Lecturer Support and Self-Efficacy on Students' Off-Classroom Training Effectiveness

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ABSTRACT

Off-classroom training is important to sharpen the soft skills of university students. The study discussed the relationship of lecturer support and self-efficacy with training effectiveness of students outside the classroom. The scope of study was 314 agriculture students taking human resource management course. The study applied quantitative research method and underpinned by training engagement theory, which considers both internal and external factors in evaluating training effectiveness. The findings were analyzed using IBM-SPSS v 24 software. The findings showed that both variables significantly influenced training effectiveness, and self-efficacy influenced training effectiveness more than lecturer support. It is concluded that the understanding of the best factor influencing training effectiveness will assist lecturers in designing suitable training programs for the students in the future.

RESEARCH BACKGROUND

The introduction of Industrial Revolution 4.0 in Malaysia has sparked since early 2017. Similar to other developing countries, Malaysia has taken initiatives to face the new revolution in manufacturing-based industries that have become digitalized and automated, which reduced the need for manpower. "Smart factory" or "smart manufacturing" concept was introduced in which cyber-physical systems monitor the real-time physical progress of the factory. The concept enables decentralized decisions in an organization (MITI, 2018; Pandiyan, 2017). The rise of Industrial Revolution 4.0 might be challenging especially for young fresh university graduates seeking for jobs after completing their first degree or diploma. Thus, it is important for the education provider, such as universities and other tertiary educations, to equip the students with skills through training sessions. The traditional way of in-classroom teaching and learning activities needs to be balanced with the off-classroom activities to increase the soft skills of the students.

Off-classroom is one of the methods for students to gain knowledge as a complement to the formal classes in the university. Students can demonstrate the knowledge they have learnt in the classroom outside of the classroom. This is in line with the suggestion by Malaysian Education Minister, Dr Maszlee

Malek, who stated that "off-classroom programs need to be sparked and not blocked because the university is an intellectual field to sharpen the talents and skills of the students" (Sukaimi, 2018). Implementing off-classroom training is one of the agendas towards realizing the National Education Development Plan.

Every student leaves his/her university as a person who has been instilled with universal core values and intact national identity. The values that have been learned will be practiced in everyday life, generating civic behaviour including increasing their involvement in voluntary activities; accepting individuals of different nationalities, religions, and ethnicities; avoiding corruption and crime; and demonstrating trust and integrity. In addition, everyone who graduated from a university is willing to be a leader for oneself and one's family, or be a part of a larger community or a country. The mission is stated in Malaysia Education Blueprint 2013−2025 (MOE, 2012), that is, all stakeholders including educators, students, industry, government and non-governmental organizations must play the role as advocates to enhance students' employability skills. The close collaboration between the Higher Education Ministry and industry plays an important role in ensuring an increasing percentage of graduates in the country. It was evident by the 1.8 percent increase in the average rate of graduates to 79.1 percent in 2017, compared to 77.3 percent in 2016. Organizing more training for students, particularly in soft skills and entrepreneurship could assist them to be prepared for a career (Arif, 2018).

Training effectiveness can be influenced by many factors. As for the study, training effectiveness is focused on the off-classroom training for students in order to understand their course, particularly a reading course like human resource management. The study focused on self-efficacy (internal factor) and lecturer support (external factor) in evaluating training effectiveness, which is a part of the training engagement theory that considers all of the employee and organizational factors in order to evaluate training effectiveness or engagement (Sitzmann & Weinhardt, 2018). Supervisor support was widely discussed in prior literature; however, research examining and focusing on lecturer support towards training effectiveness of students is still lacking. Thus, the study posed three research questions: 1) is there any significant relationship between lecturer support and training effectiveness?; 2) Is there any significant relationship between self-efficacy and training effectiveness?; and 3) what is the most influential factor that contributes to training effectiveness of agriculture students?

LITERATURE REVIEW

Lecturer Support

The supervisor's role in training programs is often viewed as a critical organizational climate dimension in which it may influence the effectiveness of training programs in an organization. Jayawardana & Prasanna (2007) agreed that there is a positive relationship between supervisor support and training effectiveness. When managers assist in the development of employees, training will be more effective in improving their individual work performance. This result was supported by Azman et al. (2009), who found a positive correlation between supervisor support and job performance.

Supervisor support is crucial in the transfer of training at the workplace. Support is directly related to the motivation to transfer, which encourages the transfer of training (Ling, Woon, & Ven, 2011). Employees believe that supervisor support can create effective motivation to transfer strategies to promote employees' behaviour so that they will apply or transfer the learned skills in the real workplace. Moreover, supervisor support has an indirect effect on trainees' transfer outcomes through its influence on the transfer climate. Supervisors might increase trainees' opportunities to transfer, which will lead to increased transfer outcomes (Nijman et al., 2006).

