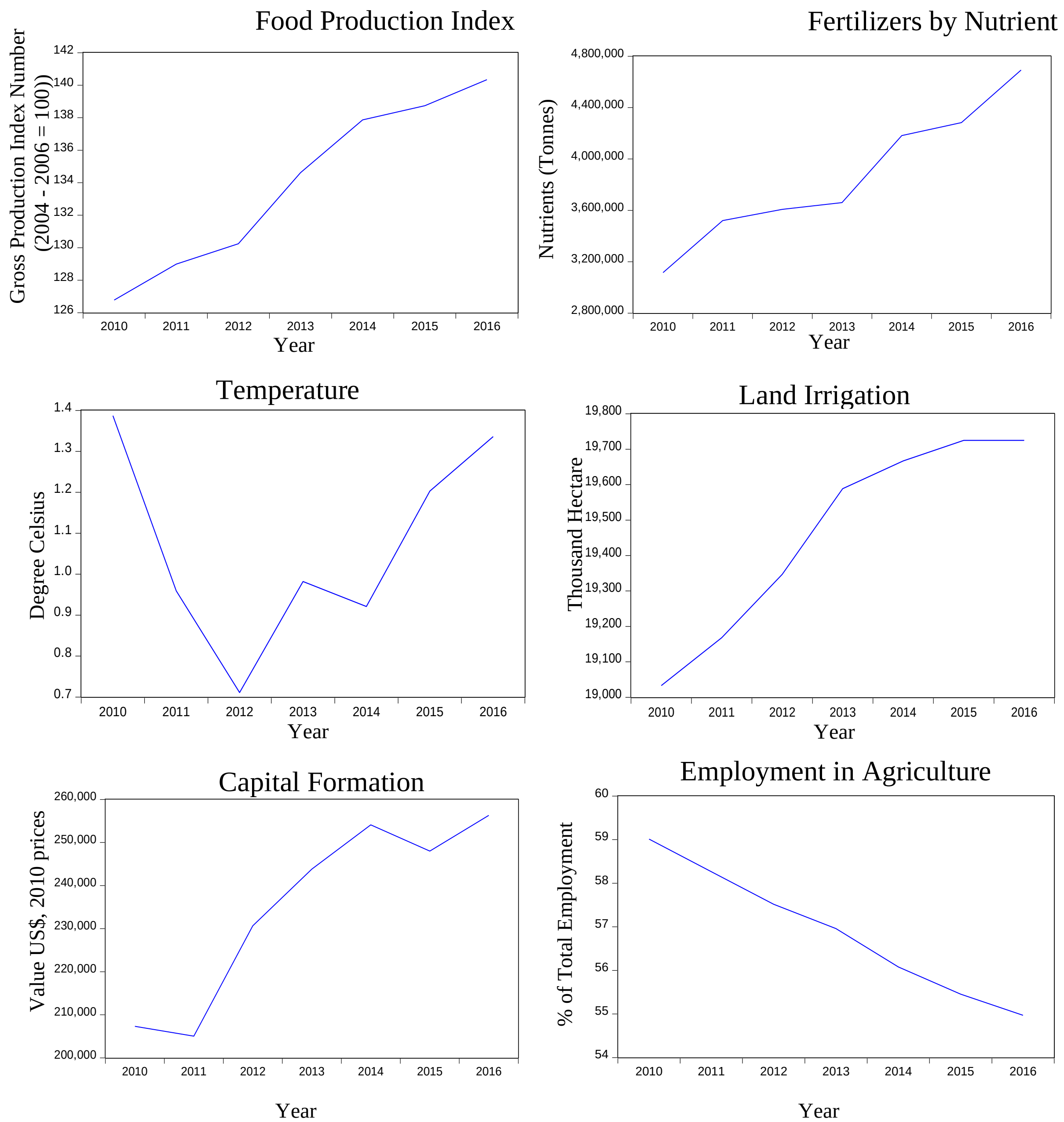
Thus, sustainable water management for irrigation is a major key to improving food production and reducing undernourishment, hunger, and famine. Some expansion of irrigation areas and improved efficiency of water supply usage will help these countries achieve food security. Failure to achieve efficiency and sustain irrigation areas could have a negative impact on land resources and accelerate the process of environmental degradation. Irrigation and water development strategies have not been given special attention by previous studies because of the lack of understanding of the link among water scarcity, food production, food security, and environmental sustainability (Carruther, et. al., 1997).

In addition to irrigation systems, fertilizers also have an impact on food production. Fertilizers are combinations of nutrients that are very important in the production of crops and agriculture production. Fertilizers include three important primary elements: nitrogen (N), phosphorus (P), and potassium (K). They also contain secondary nutrients such as sulphur, calcium, and magnesium. Fertilizers sustain the soil by returning essential mineral nutrients and thus sustaining hardier growth. All primary and secondary types of fertilizers are very important and need to be sufficient to increase crop production. Figure 1.1 below illustrates the trend of fertilizer consumption in nutrients used for agriculture used where Fertilizer consumption (nutrients) increased from 2010 until 2016. These fertilizer products include nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). However, traditional nutrients, such as animal and plant manures, are not included.

The next resources for food production are labour and capital formation. Labour and capital play an important role in food production. However, according to figure 1.1, labour input shows a decreasing trend from 2010 until 2016 where employment in agriculture has been declining on average at nearly 1 per cent per year, as a share of total employment, the proportional rate of decline has generally been fastest in least develop countries where the level of agricultural employment is high. Moreover, Least Develop Countries recorded a remarkable growth in Food Production Index for the period of 2010 until 2016 and this growth is parallel with the growth of capital formation in agriculture sector where this input has increase drastically from US$207,315 in 2010 to US$302,121 million in 2018.

Apart from the aforementioned four important inputs, climate change also plays an important role in determining the sufficiency of food production (Fischer & Parry, 2010). Food production depends significantly on specific climatic conditions. Changes in the frequency and severity of temperatures presents major challenges to farmers, and extreme weather conditions can cause a reduction in food production. The effects of climate change need to be considered as a factor affecting food production (EPA, 2013).

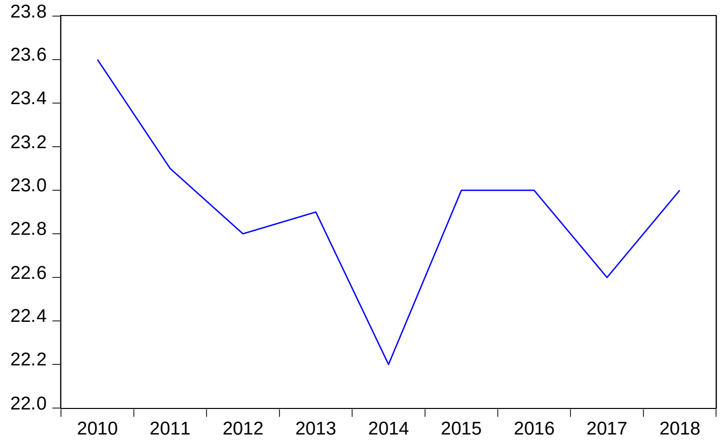
Figure 1.1: The Plots of Food Production Index, Fertilizer by Nutrient, Temperature, Land Irrigation, Capital Formation and Employment in Agriculture Sector, 2010 - 2016



Source: Food and Agriculture Organization Statistic (FAOSTAT)

Insufficiency of food production and the global food crisis have caused least developing countries major problems of malnutrition, hunger, and a lack of proper nutrition. The World Food Programme defines malnutrition as a condition in which those affected have difficulty growing up and are susceptible to disease. Malnutrition also affects people's ability to learn and do physical work. There are two types of malnutrition: first there is protein-energy malnutrition, known as the lack of enough protein and quality food to provide energy to the body. Second, is micronutrient deficiency of vitamins and minerals. The Food and Agriculture Organization (FAO) has defined undernourishment as the proportion of the population whose dietary energy consumption is less than a pre-determined threshold. The threshold is country specific and is measured in terms of the number of kilocalories. The population in least-developed countries has increased more than 10 percent. Although food production has increased, it is not enough to fulfil all the populations' needs. Insufficient food production will cause an undernourishment problem, increase the food deficit and will cause a food security problem. Figure 2 below shows the prevalence of Undernourished for least develop countries for year 2010 until 2018.

Figure 1.2: The Plots of Prevalence of Undernourished in Least Develop Countries



Source: Food and Agriculture Organization Statistic (FAOSTAT)

Figure 1.2 above illustrates the percentage prevalence of undernourishment in least developing countries. The percentage prevalence of undernourishment decreased from 2010 until 2012. increase in 2013. The prevalence of Undernourished has spike in 2015 and 2018 which is increase to 23 per cent. This shows that the food security problem is still a critical issue and needs to be overcome to achieve food security. The objective of this paper is to examine the linkages between agricultural input, climate change and food production in Least Developing Countries.

Literature Review

Generally, several studies have been conducted to determine the link between food sufficiency and food security. Sufficiency of food depends not only on domestic food production but also on food imports and food aid. However, all countries need to increase their food production to fulfil domestic sufficiency so they will not be too dependent on food imports and food aid. The Neoclassical Production Theory has identified five important factors that impact food production: raw materials, machinery, labor, capital goods, and land. However, this study focuses only on land factors, and these factors are divided into three important elements: irrigation land, fertilizer, and climate change.

Generally, domestic food production depends on adequate irrigated land and water. The efficiency of irrigated land will benefit all farmers and increase their food production and hence food supply, reduce hunger, and achieve food security (Dabour, 2002). Moreover, Dowgert et al. (2006) have listed several benefits of irrigation systems in domestic food production, stating that an efficient irrigation system will minimize drought-induced crop failure and famine, which have an indirect positive impact on the environment. In addition, this system will increase nitrogen fertilizer utilization, reduce nitrous oxide emission, increase the value of agricultural land, increase domestic production, and result in crop yield stabilization. Efficient irrigation technology is very important to increase food production, achieve food sufficiency, prevent hunger, and stimulate economic growth (Oriola, 2009). Besides that, climate change has a significant impact on the availability of water and irrigation (Mu & Khan, 2009). These authors have stated that if China were to address the climate change problem in terms of irrigation, it would increase its total grain production from 400 million tons in 2000 to 521 million tons in 2030. Making China's irrigation systems more efficient would directly increase food production and food security in that country.

In addition to irrigation systems, fertilizers also have an impact on food production. Fertilizers are combinations of nutrients that are very important in the production of crops and other forms of agriculture production. Fertilizers include three important primary elements: nitrogen (N), phosphorus (P), and potassium (K). Fertilizers also contain secondary nutrients such as sulphur, calcium, and magnesium. Fertilizers sustain the soil by returning essential mineral nutrients and thus ensuring hardier growth. All primary and secondary types of fertilizers are very important and need to be sufficient to increase crop production.

Additionally, increases in food productivity and crop yields are based on two types of fertilizer categories: natural fertilizers and chemical fertilizers (Kueh, 1984). The main issue that has arisen is whether substitution of natural fertilizes for chemical fertilizers is important in order to increase food production and whether a combination of both kinds of fertilizers has a huge benefit on Chinese food grain production. The author has found that the overall supply of natural fertilizers has grown at a slower rate than chemical fertilizers, because natural fertilizers will increase nitrogen use and cause shortages in phosphorus and potassium, and the ineffectiveness of natural fertilizers in some areas in China will occur. This is in contrast to the performance of chemical fertilizers, which have benefitted agricultural output consistently, and aggregate average and marginal rates of yield returns in China are estimated to remain high in the future.

However, some authors have argued that natural fertilizers or nitrogen fertilizers (N) are very important in that they supply sufficient food energy and protein to the current global population (Dawson & Hilton, 2011). The main purpose of this issue is to examine the potential causes of increasing nitrogenous fertilizers and increasing food production to feed the global population. Global food security achievements are based on sufficient and efficient strategies to supply nitrogen fertilizers for future production. In addition, the quantity of N that is required for food production in the future also depends on the global population and the extent to which reactive N can be recycled and losses minimized. Improving fertilizers used will increase agriculture growth, improve human welfare, and raise economic development, especially in Sub-Saharan Africa (Larson & Frisvold, 1996). Sub-Saharan Africa faces a great food deficit and large-scale food insecurity. To overcome these problems, the agricultural sector needs to increase its crop production by 4%. An increase in fertilizer use is an important factor in sustaining agriculture growth and will increase crop yields. The average fertilizer application rates in Sub-Saharan Africa must match the fertilizer use rates found in Kenya and South Asia, which are about 18% of the annual growth rate, to prevent loss of soil nutrients. The main strategy in fertilizer use in Sub-Saharan Africa is to increase the availability of fertilizers, which will result in lower prices of fertilizer, increase demand, and solve problems related to fertilizer subsidies.

Previous studies show that fertilizers play an important role in increasing crop production and crop yields. However, Diwan & Kallianpur (1985) found that fertilizers have less impact on food grain production in India. Their research included the development of Biological Technical Change (BTC), using fertilizers as a proxy and adopting land-labor substitution to measure biological technology and land productivity in terms of fertilizers and food production in India. Countries' governments and international agencies can play a role in increasing the use of fertilizers. For example, the Indian Government has made a large investment in irrigation and fertilizers, which has resulted in an increase of about 2.5 million hectares under irrigation, so fertilizer consumption will increase about 12%.

These ideas are supported by Ladha et al., (2005), who carried out a study on the efficiency of nitrogen fertilizers in cereal production, providing both retrospective data and prospects for the future. Based on their study, 50% of the world's food production relies on nitrogen fertilizers totalling around 83 million metric tons. Sixty percent of global nitrogen fertilizers are used to produce three major crops – rice, wheat, and maize. In addition, efficiency and improvements in nitrogen fertilizer usage is very important in order to increase cereal grain production by about 50% to 70% to feed 9.3 billion people globally by 2050. The challenge with regard to fertilizer use is improving farmers' knowledge about fertilizer use and ensuring the techniques used are cost-effective and user-friendly. Ladha et al., (2005) also focus on developing fertilizer management strategies that are based on synchronization between supply and nitrogen fertilizer requirements for crop production.

Climate change has an impact on the agriculture sector, especially in terms of agricultural production (Aydinalp & Cresser, 2008). Global climate change has an impact on agricultural production through a reduction in crop yields and agricultural productivity, and decreased global cereal production. Climate change problems depend on physical, biological, and socioeconomic characteristics that are usually found in dry-land areas at lower latitudes and in areas that depend on rain-fed and non-irrigation agriculture. Global climate change is a major cause of natural disasters and is known as an environmental pollution that originates from human activity and has an impact on the world food production system (Douglas, 2009). This study has identified several situations that can be classified as climate change problems. The first is related to the rise of the water level in major rivers and oceans, thus causing floods in deltaic areas. Next, is the rise in global temperatures caused by greenhouse gases in the atmosphere. These two situations have an impact on crop production and yields through floods, droughts, vector-borne diseases, and pest infestations. Damage to food causes many problems, including unemployment, starvation, and malnutrition.

These proposals are supported by Mu & Khan (2009), who examined the effect of climate change on the water and food nexus in China. Based on this study, changes in precipitation and evapotranspiration are used as a proxy to measure climate change. Total grain demand in China would to increase to 427 million tons by 2050 and total grain production would increase up to 629 million tons in 2050 if China were free from climate change problems. In addition, climate change has an indirect impact on food production through future water availability and demand for irrigation water.

Next, climate change in terms of warming oceans could have an impact on the reduction of global per capita agriculture production and threaten food security (Funk & Brown, 2009). This study has found that the level of local agriculture production is determined by the amount and quality of arable land, fertilizers, seeds, pesticides, farm-related technology, practices, and policies. The study examines the emerging threats to global and regional food security, including a reduction of yield gains, increases in population, and climate change problems due to warming in the tropical Indian Ocean and its impact on rainfall. This study has revealed that climate change in terms of drought caused by anthropogenic warming in the Indian and Pacific Oceans will reduce food availability and food production and decrease grain yields by disrupting moisture transport and bringing dry air to crop-growing areas. Moreover, warming in the Indian Ocean impacts African rainfall and reduces the amount of precipitation during the main growing season.

Finally, machine and labor play important roles in food production based on the neo-classical production theory. Fishelson (1974) has mentioned that capital and labor substitute for each other, and that the elasticity of substitution between labor and capital is smaller than unity. The efficiency of labor has risen more than capital, which shows that labor can substitute highly for capital. This shows that increasing labor efficiency will increase agriculture production. These issues are supported by Dorward (2013), who has suggested that agriculture labor productivity is very important in the development of agriculture. An improvement in agriculture labor productivity will increase agriculture production, increase food availability, increase incomes, and increase food expenses. Besides that, higher labor productivity in agriculture will release agriculture labor from food production to the production of other goods and services. Moreover, in low-income countries, increases in labor productivity in the agriculture sector result in productivity increases in these countries.

Besides labor productivity, machinery is an agricultural production or also known as capital input based on production theory. Agricultural machines are designed for use in agriculture production. These machines are used for soil management, seeding, fertilizing, and harvesting (Nemecek & Kagi, 2007). Nemecek & Kagi (2007) have classified agriculture machinery into six classes: tractors, harvesters, trailers, agriculture machinery (general), agriculture machinery (tillage), and slurry tankers. Additionally, crop production involves several machinery operations, crop management, input costs, and other factors to increase productivity. An optimal combination between crops and machinery will sustain farming systems. To enhance productivity, Yousif et al. (2013) have developed a computer system using Excel-Visual basic software for farm management to estimate machinery and farm costs and also net returns from crops grown under different farming systems.

Methodology

This paper will employ a static panel data which are also known as longitudinal or cross-sectional time series data, is the dataset in terms of the behaviour of entities such as countries, regions, companies, and firms observed over time. There are benefits to using panel data estimation because panel data can control all variables that cannot be observed, such as cultural factors; furthermore, this method will control variables that change over time but not across countries or regions. This paper using a fixed-effects model because this model is suitable if unobserved individual characteristics are assumed to be correlated with the error term. Fixed-effects (FE) models are used to analyze the impact of fluctuating variables over time. Besides that, fixed-effects models are used to determine the relationship between predictor and outcome variables within a country. Each country has its own characteristics that may or may not influence predictor variables. Besides that, this method can also add time effects to the country-effects model to have a time- and country-effects regression model. In a fixed- effects model, time invariance cannot be included because the values will be equal to zero for all time periods. Based on a fixed-effects assumption, all time-invariant characteristics are unique to all countries and cannot be correlated with others countries' characteristics. This fixed-effects model controls all time-invariant differences between countries and will cause the estimated coefficients of the fixed-effects models not to be biased because these models have omitted time-invariant characteristics. An alternative way to substitute a fixed-effects model, is by using a random effects model. The difference between fixed effects and random effects is whether the unobserved individual effect represents the elements that have correlated with the regressors in the model, and it does not matter whether either of these effects are stochastic or not. The random effects model is the most suitable model if the error term or the differences across countries are linked with the dependent variable. Time-invariant variables can be included in this random effects model. Lastly, to identify whether the fixed-effects model or random-effects model is more suitable for this study, we needed to run a Hausmen test, where the null hypothesis represents the random effects model and the alternative hypothesis is a fixed-effects model.

Data Description

Next, to fulfilled this paper objectives, the data sets of the selected variables in this article were obtained from the Food and Agriculture Organization Corporate Statistical Database (FAOSTAT). Five variables were considered throughout the analysis where Food Production Index are used as a dependent variable and explanatory variables include Fertilizers consumption in nutrients, Temperature in degrees Celsius, Land equipped with irrigation, gross fixed capital formation and employment in agriculture sector. The analysis of data covered from 2010 until 2016 in Least Developing Countries. Table 1 illustrate the source of data and variables description.

Table 1: Detail of Variables

Variable Name	Abbreviation	Unit of Measurement	Source
Food Production Index	fpi	Gross Production Number (2004 - 2006 = 100)	FAOSTAT
Fertilizers by Nutrient (NPK)	fert	Total Nutrients (tons)	FAOSTAT
Temperature	temp	Degrees Celsius	FAOSTAT
Land area equipped for irrigation	il	Thousand Hectare	FAOSTAT
Capital Formation	cf	Value US$, 2010 prices	FAOSTAT
Employment in agriculture	lb	(% of total employment)	FAOSTAT

Model Specification

Food production is one of the food availability components that play an important role in improving food security at national level (USAID, 1992). To feed the populations of developing countries, food production needs to increase by about 40 percent by 2030, according to an FAO (2006) analysis. Model specifications are based on the theoretical production model adopted from Yuan (2011) and Stern (2006). The model is illustrated below as:

$$\ln y_t = \alpha_0 + \beta_1 \ln fert_t + \beta_2 \ln temp_t + \beta_3 \ln il_t + \beta_4 \ln cf_t + \beta_5 \ln lb_t + \mu_r + \tau_t + \varepsilon_{it} \quad \ldots \quad (1)$$

Where Y_t is Food Production Index (FPI) in year t, fertilizer (fert), climate change (cc), irrigation land (il), Capital formation (cf), employment (lb),regions unobserved fixed effects (μ_r), time-specific unobserved fixed effects (τ_t), and error term (ε_{it})

This paper highlights three factors that impact food production: climate change (Mu & Khan, 2009), land irrigation (Carruthers et al.,1997), and fertilizer use (Borlaug, 2008). The control variables is capital formation which, based on the World Bank, is a proxy for input agriculture indicator. The last control variable is rural manpower (Mr), which, based on the Food and Agriculture Organization (FAO), is a proxy for percent of employment in the agriculture sector. All these two control variables are based on Yuan's (2011) approaches.

Result and Discussion

The descriptive analysis shows mean, standard division, minimum and maximum of the study variables. Table 2 provides the descriptive and correlation analysis where the mean results show that fertilizers generate a high value of 9.8154. Besides that, The standard deviation analysis for fertilizers also show this variable is the most explosive variable with the highest deviation of 2.28 followed by Land equipped with irrigation (il). According to correlation analysis, its illustrate that fertilizer, land equipped with irrigation, capital formation has positive relationship with food security. However, temperature and employment in agriculture sector show negative relationship with food production.

Table 2: Descriptive and Correlation Analysis

Variables	fpi	fert	temp	il	cf	lb
Mean	4.8532	9.8154	0.0091	4.0115	4.3707	3.9402
Std. Dev.	0.2127	2.2849	0.4159	2.2634	1.9057	0. 4029
Minimum	4.0992	2.3786	-2.4769	-2.0402	-1.0621	2.2083
Maximum	5.3562	14.6535	0.6981	8.6125	7.6599	4.5230
Observation	324	201	294	293	322	315
Correlation						
fpi	1.0000					
fert	0.4194	1.0000				
temp	-0.0214	-0.1218	1.0000			
il	0.3442	0.6855	-0.2353	1.0000		
cf	0.3561	0.7674	-0.1977	0.6566	1.0000	
lb	-0.0512	-0.0721	-0.1160	0.0505	0.0820	1.0000

Next, static panel data analysis presented in Table 3 shows the impact of fertilizer consumption, land irrigation, temperature, capital formation and employment in agriculture sector on food production in Least Developing Countries. This analysis has employed fixed effect model to determine the linkages between agricultural input, climate change and food production based on hausman fixed test whose results illustrate that it is significant at the 1 per cent level. Based on this result, the fixed effect model is the preferred model.

Table 3: The Linkages Between Agricultural Input, Climate Change and Food Production

Food Production	Fixed Effect Model
Fertilizers	0.0224***
Temperature	0.0021
Land Area Equipped for irrigation	0.7120***
Capital Formation in Agriculture	0.0649**
Employment in agriculture sector	-0.0910
Intercept	1.3719
Observation	177
R-Square	0.1276
F-Test	8.22***
Vif	2.01
Breusch& Pagan Lagrangian Multiplier	362.13***
Hausman Fixed Test	15.65***

*, **, ***significant at 10%, 5%, 1%, respectively

According to the fixed effects analysis above, fertilizer gives a significant impact on food production in least developing countries. The result is in line with the theory, which asserts that fertilizer is very important to increase food production (Borlaug, 2008). This study found that fertilizer consumption is very significant and does contribute to increase food production where 1 percent increase in fertilizer consumption with better nutrients will increase food production 2.24 percent. The next variable is temperature, where based on the result illustrated above, temperature is not a significance influence on food production in least Developing Countries, because there are other factors that more readily influence food production. Kang et al. (2009) found that climate change not only directly impacts food production but also has an impact on food production through other channels, such as water availability, crop yields, and crop water productivity. In addition, these authors also mention that the impact of climate change also depends on the location and geographical characteristics of the affected areas. Besides of these two variables, irrigation also plays a very crucial role in increasing agriculture production (FAO, 2002). Based on fixed effects analysis above, which shows that the increase of 1 percent in total area equipped for irrigation will increase food production by almost 71.20 percent. Irrigation systems help poor and smallholder farmers to increase their yields from crop production. The productivity of crop production is significantly higher in irrigated areas compared to the same crop production under non-irrigated areas (Hussain & Hanjra, 2004). Additionally, this research has adopted two important control variables, capital formation in agriculture sector and employment in agriculture sector. The results of a fixed-effects analysis show that capital formation in agriculture sector have positively significant give an impact on the food production while employment in agriculture sector are not significant give an impact on the food production in least developing countries.

Conclusion and Policy Implication

Food is very important for social development with sufficient nutrition to produce energy and to protect human bodies from infection and disease. Recently, food security has been recognized as one of the most important global issues. Mainly, the objective of this study is to examine the linkages between food production, agriculture input and climate change. This study has proved that there is a positive linkage between agriculture input in term of fertilizer, land irrigation and capital formation in agriculture sector with food production in least developing countries. fertilizer, land irrigation and capital formation in agriculture sector are positively significant to increase food production in least developing countries where increase in these three important variables will increase food production significantly. However, temperature and employment in agriculture sector are not significant give an impact on food production, where these two variable are not having any linkages to increase food production in Least Developing Countries.

Policy Implication

In accordance with the objectives of this study and the result of this paper shows that land irrigation provides a huge impact on food production is these Least Developing Countries, the governments, in partnership with public and private institutions, need to work toward defining and implementing comprehensive strategies for irrigation development. There are four important strategies that should be implemented to increase land irrigation areas to boost food production in these countries. The first strategy is to increase the national budgetary allocations for irrigation infrastructure development, and the next is to develop a legal framework to ensure the land rights of farmers, which will motivate farmers to invest in irrigation. Crop diversification will enhance farmers' incomes and viability levels and promote cost recovery from users, which will be adequate to cover the operation and maintenance costs; this is the third strategy. Finally, capacity-building programs should be developed to strengthen, support, and enlighten farmers and encourage farmer participation in irrigation development (Nhundu & Mushunje, 2010).

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A MODEL FOR A FUNCTIONAL AND ENTREPRENEURIAL INTERNSHIP PROGRAM FOR HOSPITALITY EDUCATION IN THE PHILIPPINES

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Abstract: *The main objective of this study is to develop a functional and responsive entrepreneurial internship model for Philippine Hospitality Management Education program. To achieve this, mixed methods research design was employed using a combination of the following: survey that contained assessment of compliance to a checklist from the Philippines' Commission on Higher Education [CHED] Student Internship Program in the Philippines [SIPP] Requirements and a survey questionnaire developed by the researcher containing proposed requirements for the quantitative portion of the study. A semi-structured interview with key informants was utilized for the qualitative side, and combined with quantitative results, the model was constructed and formed. This descriptive study determined the present status of the selected HEIs internship in regard to their adherence to the SIPP requirements. Further, the paper used the importance - performance analysis (IPA) to identify the existence of the entrepreneurial elements as well as the perceived importance of these elements for the hospitality internship. The study showed that there were no significant differences in the level of compliance to CHED's SIPP between autonomous and non-autonomous HEIs. Moreover, the elements of an entrepreneurial internship program namely entrepreneurial objectives, internship trainor/facilitator, pre-entrepreneurial internship stage, entrepreneurial internship stage, and post-entrepreneurial internship stage were perceived to be important but non-existent in most hospitality management internship programs.*

Keywords: *entrepreneurship, internship, hospitality education, functional*

Introduction

Recent developments strengthened the key role that a university plays in the transformation of global businesses. This led to the emergence of the entrepreneurial university phenomenon in the new knowledge-based society (Etzkowitz, 2013). The paradigm shift on the responsibility of a university from teaching and research to include business activities clearly put into action the helix model of industry, government and university relationships. This model further showed how a university becomes an important innovation key element in providing seed bed for new business human and financial capital (Etzkowitz, 2013). The entrepreneurship education [EE] has developed as a vital instrument to enhance entrepreneurial orientation and as such, has been highlighted in several policy measures, strategic recommendations, and action plans of diverse international organizations, such as the EU, the World Bank, OECD, and the World Economic Forum (Ndou, 2016). The major reasons for the closure of businesses are poor profitability and lack of access to capital (Velasco et. al, 2014). The limiting factors identified by the study contributing to these situations include lack of financial resources and access to institutional credit as main reasons followed by the need to improve formal and informal education and training toward entrepreneurship and the improvement of technological infrastructure, research and development (Velasco et. al, 2014). Studies revealed that 89.5% of the Filipino entrepreneurs did not have formal education (Velasco et. al, 2014). This warrants new academic programs and courses to be opened and offered with partnerships on start-ups to help propel entrepreneurial developments in the country. The need to review the secondary and tertiary education in the country in order to promote entrepreneurship as an alternative to employment now becomes imperative. The Filipino youth have started to present a new position on entrepreneurship as one best option towards improving one's status of living (Velasco et. al, 2014). With reference to the formal education concern identified by the GEM report, the National Statistical Data of the Commission on Higher Education [CHED], Business Administration and Related Courses cluster (including Hospitality Management Program) is among the programs with the highest number of enrollees in the country. In light of the recent ASEAN integration, the Philippine business initiatives, recent country's K to 12 education program, the GEM report on the need to upgrade formal business programs, the Asia Pacific tourism and hospitality industry growth marks and emerging issues on hospitality business program internship policies and standards, a need to review the present educational offerings in entrepreneurship and business-management related courses specially the hospitality program in the country becomes a must. Internship is recognized to be an integral component of hospitality management students' academic journey. Citing Velasco et al's (2014) observation on the need to improve formal and informal education and training toward entrepreneurship, this research acknowledged that the gap on entrepreneurial training among hospitality management internship programs exists. Despite the rigorous on-the-job training on various operational departments, the aspect of entrepreneurial management of the business was excluded. This is the research problem that this study proposed to explore and recommend solutions. Doing so will uplift not only the skills aspect of the internship programs but the competency of students on entrepreneurship and management side of the business.

