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# Identifying Students' Soft Skills in Managing Projects

# Zaimy Johana Johan<sup>1</sup>, Nurul Anisah Khalid<sup>2</sup>

<sup>1</sup>Malaysia Institute of Transport, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia, <sup>1,2</sup>Faculty of Business Management, Universiti Teknologi MARA (UiTM) Selangor Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor, Malaysia Email: zaimy@uitm.edu.my

# **Abstract**

The statistics from Human Resources Ministry have revealed that 227,300 of 711,000 people were from the age group of 20-24 employed workers in Malaysia, followed by 160,800 from the age group of 25-29. Unemployment issue is associated with job compatibility and incompatible levels of qualification attained. Other issues addressed by the industry are graduates' lack of communication and interpersonal skills. Therefore, this study aims to identify students' soft skills in managing projects as part of their core courses in respective programs and semesters. The skills that can be developed by students in managing projects are communication skills, critical thinking and problem solving skills, teamwork skills, information management and lifelong learning skills, entrepreneurial skills, spiritual and ethical values, and leadership skills. Using a purposive sampling approach, 286 questionnaires were distributed to UiTM students of the Faculty of Business and Management. However, only 267 questionnaires, constituting a response rate of 93% were useful for data analysis using SPSS v. 23. The regression result reveals that communication, teamwork, information management and lifelong learning, entrepreneurial and leadership skills are supported in managing projects. Meanwhile, critical thinking and problem solving skills are not supported and this could be due to the similar nature of the ongoing project activities such as organizing academic trips, seminars, and workshops. Notwithstanding this, the proposal templates and previous project proposals are possible to be main references for both past and present students without incorporating the actual needs and enhancement of the projects being assigned. Having said that, by managing projects; students can develop soft skills as these skills are necessary to acquire and fulfill the requirements from the Ministry of Higher Education (MoHE) and respective employers.

**Keywords**: Soft Skills, Project-Based Learning, Problem Solving, Project Management, Managing Projects

# Introduction

Soft skills are non-technical skills related to how individuals work; this includes how employees interact with colleagues, manage work, and solve problems. Managers are now searching for potential employees who are able to work with others and can think beyond

theories and learning. While universities continue to enhance the syllabus and learning outcomes to suit the industry's demand, many employers constantly highlight the issues with graduates not being able to demonstrate soft skills, in particular communication and the ability to converse in English well. Their ability to work effectively with others, analytical, decision making, problem solving, professionalism, and ethics are the soft skills that are still lacking among fresh graduates (Abdul Wahab, 2022). The statistics from Human Resources Ministry have revealed that 227,300 of the 711,000 population were from the age group of 20-24 employed workers in Malaysia, followed by 160,800 from the age group of 25-29 (Morden, 2022). Unemployment issue is associated with job compatibility and incompatible levels of qualification attained. Other issues addressed by the industry are graduates' lack of communication and interpersonal skills. The number of unemployed graduates in skill-related rose by 14.4% to 1.55 million in 2021 from 1.36 million in 2020 as they picked up jobs that did not match their qualifications and skills (Hazim, 2022). According to the Ministry of Higher Education (MoHE), every student needs to develop soft skills as they are vital in the modern business world, which have the requirements and expectations students need to meet to achieve professional success. There are many avenues at university settings for students to develop the seven (7) soft skills required by the MoHE; the Module for Development of Soft Skills for Higher Learning Institution Malaysia, which are critical thinking and problem solving, communication, information management and lifelong learning, teamwork, spiritual and ethical values, entrepreneurial, and leadership skills (Samat et al., 2019).