Besides, supervisor support may also encourage employees' motivation to learn. The learning process may influence training readiness and job performance, which includes affecting the training effectiveness of the employees (Park, Kang, & Kim, 2017). In other words, supervisor support could encourage employees to learn the skills and knowledge required in the workplace while fostering learning motivation, which has a positive influence on the employees who are being prepared for training and improving their job performance. As the context of this research is the off-classroom training, the supervisor support term has been changed to lecturer support. Off-classroom training would not be effective without the support and encouragement from the lecturers, particularly for reading and calculation subjects (Sari, 2010). Thus, it is important to study the relationship between lecturer support and training effectiveness.

Self-Efficacy

Self-efficacy is defined as a person's belief in his or her own capabilities to organize and execute the action required to manage the prospective situations (Bandura, 1995). Several studies have shown a positive relationship between self-efficacy and training effectiveness. Employees' judgement is normally related to the subordinates' capabilities and their involvement in self-efficacy activities, which will lead to the effectiveness of training. Bujang & Mekol (2010) indicated that self-efficacy significantly mediates the relationship between training framing and training effectiveness. Therefore, trainee self-efficacy is suggested as an important factor that will increase the employees' desire to transfer what they have learned to the workplace.

Self-efficacy is also closely related to training motivation. Several studies have shown a positive relationship between self-efficacy and training motivation. Tziner et al. (2007) found that self-efficacy has a significant effect on training effectiveness by enhancing the motivation to learn, which in turn leads the trainee to acquire more knowledge, skills, and competencies and to develop superior work strategies. Employees with higher self-efficacy tend to be more productive and motivated to participate in the training program and willing to learn new knowledge (Tai, 2006). Besides conventional training, e-learning training also positively influences e-learning effectiveness, which means higher computer self-efficacy results in better training effectiveness (Chien, 2012).

Research conducted by Wen and Lin (2014) indicated that self-efficacy is positively associated with the motivation to learn. The research also revealed that an individual with a higher level of self-efficacy tends to have a confident belief in one's capabilities of performing a particular task successfully. Besides, the supervisor plays a vital role in developing employees' self-efficacy, which then impacts trainees' reaction, learning, and transfer motivation (Tai, 2006). Moreover, Iqbal & Dastgeer (2017) discussed the mediating effects of motivation to transfer among self-efficacy, training retention, and transfer of training. The findings indicate that employees with higher self-efficacy and retention exhibit a higher motivation to transfer, which ultimately leads toward a higher transfer of training. In line with the previous discussion, Sharma & Sharma (2016) revealed that a continuous learning culture and self-efficacy have a positive and significant impact on training effectiveness.

Training Effectiveness and Off-Classroom Training

Training is an important investment in ensuring that trainees are competitive and have good knowledge and skills. The training program is applicable for university students, which enables them to improve their employability skills including communication, presentation, negotiation, and program

organizing skills. Training effectiveness refers to a trainee's knowledge, skills, and behaviour learned in a training session and their effective application on the job. Learning effectiveness has a closer relationship with the transfer of training. Environmental support is vital in achieving training program effectiveness (Mbarek & Zaddem, 2013).

Off-classroom study is defined as a situation where content delivery through learner-centred activities such as problem-based learning occurs outside of the classroom (Mason, Shuman, & Cook, 2013). Off-classroom training was organized to help students improve their knowledge in human resource management and indirectly sharpen their talent in handling and organizing a program. According to Sari (2010), the off-classroom study can assist to increase the positive activities of the students and decrease the negative ones. Students' motivation and learning quality indirectly grew. Their examination results also improved, showing good performance and thus achieving the school's goal. To ensure the effectiveness of the off-classroom training program, the organizer was required to study the analytical ability of outside potential as a learning source with a concept that aimed to reach, select the environment, analyse strengths and weaknesses, and also anticipate the problems that may occur.

Off-classroom training is more effective because it allows the instructor to incorporate more contents and materials, and the students will participate better in a training session as compared to the traditional classroom (Bishop & Verleger, 2013; Mason, Shuman, & Cook, 2013). Yaqoot, Noor, & Isa (2017) also found that contextual factors such as training environment and trainees' motivation have a positive impact on training effectiveness. It is parallel to the findings of Shahrooz (2012) who discovered that a trainee's awareness of the training objectives, training continuity, and control of good and orderly training programs improved training effectiveness. Proper implementation and designation of training will assist trainees' involvement and attitudinal changes while allowing them to apply and adapt new skills and knowledge quickly.