Literature Review

There is no adequate literature on the Hospitality Entrepreneurial Internship and on the relationship between the entrepreneur and the student trainee (Lahm & Heriot, 2013). In the absence of a generally accepted entrepreneurship internship model in the US and Europe (Rideout & Gray, 2013), qualitative researches were conducted to accumulate by observation. Lahm and Heriot (2013) discussed the developmental components of the entrepreneurial internship observed which include: evaluation of the entire program, identifying priorities, building of local contacts, promotion of the program, internship supervision, and finalization of procedures. Common issues and concerns usually encountered in the entrepreneurial training include choice of placement (global or local), selection of industry partners' willingness to share entrepreneurial best practices and restrictions on the use of space and technology, among others (Lahm & Heriot, 2013). The internship program is very competitive requiring strong student skill set in meeting host company needs on availability, attitude, aptitude, and ambition of applicants. Projects may include conducting research and competitive analysis, assisting in strategy development, evaluating policies, improving operational efficiency, implementing metrics to increase productivity and assisting human resources, among others. Dilts and Fowler as cited by Zreen, Farrukh Nazar & Khalid (2019) emphasized the importance and advantages of an entrepreneurial internship as a vehicle for effective learning thru hands-on application of business theories taught. These business schools integrate the classroom learnings with entrepreneurial training at the small business partners' workplace. The study of Dobratz, Abbey, and Singh (2014) emphasized the potential benefits of student internships to the students, school, and employer and suggested that internships be integrated in formal entrepreneurial education programs. The practical training component of the business program incorporates the valuable service and contribution of industry experts who serve as professional mentors during the internship process. Various strategies are implemented from the incubator concept, manpower and funding support, workshops, meetings, business plan pitches and competitions to consultations and interactions to start-up businesses. The training content components was proposed in 2007 by the paper of Pretorius & Wlodarczyk (2007) on their assessment of entrepreneurial curriculum training. Business skills [BS], entrepreneurship skills [ES], and motivation development [M] are the salient training components of an entrepreneurial internship program. This framework as described, outlined the fundamental elements of entrepreneurship training, namely - management skills, opportunity identification, business planning, and need for achievement [nAch] (Vosloo, Vosloo & Antonites, 2018). Table 2 outlined the constructs for training execution. It became compulsory for entrepreneurial students be exposed to the practice-based training environment for the development of the right entrepreneurial attitude and behaviour (Neck and Green, 2011). To further enhance training experiences, the Royal Institute of Technology University [RMIT] model was developed showing the relationship flows between and among the students, and faculty and industry mentors work in the management of an entrepreneurial internship (see Figure 1). Engaging in work-based programs, like entrepreneurial internships, create opportunities, productivity and effectiveness among future Tourism and Hospitality professionals, the RMIT model allowed students to acquire hands-on experience via various concepts which include group dynamics, client reporting, marketing, feasibility analysis, presentation skills and business case developments, among others. Gilbert (2010) explained the use of the RMIT model, the experiences gained, the skills acquired, the challenges faced and the recommendations for administration, students and industry partners for program improvements. The study revealed the abilities needed to survive the internship challenges which include: ability to work under pressure, team work, problem-solving, independent work from mentor, novel and creative customer approaches, constructive feedback, market research skills and ability to make a stand on what one believes in (Gilbert, 2010).

Theoretical Framework and Hypotheses Development

Leibenstein's X-efficiency theory of entrepreneurship. Harvey Leibenstein (1922-1994), an American economist who proposed his X-Efficiency Theory on Entrepreneurship, defined an entrepreneur as a "gap-filler who can recognize market trends and can develop new goods or processes in demands" (as cited in Nayab, 2011). According to Leibenstein, there are two main roles of entrepreneurs: complete the inputs and fill gaps.

Peter Drucker and Howard Stevenson's opportunity-based entrepreneurship theory. On the other hand, Drucker (as cited in Nayab, 2011) explained innovation, resources, and an entrepreneurial behavior as the keys to entrepreneurship. Moreover, entrepreneurs do not cause change but exploits the opportunities presented by change (Drucker 1985 as cited in Simpeh, 2011). Further, in support of Drucker's claim, Stevenson (1990 as cited in Simpeh, 2011), the core of entrepreneurial management is the "pursuit of opportunity regardless of resources".

Kirzner's theory of adjustment of price. Kirzner's theory (as cited in Nayab, 2011) also considers the alertness to recognize opportunity more characteristic than innovation in defining entrepreneurship. Price adjustment and alertness on non-equilibrium are the two roles of entrepreneurs.

McClelland's motivation adjustment theory. Tenets of the need for achievement [nAch], need for affiliation [nAff], and need for power [nPow] concurred that economic development relies heavily on entrepreneurial behaviors of individuals (Dhriiti.com, 2017).

Table 1. Constructs Pertaining to Training Execution

Factor	Considerations
Context of the Program	Minimum educational level of the participants Outcomes of the program after participation Needs of the target group who participate in the program Reasons for participating in the program Previous experience of the participants
Business knowledge and skills	Perceiving an opportunity in developing a concept Starting a business venture from the business plan Growing the business venture after start-up Competing in a mature market through effective and efficient strategies Exiting the market in a decline phase through successful divestment strategies
Facilitator	Developing entrepreneurial thinking patterns Reinforcing entrepreneurial ways of being and behaving Apprenticeship and mentoring through venture establishment Application of a holistic and multi-disciplinary approach Own level of practical experience with start-ups
Approaches used to transfer knowledge and skills	Use of appropriate approaches, techniques and methods that enhance learning Optimal participation of the learner in the learning process Incorporation of real-life problems and obstacles in the learning process
Business plan utilization	Preparation of a business plan Presentation of the business plan to peers, facilitators and potential funding institutions Opportunity to defend the main principles and assumptions underlying the plan against critical evaluation Execution of the business plan under real circumstance

Note: Adapted from Pretorius (2000) "Evaluation of a proposed training methodology to enhance micro and small business start-ups in South Africa", Proceedings: ICSB World Conference. Brisbane, Australia.

Taken from various literatures that acknowledged the importance of developing the right entrepreneurial attitude among students during the internship course, as well as the theories that strengthened the value of exploring opportunities, hypotheses were formed. These were cited in the studies of Dilts and Fowler as cited by Zreen, Farrukh Nazar & Khalid (2019), and Gutierrez and Baquero (2017), and Neck and Green (2011). These hypotheses were developed to address the research objectives and answer the research questions. Part of the research objectives was to determine the level of compliance of the selected HEIs' on CHED's Student Internship Program in the Philippines [SIPP] requirements, henceforth, the following hypothesis is formed.

H01: There is no significant difference on the level of compliance between autonomous and non-autonomous HEIs.

The existence and statement of clarified entrepreneurial objectives are important in an internship program, as defined by the study Vosloo, Vosloo & Antonites (2018), and the various entrepreneurial management models for internship. Any program for that matter should clearly state the program objectives consistent with McLelland's motivation adjustment theory that defined an individual's need for achievement [nAch]. It would be nearly impossible to achieve something, if the objective is not clarified, hence, the following hypothesis was developed:

H02: There is no significant difference on the respondents' perception on the existence and importance of setting hospitality management program entrepreneurial objectives.

The study of Pretorius (2000) highlighted the importance of training facilitators during internship programs, thus, from these inputs, the following hypothesis was formed.

H03: There is no significant difference on the respondents' perception on the existence and importance of setting a hospitality management program facilitator/trainer.

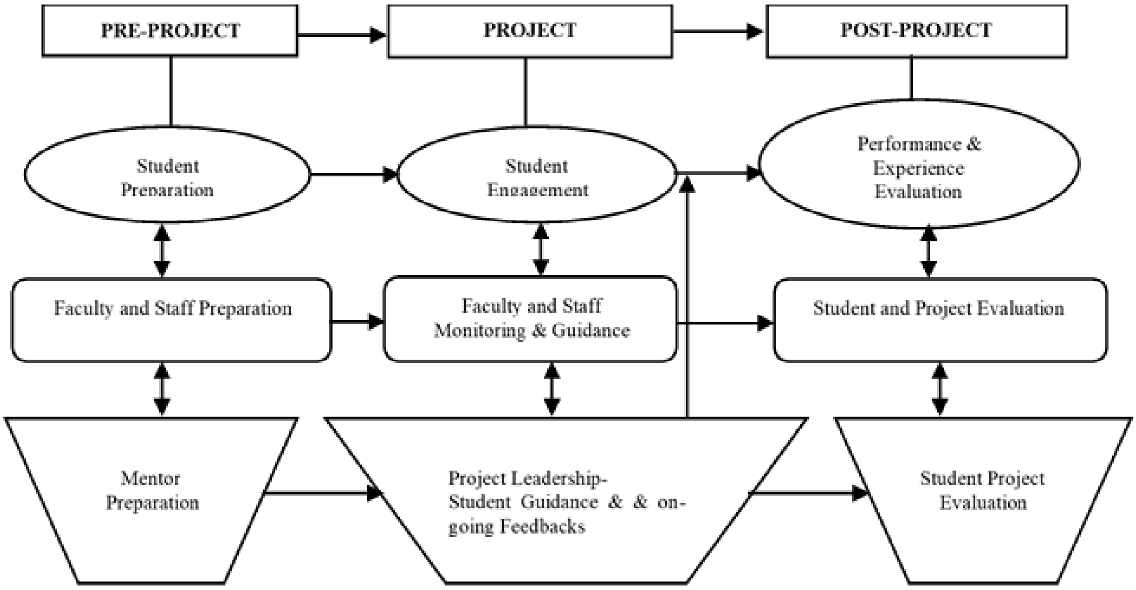

Figure 1: The Royal Institute of Technology University MIT-D Conceptual Model of Applied Learning

Adapted from Gilbert, D. (2010). Integrating Theory and Practice for Student Entrepreneurs: An Applied Learning Model. *Journal of Enterprising Culture*, *18*(1), 83-106

The RMIT model showed how students acquire hands-on experience via various concepts which include group dynamics, client reporting, marketing, feasibility analysis, presentation skills and business case developments, among others (Gilbert, 2010). Moreover, the RMIT model inspired the inputs for pre-entrepreneurial internship stage, the entrepreneurial internship proper stage, and the post-entrepreneurial internship stage. The entrepreneurial internship and cooperative education program of the Missouri University of Science of Technology as well as the Iowa State University Papajohn Center for Entrepreneurship, developing ability to identify opportunities. This concurred with the theories of Leibenstein's entrepreneurship theory, Drucker and Stevenson's opportunity-based entrepreneurship theory, and Kirzner's theory of adjustment of price, hence, the following hypotheses were developed:

H04: There is no significant difference on the respondent's perception on the existence and importance of setting a pre-entrepreneurial internship stage

H05: There is no significant difference on the respondent's perception on the existence and importance of setting an entrepreneurial internship proper stage

H06: There is no significant difference on the respondent's perception on the existence and importance of setting a post-entrepreneurial internship stage.

The research paradigm portrayed the model (see Figure 2) proposed by the researcher grounded on the framework developed by The Royal Institute of Technology University MIT-D Conceptual Model of Applied Learning (see Figure 1).

Research Methods

Research Design

To achieve the objectives of this study, the mixed method research design was used. As a design, it collected and analysed data both quantitatively and qualitatively. The quantitative part of the study used a 3-part survey questionnaire developed by the researcher. Questionnaires are instruments commonly used in behavioral and social sciences to quantify knowledge, skills, and attitudes of participants (Hoekstra et al., 2018). Part 1 contained questions that determined the following profiles of the HEI-respondents: school background, hospitality business/management program objectives, faculty, and course profile details. Part 2 contained a checklist used to evaluate compliance/adherence of the HEI on CHED Memo 104 s. 2017 prescribed as a local internship standard. Part 3 of the survey questionnaire contained questions incorporated the entrepreneurial elements of the internship program in use. The qualitative part of the study utilized interviews conducted among thirteen [13] selected academicians and/or business owners. The selected interview respondents from the academe were thirteen [13] HEIs from the following regions in the Philippines: Region 3 (1 HEI), National Capital Region (6 HEIs), Cordillera Autonomous Region (2 HEIs), and Region 4 (4 HEIs). The selected interview respondents among industry practitioners were twelve [12] entrepreneurs: food business (6), non-food (2), hotel and lodging (4).

Statistical Treatment of Quantitative Data

Results of the survey were analyzed using T-test for difference of means of two groups, and Paired Samples T-test. In particular, the two-sample T-test was used in which the two groups are independent of each other. The independent groups were the autonomous and non-autonomous universities. T-test for difference of means of two groups was used the accept or reject the null hypothesis H01. This test was the appropriate statistical tool to use because the same group evaluated existence and importance of the factors (or variables) identified in the study. This test was used to accept or reject the null hypotheses H02 to H06.

Analysis of Qualitative Data

The data from the conduct of interviews were transcribed verbatim. Clustering of data obtained from the interviews into sections or groups of information, also known as themes or codes achieved using a repertory grid. Finally, the emerging categories generated helped identify the respondents' perception on desirable components of an Entrepreneurial Internship Program for Hospitality Education in the country. This was the triangulation process done to combine the survey results with themes extracted from the interviews to form the model as described in the research simulacrum.

Results

Descriptive Statistics

Among the important HEI profiles derived from the descriptive statistics are the following:

1. Most of the HEIs were accredited by CHED either as autonomous or deregulated (40 out of 52);
2. Most of the faculty members have backgrounds in business (45 out of 52);
3. Most of the faculty members handle a maximum of two [2] internship batches (35 out of 52);
4. Most practicum hours were set at a minimum of 500 hours;
5. Most of the practicum in-charge were holders of master degrees in HM/HRM and/or with at least 3 years relevant industry experience (39 out of 52); and
6. Most of the HEIs designate practicum program and placement coordinators (43 out of 52)

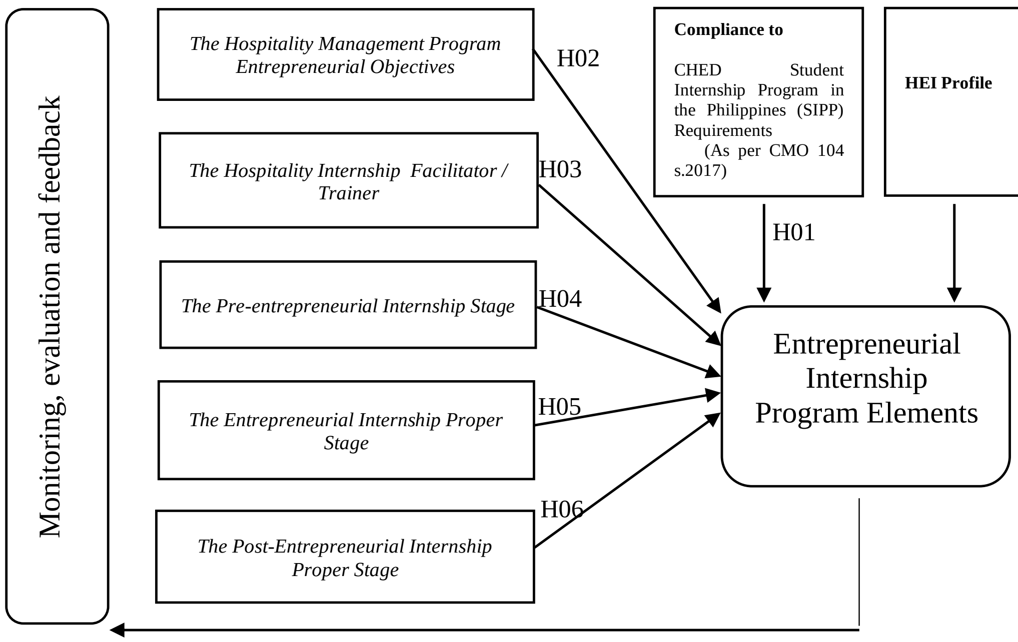

Figure 2: Hypothesized Research Model (Research Simulacrum)

Compliance to CHED's SIPP Requirements Checklist

Part 2 of the survey is about compliance of the respondents on the guidelines set by CHED as outlined in the CHED's SIPP Requirements as per CMO 104 s.2017. Moreover, the reliability statistics of the SIPP questionnaire had a Cronbach's Alpha of 0.946 which satisfied the threshold of more than 0.7 for internal consistency. The results of part 2 survey are summarized in Table 2. The respondents perceived their respective institutions to be compliant to a larger extent with CHED's SIPP requirements. The levels of adherence to requirements of CHED's SIPP checklist between autonomous and non-autonomous universities were compared. Using t-test for statistical significance in means, the results of were summarized in Table 3. Results showed that there were no significant differences in adherence to CHED's SIPP requirements between HEIs that are autonomous and non-autonomous. Thus, the null hypothesis H01 was supported. The existence and importance of the entrepreneurial elements were tested for statistical significance on difference of means using paired samples t-test. The results were shown in Table 4. Results showed that there were significant differences between perceived existence and importance of the elements. It showed that the perceived existence of all elements was significantly lower than the perceived importance. The implication was, respondents recognized the importance of the elements however, in general, in most institutions, some of the elements were lacking or none existent at all. Hence, hypotheses H02, H03, H04, H05, and H06 were all rejected.

Qualitative Analysis – Themes Extracted

***Motivations in Becoming An Entrepreneur*:**

The participants concurred that the main motivations for engaging in entrepreneurship were financial independence, exploration of opportunities and experiences, help in nation building, and inspiration from successful business entrepreneurs. Other common motivations to become entrepreneurs were inspiration taken from the experience of successful businessowners, be it family, friends and colleagues, and the prospects of becoming an "own boss" and earn limitless income.

Evaluation on The Current Internship Programs and Expectations:

There was a consensus among the two groups of respondents that current hospitality internship programs in their institution focus on skills and knowledge application. The programs were centered on training students to become employees while honing entrepreneurial skills were not really emphasized. The two groups of respondents agreed that entrepreneurial elements be integrated in the internship program for HRM/Hospitality Management. The entrepreneur respondent group agree on training students in the business management area. The expectations of entrepreneurial HRM student trainee are as follows: Flexible, professional, passionate, service-oriented, innovative, effective communicators, decisive, with leadership qualities, resourceful, hard-working, willing to learn and interested in entrepreneurship. Basic knowledge in financial management, management, marketing, leadership skills, human relation skills, communication and interpersonal skills, and different HM skills and competencies are musts for entrepreneurial HRM/HM trainees. Computer literacy, social media marketing, legal aspects of starting a business were also some of the added desirable skills. Desirable trainor / coach qualifications both from the industry partner and HEI were also defined and these are: trainer should at a minimum, a graduate of either a business-related course or HM/HRM. Added qualifications include experience in either managing own business or HM/HRM related industries. Trainers should be willing to impart their knowledge and expertise to trainees. Moreover, trainers are expected to have the following knowledge and skills: management and finance; operations; specific skills like baking, food processing; digital marketing and computer literacy (social media, other marketing platforms). Both trainee and trainor are expected to be competent, pointing out the importance of student and mentor preparation. Students are to have necessary skills gained from their academic classes while mentors should have the appropriate industry immersion particular to the type of business the student-trainee might be interested in. It is expected that mentors shall involve student-trainees in problem solving, allow students to "shadow", and provide guidance all throughout the program. The use of simulation exercises to allow the trainees to experience the environment during an entrepreneurial undertaking was also highlighted. Simulations can be done on site, shadowing activities, or setting up entrepreneurship laboratories. Interviewees agreed that monitoring and feedback are essential in the program. Monitoring can be in the form of regular ocular checks of the student-trainees by an assigned facilitator while feedbacks can be made by the trainer, the student themselves and the faculty in charge. From quantitative and qualitative results, the proposed model was developed, in response to the need of integrating entrepreneurial elements in the internship programs of BS HRM/HM students, as shown in Figure 3.

Table 2: Compliance to CHED's SIPP requirements

	Mean	SD	VI
HEI Obligations/Responsibilities; Planning/Engaging/Orientation	3.801	0.248	larger extent
HEI Monitoring and Evaluation	3.787	0.316	larger extent
HEI Reporting	3.605	0.709	larger extent
SIPP Coordinators Requirements	3.714	0.645	larger extent
SIPP Coordinators Obligations	3.869	0.244	larger extent
Student Intern Requirements	3.974	0.086	larger extent
Student's Obligations/Responsibilities	3.929	0.147	larger extent
Student's status in the HTE	3.776	0.369	larger extent
Host Training Establishments (HTEs) General Obligations	3.853	0.230	larger extent
HTE Specific Obligations and Responsibilities	3.858	0.248	larger extent
Parent/Guardian Obligations and Responsibilities	3.929	0.270	larger extent

Note: As summarized by the researcher.

Table 3: Test for significance of means

	Autonomous		Non-autonomous		t - test value	p - value
	Mean	SD	Mean	SD		
HEIObligations/Responsibilities; Planning/Engaging/Orientation	3.785	0.289	3.817	0.207	-0.447	0.657
HEI Monitoring and Evaluation	3.810	0.288	3.764	0.344	0.503	0.617
HEI Reporting	3.514	0.768	3.693	0.652	-0.883	0.382
SIPP Coordinators Requirements	3.708	0.624	3.720	0.678	-0.063	0.950
SIPP Coordinator's Obligations	3.827	0.270	3.909	0.214	-1.170	0.248
Student Intern Requirements	3.964	0.105	3.983	0.063	-0.753	0.455
Student’s Obligations/Responsibilities	3.913	0.188	3.943	0.095	-0.712	0.480
Student's status in the HTE	3.792	0.252	3.760	0.459	0.298	0.767
HTE Obligation	3.858	0.232	3.848	0.233	0.156	0.877
HTE Specific Obligations and Responsibilities	3.836	0.249	3.880	0.251	-0.617	0.540
Parent/guardian obligations	3.875	0.369	3.980	0.100	-1.373	0.176

Note: As summarized by the researcher. Null hypothesis is rejected at $p<0.05$ significance. No significant differences in SIPP compliance between autonomous and non-autonomous HEIs

Table 4: Paired samples T-test

	Existence of the Elements		**Importance of the Elements**		t - test value	p - value
	Mean	SD	Mean	SD		
A. The HM Entrepreneurial Objectives	3.270	0.477	3.591	0.469	-3.042	0.006
B. The Hospitality Internship Facilitator/Trainer	3.304	0.663	3.722	0.417	-2.617	0.016
C. The Pre-entrepreneurial Internship Stage	2.826	0.827	3.530	0.481	-3.992	0.001
D. The Entrepreneurial Internship Proper Stage	2.539	0.799	3.339	0.616	-4.477	0.000
E. The Post -entrepreneurial internship Stage	2.739	0.923	3.530	0.538	-3.827	0.001

Note: As summarized by the researcher. Null hypothesis is rejected at p-value < 0.05 significance. There is significant difference in existence and importance of the elements

Conclusion and Recommendations

Conclusion

The study found confirmation that entrepreneurial abilities of students undergoing practicum are not among the priorities during training. Respondents agree on the need to include entrepreneurship as among the focus of internship programs. The elements of an entrepreneurial internship program were formulated in this study, guided by models and frameworks developed by institutions practicing entrepreneurial internship in their programs. The elements hospitality management entrepreneurial objectives, internship facilitator / trainer, pre-entrepreneurial internship stage, entrepreneurial internship proper stage, and post-entrepreneurial internship proper stage were based on the RMIT model. The researcher modified the model based on knowledge and expertise in the industry that would fill the gap of the lack in entrepreneurial elements in the HM/HRM internship programs in the Philippines. Moreover, the researcher acknowledged the importance of adhering to CHED’s SIPP requirements, thus, this was included in the proposed model. In addition, the researcher found it necessary to include certain attributes of HEIs’ profile as part of the model. Each of these elements contain factors that would guide institutions in meeting the requirements, and these were taken from the qualitative part of the study. Feedback and monitoring are among the components of the model because it essential to evaluate program impact on the student, the host training establishments [HTE]s and the HEIs offering HM/HRM. In this manner, not only would be the program be revised for improvement but the whole curriculum of the HM/HRM itself would be subject to changes based on industry demands and needs.

Recommendations

Since no significant difference exist between autonomous and non-autonomous compliance to CHED's SIPP requirement, all the recommendations can be applied to non-autonomous HEIs as well. It is recommended that non-autonomous HEIs prioritize accreditation with CHED. Memorandums of agreement between HEIs and HTEs be strongly forged to formalize training objectives, expectations, and implementing rules and regulations to be followed both by trainees and trainers. Future studies may be directed towards the following: Cost-benefit analysis of the entrepreneurial internship program; Effectiveness of the program as perceived by HM/HRM graduates who underwent the entrepreneurial internship program; and A tracer study on successful business entrepreneurs of HM/HRM graduates.

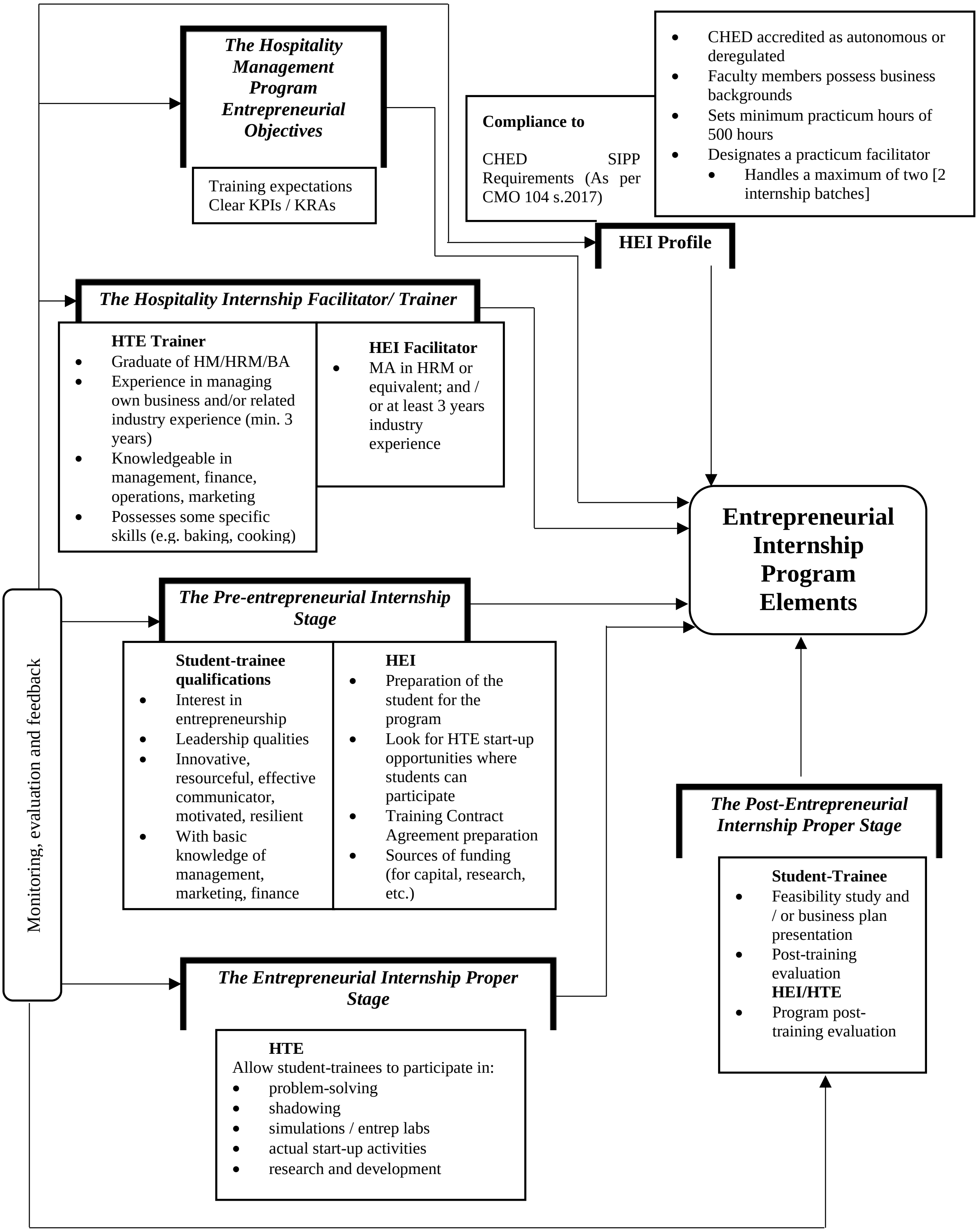

Figure 3: Proposed Model for Entrepreneurial Internship Program for HM/HRM

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THE INFLUENCE OF SUBJECTIVE NORMS TOWARDS TAX COMPLIANCE BEHAVIOUR AMONG CIVIL SERVANTS IN SELANGOR

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Abstract: *Tax compliance is a global issue. It has not been easy for any government across the globe. Numbers of eligible taxpayers did not comply with their tax obligations annually. There are a numbers of past research proves the association of subjective norms towards tax compliance behaviour. However, there are scarcity of studies that analyse the influence of subjective norms among civil servants. Therefore, this study interested to examines the influence of taxpayers attitudes towards their tax compliance behaviour. This quantitative research uses self-administered questionnaire as its medium of data collection. There are 120 civil servants in Selangor participated as respondents. The findings of the data revealed a moderate relationship between attitude and tax compliance behaviour.*

Keywords: *tax compliance, subjective norms, civil servants*

Introduction

Tax compliance, or lack of, taxes has been a common topic of public policy throughout history. While being a global issue and a phenomenon that has existed for decades, there is relatively recent attention to the subject as a research area for both tax non-compliance and tax evasion. Although a large amount of information about tax compliance actions has been acquired in a short time, there is still more to be learned on the subject, as the tax non-compliance problem is deteriorating rather than improving. Historically, tax policy literature focused on the effect of economic conditions on taxpayer behaviour. The belief that people are going to behave in their own best interests is the foundation of the utility model they expect. Allingham and Sandmo (1972) proposed this model as an explanation for conduct about tax compliance behaviour.