A project is an effort to produce a unique product or service in the short or long term with clear objectives, project scopes, and deliverables. Meanwhile, soft skills are fundamental skills in life, especially in students' development can be divided into three categories; additional skills or knowledge; personal qualities; and interpersonal skills (Sugito et al., 2017). In a higher level of education, most courses require students to manage projects as part of their continuous assessment under group projects. Besides that, every program has its society involving students managing forums, team-buildings, and dinners during their department weeks. In managing projects, students are required to follow the university's standards and guidelines to ensure the project can be executed and fulfilled the university's requirements. These activities may develop students' soft skills, such as critical thinking, problem solving, leadership skills, and teamwork skill by leading one-self and their classmates or team to organize, implement and manage tasks or activities throughout the projects (Shariff et al., 2011). Currently, with demanding job requirements, soft skills are vital can act as weapons of students' capabilities with their hard skills. The industry players expect fresh graduates to be fast learners, independent workers and can build harmonious relationships express their thoughts and feelings, a team players who hold ethical and spiritual beliefs, and ability to be agile. Even though students graduate with excellent results, it may not guarantee that students will get good jobs in the future. Academic education is no longer a single ticket, but it has to be combined with soft skills (Ramlan & Ngah, 2015). To develop students' soft skills in managing projects, two approaches can be used, which are Project-based learning (PjBL) and Problem-based learning (PBL). To simplify, PjBL and PBL are practical methods that can improve skill sets, increase understanding, create deeper impact, and better knowledge retention for students involved in group projects. The approaches are also effective training grounds for students to develop analytical, problem solving, and teamwork skills (SIDDIKY, 2020). Therefore, this study aims to identify the students' soft skills in managing projects as part of the core courses in their respective programs and semesters.

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The importance of soft skills among students is rather apparent in securing suitable jobs at the right organization. The graduates are expected to be positive, proactive and able to build good working relationship with their coworkers, able to express their thoughts and feelings, be cooperative, accommodating and capable of becoming a team player, possess stable ethical principles, pleasant and assertive, and professionalism.

#### **Literature Review**

Students' soft skills in managing projects

Soft skills are divided into two; which are soft skills and hard skills. The general definition of soft skills is interpersonal skills that are linked to emotional intelligence. Conversely, hard skills are skills that students can gain by learning in classroom or from their experience, and the skills are more directly related to the traditional intelligence principles (Ritter et al., 2018). The Ministry of Higher Education (MOHE) had introduced the soft skills namely communication skills, critical thinking and problem-solving skills, teamwork skills, lifelong learning and information management, ethical values and leadership skills, for implementation and development of undergraduate students in higher learning institutes in Malaysia (Sulaiman et al., 2016). Experts agreed that the real strength of PjBL is a learning method for the students because of their motivation and engagement to the real situation in which they believe that the students can learn more if they are motivated and engaged (Schaddelee & McConnell, 2018). By managing projects, students need to have proper planning that requires them to think critically. Students are also involved in decision making and problem solving. These activities can develop students' soft skills when the students are experiencing real project implementation, gaining exposure dealing with internal and external stakeholders, rather than just discussing the project processes and theories (Shelley, 2015).

## Communication Skill

Communication skills are students' abilities in giving and receiving different kind of information verbally and through other platforms such as social media and emails. The skills, which are important for students, involve listening, speaking, observing and empathizing when managing projects. Communication skills are a person's ability to deliver or share any knowledge or information, and the ability in speaking and writing (Sapriadil et al., 2018), and easy to share ideas (Oussii & Klibi, 2017). Oral and written communication skills are known as important skills that have become employers' requirements and expectations of fresh graduates (Wesley et al., 2017). Oral communication skill allows students to fully participate in their learning and show their ability to communicate. For example, if any problem happens throughout the projects such as to get sponsorship or budget to run their projects, they learn how to communicate with others(Andrade, 2020). Based on a case study conducted by undergraduate students of Operations Management, it was mentioned that the students can develop their communication skills by organizing projects. In bricks challenge event, the organizer needed to attract students to participate in the challenge, find sponsorship, coordinate with third parties, present the outcome of the event and communicate with lecturers from other faculties. All these have considerably developed students' communication skills (Nor Azmi et al., 2019). Therefore, this study hypothesizes that:

H1: Communication skills have a positive effect on students' soft skills in managing projects.