Theoretical Framework

Fig.1 illustrates the interrelationship between the dependent and independent variables. Training effectiveness is the dependent variable whereas lecturer support and self-efficacy are the independent variables. The study underpins training engagement theory where the theory can visualise the multilevel antecedents of training effectiveness (Sitzmann & Weinhardt, 2018). The present study only focused on the 'goal establishment' stage where the macro level of analysis (the lecturer support who provides training initiatives) and between-person level of analysis (students' self-efficacy) will help the training to be effective as the goal is being established by the participants, which is the students.
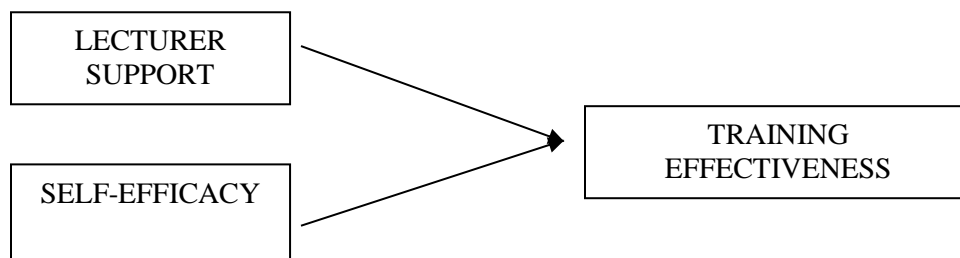
(Adapted from: Lin & Shariff, 2008; Madagamage et al., 2014; Park et al., 2018)

Figure 1: Theoretical Framework of the Study

METHODOLOGY

In conducting the study, the researchers used a quantitative research method by using the survey questionnaire as the instrument. The scope of study was agriculture students in a public university at southern Malaysia. The students were taking human resource management course in their second year of study, and they were required to attend an off-classroom training to fulfil the course requirement. Unlike their agricultural courses, the human resource management course involves a lot of reading thus off-classroom activities are important to enhance students' understandings. The total number of students were 314 and the questionnaire was distributed to all students. Out of 314 returned questionnaire sets, only 74% were usable for statistical analysis. In the questionnaire, the researcher used a nominal scale for the demographic profile section and the Likert scale rating for other three sections. The questionnaire used in this study was adapted from the literature to ensure its reliability. Table 1 shows the original sources used to develop the questionnaire for the study.

Table 1: Sources of Questionnaires

Variables	No. of items	Sources
Demographic profile	4	The researchers
Lecturer support	5	Madagamage et al. (2014)
Self-efficacy	5	Madagamage et al. (2014)
Training Effectiveness	5	Lin and Shariff (2008)

FINDINGS

The researchers analysed data for the study using the IBM-SPSS v24 software. Selected tests were run to answer the research questions and achieve the research objectives. The tests include reliability test, descriptive analysis, and multiple regression analysis. Table 2 shows the reliability analysis values for the instrument used in the study. The Cronbach's Alpha values were 0.866 for lecturer support, 0.879 for self-efficacy, and 0.871 for training effectiveness, indicating that the questions used to measure all variables in the study were good and reliable (Sekaran & Bougie, 2016).

Table 2: Cronbach's Alpha Results

Variables	No. of items	Cronbach's Alpha Value
Lecturer support	5	0.866
Self-efficacy	5	0.879
Training Effectiveness	5	0.871

Table 3 shows the descriptive analysis of the respondents for the study. Out of 253 respondents in the sample, 114 respondents (45.1%) were male while 139 respondents (54.9%) were female. The respondents were from twelve groups in their diploma batch, represented by the letters A to J. All of the respondents were agriculture students in their second year of study. Group J had the highest number of students (10.3%) as compared to other groups. There were 62.8% (159) respondents who had working experience whereas the rest (94 students) had no working experience. During the three-year period of the agriculture course, students will experience two internship sessions during their semester break. They have to work at the university's farm during their second year and at outside plantation companies before

they start their third year in-classroom lessons. The course teaches the students to be more independent and better in teamwork and other soft skills.

Table 3: Summary of Descriptive Analysis of Respondents

Elements		Frequency	Percentage (%)
Gender	MALE	114	45.1
	FEMALE	**139**	**54.9**
Age	19	5	2.0
	20	241	**95.3**
	21	2	0.8
	22	5	2.0
Group	A	22	8.7
	B	25	9.9
	C	21	8.3
	D	21	8.3
	E	17	6.7
	F	24	9.5
	G	17	6.7
	H	18	7.1
	I	21	8.3
	J	26	**10.3**
	K	17	6.7
	L	24	9.5
Working experience	Yes	159	**62.8**
	No	94	37.2

To answer the research questions posed in the study, the researchers used correlation and multiple regression analysis.