Worldwide studies have pointed out that tax compliance rates are low in high-income countries and lower even in medium- and low-income countries. Survey of compliance behaviour have been conducted about fairness perceptions and compliance behaviour: taxpayers" judgments in self-assessment environments (Saad, 2011).

In Malaysian context, 56% of the total federal government revenue came from taxes, in which 40.3% came from income tax. As from the whole tax cake portion, income taxes is the highest contributor followed by companies taxes and petroleum taxes (Refer Figure 1.1). Realizing the importance of tax as a vital source of income, the Government through the Inland Revenue Board (IRB) continuously intensified their efforts to accomplish high tax collection. The amount proves succeeded when the amount of income tax collection showed a gradual increment as indicated. It increases in difference at 7.76% in 2016-2017 from 4.69% in 2015-2016 (Inland Revenue Board of Malaysia, 2019).

It is important to note that from the number of taxpayer recorded, there are large number of cases finalized following the tax investigation conducted by IRB which signal that, this could be an indicator of the efficiency of the IRB in conducting the tax audit at the same time it could also reflect the number of non-compliant tax payer in Malaysia. To better comprehend the Malaysian tax scenario, it is worthwhile to compare it with other neighbouring countries as well OECD average. Figure 1.2 illustrated tax to GDP ratios among Asia countries. Although Malaysia remarks a better position from Indonesia and Singapore, but Malaysia's point below Japan and Korea as well as OECD average. Compared to Philippines and Singapore who experienced increased in their tax to GDP ratio between 2013 and 2014, Malaysia experienced decreases (OECD Data, 2018). This scenario continues until 2015, where tax to GDP ratio noted reductions.

Figure 1.1: Comparison of Direct Tax Collection by Component

Direct Tax Component	2017 (RM Million)	2016 (RM Million)	Difference (%)
Individuals	31,901.57	29,603.47	7.76
Companies	68,801.94	65,974.74	4.29
Stamp Duty	5,670.32	5,674.04	(0.07)
Withholding Tax	3,266.38	2,549.36	28.13
RPGT	1,697.98	1,491.67	13.83
Cooperatives	74.48	89.71	(16.98)
Other Taxes	86.69	90.09	(3.77)
Other IT - Sec 124	51.23	46.18	10.94
Petroleum	11,760.92	8,425.76	39.58
Gross Collection	**123,311.51**	**113,945.02**	**8.22**

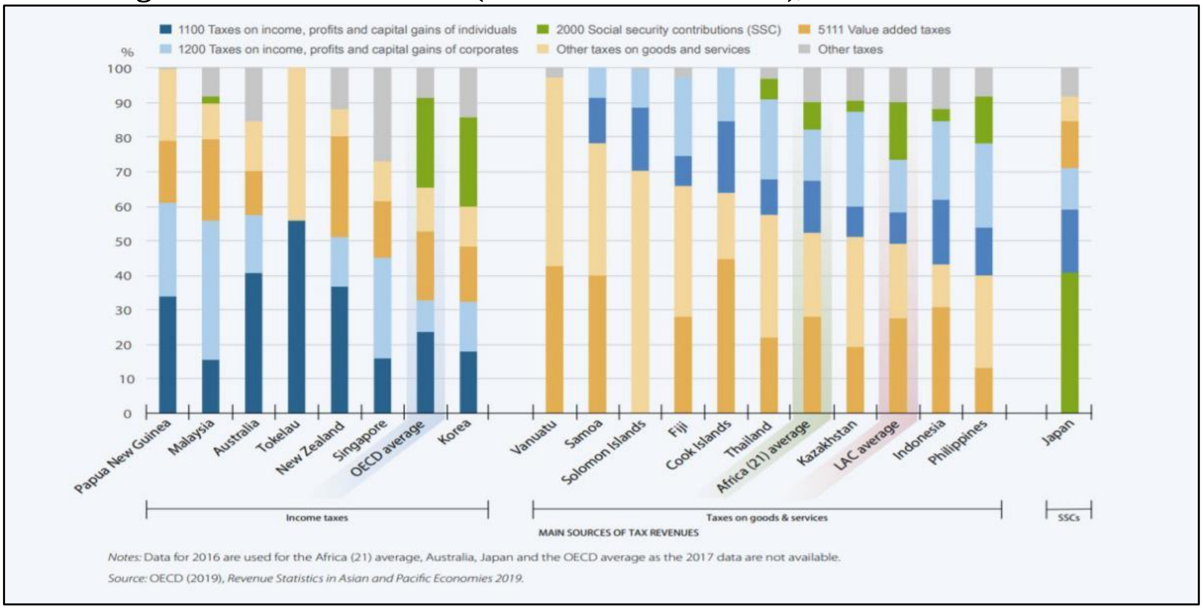
*Other taxes include Labuan tax and non-tax revenues

Source: Lembaga Hasil Dalam Negeri (2017)

In Malaysian context, tax evasion is a severe offence chargeable under Section 114 of the Income Tax Act which includes offences like (a) omits from a return made under the Act any income which should be included, (b) make a false statement in a return, (c) gives a false answer (orally or in writing) to a question asked or request for information made in pursuance of the Act, (d) prepares or maintains or authorizes the preparation or maintenance of false books of account or other false records, (e) falsifies or authorizes the falsification of books of account or other records; or (f) makes use or authorizes the use of any fraud, art or contrivance. Therefore, it can be concluded here that, tax compliance is an act of complying with rules and regulations as specified in the Income Tax Act 1967 (with amendment). This includes, filing tax return, reporting all income and expenses accurately, paying all amount of taxes owed and fulfilling all the deadlines provided by the tax authority.

Therefore, with the rising trend of non-compliance among the taxpayers, the present study aims to explore the factors which could influence people to comply with the tax law in order to better understand the behavior of the taxpayers. Appropriate mechanism could be used to increase the level of voluntary compliance especially among the civil servants who served as the backbone of the government.

Figure 1.2: Tax structures (% of total tax revenue), 2017 in Asian Pacific



Literature Review

Tax Compliance Beaviour

Tax compliance behaviour is a complex subject (James and Alley, 2002). It is not possible to understand this behaviour through a single factor (McKerchar, 2010). A number of previous research for example Saad (2011) and Abdul Hamid (2014) was undertaken to understand the compliance behaviour through Theory of Planned Behaviour (Ajzen, 1991) framework. This study aims to follow the same path by focusing on one of the Theory of Pland Behaviour (TPB) variable which is attitude. This variable is then tested to civil servants in Selangor in order to better understand the attitude of civil servants with respect to complying with the tax law.

Vast number of research have been devoted in understanding tax compliance behaviour cutting across various disciplines such as accounting, economics, political science, public administration and psychology. Various factors lead to tax compliance behaviour has been revealed from the research. For instance, the Inland Revenue Service of US listed as many as 64 factors that affect taxpayers reporting decision (Alm, 1999). Some of the factors include, demographic factors (See for example, Aitken and Bonneville, 1980; Chan et al., 2000; Chen, 2006; Hamzah Sendut, 1991, Hasseldine and Hite, 2003; Hite, 1997; Jackson, 1986; Jeyapalan Kassipilai et al., 2003; Richardson, 2006; Song and Yarbrough, 1978), economics factors (See for example, Allingham and Sandmo, 1972; Alm and Jackson, 1992; Clotfelter, 1983; Davis et al., 2003; Friedland et al., 1978; Kirchler et al., 2008; Park and Hyun, 2003; Pommerehne and Weck-Hannemann, 1996; Srinivasan, 1973) and behavioural factors (Chan et al., 2000; Orviska and Hudson, 2003; Viswanath Umashanker Trivedi et al., 2003). Furthermore, Jackson, (1986) in their comprehensive review studies highlighted 14 variables that were most commonly examined in tax compliance literature. Richardson and Sawyer (2001) then updated this synthesis by adding up another five variables.

Generally, previous tax compliance studies debated the issues of tax compliance by using either economic approach or socio-psychological approach (Alm et al.,1995; Andreoni et al., 1998; James and Alley, 2002). While economic approach focuses on tax gap, psychological approach on the other hand, stresses on the importance of voluntary compliance. The concentration of economic approach is only on the trade-off between benefits of evading and the risk of detection. This is in contrast from the psychological approach which in the premise that compliance behaviour is constructed by various factors and not focuses on economic factor solely. The characteristics between the two approaches are illustrated in the following Table 1.3

Table 1.3 Economic verses Psychology Approaches in Tax Compliance Studies

Tax Compliance	Economic Approach	Psychology Approach
Concept	Tax Gap 100% compliance less actual revenue	Voluntary. Willingness to act in accordance with the spirit as well as the letter of the law
Tax compliance	Economic Rationality	Behavioural cooperation
Definition	Narrower	Wider
Exemplified by	Trade Off: 1. Expected benefits of evading 2. Risk of detection and application of penalties 3. Maximize personal wealth	Individuals are not simply independent, selfish utility maximizers. They interact according to differing attitudes, beliefs, norms and roles. Success depends on co-operation
Issues of	Efficiency in resource allocation	Equity, fairness and incidence
Taxpayer seen as	Selfish calculator of pecuniary gains and losses	" Good citizen"
Can be termed the	Economic Approach	Behavioural Approach

Source: James and Alley, 2002 (pg 33)

Theory of Planned Behaviour

Socio-Psychological proponents argued that the understanding on compliance goes beyond the deterrence factor as described in the economic model. As posited by Feld and Frey (2007), tax compliance is a psychological tax contract that goes beyond traditional deterrence and explains tax morale as a complicated interaction between taxpayers and the government. The past decade has observed the rapid development on the study on socio-psychological factors in understanding tax compliance behaviour as discussed in the previous section. Psychological aspects like knowledge (Andreas Enni Savitri, 2015; Mei L. et al. 2012; Natrah Saad, 2014), fairness (Abdulhadi Khasawneh et al. 2008; Natrah Saad, 2011), social norms (Bobek and Hageman, 2015), religion (Raihana Mohd Ali, 2013) and many other factors were examined against tax compliance behaviour. Apart from all these factors, there are also some researcher who tested behavioural theories such as TPB (Ajzen, 1991), Goal-Framing Theory (Lindenberg, 2001) and Equity Theory (Adams, 1963) in predicting taxpayers compliance behaviour. But, the most influential behavioural theories used in tax compliance research is TPB.

Number of few studies had attempted to test TPB in the context of tax compliance. For example in Bobek and Hageman (2015) and Viswanath Umashanker Trivedi, Mohamed Shehata and Mestelman (2004) it is confirmed that the TPB is effective in explaining compliance behaviour. The measure of compliance is found to have a high correlation with actual tax evasion behaviour. The TPB also has been used to analyze the compliance behaviour of the Malaysian's taxpayers (For example, Natrah Saad, 2010) and Malaysian tax agents (For example, Suhaila Abdul Hamid, 2014). It is proven that TPB is capable in explaining the tax compliance behaviour in Malaysia where two of its components are found to be highly influential to tax compliance behaviour.

Despite of being widely used, the TPB has some limitations. First, behaviour is a complex issue. To understand behaviour only by looking at attitudes, subjective norms and perceived behavioural control is not sufficient. There are some other determinants that might influence behaviour. Second, there may be a substantial gap of time between assessment of behaviour intention and the actual behaviour being assessed (Werner, 2005). During the time gap, the intention of an individual might change.

The Influence of Subjective Norms towards Tax Compliance

According to Kirchler (2007), the concept of norms in tax compliance is difficult to theorize since norms could originate from individual standards (internally from the taxpayer), socially approved standards (from those who near to the taxpayers), or the societal norms which are from the unified or at the national level and translated into the tax law. Subjective norm as explained by Ajzen in the The Theory of Planned Behaviour (1991), are worldwide social burden from those who close to a person such as family and friends, who could put forth influence on a person's ethical decision making because what is considered as ethical is not globally constant (Westerman, Beekun, Stedham, & Yamamura, 2007). This is supported by Kirchler (2007) in a tax context, who debates that the tax compliance behaviour of taxpayers is influenced by the group they are related with.

In Richardson and Sawyer (2001), subjective norms by means of peer influence are considered as an important tax compliance factor. Similarly, the Fischer Model used by Fischer et al. (1992) also recognizes the importance of subjective norms (peer influence) in clarifying the tax compliance behaviour of taxpayers. Other researcher such as Bobek (1997), Elffers et al (1987) and Hanno and Violette (1996) observe a positive relationship between subjective norms and compliance behaviour. Such a relationship was also documented in Canada by Trivedi et al. (2005) in the case of compliance behaviour but not in the non-compliance situation. However, Kirchler et al. (2006) failed to find such relationship.

Subjective norms are the views which considered important by individuals who advise the individual to perform or not perform certain behaviors and motivation accompanied by a willingness to do or not do something that is considered important (Wedayanti & Giantari, 2016). According to Maulana (2009) subjective norms or socially refers to a person's beliefs on how and what to think about people considered important and motivated to follow the thought.

Subjective norms talk about the social pressure that an individual confront whether or not to perform a specific behaviour. According to Ajzen (1991), human beings set their beliefs from people that are important to themselves, whether that people approve or not approve with the behaviour, and whether these important people does that behaviour or not. The TPB suggests that if the important people approve or perform the behaviour, there is a greater likelihood that the person would also execute the behaviour. Past studies proposed that past studies have documented mixed findings on the influence of subjective norms. This is maybe due to the concept of 'norm' it is difficult to operationalize (Kirchler, 2007). The current study therefore proposes the following hypotheses:

1. Does subjective norms significantly influence taxpayer in complying with the tax law?

   H_2: Subjective norms significantly influence taxpayer in complying with the tax law

Methodology

The present study used quantitative approach as its methodology. As define by Cohen et al., (2007), quantitative research is well-defined as social research that make use of empirical methods and empirical statements. He then furthers states that empirical statement is based on a descriptive statement regarding what is the real world is rather than what real world is ought to. The existing study adopted quantitative as its research methodology because quantitative method is the finest method that can be used in explaining a phenomenon. It is a terrific method to further describe what create a phenomenon, what are the factors that lead to a phenomenon.

As the current research interested in understanding a tax compliance phenomenon, and the researcher target to inquire into whether attitude does have influences towards tax compliance behaviour. Therefore, quantitative design is the best as it suits the purpose.

This study involves understanding on the tax compliance among the civil servants. Civil servant can be defined as Public Service formerly known as the Civil Service has assumed a significant key role in the economic and social development of the country. According to Federal Constitution Act 132 (1) civil servant are among the (a)armed forces, (b)judicial and legal service, (c)general public service of the Federation, (d)police force, public service of each state, education service, (f)joint services. Person who is a member of any of the services mentioned in paragraphs (a), (b), (c), (d), (f) and € of Clause (1) holds office during the pleasure of the Yang di-Pertuan Agong, and, except as expressly provided by the Constitution of the State, every person who is a member of the public service of a State holds office during the pleasure of the Ruler or Yang di-Pertua Negeri (Attorney General's Chambers of Malaysia, 2019). Which means, civil servant needs to practice good ethics in perform their task and follow the rule and regulation that been set by government. For example, civil servant needs practice trust, integrity, responsibility, excellence, loyalty, commitment, dedication, discipline, diligence and professionalism (Prime Minister's Office of Malaysia, 2019).

The population of this study is derive from the database developed by the researcher where Table 1.3 shown that active employers in Negeri Selangor have active employees approximately around 1,921,904 in 2018. So, this study will be targeted Selangor civil servants as respondent. This is because it shown Selangor state have the largest amount number of active employees compares to W.P Kuala Lumpur. To determine sample size Krejcie and Morgan (1970) table of sample size is bring forth below. Based on the author, as the population increases at 170 N, the sample increase at diminishing rate and the sample size remain constant at slightly at 118 S. On the other hand, Sekaran and Bougie (2011) also suggested that the common sample size of many studies is within the range of 30 to 500 samples.

Table 1.3: Number of Active Employers and Active Employees 2014 - 2018 by State and Channel Environment

Negeri	Majikan Aktif					Pekerja Aktif				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Johor	53,101	55,347	57,302	58,394	59,507	652,185	684,897	699,318	734,183	764,537
Kedah	17,080	17,364	17,845	17,738	17,569	230,313	235,233	243,838	245,251	258,044
Kelantan	8,048	8,021	8,014	7,984	7,965	86,868	88,676	89,464	89,572	94,072
Melaka	12,726	12,907	13,212	13,213	13,243	164,100	172,707	192,361	199,199	189,285
Negeri Sembilan	12,602	12,794	13,169	13,250	13,427	153,115	158,080	159,718	164,629	174,982
Pahang	15,383	15,672	16,072	16,157	15,906	173,442	167,909	169,644	174,017	180,127
Perak	30,798	31,141	32,036	32,245	31,993	312,515	319,922	327,018	338,379	343,523
Perlis	1,900	1,928	2,015	1,962	1,931	21,494	21,555	21,663	20,222	21,578
Pulau Pinang	29,452	30,365	31,027	31,254	31,430	458,907	476,349	495,206	517,853	534,425
Sabah	29,752	29,892	30,274	30,114	29,600	332,096	342,542	344,529	348,265	361,803
Sarawak	34,208	35,570	36,860	37,278	37,359	446,746	464,678	470,694	484,114	494,825
Selangor	86,821	91,059	95,318	98,060	100,867	1,555,697	1,606,408	1,696,430	1,763,733	1,921,908
Terengganu	8,478	8,616	8,501	8,441	8,360	117,360	116,524	116,645	155,148	127,881
W.P Kuala Lumpur	61,690	63,588	66,045	67,633	67,903	1,493,819	1,521,504	1,571,330	1,609,383	1,610,441
Lingkungan gaji	Majikan Aktif					Pekerja Aktif				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Bawah/Below 100	393,970	406,448	419,059	424,997	427,771	3,190,715	3,402,791	3,382,734	3,491,553	3,597,441
100 - 199	4,496	4,642	4,762	4,853	5,093	616,518	637,231	656,023	688,016	702,226
200 - 299	1,371	1,400	1,494	1,498	1,662	330,280	338,436	361,634	371,739	403,406
300 - 399	674	701	767	734	802	231,822	241,263	264,313	252,700	276,519
400 -499	404	376	408	427	464	179,464	167,374	182,218	190,192	206,790
500 - 599	255	269	266	270	290	138,809	146,962	145,658	153,411	157,924
600 - 699	163	166	188	181	181	104,528	107,419	121,414	116,482	117,080
700 - 799	120	105	137	135	127	89,442	78,100	102,497	105,811	95,290
800 - 899	86	99	76	88	79	72,610	84,638	64,025	74,216	66,806
900 - 999	63	57	74	75	74	59,231	54,195	69,820	70,987	69,947
1,000 dan lebih/and over	437	414	459	465	517	1,185,238	1,091,575	1,247,612	1,288,841	1,384,002

Source: PERKESO, Department of Statistics Malaysia

Findings

There were 118 questionnaires distributed and collected to respondent and the researcher received return feedback was 93 respondents.Therefore, our response rate was 78% considered as low response rate. This is because the situation of COVID 19 hit all over the world including Malaysia. Most of offices and public sector were closed. The researcher had the data collection phase by phase and it is quite difficult to reach the original sample. However, according to Shefali Pandya, 2019, it is preferable to get a high response rate (80% or higher) from a small, random sample rather than a low response rate from a larger pool of potential respondents. This is consistent with the Australian Vice-chancellors' Committee & Graduate Careers Council of Australia (2001) regarded 'an overall institutional response rate for the Course Experience Questionnaire (CEQ) of at least 70% to be both desirable and achievable. This indicates that the response rate for the current study is thus acceptable.

Based on the analysis, no significant and positive relationship is observe between subjective norms and tax compliance behaviour. **(*r= -0.560, p=0.636)***. Therefore, H_1 is accepted and rejected H_0 where there is no relationship between attitude and tax compliance behaviour.

The findings of the study is contradicted with the work of Richardson and Sawyer (2001) where they clarify that subjective norms by means of peer influence are considered as an important variable towards tax compliance factor. It is also contrary with the Fischer Model used by Fischer et al. (1992) who acknowledges the significance of subjective norms (peer influence) in explaining the tax compliance behaviour of taxpayers.

Table 4.6 ***Nonparametric Correlations between Subjective Norm and Tax Compliance Behaviour***

		Tax Compliance Behaviour (DV)
Subjective Norm (IV2)	Pearson Correlation	-.050
	Sig. (2-tailed)	.636
	N	93

Conclusion

Based on the findings,the study has indicated that here is no significant and positive relationship between Subjective Norm and Tax Compliance Behaviour.This is contradicted with an updated work by Richardson & Sawyer (2001) where they clarify that subjective norms by means of peer influence are considered as an important variable towards understanding tax compliance factor. It is also contradicted with the Fischer Model used by Fischer et al. (1992) who acknowledges the significance of subjective norms (peer influence) in explaining the tax compliance behaviour of taxpayers.

The findings also contrary with the study of Westerman et al. (2007) who found out that respondents from Germany, Italy, and Japan that peers show greater control in a person's ethical decision-making compared with national culture. The findings also different with the findings of Hanno and Violette's (1996) where it reported in their study the importance of subjective norms in tax compliance behaviour. In Bobek and Hatfield (2003) who studied subjective norms in tax compliance in the US, they find out that subjective norms have positive influence and highly significant in all three situations used in the study. A they used the TPB among students in the US to figure out the reasons why taxpayers favour a refund, their study shows that subjective norms influence the withholding tax position of the taxpayers. When the advice provided by people around taxpayers to lower their withholding tax status rises, the greater the probability of doing the behaviour.

All in all, the findings of this study is different with the past studies. This is largely because the sample used in this study. As this study occupies only civil servants as the respondents, the findings could be different in that sense. Further research could be undertaken in order to better understand the influence of subjective norms among civil servants in a bigger context.

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MANAGEMENT COMMITMENT AND SAFETY TRAINING AS ANTECEDENT OF WORKERS SAFETY BEHAVIOR

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Abstract**:** *The manufacturing sector in Malaysia is categorized as one of the dangerous work sectors with a high accident record. The use of heavy machinery, unsafe working condition and hazardous materials handling is among the causes of many work-related accidents recorded among factory workers. In addition, the lack of safety training and low safety management commitment towards worker safety also contributed to the increasing number in this statistic. The goal of this study is to examine the relationship between management commitment and safety training on safety behaviour among workers. This study involved small and medium factory workers operating in the northern states of peninsular Malaysia. The data for this study was obtained using a questionnaire, while the Statistical Packages for Social Science (SPSS) application was used to perform the data analysis process. The results of the data analysis show that employers' commitment to safety and safety training has a positive relationship with safety behaviour among study respondents. Suggestions and improvements to the study are presented at the end of this writing*

Keywords: *worker, safety training, management commitment, safety behaviour, small and medium factory*

Introduction

A safer workplace is crucial element to the continuous operation and survival for any organisations. Development and nesting a safer workplace should be the highest priority within the organizations. This situation depends on several factor for examples, good safety management practices and positive behaviour toward safety among workers. As employers, they have an obligation to build and maintain a safe workplace and comply with OSHA regulations at the same time. However, hang up a safety poster and run few safety programs once a year is not enough if no positive work safety culture been cultivated in the organization. Safety culture refers to "the outcomes of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation's health and safety management" (Health and Safety Executive [HSE], 1993). Understanding the factors influenced the safety culture of organisation can be a significant element in changing employees' safety behaviours and boost the workplace safety performance. The main target of this research is to investigate the link between management commitment and safety training on worker safety behaviour.

Literature Review

For almost all countries in the world, small and medium enterprises (SMEs) are significant, particularly in developing countries such as Malaysia. The sector is considered the backbone of the Malaysian economy, leading to country industrial production (98.5%), exports (17.9%), employing about 48.4% of Malaysians, generating 7.3 million jobs per year, and manufacturing more than 8,000 products for the Malaysian and foreign markets. SMEs alone contribute to 38.9% of the Malaysian gross domestic product (GDP) (Department of Statistics Malaysia [DOSM], 2019). Many factors are responsible for the growth of small and medium-sized enterprises in Malaysia, including financing for small and medium-sized enterprises, new technology, and various trade directories and trade portals. 5.3 percent of companies are involved in manufacturing, while 89.2 percent of companies are involved in services. In 2016, 907,065 companies were reported to be the total number of companies in the SME market, of which 76.5% were registered as micro-enterprises, 21.2% were small enterprises, and 2.3% were medium-sized enterprises (DOSM, 2019).

The manufacturing industry is characterised as economic sector with a poor safety performance compare with other industries. In Malaysia, the manufacturing sector leads to about 4 percent of all industrial accidents. An average of 80 employees have been killed in incidents per year (Abas et al., 2013). Although the implementation of self-regulation, through the adoption in 1994 of the Occupational Safety and Health Act (OSHA), the number of occupational injuries in this segment of the economy is still high. However, very limited information indicated the actual number of occupational accidents happen in small and medium-sized manufacturing companies.

Due to that, a better understanding of safety behaviour and its key determinants (enablers) will help small and medium-sized manufacturing companies to strategically allocate resources and concentrate their efforts to ensure the improvement of their overall safety performance.

Safety Behaviour

Worker behaviours towards safety are the main 'ingredient' that binds everything together to create safer workplace. Safety behaviour is positive safety behaviour by worker toward safety while working. Examples of positive safety behaviour among worker is wearing PPE's, follow the SOP's and comply with safety rules. Positive safety behaviour among worker will lead to low accident statistic with minimal injuries and loss.

In other hand, if an 'unsafe' behaviour become a norm in the organization, it will lead to unwanted accidents that may cause to injuries and fatalities. At the end, the worker might suffer physically and emotionally. The flopped occur when the management fail to recognize this problem among their worker and often acknowledge the unsafe behaviour is part of work practice.

Previous study proof that various safety management practices (such as management commitment, safety training, safety communication, etc.) has a significant contribution on maintaining positive safety behaviour (Trinchero et al., 2017; Yorio & Wachter, 2014; Flin, 2017; Lin et al., 2017; Brunetto, et al., 2016; Kapp & Han, 2017; Subramaniam et al., 2016). The aims of this investigation are to analyse the relationship between the management commitment and safety training to employee safety behaviour in small and medium-sized manufacturing enterprises in northern Peninsular Malaysia.

Management Commitment

Management commitment is a term frequently use to defined management involvement and participation in organization safety programs. In the earliest safety investigation, researchers discovered that management commitment on workplace safety is an important antecedence in influencing the effectiveness of an organization's safety initiatives programs. To have high committed safety management commitment, all management team members should be united in their way of thinking about safety and integrate it into their organisation's strategic decision-making processes. The management commitment on safety must been show in an observable activity by the management and must be demonstrated in their behaviour as well as their words (Alam et al., 2020, Abdullah & Abdul Aziz, 2020). Safety policy statement is one of solid example of management commitment on safety.

Safety Training

Safety training always been a crucial element in most successful accident prevention programme in any organization. It boosts safety behaviours and enhance safety related knowledge among workers. Thru safety training, workers able to recognize the hazards and minimize it before it became disaster. Organizations should create a formal, rigorous and comprehensive safety training program for all their employees, which help them recognize the hazards and implement all means to prevent from accident (Guo et al., 2016; Flin, 2017; Lin et al., 2017). Therefore, safety training is considered as a management practice. This study aims to investigate the relationship between management commitment and safety training on safety behaviour among worker. Based on above justification, this study proposed the research framework as in Figure 1.

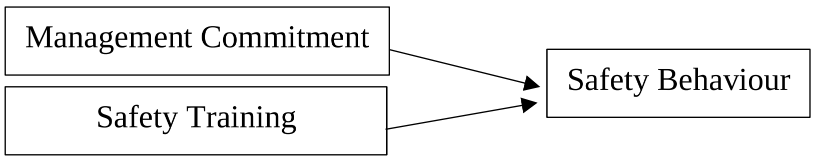

Figure 1: Research Framework

H_1 Management commitment has positive relationship with safety behaviour
H_2 Safety training has positive relationship with safety behaviour

Methodology

This is a correlational study that employed to identify the link between independent variable and dependent. To gather valuable data to fulfil the objectives of this research, a quantitative method was employed. Structured questionnaire was used to gather data. For this study, a total of 47 items in the questionnaire were adopted from the previous studies.