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# Critical Thinking and Problem Solving Skills

Critical thinking and problem solving skills are skills required in managing projects. The pairing skills are ability for students to think critically, which involve attitude, knowledge and skills, and competency to solve problem in an effective and timely manner. Critical thinking is defined as a method for problem solving and decision making that require one to anticipate problems, plan and resolve issues, and to ensure that team members know what to do according to the expectation (Lovelace et al., 2016). There are evidences showing when there is lack of critical thinking while managing project, it will cause project failures such as cost overrun and repeated errors, incorrect assumptions, bad decisions, failed systems, failed-inaction when necessary and giving bad advice (Rakesh & Fai, 2013). PjBL supports that managing a project provides real-life learning experience to students, which requires them to utilize their problem solving skills and gain new knowledge and experience. Students can develop problem solving skills when they need to think of how to solve the problem rather than receiving instructions from the lecturers (Marzo-Navarro & Berné-Manero, 2022). It is important to emphasize that a project requires the learners to comprehend and focus on the problem-based learning (Schaddelee & McConnell, 2018). Students can develop their critical thinking skills by re-running a project to try to get a better result because they are the decision-makers in real-life learning experience (Gilbert & Wingrove, 2019). Based on a case study conducted by undergraduate students of Operations Management, it was mentioned that during the bricks challenge event, many problems occurred at the beginning until the day of the event, such as students did not get any sponsorship and limited budget provided by the university. Nevertheless, the students managed to eventually get minimum fee payment from the participants (Nor Azmi et al., 2019; Suhailey et al., 2019). Hence, the study hypothesizes that

H2: Critical thinking & problem solving skills have positive effect on students' soft skills in managing projects.

## Teamwork Skills

Teamwork skills are skills that students can work in a group to perform tasks assigned by their lecturers for group projects and assignments. Teamwork skills are the ability of an individual to work in a group (Paguio & Jackling, 2016). Doing a group project represents a learning activity in higher education that enables students to develop their teamwork skills (Lau et al., 2013). Based on a case study done by undergraduate students of Operations Management, it was mentioned that by organizing bricks challenge event, a student can develop his or her teamwork skills by working together in managing the event by planning, executing, monitoring and control, and closing for the event to run smoothly (Azmi et al., 2019). Besides, the ability to work effectively with others (WEWO) is recognized as vital for students from all backgrounds and it is generally considered one of the most important skills as graduates reach the labor market (Jackson et al., 2014). Following this discussion, the third hypothesis is postulated

H3: Teamwork skills have a positive effect on students' soft skills in managing projects.

# Information management and lifelong learning skills

Information management skills are when students are able to find any related information in order to manage group projects given by the lecturers and all the knowledge that can be used

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for the future. Based on other researchers, information literacy is a set of abilities to discover, retrieve, analyse, and use information such as abilities allowing students in searching, filtering, utilizing, writing, smoothly completing research, and, most importantly, assuming to become actual lifelong learners (Feng & Ha, 2016). The simple definition of lifelong learning is referring to what people have learned throughout their life (Ting et al., 2015). Students can learn how to find the best solution in solving problems because in managing projects as the problems occur during the progress of the projects. Indirectly, students can develop or improve their information management and lifelong learning skills (Feng & Ha, 2016). Based on a case study done by undergraduate students of Operations Management, it was mentioned that students can get real experience by organizing bricks challenge event as their project. Besides studying the theories, a student can face a real situation that helps them gather new knowledge on how to handle a project from the beginning until the end. By managing this event, students can also relate the information that can be used in managing the event (Nor Azmi et al., 2019; Samat et al., 2019). Even though the project outcomes are not satisfactory or unsuccessful, students can still learn the process of how to manage the projects and make improvement to become better in managing projects in the future (Shepherd et al., 2014). In light of this statement, it is proposed that

*H4*: Information management and lifelong learning skills have positive effect on students' soft skills in managing projects.