RQ1: Is there any significant relationship between lecturer support and training effectiveness?
RQ2: Is there any significant relationship between self-efficacy and training effectiveness?

Table 4 shows that self-efficacy has a higher correlation with $r = 0.795$, $p < 0.000$ compared to lecturer support with a lower correlation value of $r = 0.730$, $p < 0.000$. It shows that both variables (lecturer support and self-efficacy) have a moderate positive relationship with the dependent variable (training effectiveness).

Table 4: Pearson's Correlation Coefficient Analysis

		Training Effectiveness	Lecturer Support	Self-Efficacy
Training Effectiveness	Pearson Correlation	1	**.730**	**.795**
	Sig. (1-tailed)		.000	.000
	N	253	253	253
Lecturer Support	Pearson Correlation	.730	1	.716
	Sig. (1-tailed)	.000		.000
	N	253	253	253
Self -Efficacy	Pearson Correlation	.795	.716	1
	Sig. (1-tailed)	.000	.000	
	N	253	253	253

**. Correlation is significant at the 0.01.

RQ3: What is the most influential factor that contributes to the training effectiveness of agriculture students?

Multiple regression analysis shows the strength of the relationship between the independent variables studied, which are lecturer support and self-efficacy. Table 5 shows the value of F is 271.783, which indicates that the relationship between the variables is highly significant. R-square is the percentage of variance of the dependent variable described by the variance of the independent variables (Sekaran & Bougie, 2016). Table 6 shows that R-square in this study is 68%. Hence, it indicates that both independent variables, which are lecturer support and self-efficacy, explain 68% of the variance of the dependent variable, which is training effectiveness. Meanwhile, the other 32% is explained by an unidentified variable.

Table 5: ANOVA for Regression Analysis

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1119.343	2	559.671	271.783	.000[b]
	Residual	514.815	250	2.059		
	Total	1634.158	252			

a. Dependent Variable: Training Effectiveness
b. Predictors: (Constant), Self-efficacy, Lecturer Support

Table 6: Model Summary for Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.828[a]	.685	.682	1.43501	.685	271.783	2	250	.000

a. Predictors: (Constant), Self-Efficacy, Lecturer Support
b. Dependent Variable: Training Effectiveness

To determine which variable contributes more in the relationship of lecturer support and self-efficacy with the dependent variable that is training effectiveness, the researchers compared the value of Beta (β). Based on Table 7, the stronger predictor for training effectiveness is self-efficacy with $\beta = 0.546$, while lecturer support comes in second with $\beta = 0.339$. Therefore, self-efficacy is the more important factor that contributes to training effectiveness of agriculture students.

Table 7 - Coefficient of Regression Analysis

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.483	.756		3.284	.001
	Lecturer Support	.339	.052	.330	6.493	.000
	Self-Efficacy	.546	.050	.558	10.972	.000

a. Dependent Variable: Training Effectiveness
a. Predictors: (Constant), Lecturer Support, Self-efficacy
b. Dependent Variable: Training Effectiveness

DISCUSSION

The findings of the study proved that both the independent variables (lecturer support and self-efficacy) have an influence on the dependent variable (training effectiveness). Self-efficacy has more influence on training effectiveness as compared to lecturer support. The reason is that self-efficacy is within the person and an internal factor that drives the students to attend and understand the training program. In line with the self-determination theory in psychology, the inner-self factor will influence the most in creating effectiveness and awareness of an individual to execute an action (Deci & Ryan, 2000). On the other hand, the macro level analysis or external factor, which is lecturer support, should not be neglected. It is proven that lecturer support also has a significant impact on training effectiveness. Besides having influence over the students, lecturers must play an important role in encouraging the students to attend the training programs and apply the knowledge they gained from those programs in their study. The lecturers are role model for students by attending and organizing suitable training programs at the university.
Nevertheless, the extension of the training engagement theory is the within-person analysis where the participants will establish mastery of goal. It means that the students will strive to complete training and enhance their knowledge and skills. They perceived that the training is worthwhile and important to themselves. In order to get there, the lecturers should play their roles in explaining to the students the importance and the benefits of attending to such trainings. The ambidexterity of student-lecturer relationship will help a training to be more effective. The lecturers also should avoid emphasizing punitive actions to the students for the absence but inspiring the students to join the off-classroom activities. The activities not only for them to score the course they were taken, but they might use the skills and knowledge in their career in the future or to survive in their daily lives.

CONCLUSION

It is proven that both lecturer support and self-efficacy influence the training effectiveness of off-classroom training programs. Future research should consider investigating the effectiveness of off-classroom digital training programs in their study. Also, another future research avenue is off-classroom training for school students, as we are living in an era where the focus has shifted towards student-centered learning.

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