The study was conducted among workers in small and medium-sized manufacturing companies operating in the Northern region (Perlis, Kedah, Penang, and North Perak). A convenience sampling was proposed to execute the proposed study. The sample size was calculated based on the suggestion by Roscoe Rule of Thumb (1975) as cited in Sekaran & Bougie (2013). However, to take care of non-responses that might affect the required sample size, this research decided to increase the sample size to 500.

Statistical Package for the Social Sciences (SPSS) was utilised to analyse the data. The analysis includes descriptive statistical analyses and hypotheses testing analyses. Pilot test was conducted prior the actual data collecting even though the instruments been validated from earliest studies. The reliability results for each variable ranged from 0.604 to 0.893, which are generally considered acceptable for research purposes as recommend (Sekaran & Bougie, 2013).

Results of the Data Analysis

The total number of respondents consisted of 137 men and 245 women. Most of the respondents (81.5 percent) were married and 44.2 percent were 20 to 30 years old. The majority (85.9 percent) reported earnings below RM1000 per month in terms of salary range. Just 25.7% suggested they had to function in shifts.

The model summary is represented by Table 1. The *R-value* is 0.685 and the R^2*-value* is 0.469, which demonstrates a strong linear regression between variables. This value shows that 46.9 percent of the variance in safety behaviour was explained by the interaction with independent variables that been investigated.

Table 1: Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.685	0.469	0.466	5.90820

Table 2 displays the regression for significant factors correlated with safety behaviour.

Table 2: Regression and Related Statistics

		Unstandardised Coefficients		Standardised Model Coefficients		
Model		B	Std. Error	β	T	Sig
1	(Constant)	1.376	3.100		0.444	0.657
	Management Commitment	0.686	0.043	0.664	16.105	0.000
	Safety Training	0.321	0.113	0.111	2.765	0.006

The hypothesis testing indicated that both independent variables have a significant and positive association with safety behaviour. Based on the result, the management commitment has stronger relationship with safety behaviour compare to safety training. This findings is consistent with the result of past studies that proved a significant relationship between management commitment and safety training on worker safety behaviour (Osman et al., 2019; Abdullah & Abd Aziz, 2020; Panuwatwanich et al., 2017; Yean et al, 2020).

Discussion and Recommendation

The findings of the study revealed that management commitment is positively associated with the safety behaviour among respondent. Management commitment to safety has been as main antecedent to organization management practices. The top management's commitment is consequently important to any safety performance success and the support is crucial to bringing accident rates down. A study by Vinodkumar and Bhasi (2010) shows that organisation's safety commitment impact on compliance, measured as personal understanding consequences, earned from interest shown by the employers towards protection from accidents of their employees. There is a significant evidence that management commitment is one of the main elements in reducing accidents at work (Vinodkumar & Bhasi, 2010).

The hypothesis suggests that there is a positive association between safety training and safety behaviour. Most of the respondents agreed that their employers fulfil their management obligations by providing them with safety training. This situation indicated the positive safety management practices in their workplace. The important role of safety training in promoting safety behaviours among employees has been recognised by top management. Even though this program eats a lot of company allocation, the management still provides the basic safety training for their employee as their compliance to OSHA 1994. This finding supported by the past research outcome that indicated a positive and significant association between safety training and safety behaviour (Guo et al., 2016; Flin, 2017; Lin et al., 2017).

This research contributes to the existing literature in several important ways. First, the present study had fulfilled the gap by examining the effects of management commitment and safety training on safety performance. Second, this research has provided a theoretical implication by giving additional empirical evidence in the domain of social cognitive theory, which posits that a positive state of mind in the form of safety management will promote positive work behaviour and enhance company safety performance. This research has extended the application of theory by examining the aforesaid relationship with the samples withdrawn from SMEs. This is vital because focusing on a different research setting may expand the practicality of the theory. Third, the findings of this research also provide useful information to the present and future employers. This is crucial because employers are extensively involved in the development of positive safety behaviour for their organisation. Therefore, the management of SMEs, especially the owner of the company may consider redesigning the work environment through safety-orientated climate to facilitate the opportunity to the workers to work positively towards safety.

Regarding the study limitation, this study is limited by its self-reported instrument. The main limitation of self-reported instrument is that there are a few potential validity problems associated with it. Another limitation is the data for the study were collected at a single point in time. Besides that, the data of this study were gathered only through questionnaire. Thus, the feedback depends on the voluntary cooperation of the academics. Further, the responses may not be a consistent and accurate measure of work behaviours since respondents may be biased in answering the questions to project their good image. Therefore, to enhance the precision of findings, quantitative and qualitative methods of research could be incorporated in the future studies.

In summary, the purpose of this study was to test the relationship between management commitment, safety training, and safety behaviour. Despite the limitations discussed previously, this study has the potential to make significant contribution to safety research and practice. The findings of the significant influence of management commitment and safety training on safety behaviour demonstrates the importance of workplace safety practices within organisation, particularly among SMEs in Malaysia. Organizations need to actively nurture a strong and positive safety culture all year-round and make it as company DNA. Organization should ensure safety as one of the organization’s main values and constantly striving to improve it in the workplace.

Acknowledgement

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SOLVING PRODUCTION ASSEMBLY LINE USING SIMULATION

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Abstract. *The accelerated development of computers and software (particularly free and open source software) made more accessible, for a large category of researchers and engineers, the use of computer aided simulation techniques. In general terms, the modelling and simulation can be used to describe any technique that approximates solutions to quantitative problems through statistical sampling. The simulation has important applications for discrete event systems usual in manufacturing, stress/strength stochastic modelling in design, reliability, maintainability and availability evaluation. The objective of this paper is to propose the utilization of the simulation technique as a tool to solve actual production problems. This is done through a case study of an independent workstation assembly line arranged to produce the outer refrigerator body called Ireland assembly. A motion and time study conducted and the result were used to simulate the existing line operation using Witness simulation software. This initial simulation enables the identification of the key problems of bottleneck exist which responsible for restraining the output. Subsequent simulation was conducted to test different workstation of assembly line arrangement. As a result, a new assembly line balancing is developed to achieve required production rate and to achieve minimum amount of idle time.*

Keywords*: Witness simulation, Production difficulties, Assembly line balancing*

Introduction

Liebherr is one of the world's largest manufacturers of construction machines. The Liebherr Group is also successfully involved in many other product areas. Overview of all divisions Refrigeration & freezing, construction machines, mining equipment, mobile and crawler cranes. Domiciled in Kluang, Johor in the southern part of the country, the company developed new ice cream freezers for the Southeast Asian market a short time later. Since then, considerable sums of money have been invested to modernize and extend the production facilities in an environmentally friendly way. Modern refrigerators and freezers are now produced for commercial uses in Kluang.

Liebherr Company, a manufacturer of refrigerators is experiencing difficulties in production due to the current production flow of the assembly line used to install the several components of outer design of refrigerators which components involves outer left and right, top and bottom, real and frame of the refrigerators. The Ireland assembly line consist of four independent workstation namely outer subassembly, bottom subassembly, and frame and rear subassembly. The outer assembly covered installation of left and right fridge wall whereas the bottom also covered the top installation. There are four operator located at each subassembly station.The project adopts an analytic approach based on real life data from Liebherr . However, due to the uneven nature of the cycle times shown in Appendix1 below, achieving required production output has been difficult to meet customer requirements.

To overcome those production difficulties, the objectives are:

a) To identify the key reasons why the designed production yield could not be met due to the bottlenecks.

b) Suggest changes in the assembly line layout or balancing in order to obtain the required output working at normal pace during the normal working hours.

A constraint slows the process down and results if waiting for downstream operations and excess capacity results in waiting and absorption of fixed cost. Based on the previous literature, several authors have used different methods in order to analyse the line balancing, adaptive genetic algorithms as proposed by Yu and Yin (2009) and Levitin et al. (2006). In reality the cycle time and task times will vary because of operator is variance or difference in working competencies of various tools and equipment which are used in the assembly operations.

The production volume of the product which is being assembled varies due to competition. As a result, the cycle time for the product also varies. So, the Witness simulation can be used to analyse to determine which station or root causing the bottleneck to the process. This is the basic reason why this paper will propose the utilization of Witness modelling and simulation as a tool to identify problems and to propose corrective actions to actual production issues observed in a real-life assembly line already in operation.

Literature Review

The plant layout design is a typical matter that can be approached with a modeling and simulation approach. As a matter of fact, in literature, there are many examples of simulation models devoted to analyze this topic, and most of them have been implemented using common commercial software like Simul8™ or Arena™. Smutkupt and Wimonkasame (2009) utilized Arena to develop a model that overtakes the limited results provided by the implementation of the CRAFT (Computerize Relative Allocation Facilities Technique) methodology, by showing more information of the design layout like the total time in system, waiting time and utilization. This is made possible thanks to the simulation model developed in ARENA™ which it is properly connected to the design system and to an output report system using ad hoc Microsoft Visual Basic™ interfaces.

Simul8™ is used in Magoulas et al. (2002) for the design of a steelworks facility. This stochastic model allows handling the uncertainties that arise from stochastic elements in the environment and in the objective function evaluation process. The authors themselves developed, in (Briano et al.2004) an easy SIMUL8 model devoted to analyze the performance level of a dental technician lab. Taking into account the wide literature regarding the layout design, the authors propose the use of simulation in order to validate a widget plant layout scenario.

More specifically, the simulation is used to evaluate the utilization coefficient of the forklift truck used for handling the various parts, for determining the average and maximum number of parts in queue waiting to be processed and the average WIP (Work in Progress) value and time. In order to do this, the authors have used another commercial software: WITNESS™ from Lanner Group. WITNESS is a process simulation software commonly used for both educational and business purposes, and it is one of the most suitable for simulating plant layouts.

Methodology

2Hillier and Liberman (1995) suggest that the initial step to simulate an operation is to develop a model that represents the system to be analyzed. This project begins with the development of a simulation method using a trace driven simulation that represent actual input data. In the case of manufacturing line studies, this project recommends the following procedure for this kind of simulation:

- Each of the workstations in the production line is based on actual watch time measurements, a cycle time frequency distribution should be prepared for simulation procedure.
- Through an actual data recorded, measure the goodness of fit which typically summarize the discrepancy between observed values and the values expected under the model in question. Such the measures can be used in statistical hypothesis testing for example test for normality or residuals to test whether two samples are drawn from identical distributions (see Kolmogorov–Smirnov test), or whether outcome frequencies follow a specified distribution (see Pearsons chi-squared test). In the analysis of variance, one of the components into which the variance is partitioned may be a lack-of-fit sum of squares.
- Repeating the same procedure for the all the work station in a given production line and considering their simultaneous operation.
- Build the conceptual model that describes the actual system is working and build the real Witness simulation models by inserting all the data required. This situation could enable the identification of eventual operational problems as well as the line simulated output.

Pearson Chi Squared Test

Pearsons chi-squared test uses a measure of goodness of fit which is the sum of differences between observed and expected outcome frequencies (that is, counts of observations), each squared and divided by the expectation:

$$\chi^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

where,

O_i = an observed frequency (i.e. count) for bin i
E_i = an expected (theoretical) frequency for bin i, asserted by the null hypothesis.

With the cycle time data collected, should have measure the probability density function to investigate the types of distribution for each processes. The first process installation of outer top is fall under uniform distribution which mean 4.075 and standard deviation is 0.85896 whereas the other process outer rear subassembly process capture the exponential distribution clearly showing that process fall under unstable condition has an error 1.5236.

Conceptual Model

Below shown conceptual model describe the assembly process. The outer right and left station has one operator install both component while for rear and frame station has different process with one operator located covered for both process (Figure 1). Total has five operators which one operator covered for two sub-assemblies, two at main assembly and the rest at rear and frame each station. They have 10 working hour per day with 45 minutes break and 15 minutes for tea break.

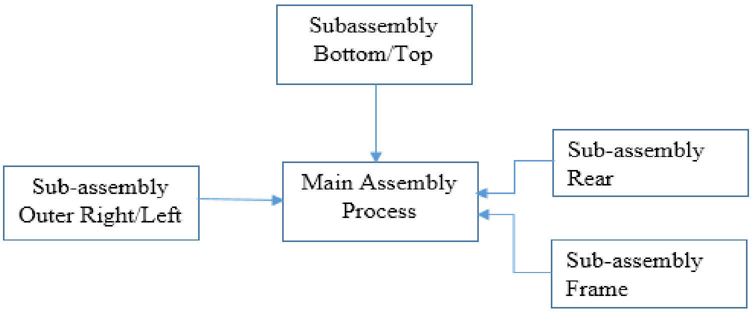


Figure 1: Conceptual model for main assembly process

Result and Discussion

According to Winston (2003), the best way to simulate an operation is to develop a simulation method using discrete event probability. There are currently five workstations in the production process. Based on the frequency distribution and probability density function, a simulation model is generated. An occurrence in each workstation is determined from the random cycle time. Table 3 below shows the percentage of machine idle, busy, and empty and others data of each of the work stations. The actual process flow occurrence of each station is shown in Figure 2. These percentages are used to identify operational problems as well as line simulated output.

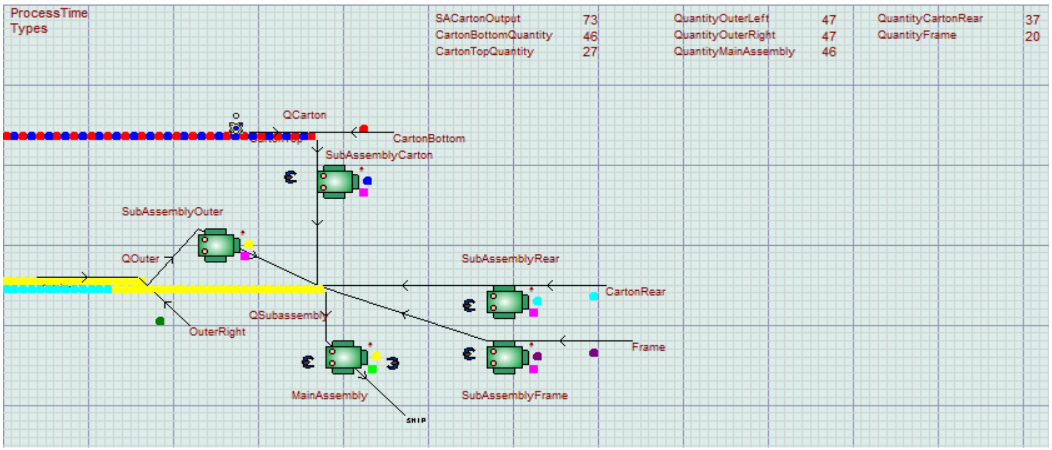


Figure 2: Simulation model built for assembly process

Table 1: Machine statistic

Name	Sub-Assem Outer Left/Right	Main Assem	Sub-Assem Bottom/Top	Sub-Assem Rear	Sub-Assem Frame
%Idle	0.00	0.56	3.07	0.00	1.69
%Busy	31.62	99.44	24.95	25.19	37.72
%Filling	0.00	0.00	0.00	0.00	0.00
%Emptying	0.00	0.00	0.00	0.00	0.00
%Blocked	68.38	0.00	71.98	74.81	60.59
%Cycle Wait	0.00	0.00	0.00	0.00	0.00
%Setup	0.00	0.00	0.00	0.00	0.00
%Setup Wait	0.00	0.00	0.00	0.00	0.00
%Broken Down	0.00	0.00	0.00	0.00	0.00
%Repair Wait	0.00	0.00	0.00	0.00	0.00
No. of Operation	27	46	37	47	20

Based on Table 1 above, the main assembly station busiest time compared to other sub-assembly stations. This is because all the components is centred and waiting to be install at this station following with sub-assembly frame 37.72 and next to outer sub-assembly 31.62. Then, the probability of machine is idling is most outer and rear stations instead of bottom, top and frame assembly is always busy with 3.07 percent and 1.69 percent each. This is showing that management should re-arrange the operator allocation to balance the processes. Other than that, data showing that percentage of station in blocking condition is station rear assembly is highest which always been blocked instead 0 percent at main assembly as this can explain the others sub-assembly station is always blocking each other. The number of operation or the output of each station produces is 47 pieces for rear assembly.

Verification and Validation of Model

The developers and users of these models, the decision makers using information obtained from the results of these models, and the individuals affected by decisions based on such models are all rightly concerned with whether a model and its results are correct. This concern is addressed through verification and validation of the simulation model as figure 3 below showing the warm up period for the assembly station reach the steady state period is after 61.899 minutes of startup time while from 0 to 51.327 minutes is still in transient phase (see table 2).

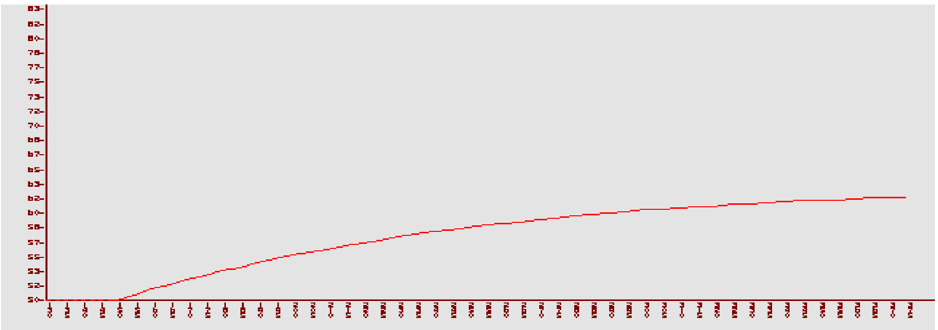
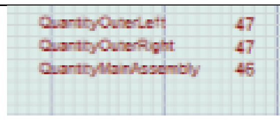


Figure 3: Warm up period

Table 2: Time for process to reach steady state

Name	Plot	Mean	Std. Deviation	Min. Value	Min. Record	Max. Value	Max. Record
Data	1	51.327	4.21	3	5	61.899	375

Table 3: Actual output vs model output

Actual	Model
Average cycle time main assembly = 16 minutes (Table 1) Total Working Hours = 540 minutes Total production output = (540/16) = 33.75 pieces	 Main assembly per day 540 minutes running = 46 pieces (Figure 2)

In order to obtain required production capacity, we have to balance the production line considering respective standard cycle times. From analysis of the current performance as seen in Figure 2 above, the main assembly should be added another machine to balance out the another four workstation because it has the highest cycle time. Therefore, to balance the line or assembly process, we have to create changes in the current performance by re-arrange the operator allocated instead of adding workstation assembly.

Conclusion

The results of this study provide strategy to reduce the unleveled production by investigating the process efficiency in order to maximize the production output. The statistical cycle time variation induced the excess labor idleness and the fact that actual standard cycle times became higher than the ones considered when the line was originally designed in assembly line. By knowing the production problem causes, it was possible to suggest changes in the line operation practices as well as in the line balancing proposed. The adequacy of those suggestions could be validated through additional simulations which will show that the output problem could most probably be overcome once those changes would be implemented in the factory floor. In summary, an uncomfortable production problem could be resolved through the utilization of the Witness simulation, with minimum disruption to production and incurring in insignificant.

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RELATIONSHIP OF SERVANT LEADERSHIP TOWARDS ORGANIZATIONAL CITIZENSHIP BEHAVIOUR (OCB) AND JOB SATISFACTION AMONG TEACHERS: A REVIEW OF LITERATURE

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Abstract: *This paper examines the relationship between servant leadership, organizational citizenship behavior and job satisfaction among school teachers. The first objective of the study is to explore the history, concept and development of servant leadership, organizational citizenship behavior and job satisfaction. Second objective is to determine previous related studies reveal on the relationship between these 3 theories towards teachers throughout the world. Third objective of the study is to focus on the relationship study between of these 3 theories in the Malaysian education system. As a conclusion, this study will provide the researcher's views on why this study should be featured in the Malaysian education system*

Keywords*: servant leadership, OCB, job satisfaction, school organization, Malaysia.*

Introduction

There are many styles of leadership that exist around the world. One of the most recognizable leadership styles is servant leadership. In the concept of the modern-day, servant leaders should become the builders of cooperation within the group beyond being a leader. The advantage of servant leadership is that it can provide a structured environment in which it places the principles in servant leadership at its core (Beazley & Beggs, 2002). The principle of servant leadership theory is not only applicable in industrial organizations, but it is also applicable in school organizations.

In order to strengthen the quality of the nation's education, schools need to restructure their organizations to meet the demands of flexibility, quality concern and academic excellence. Today, servant leadership theory is seen as more applicable to school organizations than any other theory.This is because the organization's environment is now more likely to have leaders who serve followers. So that, followers have the opportunity to develop the potential to serve the organization and achieve better results than the results of a single leader (Ozyilmaz & Cicek, 2015). In addition, it build strong relationships between organizational leaders and followers, thus encouraging followers to fully engage in their work whether formal or informal (Owen & Hekman, 2015).

School organizations require teachers who are committed to the task including achievement of the school's values, objectives and goals (Runharr, Konermann & Sanders, 2013). However, there are many factors that influence the achievement of these goals such as job satisfaction among employee’s aspect. Therefore, the aspect of job satisfaction is one of the important topics in psychology.Faudziah and Nor (2012) support Bryan and Wilson's (2014) statement that there is a significant correlation between job satisfaction and job performance.In addition, the achievement of school objectives is also dependent on teacher voluntary behavior or referred to as organizational citizenship behavior (OCB) (Duyar, Ras & Pearson, 2015).Teacher OCB is defined as the willingness of teachers to perform tasks beyond their formal responsibilities with the aim of helping schools achieve their goals (Nasra & Heilbrunn, 2015). Previous studies have shown that OCB plays a positive role in the school climate and is an important aspect of the education sector (Christophersen, Elstad, Solhaug & Turmo, 2015). In theory, servant leadership is seen as having a relationship on teachers' job satisfaction and OCB.

History, Concept and Development of Organizational

Servant Leadership

Servant leadership theory was created 4 decades ago by Greenleaf (1970). Greenleaf recognizes that as the youthful revolution has been pushed by the company to be more important to the employer, one needs to lead the company where it has to change from the sole role of chairman to the co-founder of the group. Basically, Greenleaf (1970) states that there are 9 aspects of servant leadership, that is: (1) listening, (2) empathy, (3) healing, (4) awareness, (5) persuasion, (6) concept creation, (7) foresight, (8) stewardship and (9) building community to help develop other people and the community. In general, there are over 100 features of servant leadership identified in previous studies. For over two decades back, there was an increasing number of scholarly articles in servant leadership. Therefore, the dominant themes of servant leadership based on the researchers' research are summarized in Table 1.

Table 1: The dominant themes of servant leadership are based on researchers' research

d	Themes
Greenleaf (1991)	Listening skills, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship and building community to help develop others and promoting community
Graham (1991)	Inspiration, moral
Buchen (1998)	Identification, the ability to reciprocity, relationship builder, preoccupation with the future
Spears (1998)	Listening, sympathy, healing, awareness, persuasion, conceptualization, foresight, supervision, commitment, community
Laub (1999)	Giving value to people, develop people, build communities, displaying originality, providing leadership, sharing
Russell (2001)	Appreciate others, empower, vision, credibility, trust, service, modeling, pioneer
Sendjaya, Sarros and Santora (2008)	Influence change, volunteerism, honesty, spirituality, covenant relationships, moral responsibility
Van Dierendonck and Nuijten (2011)	Empowerment, accountability, standing back, humility, authenticity, courage, forgiveness, stewardship.
Focht & Ponton (2015)	Appreciate others, humility, listening, trust, caring, honesty and transparency, services, empower, serve others first, cooperation, loving, learning

From the researcher list above, the most widely used in leadership style research around the world is by Van Dierendonck and Nuijten (2011). There are 8 themes used in his theory. The meaning of empowerment is the servant leader encourages the workers. Accountability means leaders give employees responsibilities to perform to build their confidence. Besides, standing back means leaders prioritize potential of employees first and give them the support they need. Humility shows that leaders willing to admit that nothing is perfect and they will make mistakes. The next theme is authenticity which means servant leaders need to be the first to ensure that their behavior is consistent and honest. The 6th theme is courage which shows that leaders willing to take risks and try to do something new in their decision making. The next theme is forgiveness which means that servant leaders can be forgiven when facing employee mistakes and conflicts. The last theme is stewardship which related to social responsibility, loyalty and teamwork.

Organizational Citizenship Behaviour (OCB)

Basically, there are several behaviour researches that is almost equal with Organizational Citizenship Behaviour also known as OCB. According Muhdar (2015), this fact is based on the idea by Barnard (1938) according to concept "ready to cooperate". In addition, the idea was also inspired by Roethlisberger and Dickson (1939) relating to "cooperate informally". Additionally, Katz and Kahn (1967) has put forward ideas on the behaviour patterns of individuals. These concepts are the basic for the emergence of OCB before it be discussed in more detail in the early 1980's. They already introduce three types of behaviour as the basic for ensuring an organization to function properly that is the employees get encouragement and support to be in the system, employees can listen to instructions and perform the role required, be innovative and be able to carry out a task spontaneously. This principle not only cover all activities that can create a positive climate in the organization, even the members of the organization itself in cooperation with each other without coercion.

According to the Organ (1988), OCB is a behaviour that supports the psychological and social environment in which the occurrence of task performance. It also means that a person with high OCB does not expect a bonus payment or reciprocal as they carry out the task should exceed in the organization as voluntary. OCB has 5 dimensions of altruism, courtesy, conscientiousness, sportmanship and civic virtue. Several measurements of a person's OCB dimensions have been studied and developed.The Morison Scale (1995) is one of the best psychometric measures (Aldag, Ray & Wayne, 1997). Scale measures of the five OCB dimensions of OCB are shown in Table 2.

Table 2: The scale measures of the OCB dimension

Dimension	Measurement
Altruism	• Replacing a vacation partner • Helping colleague with too many tasks. • Assist the new colleague orientation process without any coercion. • Take the time to help colleague • with work problems. • Be willing to do any work without being asked. • Help your colleagues in other departments when they have a problem. • Help customers if they need help.
Courtesy	• Be aware of changes and developments within the organization. • Follow any announcement from the organization. • Make the decisions in evaluating the best for your organization.
Conscientiousness	• Arrive early at work • Punctual. • Don't spend time discussing things outside the scope of your work. • Come soon when needed.
Sportmanship	• Do not exaggerate issues beyond his or her duties.
Civic virtue	• Pay attention to what helps your organization's image. • Pay attention to meetings that are considered useful • Collaborate in groups

Job Satisfaction (HERZBERG Theory)

Generally, the terms of the word 'job satisfaction' is symbolized individual behaviour towards work and their organizations and can be identified as the emotional reactions of workers to the working environment based on real achievement compared to the estimated (Phillips & Gully, 2012). There are various theories related to job satisfaction. However, this research was choosing Herzberg's theory as a guide in conducting this research. This theory was founded by Frederick Herzberg and assisted by Bernard Mausner and Barbara Snyderman. He created this theory after conducting a research of 203 experts account and engineers according to job satisfaction at Pittsburg in 1959. The research found that positive feeling comes when they can reach targets set by themselves and feel negative when faced with workplace environment and administrators who are not cooperative (Hampton, 1981).

Herzberg introduced two important elements in increasing employee motivation as Two Factor Theory. Based on this theory, it is divided into two groups, encouragement needs (motivators) and environmental requirements factor (hygiene). Encouragement needs factors related to positive feelings on matters relating to work. It is known as a stimulant factors or motivation internal (intrinsic) where it became a contributor to high job satisfaction. Environmental requirements factor related with work environment itself. It is known as external (extrinsic) where it caused discontent (Herzberg, 1959). According to Herzberg, these two factors do not depend on each other. Herzberg Two-Factor model is shown in Table 3.

Table 3: Herzberg Two-Factor Motivation Model

Motivator factors (intrinsic)	Hygiene factor (extrinsic)
1.Performance	1. Supervision
2.The award	2. Working conditions
3. The work itself	3. Interpersonal relationships
4. Responsibility	4. Salary
5. Progress and recognition	5. Smart management from the employer

The presence of intrinsic factors can motivate the workers. If this factors does not exist in the organization, it does not cause the employees to feel dissatisfied or not be motivated to perform their duties.However, the existence of extrinsic factors in the organization does not contribute to the rise of feelings of satisfaction among the workers, but in the absence of these factors, they can cause dissatisfaction. In conclusion, motivator or intrinsic factors can be recognized as factors contributing to job satisfaction, while hygiene or extrinsic factors are better known as dissatisfaction factors.

Previous Related Studies (Reveals on The Relationship Between These 3 Theories Towards Teachers Throughout the World)

Servant Leadership in Secondary Schools

Interpretation of servant leadership can be defined as the development and facilitation in achieving the mission and vision of development to the needs of long-term success and its execution by displaying the correct way (Ayinde, Akintayo & Kayode, 2015). A school will be successful if it can achieve the vision and mission that has been set. The size of this success is highly dependent on the leadership mechanism that practiced in the organization involved. Leaders who do not target its own sake alone, but is more concerned with the good of their followers and organizations, will be able to stimulate an increase confidence in the organization then the higher interest of the organization (Kunze, Raes & Bruch, 2015). An organization (school) who wanted to reach effectiveness in the pursuit of success must recognize unique talents of its employees in their efforts to help advance the organization. Leaders in particular should play a major role in helping employees to exhibit and realizing their potential (Porath, Gerbasi & Schorch, 2015).