# **Entrepreneurial Skills**

Entrepreneurial skills are skills that students can make a profit or benefit from the event that they manage and transform it into a business. The term 'Entrepreneurship' can be understood from an individual to a structured organization that constantly seeks and develops new ideas and transforms those ideas to create new businesses (Sousa & Almeida, 2014). The best approach to learn how to be an entrepreneur is through 'learning by doing' which means that students implement what they have learned in class into a real business setting such as managing events that can generate income, besides implementing a class discussion to solve the problem from the case study. As a result, when the students face a real-life problem, they will understand the situation better and indirectly, students can develop their entrepreneurial skills while managing projects. Entrepreneurship skills include translating an idea into a business plan, be able to identify any opportunity that can be created as a business, understanding the environment of business and have the ability to give advice to other people if needed (Chang & Rieple, 2013). However, other research states that managing projects does not develop students' entrepreneurial skills but able to develop students' understanding in order to succeed in managing project, such as skills to identify opportunity and analyse the limited resources and opportunities outside the university environment (Lloyd et al., 2019). Based on the discussion, the hypothesis below is developed

H5: Entrepreneurial skills have a positive effect on students' soft skills in managing projects.

### Spiritual and ethical values

Spiritual and ethical values are positive behavior that students need to have especially when they are involved in decision making. By applying these values, students can differentiate the right and wrong actions. Based on other researchers, spirituality is about kindness, politeness, relativity, and perseverance whereby these meanings and understandings are created by the

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people (Nolan-Arañez & Ludvik, 2018). Ethics has been defined as making a good action which probably will support good manners development and good personality to bring happiness in life (Bredillet, 2014). In order to develop students' ethical values, PBL is an effective method in solving real-life problems. In managing projects, students will be exposed to real-life problems that require them to make decisions to solve all the problems. Students can learn how to make good decisions by involving themselves in the decision-making process. There are several principles and guidelines to make ethical decision making whereby every decision must be decided correctly, kindly, fairly, honestly, confidently, and is non-harming to any individual (Johan & Baharudin, 2021). Based on a case study done by undergraduate students of Operations Management, it was mentioned that spiritual and ethical values can be developed by the students via organizing a project (Nor Azmi et al., 2019). In bricks challenge event, the students received the budget for any event earlier than the event date. The students managing the project need to utilize the money only for the expenses required to successfully organize the event. In a project involving bricks competition, students as the organizers need to be fair and honest in making decisions and not cause bias to any participants (Suhailey et al., 2019). Based on the discussion, the following hypothesis is developed

*H6*: Spiritual & ethical values have positive effect on students' soft skills in managing projects.

# Leadership skills

Leadership skills are ability of a person to lead other people and ensure the groups are able to manage every task given. Based on other researchers, the definition of leadership is achieving goals by using others' effort and action. Leadership skills are needed to negotiate with others, to involve in a group environment, to deliver service to others people, and to solve if any conflict happen in a project (Weber et al., 2010). The Malaysian Education Blueprint of 2013 - 2025 states that education will create formal and informal opportunities to develop leadership skills by helping every student to work in a group and take on leadership roles due to critical problems in today's world in which people are unable to lead and cooperate with each other. The education aims to develop leadership skills for every student in Malaysia (Malaysia Education Blueprint, 2013).

Other researchers concluded in the Kellogg Foundation Project which is 'leadership in the making', through the programs and activities related to develop the skills such as managing a project, universities have the potential to develop and instil leadership skills in every student (Marcketti et al., 2011). Based on a case study done by undergraduate students of Operations Management, it was mentioned that students can develop their leadership skills in a project. In bricks challenge event, students are divided into a few groups and each group has their own leader. Students can learn how to be a leader where they need to manage and divide tasks fairly to their team members. Besides that, a leader also needs to ensure their projects can run smoothly until the end (Azmi et al., 2019). Accordingly, the study hypothesizes that

H7: Leadership skills have a positive effect on students' soft skills in managing projects.