According Syakirah, Saiful and Jefri (2016), employees (teachers) a sense rewarded by the management will be tried hardly without expecting any reward. The feeling of pleasure during work among workers is an important factor in the success of an organization chart. In addition, a research by Al-Mahdy, Al- Harthi, and Salah El-Din (2016) found that teachers' job satisfaction is highly related to the principles of servant leadership. For that reason, the servant leadership in secondary schools is very necessary as proven when once the principals are willing to serve and lead (leadership servant), it will increase the OCB teachers in positive emotions while improving job satisfaction at the highest level and makes a low working pressure (Hung, Tsai & Wu, 2016).

Organizational Citizenship Behaviour (OCB) Among Teachers

School is an organization that depends on the willingness of teachers to work outside from their regular (Asnani & Norsiah, 2017). The work outside from regular teacher is called as organizational citizenship behaviour (OCB) and it is an important element in predicting school performance (Duyar, Ras, & Pearson, 2015). Feelings voluntary stints in excess of official duties is considered as an additional requirement in order to improve the effectiveness of an organization (Aini & Mohd, 2016) including schools. Teachers who practice OCB may show features of altruism, modesty, meticulously, teamwork and pure nature in which it supports the physiological functions and the effectiveness of a school (Chun-wen Lin, 2017).

In the context of globalization, the research on OCB in school organizations have started to be attention. Most of OCB research emphasize matters related to school environment climatic influence in which it is the main thing that should be included in the school to ensure that organizational goals are achieved (Popescu & Deaconu, 2013). According to a research conducted by Nur and Fatima (2018), there are three main factors that are very dominant in creating OCB among school teachers, that is neuroticism, openness and consensual. These factors include some features that affect the climate in the organization OCB among teacher's existence of cooperation, helpful, tolerant, freedom to give idea and flexibility.

Therefore, affinity can be connected with the existence of servant leadership needs OCB among teachers to achieve the goals of an organization (school). This coincides with the fact Marek, Karwowski, Frankowicz, Kantola, and Zgaga (2014), a citizen organization with high OCB will propel the organization to achieve its vision, mission and goals. This statement is corroborated by the findings of a survey conducted by Harris, Hinds, Manansingh, Rubino, Morote and Ed (2016) which shows that the practice of servant leadership is a major factor in influencing employee satisfaction and a major cause of their stay in the organization.

Job Satisfaction Among Teachers

Job satisfaction among teachers is an important indicator to provide a prosperous climate for teachers and pupils (Nor, Jamalul & Ruzita, 2016). The increase in job satisfaction of teachers viewed able to motivate them to always continue in the process of improving teaching skills, create a more conducive learning environment and improve student achievement. The dimensions of job satisfaction are different between individuals (Norhazwani & Jamalullail, 2016).

Relationship of Servant Leadership and Behaviour Citizenship Organization (OCB)

Researches related to servant leadership and OCB devoted in the organization of the school is very limited. Among the research that can be attached is a research conducted by David, Judy, Roxanne and Philip (2013), in which the research examines the relationship between principal's servant leadership with OCB and school climate carried out in Alabama. The research found the practice of servant leadership by the principal is very related to the climate of the school. It also found that the practice of servant leadership is strongly associated with the school organization OCB.

Moreover, Amos (2014) conducted an analysis of the relationship of servant leadership, OCB and effectiveness as a group in the South African school system. The researched emphasizes matters related to the role of servant leaders to promote positive behaviour in the organization. Servant leadership can shape the school climate to provide more opportunities and space in shaping or creating positive behaviors such as OCB. Next, a research conducted by Adrian Geoffrey Van Der Hoven (2016) which examines the relationship between servant leadership with trust, psychological empowerment, job satisfaction and OCB among teachers selected in the West Cape. The results from the research showed significant effects and positive relationships in the study.

Recent research carried out by Muhammad, Asma and Mushtaq (2018) related to school performance that practice servant leadership with teachers' OCB effect. Based on the results of research, show that empower employees, providing support to employees and responsible for a positive impact and very important in influencing the OCB teachers. The research also found how servant leadership affects teachers' OCB where it affects the pattern of the overall performance of the school. Based on the results of researches that have been conducted abroad that has been attached as mentioned above, it is clear that there is a significant correlation between the two variables above between servant leadership and OCB. It covers various fields including education.

Relationship of Servant Leadership with Job Satisfaction

School leader with a complex role and authority can provide an effective culture, change and innovate to school (Chatzipanayiotou, 2008). However, a leader which practice servant leadership will bring a positive impact on job satisfaction of teachers where the excess corresponding to the effectiveness and quality (Al- Mahdy Al-Harthi, & Wrong, 2016). This statement is supported with a researched conducted by Georgolopoulos, Papaloi and Loukorou (2018) in Trikala, Greece. Research which done among teachers showed a good level of job satisfaction exist when the principals/headmasters practicing servant leadership in their schools. They believe that the task they are doing is important for their success and ultimately. They felt free to be more creative at their workplace. In conclusion, there is a strong focus in the literature servant leadership and employee satisfaction. Efforts to improve employee satisfaction can be seen when leaders show the characters of servant leadership (Mehta & Pillay, 2011).

Relationship of Job Satisfaction and OCB

The leader of an organization is desirable to increase the level of OCB among subordinates (Davnarışı, 2014). Job satisfaction is one of the factor that can increase OCB among staff's (Hooi Lai Wan, 2016). This statement was including situation in school organization. It was supported by Robbins and Judge (2013) research which clarify that human will become more tendency to showing their OCB if they are gaining encouragement by the things they do for the organization. It will created job satisfaction in themselves. This honour is given as appreciation of their hard work.

According to Wagner and Hollenbeck (2010), OCB difficult to achieve among employees of the organization because job satisfaction does not exist in themselves. In the same year, Zienabadi (2010) also made a researched and found that intrinsic job satisfaction gave significant impact on OCB indirectly. This statement is supported by the findings of a research conducted by Landy and Conte (2010) and Riska and Umi (2018). They state that there is a positive relationship between job satisfaction and OCB. If teacher job satisfaction level is high, teacher OCB rate is also high. The dimensions of job satisfaction that greatly influence OCB rates are awards, working procedures and regulations. The results from the researched by Ulfiani (2013) to MAN teachers in South Sulawesi showed a positive and significant relationship between job satisfaction and OCB. Based on some of the findings that have been described above, it can be concluded in general that the more satisfied an employee in carrying out the task, the more able to realize the OCB in the workplace (Ulfiani (2014). However, if the job satisfaction level is low, the OCB level is also going to be low (Chasan & Endang, 2017).

The Relationship Study Between of Servant Leadership, OCB And Job Satisfaction Theories in The Malaysian Education System.

The Ministry of Malaysian Education has proposed two leadership styles which are transformative and distributive in the management of their schools through PPPM 2013-2025. However, after more than 5 years it has been introduced into the national education system, this style of leadership is seen as having some weaknesses. These are related to the psychology and job satisfaction of the teachers (Ministry of Education Malaysia, 2017). To solve this problem, a multi-dimensional leadership style is recommended as described by Muyan and Ramli in the Journal of Educational Research (2017). In this context, servant leadership is seen as more appropriate. Servant leadership has the advantage over transformative leadership where it provides greater opportunities for passive followers. While servant leadership has more potential to develop workers than distributive leadership (Hardin, 2003; Patterson, 2003). However, there is not much research on servant leadership in the context of Malaysian school since it was relatively new in this country.

Besides that, there are several researches conducted in job satisfaction of teachers in Malaysia. Among them is a research conducted by Nor Fadilah and Azlin (2014) on teachers of Sekolah Menengah Agama Bantuan Kerajaan (SABK), Negeri Sembilan. From the study, the level of teachers' job satisfaction is at a moderate level due to the 'satisfaction' is not emphasized by the principal. Nadiah and Azlin (2014) found that SMK's teachers job satisfaction level is higher than in SBP and SMKA in Seremban where it was influenced by the style of leadership and teamwork. The research conducted on primary school teachers in Temerloh showed that they have a high level of job satisfaction due to they can run errands or things they like (Jamalul, Che, Hazita & Samsidah, 2014). In the same year, a research conducted on teachers in vocational colleges Johor showed significant correlation between job satisfaction and organizational commitment (Fatima, 2014). According to the research by Nor, Jamalul and Ruzita (2016), the teachers' job satisfaction in Ledang are at high level and there were no significant differences between job satisfaction based on the level of school achievement. While the study by Ahmad (2016) conducted in Marang, Terengganu showed a significant influence between principal leadership toward teachers' job satisfaction.

However, studies on the existence of OCB among teachers in Malaysia are limited (Asnani & Norsiah, 2017). Among the studies conducted were the top performing primary school teachers throughout Malaysia by Aini Marzita Mansor and Mohd Hasani Dali (2016). The study found that the level of OCB among respondents was high. Similar results were obtained in a study by Talebloo, Ramli Basri, Aminuddin Hassan, & Asimiran, 2015) conducted in the state of Selangor. Contrary to the high school context, OCB among its teachers is at a moderate level (Nor Laila Elias, Zoharah Omar & Khairuddin Idris, 2014). Based on the information above, the study among the three variables is independent. There is no research has yet been conducted in the context of the Malaysian school that combines these three variables. Therefore, the researcher proposes a study conducted on the relationship of these three variables to be conducted in Malaysia, specifically in the field of education. In the context of school, servant leadership based on moral principles is seen as more comprehensive than distributive leadership and it is further suggested that it is more in line with the school administration process (Yusuf, 2016). The article published by Winston and Ryan (2008) states that servant leadership is a global leadership pattern and should be included in leadership programs in Africa, Asia and the Mediterranean. It can be concluded that servant leadership is a new paradigm in leadership as it focuses more on the principles, beliefs and personalities of leaders (Yayan, 2010).Servant leadership is an effective model in the context of teacher leadership Bufalino (2017). Therefore, it is very important to study the relevance of these three variables in the Malaysian education system.

Suggestions and Conclusion

Based on further discussions above, it can be concluded that there is a relationship of servant leadership on organizational citizenship behaviour (OCB) and job satisfaction among teachers. However, this relationship is the result of a study from outside Malaysia only. Based on the result, the servant leadership style is seen as a multi-dimensional leadership style and it is seen as best practice to create OCB among teachers and to create job satisfaction among them which is seen as a necessary element of schooling to ensure that the vision and mission was achieved more transparently and effectively in the context of Malaysian educational system. The paper also proposed a number of topics that can be carried out so that the real objective of this research can be reach as follows:

1) Researches continue to create a questionnaire based on the truth of the original founders of instruments and validation of some experts (after processing language created) in the field.
2) The population of respondents identified and a questionnaire survey conducted on them
3) Conducting a pilot study before the questionnaire distributed to the actual population
4) Discard any items in the questionnaire were not right just after the pilot study were analysis
5) Doing actual research in the context of school-related with topics of research in Malaysia
6) Focus only to a state in Malaysia as the population because every school in Malaysia is subject to MOE in terms of administrative patterns, rules and staff selection. So, this means that researchers need only focus on population one of the states only in Malaysia where it represents the entire school in Malaysia.

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DOES COMPENSATION INFLUENCE THE PERFORMANCE OF ORGANIZATIONS IN MALAYSIA?

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Abstract: *Compensation is one of the relevant topics to be discussed in many organizations either in Malaysia or other countries. Presently, the compensation issue increasingly catches the interest of academics, employers, employees, and also organizations in Malaysia. This study was conducted to examine the influence of compensation to the employees and their performance to achieve the organization's goal. Due to high pressure was living cost and high risk when they are doing their works in the organizations, then they have to be more secured, either with the safety or wages. Over the past year, there is an attempt by many organizations today to identify innovative compensation strategies that are directly linked to improving organizational performance as well as work performance. This paper aims to review how compensation influences the work performance and the effect comes from the extraordinary growth of information and communication technologies (ICT), compensation has been recently proposed to indicate the integration of ICT purposely to support the traditional participatory process. However, this paper will discuss the implications of compensation in the organization in Malaysia and discusses the experience's views too. Although this study already discussed the implications and experiences by the compensation, we hope that Malaysian can provide useful insight, knowledge, and understanding from the employer to the employees where there had no problem created by them. Toward the end of this paper, a conceptual framework will be offered. Based on the discussion on related empirical review, the compensation factors are proposed to have significant influences on work performance in the organization in Malaysia. In the future, we hope that future studies would focus on other discussions of compensation factors or in reward satisfaction. Therefore, future research should be alert on how to make sure this issue is not getting worst, but be more effective and comprehensive to implement to the next generations.*

Keywords: *Compensations; Work Performance; Implications; Experiences; Malaysia*

Introduction

Performance in Malaysia nowadays has their own changes since the first revolution, for example with the great findings, the big data and the internet give an impact to this higher education industry which is increased. To achieve the organization goal, every organization is looking through to performance of workers and the organization itself. The main concept of compensation is based on how satisfied the worker with the wages or salary given. The primary goal of the present study is to seek a better understanding of the antecedents of pay satisfaction, and specifically, to focus on pay comparisons and the perceptions of fairness and organizational justice.

Nowadays work performance is an issue for the development as well as how to develop the organization performance and how to achieve the organization's goal. Besides, the work performance cannot be defined from any specific ways, it is because the performance is depend on the size, policy and strategy of the organization by concern with day to day routine with the responsibilities and also with the effort to their jobs as well (Akter, N. & Husain,M.M. (2016)).

Compensation or pay level is really synonym on how employee feels from what they had received from organization. Meanwhile, an inferior quality of psychological factor of people may affect lower productivity in completing task. Hence, no matter how good is the physical environment of the workstation provided by an organization, employees still cannot deliver the best effort if there exist feeling of unhappiness which is the salary as their important need.

In addition, the main concept of compensation is based on how satisfied the employee is with the salary given. In Malaysia as reported by Benjamin, R. (2018), the issue that is often discussed is the compensation system in Malaysia is the highest in the organizational hierarchy. For example, an issue a few years ago, a quality control assistant at a factory had a serious accident and was rushed to a government hospital, but his parents transferred him to a private hospital. When his parents went to the factory to ask for a letter of guarantee, they were told that their son was only insured for RM20,000 while his medical expenses increased to RM40,000. The family had to borrow the rest from relatives and friends and also made them debtors while in the process. Therefore, having a strong safety net for employees is very important for an organization.

This article reviews a variety of literature, including journal articles, reports, from electronic sources and others. Therefore, this article begins with the introduction or background of compensation, how to determine compensation to employees and the experience of compensation practices from other countries. Past research is mostly focused on how compensation helps or influences the organization as well as the employee himself. This article emphasizes the conceptual framework developed based on practical discussions as well as empirical surveys related to compensation as well as job performance in the public sector.

Literature Review

Compensation

The definition of compensation is about the right schemes to ensure those hardworking employees and directly rewarded fairly and in the most cost-effective way for the company (www.allaboutcareers.com). From that this is can turn then motivates employees to sustains their performance itself. Besides, people who work in any organizations they might devise policies include; salaries, bonuses, commission, pensions, life assurance, profit sharing and etc. they are mostly administering, managing and evaluating the payroll, salary structures, and incentive schemes. This is to make sure that the right people get the right amount of money at the right time.

According to Workmen's Compensation Act 1952, was to provide for the payment of compensation to workmen for an injury suffered in the course of employment. This act is shown how important compensation to employee and workmen. This is one of the things an organization can protect their employees and the performance of them. From this act, section 4 (c), '*An accident happening to a workman in or about any premises at which he is for the time being employed for he purpose of his employer's trade or business shall be deemed to arise out of and in the course of his employment if it happens while he is taking step, on or actual emergency at those premises, to protect persons who are, or thought to be or possibly to be, injured or imperilled, or to aren't to minimize damage to property'*.

Compensation are including benefits and reward career also had significant with money. The compensation, benefits and reward schemes are not only important for retaining and motivating employees, but also for attracting new people to joining the organizations. Salary and incentive packages are one of the main reasons why people apply for jobs. The more attractive compensation and benefits schemes tend to generate intended to join the organization. Consequently, those who work in this area need to be numerate, commercially aware and have a detailed knowledge of financial laws and regulations. This is as well to monitoring their company salary structures and benefits, were required to research and analyses the salary rates of the employees in the organizations (www.allaboutcareers.com).

How Determines Compensation?

According to Heathfield, S.M. (2019), there are six reasons how the companies or organization determine the compensation. First, an availability of skilled employees in the marketplace. In this context organization with many alternatives do not need to compensate the chosen employee with more than the market rate. For example; when one company needs a particular skill and has two people to choose, so they don't need to pay the employees much.

Second is desire to attract and retain particular employee. For example, an organization are had to choose the right employee and then they have to pay more, and vice versa. But then, but if has a reputation as a horrible place to work, they may need to pay more to attract employees performs. The third reason is, employee contribution and accomplishments, some companies can recognize the difference in how much an employee contributes to the company through pay differentiation with the merit increase. But some companies are looking with some honesty to determine an employee is unworthy of compensation increases or not (Heathfield, S. M., 2019).

How the companies determine compensation are based from market research about the worth of similar jobs. This is explained that the numerous companies do some formal salary survey, and they found that companies reported that their current pay and benefits for jobs based provide a good insight into the competitive rates based on employee performances. From the previous experiences, employees are looking at salary offered to the senior employees. Salary for a new employee and also increase it by a small percentage will be unfair compensation and discord within the company itself (Heathfield, S.M., 2019). The last one is company's profitability or funds available in a non-profit or public sector setting. According to Heathfield, S.M. (2019), people are willing to work for one organization because of trust. They believed in the mission and vision of the organization and perceived that the organization value may be consistent with their own personal values. Some public sector organizations have the low pay checks, but they have high benefits, for example health insurance and the pensions.

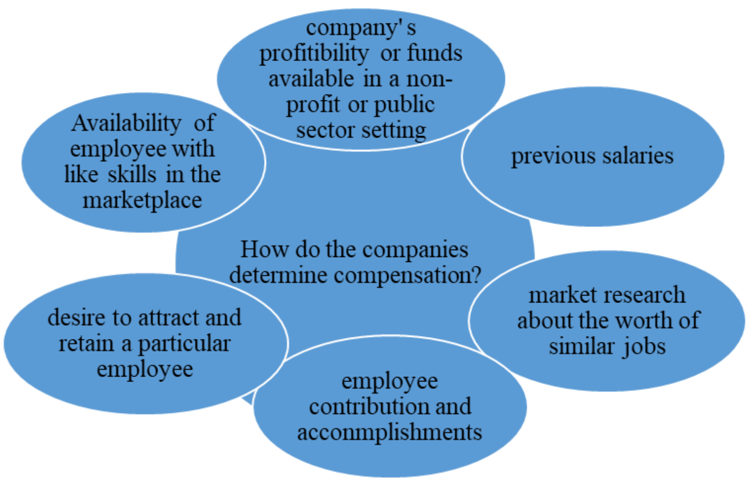

Figure 1: Compensation determine for an employee

Source: Heathfield. S.M. (2019)

Implication of compensation to Work Performance

According to Akter, N. and Husain, M.M (2016), they are study about the relationship between organization-level compensation decisions and job performance. They also examined on how companies‟ pay structures and pay levels relate to resource efficiency, patient care outcomes, and financial performance. It is observed that there are many approaches to incentive compensation such as cash bonuses, stock purchase and profit sharing and it is also examined that individual and group incentive concept can be associated with reward and compensation for business community. The concept of compensation is about all forms of financial returns and tangible services were give a benefit to employees receive as part of an employment relationship. For example, compensation surrounded by the employee wages and salaries, incentive-payments, bonuses, and commissions. Employee compensation contains all forms of pay and rewards received by employees for the performance of their jobs. Besides, employee compensation means all forms of pay or rewards going to employees and arising from their employment and it may be direct financial payments (Pay in the form of wages, salaries, incentives, commissions, and bonuses) and indirect financial payments (Pay in the form of financial benefits such as insurance).

To understand how compensation are related to the work performance, researcher is willing to conduct research about how compensation functions. Based on the study conducted for employees at the Employees Provident Fund (EPF), which is situated in Kuala Terengganu, they are satisfied with their job performance as well as the non-financial compensation received from their employer (Mas Anom, Mohd Noor Azman, Mohd Zainudin & Nurul Fatini (2017)). In accordance with this, compensation is a systematic approach including wage and incentives to employee to directly exchange for work performance and also assisting recruitment.

On the other side, organizations in higher education will gain an insight from the current study on how to improve factors that impact job satisfaction through compensation. It is because, the result that the researcher found is a positive and significant relationship between compensation and work performance. So, it is important on higher education institution to pay much attention for the compensation. From this finding, it shown that compensation is a useful instrument in the hand of the management to contribute to the organizational effectiveness and directly can effect positively on the behavior and productivity (Mabaso,C.M & Dlamini,B.I.(2019)).

Compensation Experiences: Malaysia and Other Countries

Based from the information gathered for the suggestion boxes provided in Telekom Malaysia it was mentioned that employees usually walk out of the company because of their dissatisfaction with the payment given, and argued for their inequity with others (Rudzi Munap, Muhamad Izwan & Baharom (2013). Thus, the compensation is related to pay level satisfaction towards employee current wages or salary. In addition, from the research they can assume the compensation systems or salary systems also involved pay grades often used in public sector, for example for the federal, military and for higher education.

Through, according to Muhamad Ariff Ibrahim, Wan Shahrazad and Sarah Waheeda (2018), in Malaysia the recent problems associated with the university's academic staff being dissatisfied with the increase in salaries and incentives received by school teachers while the burden of teacher duties is much less than that of them. These problems create dissatisfaction with the academic staff and create unproductive behaviors that interfere with the productivity of teaching, organization and so on. In addition, many previous studies have only examined organizational behavior, performance, etc. among school teachers and other professions.

Besides, compared to other countries like Indonesia, the researcher agreed that from the increased suitable reward system which focused on pay level, an employee will seek to increase their achievement and appreciated their work because the motivation and expectations of obtaining the reward (Muhammad Idrus Taba, 2017).

On the other side, Singapore also emphasis the issues of compensation for their workers. According to Lim, J. (2019), Singapore is looking seriously about the workers injury and safety. They also make changes to the Work Injury Compensation (WICA), and awarded only after a doctor makes a permanent incapacity assessment to the compensation based on the prevailing state of capacity. The change is needed because some injured workers receive their compensation after several month, so it causes uncertainty, especially for the foreign workers. This is will happens to who are unable to return back to their country and the situation also applies to the local too, who are bear and higher maintenance expenses.

Past Research in Compensation

Compensation is about pay were provided by an employer to employees for services rendered (i.e., time, effort and skill). This is including both fixed and variable pay tied to performance levels. Compensation as financial and non-financial extrinsic rewards provided by an employer for the time, skills and efforts made available by the employee in fulfilling job requirements aimed at achieving organizational objectives. Compensation is important for both employers and employees regarding attracting, retaining and motivating employees. Because compensation is including claims on goods and services paid to an employee in the form of money or a form that is quickly and easily exchangeable into money (Mabaso, C. (2018)).

Past research is shown that from provide cross function and cross industry training, Malaysian workers were trained in a specific industry find themselves redundant the moment a new technology crops up. Besides, when there are retrenched, they are unable to be gainfully employed again due to absence of cross industry skills. For example, a manufacturing employee will not be able to obtain jobs in the booming service industry because he doesn't have the required skills. Skill categories of workers must be widened, it is because from that it easily availability of foreign workers has created a situation where wages have come down, resulting in Malaysian workers shunning jobs that are seen as dangerous, dirty and difficult (3D) and involve long hours at work. Thus, skill application by using the right methodology should be taken into consideration and compensation should be given accordingly. The Human Resources Ministry must give these jobs due recognition to attract Malaysian workers to learn the skills and take them up (Benjamin, R. (2018)).

According to Mabaso, C.M. and Dlamini, B. I. (2019), salary is provided by the employer to their employees for services rendered (time, effort and skills). It is included both either employee or employers are fixed and variable paid are tied to performance levels. Compensation is important for both side regarding to attracting, retaining and also motivating the employees. But then, for the Malaysia perspective, money and perks matters is to make employees happy and hardworking, whereby, Malaysian employees' performance are influenced by the type of compensation, for example financial and non-financial (Mas Anom. et.al (2017)).

A few years ago, there had found about 5 top trend compensation were by the election, changes and also because of the competitive market. The most popular trend is compliance heated up with minimum wage, gender pay equity, and the act changes. In this trend it was studies on many state and local minimum wages changes in 2016. In United State on that time, the new administration was appointed, and the fewer regulations to being upheld at the federal level, are begins. So, from that he equal and fair pay were driving forces for the legislation, is a dominant theme across the laws was needed for better communications. From that, it shown that many effected organizations spent many months to preparing for the changes, auditing their jobs, pay and options for the ensuring compliance (www.payscale.com).

The second trend is, companies focus in market competitiveness. During the changes of this compensation views among employers and employees, the unemployment rate is lower than before the recession. It is shown that employees are looking for job all the time and at the same times, there had almost 60% of employees felt that they had lower paid from their organizations, from that it is actually make then intend to leave their organization within in the next six months. The effect from this situation make the organization have turn the market data to shore the pay decisions and how the market impact.

In the other hand, it is shown that the companies are starting to care about transparency and communication. The transparency had arisen as a key point of the organization in 2016. Transparency is not only for all or nothing for the option for the organization but the rather of ways to communicated effectively about the decisions that went into the setting or adjusting pay in the organizations. The fourth trend are found is organizations are managing performance more frequently. The researcher had found that in many organization, large and small, had to decide to change their performance management process. Some of them had said that the annual performance management process, had to complete with stack ranking because if the opposite from the intended responses. It created a highly competitive environment and has been linked to a fight or flight physiological responses (www.payscale.com).

And the last but not least trend is companies explore mix of the pay options. From this, it is gone are the days where companies compensate with just base pay. In order to compete for the top talent, companies are exploring all options for recognizing and rewarding employees. That includes using team-based incentives to drive collaboration, providing creative perks and offering performance-based incentives across the organization from executives to individual contributors (www.payscale.com).

Conceptual Framework

This conceptual framework is for investigating the determinants of compensation was based on the theory of Human capital (Becker, 1975), which identifies several employees to attribute such as investment in training, education, on-the-job training, and labour market experience. This is directly are associated with lifetime earnings and the link to employee's compensation. In the research had proposed the most frequently research areas in economic sciences in the last decades. This are led to researching a number of economic issues including education and family economics (Koziol, L. et. (2014)).

Furthermore, why human capital theory related to compensation and performance is because, according to Hannan, M. T. (2018), this theory is to understanding how wages or salary are determined. It is by earning in the market value once depend on how's employee's information and skills. Besides, this is also often by the outcome of investment only if the expected stream of future benefit was acquiring the skills. The important aspect of an organization is depending on how the employees perform was related to compensation provided. The more they get, then the more can motivate them to performs well together to achieves the organization's goal.

The compensation and benefits schemes are ensuring that hard working employees are rewarded fairly and in the most cost-effective way for the company. This in turn and then motivates employees to sustain their performance. The most employees are don't just work because of their job passion but, they also want a decent salary and other incentives that will reward them for their hard work in the organizations. The size of the organisation determines what kind of work you might be doing in your compensation and benefits career. In smaller organisations, some people might deal with the whole range of responsibilities, whereas larger companies may offer careers which focus on one specific aspect of the compensation and benefits remit, such as payroll management (www.allaboutcareers.com).

In this theoretical framework the researcher consists of compensation are including investment in training, education, on-the-job training and also the labour market experiences. Thus, based on this theory, the related literature above, this conceptual framework for examining the of influences of compensation value to the organization performances as shown in figure 2 below. It is are relevant to this theory, an investment in human capital depend upon the costs of acquiring the skills and the returns that are expected from the investment. So, from that it is shown that the human capital theory is most significant with the compensation and work performance among employees in the organizations. The Figure 2 below, it's shown the proposed of conceptual framework. In the framework, the influence of the compensation as independent variable and work performance as dependent variables.

Independent Variable (compensation)		***Dependent Variable***
Training *Education* *On-the-job-training* *Labour market experiences*	→	*Work Performance*

Figure 2: Proposed Conceptual Framework

Conclusion and Future Research

In Malaysia situation, employers should be more aware on the needs of their employees from the psychological or environment needs, either its effect their work performance or not. Compensation in Malaysia still needs to be more aware and perform on the right track by the organizations leaders and they have to be more concerns about the compensation in overall. However, it is not impossible to be more successful from the employees' performance, because organization in Malaysia also can learns from the other countries about how to be more alert about the compensation strategy that they had given to their employees. Although this study already discussed about the implications and experiences by the compensation, we hope that Malaysian can provide useful insight, knowledge and understanding to the workers. In future, we hope that for the future study would focus other discussions of compensation or in reward satisfaction.

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THE DANGER OF DWELLING AND ITS ROLE IN ATTACHMENT AND DEPRESSION OF COLLEGE STUDENTS

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Abstract: *Dangerous dwelling is an act where individual tends to negatively obsess over a stressful situation or problem repetitively until he feels distress. Popularly referred as rumination, it has been documented to be a strong predictor of psychological distress. As significant number of young adults attending college struggle with psychological distress, it is important to understand their psychological health concern. At present, not much is known on how dangerous dwelling escalates depressive symptoms in Malaysian college student's despite of their attachment orientation. Attachment orientation has been found to promote ruminative tendencies as well psychological distress. This study aims to look at how dangerous dwelling can influence the relationships between attachment orientation (i.e., anxious and avoidant attachment) and depression of college students. A total of 530 (n_{male}=171, n_{female}=359) students were selected using the multistage cluster sampling technique from a tertiary institution in Malaysia. Structural equation modelling indicated that both anxious and avoidant attachment orientations had direct influence on depression. Additionally, results revealed that rumination acted as a partial mediator for the path from anxious attachment to depression. Rumination, however, did not mediate the path between avoidant attachment to depression. Results are consistent with past findings in which rumination do to some extent influence the relationship between attachment orientation and depression of college students. Resolving the habits of dangerous dwelling is vital in helping youngsters to combat depression.*

Keywords: *Dangerous Dwelling, Rumination, Attachment Orientation, Depression, College Students*

Introduction

Dwelling is a method of coping with negative emotions that involves self-reflection, and elaboration of repetitive and passive focus on said negative emotions (Nolen-Hoeksema, 2000). Dwelling becomes dangerous when an individual tends to negatively obsess over a stressful situation until he becomes distraught and unable to actively resolve his emotions. Vast studies have highlighted the link between rumination and psychological distress particularly depression (Nolen-Hoeksema, 2012). College students are among one of the vulnerable groups that are susceptible to psychological distress as they tend to experience multiple developmental and environmental stressors. Depression is the most common form of psychological distress experienced by college students. Dangerous dwelling or popularly known as rumination has been found to exacerbate the symptoms of depression. Attachment orientations on the other hand has been found to promote ruminative tendencies as well as psychological distress. Individuals with insecure attachment relationships (anxious attachment and avoidant attachment) were found to be prone to ruminative tendencies as well as psychological distress. At present, not much is known on the link between rumination, attachment orientations, and depression among college students. As it is important to understand the psychological health concern of the youngsters in Malaysia, this present study aims to examine rumination and its role in attachment orientation and depression of college students in Malaysia.

Literature Review

Rumination is generally a type of negative reaction when individuals dwell on their emotions and its causes and various results instead of taking active measure to solve a problem (Sun, Tan, Fan, & Tsui, 2014). Rumination would create a recurrent representation of a stressor in the individual's mind so that a stressful event can continue in one's thoughts and affect (Zawadzki, Graham, & Gerin, 2013). In other words, individuals who tends to ruminate, deals with negative events by dwelling on negative emotion despite the event being over, and things have changed (Papageorgiou & Wells, 2002).

Individual with rumination tend to overthink emotion and immerse himself in circumstances to limit his motivation to communicate and curb his behaviour. Due to this nature of rumination, earlier studies have predicted rumination as a great predictor to depression (Connolly & Alloy, 2017; Cook, Mostazir, & Watkins, 2019). According to the Response Styles Theory (Nolen-Hoeksema et al., 2008), rumination worsens and prolongs distress and depression by enhancing negative thinking, impeding effective problem-solving, hindering instrumental behavior, and damaging social support. Hence, individuals prone to a ruminative response style tend to experience greater depressive symptoms.

Among those frequently engaged in a ruminative thinking are young adults who enter college. Transitioning from high school to college can be a very stressful experience for young adults as many significant changes takes place such as being away from family and friends, carrying more responsibility both academically and socially, and making new friends as well as the pressure to fit in. These stressful events may cause significant impairment in the mental health functioning of college students, particularly those in their freshman year (McPherson & Vise, 2013). Moreover, college students with ruminative tendency are more likely to exhibit future elevations of depressive symptoms compared to those with good emotional coping mechanism (e.g., Burwell & Shirk, 2007; Nolen-Hoeksema, Stice, Wade, & Bohon, 2007).

In addition to psychological distress, rumination has been documented to have relations to adult attachment orientations. Individuals with anxious and avoidance attachment are prone to ruminative tendencies such as emotional wondering and emotional distancing from distress. Specifically, those with anxious attachment are more prone to emotion-focused coping such as wishful thinking, self-blame, rumination (De Lorenzo, 2017). Meanwhile, individuals with high avoidant attachment tend to have dysfunctional emotion focused coping which limits their accessibility to distress. Generally, those with insecure attachment orientation (i.e., high level of anxious and avoidance attachment) have negative view of self and others and are prone to a wide range of psychological distress (Mikulincer & Shaver, 2007). A recent study found that college students with insecure attachment orientations were more at risk of experiencing depression, generalized anxiety, social anxiety, eating concerns, hostility, substance use, and academic distress (McDermott, Cheng, Wright, Browning, Upton, and Sevig, 2015). Similarly, another study on attachment orientation and psychological distress of college students from Germany and Turkey found that attachment orientations predicted the elevation of psychological distress in both samples (Turan, Kocalevent, Quintana, Erdur-Baker, and Diestelmann, 2016). Specifically, anxious attachment in the German sample and attachment avoidance in the Turkish sample showed stronger association with the elevation in psychological distress. In addition, Moreira, Martins, Gouveia, and Canavarro (2015) noted that anxious attachment with respect to a best friend and romantic partner is significantly associated with both depression and anxiety. In contrast, only avoidance attachment in relation to one's romantic partner is significantly associated with anxiety and depression.

Yet despite the extant knowledge on rumination and its role on attachment orientation and psychological distress (i.e., depression), not much is known on the linkages between rumination, attachment orientations and depression of college students in a Malaysian context. The study presented here seeks to extend the knowledge based on the establish role of rumination and its influence on attachment and psychological distress, particularly depression in a sample of Malaysian college students.

Methodology

Participants

A total of 530 college students were selected using the multistage cluster sampling technique from a local tertiary institution. Their age ranges from 18 to 33 years old with mean age of 21.90 (SD=1.76). A large proportion of them were females (68%), Malay (85%), and Muslim (88%). A large number of students come from intact (91%) and moderate (62.5%) size family (Mean=4.34, Sd.=2.05) with a moderate family income (Mean=RM4920.04, SD=4536.25). Nearly half identified themselves as not in any special relationship (46.8%, n=248). Those who were (67.6%, n=69) had been in the relationship for more than one year.

Measurements

Socio-demographics

Participants completed a short demographic form on personal characteristics (age, sex, race, semester of study, and field of study), parental characteristics (age, education, occupation, and marital status), and family characteristics (family income, number of siblings, and family structure).

Attachment Orientations

Attachment orientations (anxious and avoidance) was assessed using the Malay version of the Experiences in Close Relationships-Revised General Short Form (ECR-R-GSF; Wilkinson, 2011). The 20-item ECR-R-GSF was developed by Wilkinson as a modified version of the ECR-R to assess general attachment rather than romantic attachment in a sample of English-speaking Australian adolescents and young adults. Unlike the original scale, the Malay version comprised 14 items where 10 items measure anxious attachment and another 4 items measures avoidance in relationships. Items are statements of beliefs about relationships rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). A total of three items from the Avoidance subscale was reverse scored prior to summation. The Cronbach's alpha for avoidance and anxious attachment subscales are 0.64 and 0.86, respectively, suggesting adequate internal consistency of the scale. Higher scores on each subscale indicated greater levels of anxious and avoidance attachment.

Rumination

The ruminative response of college students was measured by the short version of the Ruminative Response Scale (RRS). This 10-item scale was formed by Treynor et. Al (2003) but originally was developed as a 22-item scale by Nolen-Hoeksema and Marrow (1991). According to Treynor and colleagues (2003), this short version scale was found to be highly correlated to the full version of the scale (r=.90) and has a high level of internal reliability (Cronbach's alpha = .85). Items are scored on a 4-point Likert scale ranging from 1 (almost never) to 4 (almost always). In the present study, this subscale was reported to have good reliability with Cronbach's alpha 0.77.

Depression

Depression was assessed using the depression subscale from the Malay version of Counseling Center Assessment of Psychological Symptoms (CCAPS-62; Kee, Ahmad Jazimin, Asma, Hapsah & Hsin-Ya, 2017). This 13-item subscale required participants to rate how well each item describes them during the past 2 weeks using a 4-point Likert scale ranging from 0 (not at all) to 4 (extremely well). Total scores were obtained by summing up all items where higher scores indicate greater depressive symptoms. This scale is reported to have high reliability with Cronbach's alpha 0.86.

Analytical Procedures

Structural equation modelling (SEM) was utilized to test the relations between attachment orientations, rumination, and depression. Prior to the structural analyses, the parcelling technique was performed to create multiple indicators of latent variables (i.e., anxious and avoidant attachment, rumination, and depression). Next, multiple indicator of variables were create based on subset of items from the original scale. As an example, instead of using the 6-item attachment avoidance subscale, three avoidance attachment scales consisting of two items each were created. After all indicator of variables were created, the structural model was analysed and model fit was estimated using several recommended (Barret, 2007; Hu & Bentler, 2000) fit indices such as non-significant χ^2 result at 0.05, Root Mean Square Error of Approximation (RMSEA) value close to 0.08, Comparative Fit Index (CFI) and Adjusted Goodness of Fit (GFI) values greater than 0.90.

Results

Descriptive and Bivariate Correlation

Descriptive and correlational analyses were conducted on the key study variables (i.e., anxious and avoidant attachment, rumination, and depression). The students scored an adjusted mean of 3.06 out of 5.00 on anxious attachment and 2.91 out of 5.00 on avoidance attachment. Meanwhile, the students were found to score an adjusted mean of 2.97 out of 4.00 on rumination. This is suggestive of the students having a somewhat moderate level of rumination. Similarly, the students scored an adjusted mean of 2.62 out of 4.00 on depression which indicates a moderate level of depression.

Table 1 presents the mean, standard deviations, and correlation of the study variables. Results revealed that anxious and avoidance attachment were positively related with one another. Both attachment variables had positive correlations with rumination and depression. However, the level of correlations differed. Avoidance attachment was found to have a weak correlation with rumination and depression, respectively. Meanwhile, anxious attachment was found to have a weak relationship with rumination, but a moderate correlation with depression.

Table 1: Mean, Standard Deviations and Correlation Between Study Variables

Variable	1	2	3	4
1. Avoidance Attachment				
2. Anxious Attachment	.564**			
3. Rumination	.251**	.440**		
4. Depression	.414**	.64**	.453**	
Means	33.03	30.56	29.71	34.09
Standard Deviations	5.22	7.58	4.65	10.14

Note. p<0.01

Structural Relations

The present study aimed to examine the effects of rumination on the relationships between anxious attachment, avoidant attachment, and depression in a single structural model. Figure 1 presents the structural model with estimated standardized regression coefficients.

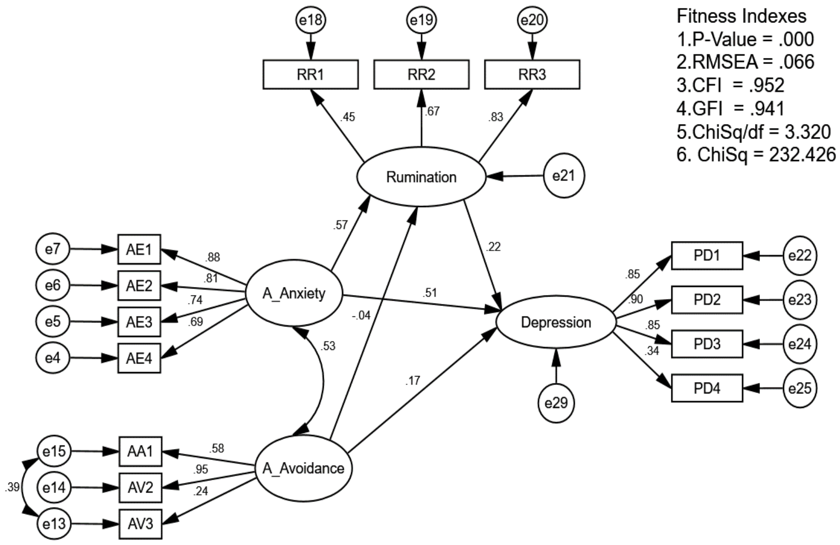

Figure 1: **Structural Model for the Present Study**

Based on the recommended goodness-of-fit, the hypothesized model was a good fit to the data with χ^2 = 232.43, χ^2/df =3.32, p <0.001; CFI = 0.952; GFI = 0.941; RMSEA = 0.066). Further inspection on the model revealed that all paths between the key study variables were significant and in the expected direction with exception to the path between avoidance attachment to rumination. These results suggest that both avoidance and anxious attachment had direct influence on depression. Moreover, rumination acted as a partial mediator for the path from anxious attachment to depression. Rumination, however, did not mediate the path between avoidant attachment to depression.

Discussion

The main aim of the study was to examine rumination and its role on attachment orientations and depression of college students. Findings revealed that rumination had a somewhat significant relationship only with anxious attachment and not with avoidant attachment. This was somewhat in contrast to past findings in which both attachment orientations are link to diminished ability to deal with emotional difficulties (Burnette et al., 2007; Ciechanowski, Walker, Katon, & Russo, 2002). This suggest that those with anxious attachment have a more hyper-activating strategies to cope with distress which leads to cognitive consequences of being hypervigilant attitude and intense experience of negative emotions (Mikulincer & Shaver, 2019). Meanwhile, those with avoidant attachment may be prone to rejecting emotion-related thoughts and avoid emotion-relation action tendencies all together (Mikulincer & Shaver, 2007). As emphasized in past research, individuals with avoidant attachment have greater levels of emotional distancing and suppression of feelings and coping strategies than those with anxious attachment (Altan-Atalay, Sohtorik İlkmen, 2020; Mikulincer & Shaver, 2019).

Additionally, the study found that rumination had direct and positive relationship to depression. This result further supported past research that has highlighted the strong influence of rumination on the development of psychological distress in an individual (Noelan et al, 2008). Similarly, attachment orientations were both found to have a direct positive relationship to depression. This was consistent with recent studies that emphasized insecure attachment orientation as being significant predictors to various psychological distress such as depression and anxiety (Stovall-McClough & Dozier, 2016). Those with insecure attachment would have rigid view of themselves and the world (Joeng, Turner, Kim, Choi, Lee, & Kim, 2017) based on their internal working models shaped by their early experiences with primary caregivers (Mikulincer & Shaver, 2019). These insecure individuals would have less effective emotion regulation strategies, lack of problem-solving skills and does not seek support in stressful situations.

Overall, the results from the present study adds to the body of knowledge on the important role of rumination on the relationship between attachment orientations and depression. Findings are consistent with the Response Styles Theory that dangerous dwelling aggravates and prolong the symptoms of depression by heightening negative thinking, impeding effective problem-solving, hindering helpful behaviour, and harming social support. Furthermore, results from this study emphasized the strong influence of insecure attachment orientations (high anxious and high avoidance) in increasing the risk of developing depression. Young adults with insecure attachment would respond negatively to stressors in their lives mainly due to their core mental schema that is negative in nature. The constant negative perception of themselves (i.e., self-blaming and being unworthy of love) and others (i.e., others as untrustworthy) would further fester the development of depression.

Several limitations exist in the present study, with the first one being its cross-section and correlational design that hinders drawing causal links between the key study variables. Furthermore, information obtained is solely based on the adolescents' response. Future studies may incorporate multiple informants to obtain a more comprehensive understanding on the linkages of rumination, attachment and depression. Lastly, this study only utilized a sample of college students from one local university, which decreases the chance of results being generalize beyond this sample of college students. Hence, future research may increase the sample population which heightens generalizability of the results.

Conclusion

The present study examines rumination and its role on attachment orientation and depression of college students. In general, the study found that rumination do to some extent influence attachment and depression. Young adults with anxious attachment were more at risk of dangerous dwelling which could further aggravate the development of depression. Additionally, this study emphasized insecure attachment as a strong predictor to the development of rumination. Those with negative self-view of self and others are more susceptible to rumination where they are persistently thinking negatively about stressful situations without able to emotionally cope well. Therefore, prevention and intervention programs should incorporate resolving the habits of dangerous dwelling in helping youngsters to prevent depression.

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AMALAN PENGAJARAN DAN PEMBELAJARAN ABAD KE-21 DALAM KALANGAN PENSYARAH JABATAN PENGAJIAN AM, POLITEKNIK IBRAHIM SULTAN

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Abstrak: *Dalam kajian ini pengkaji ingin mengenal pasti amalan pengajaran dan pembelajaran abad ke-21 dalam kalangan Pensyarah di Jabatan Pengajian Am Politeknik Ibrahim Sultan. Responden kajian adalah seramai 30 orang pensyarah unit Agama dan unt Bahasa Inggeris. Reka bentuk kajian ini menggunakan kaedah kuantitatif. Analisis deskriptif dan peratusan digunakan. Instrumen kajian ini menggunakan borang soal selidik empat mata skala likert yang berfokus kepada lapan konstruk iaitu kemahiran pemikiran kritikal, kemahiran komunikasi, refleksi, kemahiran kolaborasi, pentaksiran, penyelesaian masalah, teknologi, kreativiti dan kamahiran inovasi. Kebolehpercayaan instrumen kajian amalan pengajaran dan pembelajaran abad ke-21 ini adalah tinggi iaitu pada Cronbach's Alpha 0.929. Kajian mendapati amalan pengajaran dan pembelajaran yang menggunakan kemahiran komunikasi dan kemahiran penyelesaian masalah mencatatkan min tertinggi iaitu 3.00, manakala amalan pengajaran dan pembelajaran yang menggunakan kemahiran pemikiran kritikal seperti kemahiran berfikir aras tinggi (KBAT), kemahiran refleksi dan kreativiti dan kemahiran inovasi mencatatkan min terendah iaitu 2.00. Ini menunjukkan bahawa amalan pengajaran dan pembelajaran berasaskan ketiga-tiga kemahiran perlu ditingkatkan lagi dari semasa ke semasa. Sebagai rumusan cara berfikir pendidik guru dalam amalan pedagogi abad ke-21 perlu lebih kreatif, inovatif, berfikiran kritikal, penyelesaian masalah dan keupayaan membuat keputusan. Pensyarah yang terlibat dalam bidang pedagogi perlu sentiasa berilmu pengetahuan dan celik ICT. Kesemua faktor ini membantu dan menyumbang kepada pensyarah yang berkualiti, kompetensi dan dinamik.*

Kata Kunci: *Kemahiran pemikiran kritikal, kemahiran komunikasi, kemahiran kolaborasi, penyelesaian masalah, kreativiti dan kemahiran inovasi.*

Pengenalan

Sistem pendidikan hari ini mengalami inovasi dan transformasi secara holistik yang melibatkan perubahan kepada sistem pendidikan, kualiti kepimpinan sekolah, kualiti guru, kemenjadian murid, serta pemantapan tadbir urus yang lebih efisien (Sharifah Bee, 2015) Setiap warga pendidik perlu melakukan anjakan pradigma dan memperkemaskan keterampilan serta ilmu pengetahuan untuk menghadapi transformasi pendidikan abad ini. Penandaarasan mutu pendidikan negara bergantung kepada transformasi yang mempunyai pertautan dengan ilmu pengetahuan dan ledakan maklumat. Oleh itu, tranformasi pendidikan merupakan suatu kemestian kerana kejayaan transformasi ekonomi amat bergantung pada kejayaan pelan pendidikan yang bersifat futuristik (Abdul Ghoni, 2018).

Latar Belakang

Institusi pendidikan abad ke-21 sentiasa berdepan dengan pelbagai cabaran dalam meningkatkan prestasi pelajar, di samping memperkasakan kemampuan penyelidikan dan penyertaan dalam industri serta perkongsian pendidikan. Selain itu, institusi pendidikan juga perlu menjamin kualiti pendidikan yang diberikan memandangkan ibu bapa kini sentiasa perihatin terhadap anak-anak mereka. Tenaga pengajar juga tidak boleh bergantung kepada kaedah pengajaran tradisional sematamata untuk memastikan para pelajar bersedia menghadapi alam kerjaya kelak. Sebaliknya, mereka harus mengenalpasti kaedah yang lebih inovatif, selaras dengan keperluan pelajar masakini yang berada dalam era teknologi. Oleh itu, adalah penting untuk mentransformasi dunia pendidikan terutamanya institusi pengajian tinggi di serata dunia. Ini kerana masyarakat kini memerlukan etika baharu pembelajaran yang lebih bersifat kolabratif, global dan menyeluruh (Brownell et al., 2006).

Permasalahan Kajian

Sistem pendidikan negara sering mengalami perubahan. Fenomena tersebut bagi memenuhi keperluan perubahan dalam persekitaran pendidikan. Chong (2014) menyetujui kenyataan tersebut dengan menyatakan pelbagai perubahan dalam pendidikan di Malaysia disebabkan keperluan kepada pengajaran dan pembelajaran abad ke-21. Malah, Bartlett-Bragg (2010) menyenaraikan antara ciri-ciri guru abad ke-21: guru perlu menguasai kandungan kurikulum, mahir dan berketrampilan dalam pedagogi ketika sesi pengajaran dan pembelajaran, memahami perkembangan murid dan menyayangi mereka, memahami psikologi pembelajaran, memiliki kemahiran kaunseling dan menggunakan teknologi terkini dalam dan di luar sesi pengajaran dan pembelajaran.

Pengajaran dan pembelajaran abad ke-21 memerlukan pensyarah berfikir, merancang, berbincang, menilai, mereka cipta dan membuat keputusan berlatarkan Model *Partnership for 21st Century* (2015). Apa yang menjadi masalah dalam kalangan pensyarah ialah dari segi kefahaman, kemahiran dan kesediaan mereka untuk memberi input dan kemahiran pengajaran dan pembelajaran yang diperlukan pada abad ke 21. Pensyarah perlu mempelbagaikan kaedah pengajaran dan pembelajaran abad ke-21 yang memfokuskan kepada elemen-elemen kemahiran pemikiran kritikal, kemahiran kolaborasi, kemahiran komunikasi dan kreativiti.

Kajian ini ingin meneroka apakah amalan pengajaran dan pembelajaran yang dihadapi oleh pensyarah dalam menunaikan tugas dan tanggungjawab mereka terutama dalam meningkatkan lagi keberkesanannya dengan abad ke-21.

Objektif

i. Mengenal pasti aspek amalan pengajaran dan pembelajaran abad ke-21 dalam kalangan pensyarah Jabatan Pengajian Am di Politeknik Ibrahim Sultan.

Persoalan Kajian

i. Sejauhmanakah aspek amalan pengajaran dan pembelajaran abad ke-21 dalam kalangan pensyarah Jabatan Pengajian Am Politeknik Ibrahim Sultan?

Tijauan Literatur

NCREL & Meitri Group telah mengemukakan kerangka enGauge 21st century skills untuk menggalakkan kemahiran abad ke-21 dalam kalangan murid, guru dan pentadbir. NCREL & Meitri Group telah membangunkan enGauge 21st century skills yang terdiri daripada empat bidang utama iaitu (a) literasi era digital, (b) pemikiran inventif, (c) komunikasi berkesan dan (d) produktiviti tinggi. Penguasaan keempat-empat domain ini dapat meningkatkan pencapaian akademik dan merupakan kemahiran yang diperlukan dalam era digital (NCREL & Metiri Group, 2003). The Partnerships for 21st century skills telah mengemukakan kerangka pembelajaran abad ke-21 untuk membantu penerapan abad ke-21 menerusi kurikulum. Murid yang berjaya menguasai kurikulum ini dikatakan mampu menjadi sebahagian masyarakat dan tenaga kerja abad ke-21. Maka, murid bukan sekadar menguasai pengetahuan kandungan akademik, tetapi berupaya mengaplikasikan pengetahuan dan kemahiran terhadap tugasan yang diberi. Asas dalam mata pelajaran teras perlu disokong oleh kemahiran seperti (a) kemahiran inovatif dan pembelajaran, (b) kemahiran maklumat, media dan teknologi, dan (c) kemahiran hidup dan kerjaya (AACTE & the Partnership for 21st Century Skills, 2010).

Selain berkemampuan menggunakan teknologi. Kemahiran menggunakan teknologi bukan sekadar kemampuan menggunakan teknologi seperti Google, Youtube, Twitter, blog dan sebagainya. Murid kini sudah mahir dalam menggunakan segala teknologi yang ada berikutan mendapat pendedahan dan kemudahan. Tetapi bagaimana seseorang murid tersebut menggunakan teknologi tersebut untuk mengkaji, menyusun atur, menilai dan mencari maklumat. Murid kini sememangnya mengetahui bagaimana menggunakan teknologi, tetapi masih terdapat jurang dalam pengetahuan murid bagaimana mencari maklumat yang tepat dan sah menggunakannya (Frey & Fisher, 2012).

Seterusnya, pengintegrasian teknologi di dalam bilik darjah diperlukan dan dibimbing oleh guru. Namun, pengintegrasian teknologi bagi membina kemahiran abad ke-21 bukan sekadar menggunakan pelbagai teknologi di dalam PdP. Tetapi bagaimana seseorang guru membimbing murid dalam menilai segala maklumat yang diperoleh daripadanya. Selain, boleh menjadi pendekatan bagi membolehkan murid membina kemahiran abad ke-21 seperti kerjasama, kolaborasi dan pembelajaran kendiri (Walser, 2008). Oleh itu, keperluan membina kemahiran maklumat, media dan teknologi di dalam kemahiran abad ke-21 perlu difahami sebetulnya oleh guru. Becta (2010) telah menyenaraikan kefahaman dan pengetahuan yang diperlukan guru untuk menggunakan teknologi secara efektif menggunakan teknologi antaranya adalah: 1) mempamerkan kebolehan menggunakan internet dalam konteks profesional, 2) memahami fungsi teknologi dalam PdP yang efektif, 3) mempunyai pengetahuan dalam ICT, 4) memahami bagaimana mengenal pasti dan membina kebolehan ICT murid, dan 5) memahami tanggungjawab untuk melindungi murid dan data mereka.

Metodologi

Rekabentuk

Kaedah Kuantitatif digunakan dalam kajian ini di mana sampel yang besar dapat dikaji dan hasil dapatan kajian digeneralisasikan kepada populasi kajian (Babbie, 2001). Kaedah ini juga bertujuan untuk membina dan menggunakan model yang berkaitan bersesuaian dengan objektif yang dikaji.

Instrumen Kajian

Bahagian A instrumen amalan pengajaran dan pembelajaran abad ke-21 mengandungi maklumat demografi, manakala Bahagian B berkaitan dengan amalan pengajaran dan pembelajaran abad ke-21. Kajian ini berdasarkan rangka kerja kemahiran daripada konsep International Innovative Teaching and Learning Study (Shear, novais, means, gallagher & Langworthy, 2010). Ia juga berdasarkan daripada *The Deeper Learning Famework From The William And Flora Hewlett Foundation* (2010) dan *Partnership for 21st Century Skills* (2015).

Kajian ini menggunakan instrumen soal selidik 4 mata skala likert. Instrumen soal selidik ini terdiri daripada lapan konstruk iaitu kemahiran pemikiran kritikal, kemahiran komunikasi, refleksi, kemahiran kolaborasi, pentaksiran, penyelesaian masalah, teknologi, kreativiti dan kemahiran inovasi. Kebolehpercayaan instrument bagi kajian ini ialah pada cronbach alpa =0.929.

Kebolehpercayaan instrumen bagi soal selidik amalan pengajaran dan pembelajaran abad ke-21 dalam kalangan pensyarah adalah tinggi dan diterima sebagai alat pengukuran dan penilaian. Instrumen ini telah digubal di peringkat Jabatan Pengajian Am, Politeknik Ibrahim Sultan dan beroleh pengesahan muka daripada Ketua Jabatan.

Persampelan

Sampel kajian terdiri daripada 30 orang pensyarah Jabatan Pengajian Am, Politeknik Ibrahim Sultan.

Kemahiran Pemikiran Kritikal

Jadual 1: Taburan Min dan Sisihan Piawai Kemahiran Pemikiran Kritikal

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Merancang penggunaan kemahiran berfikir aras tinggi semasa berinteraksi dalam kuliah		23.3% 7	76.7% 23		2.77	0.43
2	Mengemukakan soalan aras tinggi semasa berinteraksi dalam kuliah		30.3% 10	60% 18	6.7% 2	2.74	0.38
3	Membimbing pelajar menjawab soalan pada aras tinggi		26.7% 8	60% 18	13.3% 4	2.87	0.63
4	Menggunakan alat-alat kemahiran berfikir aras tinggi semasa interaksi dalam kuliah		46.7% 14	50% 15	3.3% 1	2.57	0.57
5	Mengajar kemahiran berfikir aras tinggi dalam kuliah		46.7% 14	46.7% 14	6.7% 2	2.60	0.62
	Purata					**2.00**	**0.00**

Jadual 1 menunjukkan taburan min dan sisihan piawai bagi aspek kemahiran pemikiran kritikal bagi amalan pengajaran dan pembelajaran pensyarah abad ke- 21. Dapatan menunjukkan min tertinggi adalah item K3 iaitu *Membimbing pelajar menjawab soalan pada aras tinggi* (min=2.87). Min terendah adalah item K4 iaitu Menggunakan alat-alat kemahiran berfikir aras tinggi semasa interaksi dalam kuliah (min 2.57). Min keseluruhan aspek kemahiran pemikiran kritikal bagi amalan pengajaran dan pembelajaran pensyarah ialah 2.00 dan sisihan piawai 0.00.