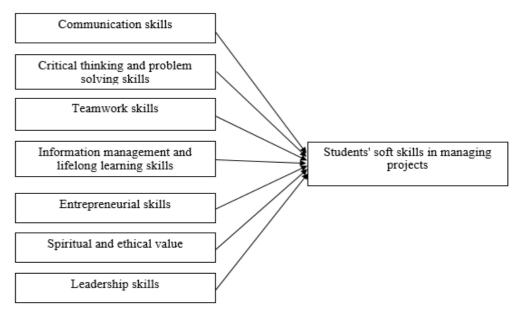


Figure 1: Conceptual Framework

Adapted from: (Ogunlana, 2004; PMI, 2008; Zuo et al., 2018)

# **Research Methodology**

For the purpose of this study, researchers used purposive sampling technique by asking screening questions to identify respondents experiencing in managing projects at university level. The respondents were students of Faculty of Business Management, UiTM Puncak Alam and Department of Postgraduate and Professional Studies, UiTM Shah Alam. The total sample size was 286, whom were from semester 2 to semester 5 of degree students, and semester 2 of master students. Only 267 out of 286 questionnaires (93% response rate) were used for data analyses using Social Sciences Statistical Package (SPSS) version 23 while 12 questionnaires were discarded due to straight-lining.

The questionnaire was divided into 2 sections; section A was respondent's background information while section B was divided into 2 parts, in which part 1 was the independent variable (communication skills, critical thinking and problem solving skills, teamwork skills, information management and lifelong learning skills, entrepreneurial skills, spiritual and ethical values, and leadership skills) and part 2 was the dependent variable (students' soft skills in managing projects). The measuring instrument was consisted of 53 items: 9 items for communication skills, 8 items for critical thinking and problem solving, 8 items for teamwork skills, 5 items for information management and lifelong learning skills, 4 items for entrepreneurial skills, 5 items for spiritual and ethical values, 5 items for leadership skills and 9 items for students' soft skills in managing projects. All 53 items were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly disagree).

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**Results**Table 1
Demographic Profile

Demographic	Categories	Frequency	Percentages	
Gender	Male	77	28.1%	
	Female	197	71.9%	
Program	BA244	161	58.8%	
	BA247	45	16.4%	
	BA775	25	9.2%	
	BM244	24	8.8%	
	BM247	19	6.9%	
Part	2	19	6.9%	
	3	40	14.6%	
	4	100	36.5%	
	5	114	41.6%	
Level of Education	Degree	249	90.9%	
	Master	25	9.1%	
Level of Involvement	Project manager/Assistant project	39	14.2%	
	manager			
	Proposal team	12	4.4%	
	Secretary/Treasurer	20	7.3%	
	Committee Leader	40	14.6%	
	Primary role	44	16.1%	
	Secondary role	42	15.3%	
Duration of Project	Within a day	118	43.1%	
,	Between 2-3 days	28	10.2%	
	Between 4-6 days	24	8.8%	
	7 days	9	3.3%	
	>More than 7 days	58	21.2%	
Distance from	Within UiTM Puncak Alam	219	79.9%	
University	UiTM Shah Alam	19	6.9%	
,	Other States	6	2.2%	
	Abroad	5	1.8%	
Total Overall Project	<rm500< td=""><td>108</td><td>39.4%</td></rm500<>	108	39.4%	
Cost	>RM1000	80	29.2%	
	>RM3000	17	6.2%	
	>RM5000	11	4%	
	Approximately RM10000	7	2.6%	
Amount of money	<rm250< td=""><td>206</td><td>75.2%</td></rm250<>	206	75.2%	
contributed by	>RM500	24	8.8%	
students (top up the	20	7.3%		
project cost/budget)	RM1000	-	=	

(Space)