Kemahiran Komunikasi

Jadual 2: Taburan Min dan Sisihan Piawai Kemahiran Komunikasi

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Memberi tugasan dalam kumpulan berasaskan projek kepada pelajar			56.7% 17	43.3% 13	3.43	0.50
2	Menggalakkan pelajar berkomunikasi dalam melaksana projek yang diberi			43.3% 13	56.7% 17	3.57	0.50
3	Memastikan tugasan menggunakan pendekatan pelbagai disiplin ilmu dan kemahiran komunikasi		10% 3	53.5% 16	36.7% 11	3.27	0.64
4	Menggalakkan pelajar membentangkan hasil dapatan projek yang dihasilkan.			46.7% 14	53.3% 16	3.53	0.51
	Purata					**3.00**	**0.00**

Jadual 2 menunjukkan taburan min dan sisihan piawai bagi aspek kemahiran komunikasi. Dapatan menunjukkan min item KK2 iaitu *Menggalakkan pelajar berkomunikasi dalam melaksana projek yang diberi* (min=3.57) berada pada min tertinggi. Manakala KK1 iaitu *Memberi tugasan dalam kumpulan berasaskan projek kepada pelajar* (min=3.43) berada pada min yang terendah. Min keseluruhan aspek kemahiran komunikasi ialah 3.00 dan sisihan piawai 0.00.

Kemahiran Refleksi

Jadual 3: Taburan Min dan Sisihan Piawai Kemahiran Refleksi

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Membimbing pelajar menulis refleksi dengan betul dan berkesan.		33.3% 10	63.3% 19	3.3% 1	2.70	0.53
2	Menggalakkan pelajar membuat refleksi kendiri selepas sesi pengajaran dan pembelajaran.		43.3% 13	46.7% 14	10% 3	2.67	0.66
3	Mendapatkan maklum balas rakan sebaya dalam sesi pengajaran dan pembelajaran.		46.7% 14	43.3% 13	10% 3	2.63	0.67
4	Menulis refleksi selepas sesi pengajaran dan pembelajaran.		53.3% 16	43.3% 13	1.3% 1	2.50	0.57
	Purata					2.00	0.00

Jadual 3 menunjukkan taburan min dan sisihan piawai bagi aspek melaksanakan refleksi dalam amalan pedagogi pensyarah abad ke-21. Min terendah adalah item R4 iaitu *Menulis refleksi selepas sesi pengajaran dan pembelajaran. (*min 2.50). Min tertinggi adalah item R1 iaitu *Membimbing pelajar menulis refleksi dengan betul dan berkesan* (min=2.70). Min keseluruhan aspek refleksi amalan pedagogi pensyarah ialah 2.00 dan sisihan piawai 0.00.

Kemahiran Kolaborasi

Jadual 4: Taburan Min dan Sisihan Piawai Kemahiran Kolaborasi

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Bekerjasama dengan rakan setugas untuk membangunkan komuniti pembelajaran profesional (profesional learning community).	3.3% 1	23.3% 7	70% 21	3.3% 1	2.73	0.58
2	Menggalakkan pelajar menggunakan pelbagai media sosial untuk berinteraksi.		6.7% 2	60% 18	33.3% 10	3.27	0.58
3	Mengamalkan lesson study untuk meningkatkan tahap profesionalisme keguruan.		20% 6	60% 18	20% 6	3.00	0.64
4	Menggunakan kemahiran kolaborasi dengan berkesan.		26.7% 8	60% 18	13.3% 4	2.87	0.63
5	Menggunakan pendekatan kolaboratif dalam pengajaran dan pembelajaran.		23.3% 7	46.7% 14	30% 9	3.07	0.74
	Purata					**2.40**	**0.50**

Jadual 4 menunjukkan taburan min dan sisihan piawai bagi aspek kemahiran kolaborasi bagi amalan pengajaran dan pembelajaran pensyarah. Min yang tertinggi adalah bagi item KK2 iaitu *Menggalakkan pelajar menggunakan pelbagai media sosial untuk berinteraksi* (min 3.27). Min terendah adalah item KK1 iaitu *Bekerjasama dengan rakan setugas untuk membangunkan komuniti pembelajaran profesional (profesional learning community).* (min 2.73). Purata min untuk keseluruhan aspek kemahiran kolaboratif (min = 2.40, sisihan piawai 0.50).

Kemahiran Pentaksiran

Jadual 5: Taburan Min dan Sisihan Piawai Kemahiran Pentaksiran

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Melakukan pentaksiran berasaskan hasil pembelajaran kursus.		6.7% 2	70% 21	23.3% 7	3.17	0.53
2	Memfokuskan pentaksiran berdasarkan pemikiran aras tinggi.		33.3% 10	56.7% 17	10% 3	2.77	0.63
3	Menggalakan pelajar membuat penilaian kendiri.		20% 6	63.3% 19	16.7% 5	2.97	0.61
4	Menggalakan pelajar membuat penilaian rakan sebaya.		30% 9	56.7% 17	13.3% 4	2.83	0.64
5	Menggunakan pentaksiran sesuai dengan pencapaian pelajar.		3.3% 1	66.7% 20	30% 9	3.27	0.52
6	Memberi maklum balas segera terhadap tugasan pelajar.		6.7% 2	70% 21	23.3% 7	3.17	0.53
	Purata					**2.50**	**0.51**

Jadual 5 menunjukkan taburan min dan sisihan piawai bagi aspek pentaksiran bagi amalan pedagogi pensyarah. Min yang tertinggi adalah bagi item P5 iaitu *Menggunakan pentaksiran sesuai dengan pencapaian pelajar*. (min = 3.27). Min terendah adalah item P2 iaitu *Memfokuskan pentaksiran berdasarkan pemikiran aras tinggi* (min= 2.77). Purata min untuk keseluruhan aspek pentaksiran (min = 2.50, sisihan piawai 0.51).

Penyelesaian Masalah

Jadual 6: Taburan Min dan Sisihan Piawai Penyelesaian Masalah

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Mengamalkan pengajaran melalui pendekatan penyelesaian masalah.		16.7% 5	56.7% 17	26.7% 8	3.10	0.66
2	Mengaitkan kursus yang diajar dengan masalah kehidupan seharian.		3.3% 1	66.7% 20	30% 9	3.27	0.52
3	Menggalakkan pelajar menggunakan pelbagai strategi penyelesaian masalah.		3.3% 1	66.7% 20	30% 9	3.27	0.52
4	Memastikan masalah yang diberikan bersifat pelbagai disiplin.		20% 6	56.7% 17	23.3% 7	3.03	0.67
	Purata					**3.00**	**0.00**

Jadual 6 menunjukkan taburan min dan sisihan piawai bagi aspek penyelesaian masalah bagi amalan pengajaran dan pembelajaran pensyarah abad ke-21. Min yang tertinggi adalah bagi item Pm1 iaitu *Mengamalkan pengajaran melalui pendekatan penyelesaian masalah* (min = 3.10). Min terendah adalah item Pm4 iaitu *Memastikan masalah yang diberikan bersifat pelbagai disiplin.* (min= 3.03). Purata min untuk keseluruhan aspek penyelesaian masalah (min = 3.00, sisihan piawai 0.00).

Kemahiran Teknologi

Jadual 7: Taburan Min dan Sisihan Piawai Kemahiran Teknologi

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Menggunakan pedagogi digital berbanding kaedah tradisional.		13.3% 4	80% 24	6.7% 2	2.93	0.45
2	Menggalakkan pelajar menggunakan teknologi yang sesuai untuk menyiapkan tugasan.			90% 27	10% 3	3.10	0.31
3	Menggalakkan pelajar menggunakan media sosial untuk berinteraksi.		67% 2	73.3% 22	20% 6	3.13	0.51
4	Menggunakan perisian yang sesuai dan mesra pengguna semasa interaksi.		13.3% 4	73.3% 22	13.3% 4	3.00	0.53
5	Menggunakan pembelajaran atas talian seperti e-book, e-video,elearning dll.		13.3 4	66.7% 20	20% 6	3.07	0.58
	Purata					**2.60**	**0.50**

Jadual 7 menunjukkan taburan min dan sisihan piawai bagi aspek kemahiran teknologi yang digunakan sebagai amalan pengajaran dan pembelajaran pensyarah abad ke-21. Min yang tertinggi adalah bagi item T3 iaitu *Menggalakkan pelajar menggunakan media sosial untuk berinteraksi* (min =3.65). Min terendah adalah item T1 iaitu *Menggunakan pedagogi digital berbanding kaedah tradisional (*min=2.93). Purata min untuk keseluruhan aspek penggunaan teknologi (min = 2.60, sisihan piawai 0.50).

Kreativiti dan Kemahiran Inovasi

Jadual 8: Taburan Min dan Sisihan Piawai Kreativiti dan Kemahiran Inovasi

	Item	1	2	3	4	Mean	Sisihan Piawai
1	Menggunakan kreativiti dan inovasi dalam pengajaran dan pembelajaran.		20% 6	80% 24		2.80	0.41
2	Menyampaikan input dengan kreatif dan inovatif semasa dalam kelas.		26.7 8	70% 21	3.3% 1	2.77	0.50
3	Menerapkan elemen kreativiti dalam proses pengajaran dan pembelajaran.		20% 6	73.3% 22	6.7% 2	2.87	0.51
4	Menerapkan kemahiran kreativiti dan inovasi dalam gerakerja kumpulan siswa guru.		26.7% 8	63.3% 19	10% 3	2.83	0.59
	Purata					**2.00**	**0.00**

Jadual 8 menunjukkan taburan min dan sisihan piawai bagi aspek kreativiti dan kemahiran inovasi pensyarah abad ke-21. Min yang tertinggi adalah bagi item KKI3 iaitu *Menerapkan elemen kreativiti dalam proses pengajaran dan pembelajaran* (min = 2.87). Min terendah adalah item KKI2 iaitu *Menyampaikan input dengan kreatif dan inovatif semasa dalam kelas* (min=2.77). Purata min untuk keseluruhan aspek kreativiti dan kemahiran inovasi ialah pada min =2.00 dan sisihan piawai = 0.00.

Dapatan keseluruhan Amalan Pengajaran dan Pembelajaran Abad ke 21 bagi pensyarah di Jabatan Pengajian Am Politeknik Ibrahim Sultan.

Jadual 11: *Taburan Keseluruhan Min dan Sisihan Piawai bagi Semua Aspek Amalan Pengajaran dan Pembelajaran (PdP) Pensyarah Abad ke-21*

	Aspek Amalan PdP Pensyarah	**Min**	**Sisihan Piawai**
1	Kemahiran Pemikiran Kritikal	2.00	0.00
2	Kemahiran Komunikasi	3.00	0.00
3	Kemahiran Refleksi	2.00	0.00
4	Kemahiran Kolaborasi	2.40	0.50
5	Kemahiran Pentaksiran	2.50	0.51
6	Kemahiran Penyelesaian Masalah	3.00	0.00
7	Kemahiran Teknologi	2.60	0.50
8	Kreativiti dan Kemahiran Inovasi	2.00	0.00
	Keseluruhan	**1.63**	**0.52**

Min keseluruhan elemen amalan P&P pensyarah abad ke-21 ialah min =1.63 dan sisihan piawai 0.52. Elemen kemahiran pemikiran kritikal (min=2.00), elemen refleksi (min =2.00) dan elemen kreativiti dan kemahiran inovasi (min=2.00) perlu dipertingkatkan keupayaannya kerana masih pada tahap rendah iaitu di bawah min keseluruhan.

Perbincangan

Berdasarkan kepada lapan dimensi kemahiran amalan pengajaran dan pembelajaran abad 21 yang dikaji, didapati bahawa dua amalan pengajaran dan pembelajaran abad 21 yang paling dominan diamalkan oleh guru-guru ialah kemahiran penyelesaian masalah dan kemahiran komunikasi. Dapatan ini menyokong pandangan Badrul Hisham dan Mohd Nasruddin (2016) yang menjelaskan bahawa guru-guru sekolah umpama ibu bapa murid semasa di sekolah. Oleh itu, guru yang efektif akan sensitif dan peka terhadap perbezaan cara belajar murid dan keperluan murid. Guru akan mengubahsuai cara pengajarannya dengan mengambil kira perbezaan yang wujud setiap masa dan tidak dapat dirancang. Dapatan ini turut dipersetujui oleh Mohd Sahandri Gani et al., (2011) bahawa kemahiran berkomunikasi secara berkesan juga berperanan mempengaruhi pengajaran guru di dalam kelas. Guru yang berkualiti semestinya mahir semasa berinteraksi dengan murid-muridnya melalui penggunaan bahasa yang sesuai dan fasih serta boleh berkomunikasi dengan sempurna melalui kepetahan bertutur.

Walau bagaimanapun, dapatan kajian mendapati terdapat tiga dimensi kemahiran berada pada tahap rendah iaitu kemahiran pemikiran kritikal, kemahiran refleksi dan kreativiti dan kemahiran inovasi. Ini bermakna kebanyakan guru masih mengamal pengajaran secara tradisional dan lebih berfokus pada guru. Dapatan keputusan ini selari dengan pandangan Sylvia dan Tobia (2014). menyatakan sebenarnya sesetengah guru tidak pernah bersedia secukupnya untuk membolehkan mereka mengajar kandungan mata pelajaran dan pada sama yang sama menerapkan KBAT. Oleh itu, guru harus membudayakan KBAT dari semasa ke semasa sebagai transformasi dalam Pendidikan.

Selain itu, konsep Bilik Darjah Abad 21 yang menggunakan pelbagai teknologi terkini, turut dibangunkan yang menyokong amalan KBAT (KPM, 2014). Penggunaan sumber berunsurkan KBAT dan alat- alat berfikir seperti CORT *(Cognitif Research Trust), i-Think dan 6 Thinking* Hat. Selanjutnya, Alat Pengurusan Grafik seperti peta pengetahuan, peta konsep, peta cerita dan alat pengurusan kognitif merupakan sumber KBAT yang mampu meningkatkan keterampilan guru dan murid dalam berfikir (Susanne, 2014). Berdasarkan kepada dapatan ini adalah disyorkan agar guru-guru memberi tumpuan kepada melatih murid berani bertampil ke hadapan untuk berkongsi maklumat. Selain itu, penghayatan pendidikan harus dihayati oleh para pendidik supaya murid berani mengeluarkan pendapatnya. Cadangan ini jelas menunjukkan kesamaan dengan pernyataan oleh Susanne (2014) yang menyatakan bahawa guru yang kreatif dan berinovasi berupaya menginspirasi murid-murid untuk memberi sumbangan melampaui ekspektasi dalam proses pembelajaran.

Kesimpulan

Adalah diharapkan kajian ini dapat memenuhi anjakan ke empat PPPM (2013-2025) iaitu *21st* mentransformasi profesion keguruan menjadi profesion pilihan. Memastikan guru memberi tumpuan ke atas fungsi teras pengajian mulai 2013 dengan mengurangkan beban pentadbiran. Ini selari dengan Anjakan 10 iaitu Memaksimumkan keberhasilan murid bagi setiap ringgit. Kajian ini juga selari dengan kehendak impak transformasi dalam PPPM (2013-2025) iaitu pendidik akan meningkatkan keupayaan bertaraf dunia yang diperlukan bagi membantu mencapai keberhasilan murid yang dihasratkan.Kajian ini juga dapat memenuhi keperluan PPPM (2013-2025) dalam aspek aspirasi sistem iaitu peningkatan keberhasilan murid setanding dengan sumber yang telah disalurkan ke dalam sistem. Pensyarah di Jabatan Pengajian Am akan memperoleh lebih keseronokan dan kepuasan dalam menjalankan aktiviti pengajaran mereka. Ini kerana dengan pakej kerjaya pensyarah yang baharu, mereka dapat menikmati perkembangan profesional yang lebih memuaskan, laluan kerjaya yang lebih baik dan proses penilaian yang telus dan adil serta berkait terus dengan keupayaan dan kecemerlangan prestasi. Oleh itu kajian amalan pengajaran dan pembelajaran abad ke-21 bagi pensyarah di Jabatan Pengajian Am Politeknik Ibrahim Sultan dapat membantu menjayakan wawasan pendidikan negara dan melahirkan warga pendidik yang cekap, berkesan dan prihatin dalam amalan sehariannya.

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FAKTOR GANJARAN DAN JAMINAN KERJA DALAM MEMPENGARUHI HASRAT UNTUK BERHENTI KERJA SEMASA KRISIS COVID-19

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Abstrak: *Sektor pelancongan merupakan antara penyumbang utama kepada pertumbuhan ekonomi Malaysia. Ini berdasarkan statistik semasa bagi tahun 2019 yang merekodkan peningkatan ketibaan pelancong asing sebanyak 2.7 peratus, dengan pertambahan pendapatan sebanyak 6.8 peratus berbanding tahun sebelumnya. Bagaimanapun, sektor pelancongan negara telah mengalami kemerosotan teruk dalam peratusan kedatangan pelancong asing akibat penularan wabak COVID-19. Kesuraman industri pelancongan sekali gus menjejaskan bilangan pengunjung dan pelancong yang menetap di hotel. Ini mengakibatkan banyak hotel di Malaysia terpaksa ditutup sementara atau gulung tikar. Di pihak pengurusan hotel, langkah pemotongan gaji, pemberhentian pemberian ganjaran dan pembuangan pekerja adalah sebahagian tindakan drastik yang terpaksa dilakukan bagi memastikan kelangsungan perniagaan. Namun, pendekatan ini dilihat sebagai tidak wajar kepada golongan pekerja sektor perhotelan. Oleh itu, kajian ini bertujuan untuk mengenal pasti hubungan antara faktor ganjaran dan jaminan kerja terhadap hasrat untuk berhenti kerja semasa krisis COVID-19. Kajian ini melibatkan responden dalam kalangan pekerja hotel yang beroperasi di negeri-negeri utara Semenanjung Malaysia. Data kajian ini dikutip menggunakan borang soal selidik yang diedarkan manakala untuk proses analisis data pula melibatkan penggunaan aplikasi Statistical Packages for Social Science (SPSS). Hasil analisis data mendapati bahawa faktor ganjaran mempunyai hubungan negatif yang signifikan terhadap hasrat untuk berhenti kerja dalam kalangan responden kajian. Sementara itu, faktor jaminan kerja pula tidak mempunyai hubungan yang signifikan terhadap hasrat untuk berhenti kerja. Dapatan kajian ini diulas dengan lebih mendalam di bahagian perbincangan dan cadangan untuk penambahbaikan kajian di masa hadapan dibentangkan oleh penyelidik di akhir penulisan ini.*

Keywords: *Sektor perhotelan, Ganjaran, Jaminan Kerja dan Pekerja Hotel*

Pengenalan

Pandemik Covid-19 yang melanda seluruh dunia termasuklah Malaysia merupakan krisis kesihatan yang mengancam kelangsungan dan kesejahteraan hidup masyarakat (Abdul Rahman, 2020). Penularan wabak Covid-19 dan sekatan perjalanan berskala besar turut memberikan impak lansung kepada industri pelancongan, penerbangan dan perhotelan di peringkat global, termasuklah Malaysia. Menurut Ketua Pengawai Eksekutif Persatuan Hotel Malaysia (MAH), Yap Lip Seng, industri perhotelan negara menerima pembatalan tempahan bilik secara mendadak pada peringkat pertama sekatan iaitu Mac telah mencecah angka

193,000 bilik dengan nilai kerugian sebanyak RM75 juta. Ini kerana, sebilangan besar pelancong terpaksa membatalkan percutian yang dirancang setelah mendapat cadangan daripada Pertubuhan Kesihatan Sedunia (WHO).

Menurut Jones (2020), industri perhotelan bermula dari penginapan, menyediakan penginapan, makanan dan minuman untuk pelancong. Industri perhotelan dan pelancongan saling berhubungan kerana fokus utamanya adalah untuk melayani pelancong dan membuat mereka merasa seperti di rumah sendiri. Penularan wabak Covid-19 menyaksikan satu demi satu hotel terpaksa mengambil keputusan yang perit dengan terpaksa menghentikan operasi susulan impak pandemik terhadap industri perhotelan. Ini bermakna ribuan atau mungkin puluhan ribu pekerja hilang punca pendapatan apabila sesebuah hotel terpaksa menghentikan operasi atau gulung tikar.

Menurut Presiden Kongres Kesatuan Sekerja Malaysia (MTUC), Datuk Abdul Halim Mansor, lebih 30,000 orang di dalam industri perhotelan di seluruh negara kehilangan pekerjaan, lebih 10,000 dicutikan tanpa gaji dan lebih 6,000 pekerja dipotong gaji ekoran aktiviti perniagaan yang kurang stabil. Oleh yang demikian, kebanyakan objektif utama pengusaha hotel adalah untuk meneruskan operasi dalam keadaan kerugian yang paling rendah dengan kos upah dan gaji yang paling besar (Mokhtar, 2020). Dwomoh, Luguterah dan Duah (2020), keadaan pandemik ini dapat menimbulkan tekanan psikologi dan juga beban hutang kepada pemilik perniagaan. Kajian ini cuba menganalisis faktor ganjaran dan jaminan kerja dalam mempengaruhi hasrat untuk berhenti kerja di kalangan pekerja hotel semasa krisis Covid-19.

Ganjaran

Ganjaran dianggap sebagai sebahagian daripada budaya sesebuah organisasi yang digunakan untuk memotivasi pekerja untuk mencapai matlamat organisasi (Akgunduz, Gok & Alkan, 2019). Sistem ganjaran dianggap alat pengurusan utama yang bertujuan untuk meningkatkan motivasi, kepuasan kerja dan komitmen pekerja, sehingga mereka dapat mengekalkan prestasi yang tinggi dan sebahagian daripada memenuhi objektif korporat yang membawa kepada keberkesanan dan keuntungan syarikat (Armstrong, 2010).

Menurut, Bustaman, Teng dan Abdullah (2014), ganjaran terbahagi kepada ganjaran kewangan dan ganjaran bukan kewangan. Gaji, bonus, kemudahan perubatan, insurans nyawa dan kesihatan antara contoh ganjaran kewangan manakala ganjaran bukan kewangan pula seperti cuti berbayar, program latihan, rancangan persaraan, saham, pembahagian kewangan adalah salah satu ganjaran yang mungkin dapat mengekalkan pekerja di dalam organisasi (Seman & Suhaimi, 2017).

Kekurangan ganjaran akan memberikan impak yang besar kepada pekerja dan hasrat untuk berhenti kerja. Sehubungan itu, ganjaran merupakan salah satu motivasi kepada pekerja untuk terus kekal dan dapat meningkatkan kepuasan kerja terhadap seseorang pekerja. Oleh itu, ganjaran dapat menjadi pemacu dalam mencapai objektif organisasi dan mempengaruhi hasrat untuk berhenti kerja yang rendah (De Gieter & Hofmans, 2015; Olawale & Olanrewaju, 2016).

H1: Ganjaran mempunyai hubungan negatif yang signifikan terhadap hasrat untuk berhenti kerja.

Jaminan Kerja

Jaminan kerja dianggap sebagai satu kepentingan yang sangat diperlukan oleh seseorang pekerja yang mana dapat menjamin bahawa pekerja dan keluarganya tidak akan kehilangan pendapatan mereka untuk meneruskan kehidupan di masa hadapan. Oleh yang demikian, pekerja akan mempertimbangkan jaminan pekerjaan sebelum memulakan karier kerjaya di sesebuah organisasi.

Jaminan kerja merujuk kepada harapan pekerja tentang kestabilan dan harapan pekerja kepada organisasi (Davy, Kinicki & Scheck, 1997; Greenhalgh & Rosenblatt, 1984; Kraimer, Wayne, Liden & Sparrowe, 2005). Hur (2019), mentakrifkan jaminan kerja sebagai satu kontrak pekerjaan undang - undang di antara pekerja dan organisasi yang memberi jaminan terhadap pekerjaanya. Kestabilan kerja di dalam sesebuah organisasi merupakan satu faktor yang menyebabkan untuk terus kekal selain faktor - faktor lain yang boleh mempengaruhi hasrat untuk berhenti kerja di kalangan pekerja.

Oleh itu, pekerja yang mempunyai jaminan terhadap pekerjaannya akan merasakan terdorong untuk terus memberi komitmen dan menunjukkan prestasi terhadap pekerjaan mereka. Sehubungan itu, tidak hairanlah ada pihak yang menentang dasar penswastaan kerajaan untuk memastikan jaminan terhadap perkerjaan. Justeru, tidak hairanlah jika sesetengah orang memilih untuk bekerja di sektor awam walaupun mendapat pulangan yang rendah berbanding swasta kerana faktor pekerjaan yang lebih stabil. Menurut Mohsin, Lengler, dan Aguzzoli (2015); Mohsin, Lengler, dan Kumar, (2013), jaminan kerja mempunyai hubungan signifikan dan positif terhadap hasrat untuk berhenti kerja.

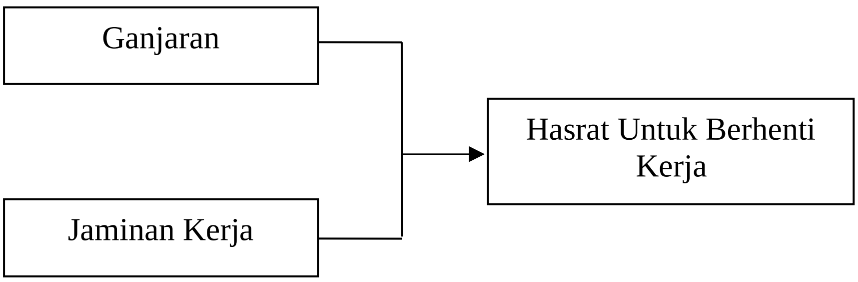
H2: Jaminan kerja tidak mempunyai hubungan yang signifikan terhadap hasrat untuk berhenti kerja.

Hasrat Untuk Berhenti Kerja

Hasrat untuk berhenti kerja merujuk kepada niat dan tingkah laku pekerja untuk meninggalkan organisasi. Haque, Fernando dan Caputi (2017), mengatakan pekerja yang mempunyai pemikiran atau hasrat untuk berhenti kerja akan meninggalkan pekerjaan mereka dalam masa terdekat apabila mereka telah bersedia untuk meninggalkan pekerjaan mereka. Menurut Cohen, Blake dan Blake (2016); Griffeth, Hom dan Gaertner, (2000); Barak, Nissly dan Levin (2001); Kim, Lee dan Carlson, (2001), hasrat berhenti kerja merupakan peramal kepada pemberhentian kerja yang sebenar.

Kerangka Kajian

Untuk memahami hubungan di antara ganjaran dan jaminan kerja terhdap hasrat untuk berhenti kerja di kalangan pekerja hotel di bahagian operasi. Model ini merupakan penyelidikan yang dilakukan dalam konteks sektor industri hotel di Malaysia.



Sampel dan Data Kajian

Populasi sasaran kajian ini adalah pekerja dalam industri perhotelan di bahagian operasi Utara Semenanjung Malaysia. Soal selidik diedarkan sebanyak 450 set dan hanya 380 set yang dikembalikan dan dapat digunakan. Soal selidik ini ditulis dalam *dwi bahasa* untuk memudahkan responden menjawab soal selidik ini kerana responden penyelidik terdiri daripada pelbagai taraf pendidikan.

Analisis Kajian

Analisis kajian menggunakan *Statistical Package for the Social Science* (SPSS) versi 24.0. Pengukuran dan alpha bagi kajian ini adalah ganjaran (α = .858) dan jaminan kerja (α = .767). Jadual 1 menunjukkan nilai *R* 0.128, mempunyai hubungan linear yang kuat antara pembolehubah. Nilai R^2 0.016, menunjukkan bahawa 1.6% daripada hasrat untuk berhenti kerja dipengaruhi oleh hubungan dengan pemboleh ubah bersandar.

Jadual 1: Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.128	.016	.011	.94787

Jadual 2 menunjukkan regressi untuk faktor penting yang berkorelasi dengan hasrat untuk berhenti kerja.

Jadual 2: Regression and Related Statistics

		Unstandardised Coefficients		**Standardised Model Coefficients**		
Model		B	Std. Error	β	T	Sig
1	(Constant)	3.104	.221		14.074	.000
	Ganjaran	-.184	.074	-.158	-2.496	.013
	Jaminan Kerja	.093	.066	.089	1.407	.160

Kajian ini menunjukkan bahawa ganjaran mempunyai hubungan negatif yang signifikan manakala jaminan kerja mempunyai hubungan yang signifikan terhadap hasrat untuk berhenti kerja. Penemuan ini konsisten dengan kajian lalu iaitu ganjaran mempunyai hubungan negatif yang signifikan dengan hasrat untuk berhenti kerja (Allen, Shore dan Griffeth, 2003). Manakala Spagnoli, Caetano & Santos (2012), ganjaran dan hasrat untuk berhenti kerja tidak konsisten dengan kajian lalu dan mempunyai hubungan positif yang konsisten. Zeytinoglu *et al*., (2012); Mohsin, Lengler dan Aguzzoli (2015); Mohsin, Lengler dan Kumar (2013), berkata kajian menunjukkan jaminan kerja signifikan dan positif dengan hasrat untuk berhenti kerja. Ini menunjukkan krisis COVID-19 memberi impak yang besar kepada faktor ganjaran dan jaminan kerja terhadap pekerja.