Table 1 displays the profiles of the survey respondents. More than half of the survey respondents or 71.9% are female while 28.1% are male students. About 58.8% of respondents are from the program BA244 (Operations Management new cohort), 16.4% of

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respondents are from the program BA247 (Transport), 9.2% are from the program BA775 (Master in Office System) and 8.8% are from the program BM244 (Operations Management old cohort). Besides that, the respondents are from different parts, in which 41.6% are from part 5 students, 36.5% are from part 4 students, 14.6% are from part 3 students and 6.9% are from part 2 students. For levels of education, most respondents or 90.9% are pursuing undergraduate degree while the remaining 9.1% are taking masters, equivalent to 25 students. Other than that, most of the students are involved in primary roles, secondary roles and committee leaders, which are 16.1%, 15.3% and 14.6% respectively. 13.9% are students hold positions as project manager or assistant project manager.

For the duration of projects, more than half of the respondents have experience running a project within a day which is 43.1%, 21% of respondents have experience running a project for more than 7 days, and 10.5% are students who have run a project between 2-3 days. In terms of distance from university, 79.9% students are within UiTM Puncak Alam, 6.9% students are from UiTM Shah Alam, 2.2% students are from other states and 1.8% is students from abroad. For the overall project cost, 39.4% are below RM500, 29.2% are more than RM1000, 6.2% are more than RM3000, 4% are more than RM5000 and 2.6% are approximately RM10000 for overall cost for a project. And lastly, for the amount of money contributed by students due to the lack of budget received from universities, 75.2% are less than RM250, 8.8% are more than RM500 and 7.3% are RM1000.

Table 2
Reliability Analysis

Variable	Cronbach's Alpha	Number items	of
Communication Skills	0.947	9	
Critical Thinking and Problem Solving Skills	0.963	8	
Teamwork Skills	0.968	8	
Information Management and Lifelong learning skills	0.944	5	
Entrepreneurial Skills	0.917	4	
Spiritual And Ethical Value	0.931	5	
Leadership Skills	0.948	5	

(Space)

According to (Sekaran & Bougie, 2013) Cronbach's Alpha measures the internal consistency, that is reliability. The higher the number of Cronbach's Alpha, the more reliable the variables. For high constancy reliability, the Cronbach's Alpha should have the reading of more than 0.708 for a good result (Hair et al., 2019).

Based on Table 2, it was shown that seven (7) variables have a reliability value of more than 0.708 which ranged from 0.917 to 0.968. That means that the reliability result is acceptable for all variables.

Table 3
Regression Analysis

F	126.321
Sig.	0.000
R <sup>2</sup>	0.769
Adjusted R <sup>2</sup>	0.763

Table 4
Results of Hypothesis Testing

Hypothesis	Relationship	Std.	Std.	t-value	Sig.	Decision
		Beta	Error			
H1	CS – SSS	0.197	0.066	3.018	0.003	Supported
H2	CT and PSS - SSS	-0.116	0.060	-1.895	0.059	Not Supported
Н3	TS - SSS	0.217	0.057	3.584	0.000	Supported
H4	IM and LLS - SSS	0.212	0.057	3.594	0.000	Supported
H5	ES - SSS	0.169	0.049	3.549	0.000	Supported
Н6	SES - SSS	0.087	0.058	1.455	0.147	Not supported
H7	LS - SSS	0.221	0.051	4.038	0.000	Supported

CS-communication skills, CT and PSS-critical thinking and problem solving skills, TS-teamwork skills, IM and LLS-information management and lifelong learning skills, ES-entrepreneurial skills, SES-spiritual and ethical value skills, LS-leadership skills, SSS-students' soft skills

R² indicates the percentage variance in the dependent variable that is explained by the variation in the independent variables (Sundram et al., 2016). In Table 3 shown, R² is 0.769. This R² implies that all the independent variables explain 76.9% of the variance in dependent variable. 23.2% of the variance in the independent variable is not explained by the independent variables in this study. This indicates that there are other independent variables which are not included in this study that could further strengthen the regression equation. F-test is significant based on the value of 0.000. Hence all independent variables significantly explained the dependent variable.