Perbincangan

Kajian ini mengkaji faktor yang mempengaruhi hasrat untuk berhenti kerja di kalangan pekerja hotel di Malaysia di mana faktor yang dikaji ialah ganjaran dan jaminan kerja. Berdasarkan kajian semasa krisis COVID-19, faktor ganjaran mempunyai hubungan negatif yang signifikan dengan hasrat berhenti kerja. Ini menunjukkan ganjaran tetap mempunyai hubungan dengan hasrat untuk berhenti kerja berbanding jaminan kerja yang tidak mempunyai sebarang hubungan.

Sehubungan itu, pelbagai pakej ransangan oleh kerajaan dan industri hotel serta pihak berkepentingan diberikan untuk membimbing tindak balas mereka terhadap krisis ini. Antaranya ialah penangguhan caruman KWSP yang dilihat mampu memberi impak yang besar kepada hotel. Selain itu, menurut Wen, Kozak, Yang dan Liu (2020), kesihatan akan menjadi faktor utama yang mempengaruhi pemulihan industri pelancongan dan perhotelan selepas krisis COVID-19 kerana sisa ketakutaan yang berkaitan dengan penyakit ini dan penyakit berjangkit yang serupa.

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PERANAN SEKTOR PELANCONGAN DALAM MENINGKATKAN PENDAPATAN GOLONGAN WANITA SUKU KAUM MAH MERI

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***Abstract**: Masalah kemiskinan merupakan masalah utama yang membelenggu komuniti Orang Asli sejak dahulu lagi. Masalah yang menjadi sekatan untuk mereka kecapi pembangunan adalah sikap ketidakterbukaan kepada perubahan. Peranan golongan wanita di dalam proses kejayaan pembangunan masyarakat dilihat sebagai satu jalan penyelesaian yang holistik di mana mereka dilihat mampu menyumbang kepada kemajuan dan pembangunan masyarakat dan negara. Sektor pelancongan merupakan satu sektor yang dapat menyumbangkan pendapatan kepada golongan ini tanpa perlu mengeluarkan modal yang besar. Melalui sektor pelancongan, wanita suku kaum Mah Meri mampu memasarkan produk, kemahiran dan kebolehan mereka melalui penghasilan kraftangan dan persembahan kebudayaan mereka. Dapatan kajian menunjukkan sektor pelancongan mampu membawa perubahan yang besar di mana golongan wanita suku kaum orang asli Mah Meri dapat meningkatkan pendapatan mereka berbanding sebelum menyertai sektor ini. Melalui kajian ini, diharapkan dapat memberi gambaran yang jelas berkaitan peranan sektor pelancongan dalam meningkatkan pendapatan golongan wanita Orang Asli.*

***Keywords:** Kemiskinan, Pelancongan, Wanita Orang Asli*

Pengenalan

Industri pelancongan meliputi semua pertubuhan di mana aktiviti utamanya adalah berkaitan dengan aktiviti yang berteraskan pelancongan. Sehubungan itu, sekumpulan pertubuhan yang mempunyai aktiviti utama yang sama dan menawarkan perkhidmatan kepada pelawat secara terus dan salah satu aktivitinya bercirikan pelancongan, maka pertubuhan tersebut dikategorikan sebagai industri pelancongan (Jabatan Perangkaan Malaysia, 2011). Pelancongan dianggap sebagai satu strategi pembangunan yang mudah dan cepat untuk mendapatkan tukaran wang asing berbanding dengan strategi pembangunan yang lain kerana sumber-sumber pelancongan telah tersedia di sesebuah destinasi. Malahan penduduk tempatan juga berupaya menjadi aset pelancongan yang dapat menarik perhatian pelancong ekoran adanya keunikan budaya, cara hidup dan adat resam. Komuniti di negara-negara membangun menggunakan sumber-sumber yang terdapat dalam komuniti mereka sendiri bertujuan dalam menyara kehidupan mereka (Kalsom, Nor Ashikin dan Mohmad Amin, 2004).

Sebagai contoh, penempatan Orang Asli Mah Meri di kampung Sungai Bumbun, Pulau Carey terkenal sebagai pusat tumpuan pelancong kerana menyediakan pelbagai aktiviti berkaitan suku kaum serta mengeluarkan pelbagai produk bermutu hasil kerja tangan penduduknya. Malah produk yang dihasilkan mendapat pengiktirafan dari Pertubuhan

Pendidikan, Saintifik dan Kebudayaan Bangsa-Bangsa Bersatu (UNESCO) kerana keunikannya. Kewujudan Kompleks Kampung Budaya dan Pusat Kraf tangan di kawasan penempatan mereka telah menggalakkan lagi aktiviti pelancongan. Justeru bidang pelancongan adalah salah satu pendekatan yang dilihat berupaya menjana sumber pendapatan bagi kaum Orang Asli khususnya, termasuk golongan wanita.

Walaubagaimanapun, kemunduran dan kemiskinan dikenal pasti sebagai satu cabaran utama yang dihadapi oleh pihak kerajaan dalam usaha membangunkan komuniti Orang Asli secara berkesan. Kemiskinan dalam kalangan Orang Asli dikatakan turut memberi sumbangan besar kepada data kemiskinan negara secara umumnya. Walaupun masyarakat Orang Asli ini masih lagi di belenggu kemunduran tetapi mereka sememangnya kaya dengan pelbagai kebudayaan dan kesenian. Seperti wanita suku kaum Mah Meri mereka mempunyai kelebihan dari segi kebudayaan dan kraftangan. Mereka banyak terlibat dengan aktiviti pelancongan melibatkan persembahan kebudayaan dan penjualan hasil kraftangan (Rohayu, 2016).

Oleh itu, artikel ini membincangkan peranan pelancongan dalam meningkatkan penglibatan wanita orang asli terutamanya dari suku kaum Mah Meri. Melalui pelancongan sekaligus menunjukkan bahawa wanita mempunyai kelebihan untuk diketengahkan dalam masyarakat ini. Wanita adalah sebagai pihak pelaksana dan penglibatan mereka perlu dikaji secara mendalam agar kejayaan mereka dapat menjadi model yang baik kepada wanita suku kaum yang lain.

Masyarakat Orang Asli

Masyarakat Orang Asli dibahagikan kepada tiga kumpulan suku bangsa iaitu Negrito, Senoi dan Melayu-Proto (Nicholas, 2000). Oleh kerana terdapat pelbagai suku kaum di kalangan masyarakat Orang Asli, maka terdapat banyak perbezaan dari segi cara hidup dan pertuturan bahasa yang digunakan. Kebudayaan dan adat resam mereka juga berbeza dan mempunyai keunikan yang tersendiri. Orang Asli merupakan komuniti yang terbukti kaya dengan ilmu pengetahuan dan kebijaksanaan tentang pengurusan alam semula jadi. Kehebatan komuniti tersebut berpunca daripada pengaplikasian kebijaksanaan ilmu tradisional yang diwarisi oleh generasi terdahulu (Suhaila, 2010). Mereka turut mempunyai pengetahuan dan pendedahan yang cukup luas mengenai alam sekitar yang berasaskan empiris dalam dunia lingkungan kehidupan bersifat fungsional. Menurut kajian oleh Roddin et al (2017), kemahiran yang dimiliki oleh masyarakat orang asli dapat membantu dalam memenuhi segala keperluan asas untuk kelansungan hidup mereka.

Masyarakat Orang Asli merupakan kumpulan yang hidup dalam kelompok sosial yang unik. Berdasarkan suku kaum yang pelbagai serta perbezaan faktor bahasa, kebudayaan, adat resam dan keadaan fungsi ekonominya, rakyat Malaysia dapat menyaksikan kepelbagaian budaya dan kesenian Orang Asli mengikut suku kaum masing-masing. Sebagai langkah mengetengahkan budaya dan kesenian Orang Asli, pelbagai persembahan kebudayaan dan kesenian diselenggarakan di majlis-majlis keramaian, seminar-seminar dan sambutan perayaan di Malaysia. Kerjasama dan penglibatan dalam kalangan masyarakat Orang Asli begitu menggalakkan hingga ada di antara persembahan mereka dijadikan acara tahunan Malaysia (Adi, Hood dan Rashid, 2006). Keadaan ini jelas menunjukkan bahawa pelancongan berperanan dalam memperkenalkan pelbagai aktiviti yang terdapat dalam kalangan komuniti Orang Asli di Malaysia.

Kemiskinan Orang Asli

Masalah yang sering dihadapi oleh masyarakat Orang Asli adalah masalah kemiskinan dan isu ini merupakan salah satu faktor penyumbang kepada isu pembangunan mereka serta kesihatan dan juga pendidikan (JAKOA, 2016). Bukan sahaja itu, masyarakat Orang Asli turut dilabelkan sebagai golongan masyarakat yang terlalu bergantung kepada kerajaan untuk membantu mereka. Seterusnya, sikap mereka adalah seorang yang pemalu, rendah diri, tidak menghayati cara budaya bekerja produktif, lemah dalam berdaya tahan bagi menempuh persaing serta cabaran luar dan kurang mempunyai keyakinan diri (Roddin et al, 2013). Bagi masyarakat Orang Asli yang berada di pendalaman dan jauh dari kawasan kegiatan ekonomi dilihat mempunyai peluang pekerjaan yang kurang menarik dari sudut pendapatan dan peluang perkembangan kerjaya. Masalah ini akan terus menjadi penghalang bagi mereka menceburkan diri dalam kegiatan ekonomi yang produktif sebaliknya akan terikat dengan amalan ekonomi tradisional. Oleh itu, kerajaan telah mensasarkan beberapa program dan mahu melaksanakan projek untuk membantu meningkatkan sosioekonomi komuniti ini (JAKOA, 2016).

Oleh itu, telah menjadi agenda pihak Jabatan Kemajuan Orang Asli (JAKOA) untuk memastikan setiap masyarakat Orang Asli untuk mengetahui dan mempunyai ilmu dalam bidang keusahawanan sebagai pemangkin kepada peningkatan sosioekonomi mereka. Pihak JAKOA telah menyusun pelbagai latihan dan kerjaya sebagai usahawan yang bersesuaian dengan kebolehan dan minat Orang Asli. Usaha ini masih berterusan sehingga kini melalui Pelan Strategik JAKOA 2016-2020. Terdapat ramai masyarakat Orang Asli mula menceburi diri dalam bidang keusahawanan seperti peruncitan, ternakan, perladangan, pengangkutan, kraftangan, pelancongan dan sebagainya (MAMPU, 2018). Namun, dewasa ini telah menjadi isu hangat diperkatakan tentang bidang yang lebih sesuai dengan masyarakat Orang Asli iaitu bidang pelancongan sama ada eko-pelancongan atau agro-pelancongan (Bernama, 2019, para 1). Ini kerana majoriti masyarakat Orang Asli sangat selesa dengan alam sekitar walaupun arus permodenan semakin meningkat. Secara tidak lansung ia dapat menarik minat pelancong untuk meneroka tempat-tempat semulajadi termasuk penempatan masyarakat Orang Asli yang dapat memperkenalkan budaya dan warisan masyarakat tersebut kepada pelancong (Roddin et al 2019). Justeru itu, keusahawanan berasaskan pelancongan dilihat mampu membantu komuniti orang asli termasuk golongan wanita dalam menyumbang sumber pendapatan keluarga.

Dalam mengetengahkan aspek pelancongan dikalangan Orang Asli, terdapat beberapa kaum Orang Asli yang berjaya dalam bidang pelancongan dan salah satunya adalah suku kaum Mah Meri di Pulau Carey Selangor. Pulau Carey adalah salah satu lokasi pelancongan yang menjadi tarikan pelancong sama ada daripada dalam mahupun luar negara ekoran adanya tarikan pelancongan melibatkan resort, budaya dan seni warisan masyarakat Orang Asli termasuk keindahan pantainya. Wanita dalam suku kaum ini sangat aktif dalam kegiatan kebudayaan seperti persembahan tarian dan penghasilan kraftangan. Merujuk kepada sumbangan kaum wanita ini, mereka mampu menjana pendapatan sendiri hasil dari aktiviti kebudayaan yang telah berjaya menarik pelancong ke penempatan mereka. Justeru, pelancongan dilihat memainkan peranan penting dalam meningkatkan pendapatan suku kaum Orang Asli termasuk golongan wanita (Rohayu, 2016).

Peranan Pelancongan Kepada Masyarakat Orang Asli

Pelancongan ialah gerakan sementara oleh manusia ke destinasi lain di luar tempat kerja dan tempat tinggalnya yang biasa, kegiatan yang mereka lakukan selama tinggal di destinasi tersebut dan kemudahan yang disediakan untuk memenuhi keperluan mereka (Saputri, 2020). Meskipun Malaysia sebagai sebuah negara yang baharu sahaja meneroka bidang ini berbanding dengan negara-negara lain di rantau Asia, Malaysia kini telah menerima pelancongan sebagai sektor penting. Justeru, pelbagai langkah diambil untuk menjadikan Malaysia sebuah destinasi unggul di rantau ini dalam bidang pelancongan. Satu alasan untuk kerajaan di serata dunia menyokong pelancongan di negara mereka kerana industri ini berkeupayaan menghasilkan ruang pekerjaan yang sentiasa berkembang. Oleh itu pelancongan yang berasaskan eko pelancongan dan agro pelancongan yang melibatkan komuniti Orang Asli juga turut menjadi perhatian bidang pelancongan pada masa kini. Ini kerana aktiviti pelancongan berasaskan komuniti Orang Asli boleh memenuhi keperluan dalam agenda Teras Strategik Ekonomi Mampan dan Seni, Budaya dan Warisan yang merupakan antara program yang dilaksanakan kepada masyarakat Orang Asli daripada pihak JAKOA (Pelan Strategik JAKOA 2016-2020).

Sebagai industri intensif buruh, pelancongan mempunyai keupayaan untuk mewujudkan peluang pekerjaan untuk sebilangan besar masyarakat yang mempunyai tahap kemahiran yang berbeza, daripada eksekutif peringkat atasan, separuh mahir dan tidak mahir (Abdullah et al, 2012; Mohd et al, 2015 & Sharma, 2019). Masyarakat Orang Asli mempunyai kelebihan yang tersendiri di mana kelebihan ini boleh digilap sebagai salah satu tarikan kepada pelancong. Antara kelebihan yang ada dalam komuniti ini adalah persembahan kebudayaan seperti sewang serta, seni dan kreativiti dalam hasil kraftangan yang turut menjadi tarikan dalam komuniti ini. Manakala alat muzik berserta dengan nyanyian dan tarian turut menjadi tarikan pelancongan. (Adi, Hood dan Rashid, 2006).

Akibat daripada aktiviti pelancongan ini telah memberi ruang untuk menghasilkan sumber pendapatan dan seterusnya meningkatkan pendapatan keluarga mereka. Merujuk kajian yang dilaksanakan oleh Roddin et al, (2018), yang dilakukan ke atas komuniti suku kaum Bateq di Kampung Jeram Dedari menunjukkan bahawa kesan pembangunan pelancongan telah membawa perubahan positif terhadap transformasi fizikal, sosial dan ekonomi mereka. Walaupun perubahan ini jauh berbeza jika dibandingkan dengan komuniti lain, namun penerimaan dan usaha mereka untuk pelancongan telah menunjukkan perkembangan yang baik bagi satu komuniti yang terpinggir dari pelbagai aspek seperti pendidikan, kemudahan dan pembangunan. Disamping itu, ekoran adanya aktiviti pelancongan dapat menggalakkan mereka untuk mengekalkan keaslian budaya hidup mereka sebagai salah satu tarikan pelancongan yang secara tidak langsung dapat melestarikan sumber jaya mereka. Selain itu, melalui penghasilan kraf tangan, dapat meningkatkan kemahiran mereka dan mengekalkan keistimewaan kraf yang mereka ada selain menyumbang kepada peningkatan pendapatan komuniti. Bagi komuniti ini, ia memerlukan pemantauan dari pihak kerajaan secara berterusan agar apa yang mereka kecapi akan berkekalan. Melalui pelancongan Komuniti Orang Asli mampu berdikari dalam menjana pendapatan keluarga.

Secara umumnya, ini menunjukkan pelancongan dapat memberi peluang pekerjaan yang menjadi satu sumber pendapatan kepada masyarakat Orang Asli. Melalui usaha dan penglibatan mereka juga telah membuka ruang kepada kerajaan dengan menganjurkan karnival usahawan dan kebudayaan Orang Asli bagi mempromosi produk keluaran Orang Asli dan kebudayaan mereka kepada masyarakat umum (JAKOA, 2016). Melalui karnival ini, ia mampu menyediakan platform dan peluang kepada masyarakat Orang Asli memperkenalkan produk, kebudayaan, kemahiran dan kebolehan mereka secara terbuka malah turut meningkatkan kemahiran komunikasi dalam kalangan Orang Asli dan membentuk perspektif yang positif masyarakat umum ke atas masyarakat tersebut. Ini menunjukkan bahawa peranan pelancongan bukan sahaja melestarikan budaya masyarakat Orang Asli malahan membentuk pelbagai kemahiran dalam usaha menarik lebih ramai kedatangan pelancong.

Wanita Orang Asli dan Kebolehan Terhadap Aktiviti Pelancongan

Peranan golongan wanita dalam membasmi kemiskinan di dalam komuniti Orang Asli menjadi satu langkah yang perlu dijadikan tumpuan. Pandangan negatif terhadap golongan wanita sebagai golongan yang tidak mampu untuk membangunkan diri dan komuniti mereka sendiri perlu ditepis. Perlu diketahui bahawa perkembangan pesat ekonomi negara kini menggamit lebih ramai wanita untuk melibatkan diri secara aktif dalam dunia keusahawanan. Seiring golongan lelaki, keterlibatan golongan wanita juga di dalam bidang keusahawanan dilihat sebagai sesuatu yang positif dalam turut serta membasmi kemiskinan dan menerajui pembangunan komuniti mereka sendiri . Oleh itu, salah satu pilihan penempatan Orang Asli yang memiliki majoriti kaum wanita sebagai penyumbang utama dalam aktiviti pelancongan adalah di penempatan Orang Asli Mah Meri di Pulau Carey.

Satu kumpulan wanita yang dinamakan Tompoq Tompoh telah ditubuhkan sejak tahun 2005 iaitu gelaran yang digunakan sebagai projek usahasama penghasilan kraftangan kaum Mah Meri (Khairunnisa Sulaiman, 2009). Kumpulan ini terdiri daripada 20 orang ahli daripada kalangan golongan wanita suku kaum Mah Meri yang kesemuanya merupakan suri rumahtangga. Mereka ini tidak mendapat pendidikan yang sempurna, malah mereka lebih memilih untuk berada di rumah dan menjaga keluarga mereka. Walaubagaimanapun, mereka berusaha untuk menambah pendapatan sampingan keluarga dengan melakukan kerja sambilan setelah selesai kerja-kerja rumah. Antara aktiviti sampingan tersebut adalah anyaman seperti tenunan kantung sirih, tikar dan bakul (Reita Rahim, 2007). Kemahiran ini telah lama bertapak di dalam diri mereka yang diperturunkan dari generasi ke generasi. Penghasilan kraf tangan mereka telah menarik minat pelancong bukan sahaja dalam negara malah diluar negara juga datang untuk melihat dan membeli kraf tangan tersebut. Selain itu golongan wanita suku kaum Mah Meri turut terlibat dalam program Satu Daerah Satu Industri (SDSI) yang turut memprosikan produk, kemahiran dan kebolehan mereka kepada pelancong. Program ini telah membuka peluang kepada mereka untuk menyertai demonstrasi dan pameran di peringkat tempatan dan antarabangsa (Jabatan Hal Ehwal Orang Asli Negeri Selangor, 2011 & Rohayu, 2016). Justeru secara tidak langsung ia telah mempromosikan kekuatan wanita suku kaum Mah Meri yang menyebabkan mereka lebih terkenal.

Pembinaan kemahiran berdasarkan pengalaman golongan wanita suku kaum Mah Meri dalam bidang keusahawanan jelas diperoleh daripada penyertaan dalam pelbagai jenis program dan aktiviti yang dianjurkan oleh pihak dalam mahupun luar negara. Mereka juga meluaskan pergaulan dengan peserta-peserta lain di dalam penganjuran tersebut yang membuatkan mereka memperoleh pengetahuan dan idea baru tentang penghasilan kraf tangan. Penerimaan dan pendedahan yang diperoleh oleh golongan wanita suku kaum Mah Meri telah banyak memberi faedah kepada mereka untuk berjaya. Ini jelas menunjukkan hubungan yang wujud antara pelancongan dan kemahiran suku kaum wanita Mah Meri telah memberi pulangan positif dari aspek ekonomi yang membuatkan mereka lebih berusaha dalam membantu ekonomi keluarga.

Metodologi Kajian

Kajian yang dijalankan menggunakan pendekatan kualitatif di mana kaedah temu bual merupakan kaedah utama yang digunakan dalam kajian ini disokong dengan pemerhatian dan dokumentasi. Setiap peserta yang dipilih mempunyai kemahiran anyaman dan tarian. Kemahiran ini telah diwarisi turun-temurun dari nenek moyang mereka. Peserta dipilih kerana faktor latar belakang mereka yang merupakan peserta yang pernah terlibat diperingkat awal pengembangan sektor pelancongan di Kampung Sungai Bumbun, Pulau Carey, Selangor dan termasuk mereka yang masih aktif sehingga sekarang. Jadual 1 menunjukkan latar belakang peserta kajian ini.

Jadual 1 : Latar Belakang Peserta Kajian

Bil.	Peserta Kajian	Tahap Pendidikan	Jantina	Kemahiran
1	PK1	Darjah 6	Perempuan	Anyaman / Tarian / Penyanyi / Pemain Alat Muzik
2	PK2	Darjah 6	Perempuan	Anyaman / Tarian
3	PK3	Tingkatan 2	Perempuan	Anyaman / Tarian / Penyanyi
4	PK4	Darjah 1	Perempuan	Anyaman / Tarian

* Nota:
PK = Peserta Kajian

PK1 merupakan ketua bagi kumpulan anyaman dan kebudayaan. Beliau berperanan sebagai ketua isi rumah. Begitu juga dengan PK3 yang berperanan sebagai ketua keluarga dalam menanggung isi rumah. Manakala PK2 dan PK4 memainkan peranan dalam menyumbang peningkatan pendapatan keluarga. PK4 hanya meneruskan anyaman dan telah berhenti untuk aktiviti kebudayaan atas faktor umur. Semua peserta kajian yang dipilih tinggal di Kampung Sungai Bumbun kerana pengembangan, penyediaan kemudahan dan pemusatan aktiviti pelancongan banyak dilaksanakan di Kampung Sungai Bumbun. Pemilihan Kampung Sungai Bumbun merupakan lambang pelancongan komuniti Mah Meri di Pulau Carey. Namun begitu, pemilihan peserta kajian tidak dapat mewakili keseluruhan wanita suku kaum Mah Meri di kawasan lain tetapi dapatan kes kajian ini boleh disesuaikan mewakili ciri-ciri persamaan yang ada pada komuniti wanita Mah Meri yang lain.

Penemuan kajian

Daripada hasil temu bual menunjukkan tahap pendapatan telah berubah di mana Jadual 2 menunjukkan pendapatan sebelum dan selepas terlibat dengan aktiviti pelancongan. Namun begitu, pendapatan ini hanya anggaran kasar dan jumlah pendapatan yang diperoleh adalah mengikut permintaan semasa. Oleh itu, kedatangan pelancong adalah penting dalam meningkatkan pendapatan setiap ahli komuniti di mana bayaran bukan sahaja dibuat terhadap persembahan kebudayaan tetapi termasuk pembelian cenderahati sebagai tanda ingatan. Melalui adanya kedatangan pelancong telah menyumbang pendapatan secara terus kepada peserta kajian tanpa melibatkan orang tengah.

Jadual 2 : Pendapatan Peserta Kajian Sebelum dan Selepas Terlibat dengan Aktiviti Pelancongan

Peserta	Jantina	Pendapatan Sebelum	Pendapatan Selepas
PK1	Perempuan	RM50	RM1000
PK2	Perempuan	RM30	RM600
PK3	Perempuan	RM400	RM500
PK4	Perempuan	RM30	RM400

Mengikut Pendapatan Garis Kemiskinan (Kasar), pendapatan yang dikategorikan miskin tegar ialah RM440 kebawah manakala pendapatan kategori miskin pula ialah RM700 ke bawah (JAKOA, 2011). Hasil kajian menunjukkan bahawa terdapat peserta kajian telah keluar dari kategori miskin tegar. Mereka mula memainkan peranan dalam membantu pendapatan keluarga. Pada peringkat awal, pendapatan dari anyaman sangat berkurangan. Namun sekarang ia semakin meningkat apabila nama mereka semakin terkenal dan bilangan tempahan semakin bertambah. Ramai antara mereka telah memberi tumpuan sepenuhnya kepada aktiviti yang berkaitan pelancongan. Justeru itu, jelas menunjukkan bahawa aktiviti pelancongan telah memainkan peranan dalam membawa perubahan positif dari segi peningkatan pendapatan peserta kajian. Selain itu taraf hidup komuniti ini semakin meningkat dengan melihat perubahan keadaan sosial mereka. Penglibatan wanita suku kaum Mah Meri dalam memperolehi pendapatan melalui sektor pelancongan disebabkan melihat perubahan golongan wanita yang lain.

Ganjaran wang yang diperoleh turut menyebabkan mereka menganggap bahawa pelancong mampu memberi pendapatan kepada mereka. Galakkan ini membentuk sikap rajin berusaha dalam kalangan mereka bagi memenuhi permintaan pelancong. Bagi PK4, beliau mengambil peluang menganyam di mana-mana sahaja bagi menyiapkan tempahan. Melalui penglibatan dalam pelancongan, secara khususnya telah memberi ruang pekerjaan baru kepada golongan wanita suku kaum Mah Meri. Pendapatan merupakan salah satu motivasi kepada golongan ini untuk terus berjaya. Pendapatan yang diperoleh membuatkan mereka lebih tekun menghasilkan produk mereka, seperti transkrip berikut.

"...Dari segi jumlah pendapatan, sekarang kita boleh dapat lima enam ratus, satu ribu dalam satu bulan. Paling tinggi kadang-kadang ada juga lah satu ribu. Kalau penanda buku tekun boleh dapat dalam tiga ratus empat ratus itu aje seorang buat. Kita jual untuk semua. Pendapatan bagi sama rata". (PK1)

"...Orang mula beli anyaman rasa umur saya masa tu umur saya katakanlah 11 tahun anyam. Orang datang dia tempah.. kalau macam ni saya buat. Macam kamu datang kat rumah saya kamu cakap ada tikar mak cik. Ada saya. Itu aje. Satu masa tu ramai pelancong datang. Banyak tempahan masa tu. Saya nak duit banyaklah. Kalau betul-betul buat boleh dapat RM300-RM400 sebulan". (PK4)

PK1 turut memainkan peranan bertindak sebagai koperasi dengan mengumpul dan membeli hasil anyaman dari penganyam wanita yang lain. Melalui usaha pembentukan koperasi dalam komuniti mampu membantu masyarakat sekitarnya memperoleh sumber pendapatan secara cepat.

"Kita kumpul dulu. Saya uruskan. Kalau dia orang perlukan duit. Dia orang hantar kat sini, jadi saya beli. Saya bayar dulu, lepas tu kumpul-kumpul. Memang membantu penduduk kampung. Barang-barang kumpul kat sini dulu. Macam koperasi lah. Saya tolong ni secara tak langsung". (PK1)

Dahulu kaum wanita banyak menghabiskan masa bersembang, pergi paya bakau dan mencari kutu. Sekarang segalanya berubah apabila kaum wanita Mah Meri turut terlibat aktif dalam aktiviti pelancongan dan menyumbang kepada peningkatan pendapatan keluarga.

"...Dulu-dulu sebelum kita terlibat dengan program anyaman, tak de apa-apa pun. Kita buat penyapu lidi dan duduk sembang-sembang. Kadang-kadang kita buat penyapu lidi dan kadang-kadang tak buat. Kalau kita tak buat kita sembang-sembang je, makan pinang, cari kutu. Dulu-dulu ada pergi bakau". (TB/PK1/PG)

Ia menunjukkan peranan yang dimainkan oleh sektor pelancongan dalam merubah kehidupan golongan wanita suku kaum Mah Meri ini berjaya menghasilkan pulangan yang lumayan. Hasil pendapatan yang diperoleh dapat menyumbang pendapatan keluarga yang secara tidak langsung mampu mengeluarkan mereka dari status miskin tegar.

Rumusan

Hasil dapatan kajian menunjukkan sektor pelancongan banyak memainkan peranan positif membantu golongan wanita suku kaum Mah Meri dalam meningkatkan sumber pendapatan keluarga. Pelancongan bukan sahaja merubah tahap pendapatan golongan ini, malahan turut membentuk sikap positif dalam penerimaan pelancong ke penempatan mereka. Banyak perubahan yang berlaku dalam kalangan wanita suku kaum Mah di mana sektor pelancongan banyak membawa perubahan dalam pelbagai aspek kehidupan mereka termasuk dalam pembentukan sikap yang positif seperti rajin berusaha dan bermotivasi. Selain itu, melalui bidang pelancongan yang diceburi dapat melestarikan budaya hidup dan warisan nenek moyang mereka yang menjadi tarikan utama kepada pelancong.

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