The significant value for p-value is 5% and for t-test the significant value is equal or more than 1.645 (Hair et al., 2017). Based on the table above, p-value for communication skills is 0.003 (0.3%), critical thinking and problem solving skills 0.059 (5.9%), whereas teamwork skills, information management and lifelong learning skills, entrepreneurial skills, and leadership skills is 0.000 (0%), and lastly, spiritual and ethical values 0.147 (14.7%). Therefore, the result displays that communication skills, teamwork skills, information management and lifelong learning skills, entrepreneurial skills and leadership skills are significant because the p-value are below than the 5% significant level. These variables are significant and positively related with the dependent variable, which is students' soft skills in managing projects. However, critical thinking and problem solving skills, and spiritual and ethical values are not significant because the p-value is above the 5% significant level. It is crucial to highlight that critical thinking and problem solving skills are negatively associated to students' soft skills in managing projects; when the critical thinking and problem solving skills increase, the

students' soft skills decrease. Spiritual and ethical values skills are also not supported to students' soft skills in managing projects.

### Discussion

Based on the results, communication skills have a positive relationship with developing students' soft skills in managing projects. Most of the respondents agreed that students can develop communication skills by managing projects as they learn how to communicate with internal and external stakeholders and present the project progress on weekly basis. The result from previous studies are also supported that communication skills is significant in developing students soft skill by managing projects (English & Kitsantas, 2013; Oussii & Klibi, 2017). Next, teamwork skills have positive relationship with developing student soft skills in managing projects. Students can develop their teamwork skills by managing projects where students need to work in a group to organize projects from start until finish (Lau et al., 2013; Ritter et al., 2018; Sulaiman et al., 2016). Besides, information management and lifelong learning skills are also significant and have a positive relationship with developing student's soft skills in managing projects. Most of the respondents agreed that when the students manage projects, they can gain new experience regardless the projects are successful or vice versa. Students can learn how to manage projects and it can be lifelong learning (Schaddelee & McConnell, 2018; Shariff et al., 2013; Shepherd et al., 2014). Entrepreneurial skills also have positive relationship with developing students' soft skills by managing projects as the skills are significant in determining the project viable and profitable (Chang & Rieple, 2013; Lloyd et al., 2019). Other than that, leadership skills also have a positive relationship with developing students' soft skills by managing projects where students have the opportunity to be project managers and team leaders (Marcketti et al., 2011).

However, critical thinking and problem solving skills, and spiritual and ethical values are not significant with students' soft skills in managing projects. This result may be due to running the same projects repetitively for every semester, which means that the students have been assigned to do the same projects as the previous students. When the students only follow the existing template, they do not have to think critically of how to manage the project because they already have references from their seniors. Other than that, when the students are usually involved in many projects, in which the content of the projects are the same with other previous projects that they had managed, managing such projects will not help them develop their critical thinking and problem solving skills because they are used to do the same cycles and probably solve the similar problems throughout the projects. Sometimes, students rely too much on their lecturers for directions and answers and will not develop their critical thinking and problem solving skills if they use all the suggestions from the lecturers to solve their problems rather than thinking of their own ways of how to solve the problems arising in their projects.

Besides that, it may be due to relying too much on others. Usually, students will appoint their classmates who have experience in managing projects to be their leaders because they believe that the friends can do better in solving the problems and able to ensure the event will be successful. Relying on others will make the students feel that they do not have to think and just following the instructions and directions given during the project life cycle. Next is because the students are having first time experience in managing projects. Due to limited knowledge and involvement in managing project, when there are project hiccups, they hardly able to overcome and solve the problems, and need to refer to lecturers for solutions. As a matter of fact, when the projects are simple and straight forward, students may take them

for granted without further analyze and enhance the project quality, and since the projects are within the university environment, students may not encounter challenges.

Other than that, there are students who are not interested in managing projects. Their involvement could be just to fulfil their assessments for the courses and they are participating in projects just for the sake of getting marks. Due to that, their efforts to manage the projects are limited and may not consider opportunities to develop soft skills. Students do not develop their critical thinking and problem solving skills because if any problem happens, they will not work hard to solve the problem and they do not even care for the result of the project be it a success or failure, as long as they had finished managing the event until the end. Besides that, it may be due to the position, whereby students favor holding primary and secondary roles which are not directly involved in making any decision and solve the problems along the project duration. Many students choose to be followers and not leaders. As a result, they are afraid to give their opinion and proposed solution and lastly, they are comfortable waiting for the instructions and directions from other members. The last reason that students do not develop critical thinking and problem solving skills is may due to complacency and comfort zone of not willing to take challenges in managing new project scopes. They prefer to manage events in a small scale rather than a bigger scale. Due to that, students unable to develop critical thinking and problem-solving skills because managing small scale projects are just following the status quo and easier to manage. The students are noticed to have low confidence level to manage the big scale projects as they feel insecure and uncertain to face the risks that might occur while implementing projects.

Apart from that, decision making is related to developing ethical values. By managing projects, students may encounter situation of dealing with substantial amount of money involving payment for reservation. They might not have passion or motivation to do better in other projects if they only receive and doing their tasks according to others' instructions as ethical value can be developed by practicing moral values of honesty, courage, fairness, respect, caring, and trust. Likewise, students will not develop their ethical values when they feel being forced by other people to do the tasks, and it will cause the students to not get any benefit from doing it.

# **Conclusion and Recommendation**

The research findings postulate that five variables support the hypothesis. The variables are communication skills, teamwork skills, information management and lifelong learning skills, entrepreneurial skills, and leadership skills. These variables have a significant and positive relationship with students' soft skills in managing project. Meanwhile, critical thinking and problem solving, and spiritual and ethical values are not supported.

As for managerial implications, lecturers should emphasize on mentoring, coaching and guiding instead of rigidly providing instructions and descriptions in the project assignments. Lectures are also able to inculcate soft skills required by the Ministry of Higher Education (MoHE) not only in managing projects but also through students' engagements with industry players, community, and other higher learning institutions. Students also need to develop the soft skills in order to meet the employers' demand and today, employers are keen to choose candidates who have the combination of good grades and soft skills. Lack of soft skills will portray the students' incompatibility, renders them relatively less competitive with other graduates in Malaysia.

As a recommendation, to develop students' critical thinking and problem solving skills is by lecturers guiding students to self-assess, monitor, and evaluate their progress in

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managing projects. Additionally, students should minimize referring to previous projects managed by the seniors, and able to develop creative thinking and being proactive in initiating projects in order to have the ownership and lead the projects from start to finish. Besides, the lecturer should seek proposed solutions from the students instead of providing them solutions. If there are problems occur during the projects execution, the students should resolve the problems without relying solely on lecturers (Andrade, 2020).

For developing spiritual and ethical values, students should instill honesty, trust, respect and compassion in managing the projects. Being involved directly, students can develop these skills because the spiritual and ethical values are skills that require students to perform conscious and righteousness rather than only practicing theories in the classroom. These skills seem straight forward by identifying the rights and wrongs, dos and don'ts. However, when it comes to ability to be fair, equal, justice, and ethical, the values can be compromised when dealing with monetary values.

It is also recommended for future studies that researchers should find and explore other variables concerning students' soft skills in managing projects. In this research, there are only seven variables and focuses on students who have experience in managing projects at Faculty of Business and Management of UiTM Puncak Alam and UiTM Shah Alam. Future researchers may pursue and expand the research from students in other faculties and universities. Besides that, mix method of qualitative with quantitative analysis is suggested to further understand and have clearer insight in identifying students' soft skills in managing projects.

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