Impact of Perceived Teachers' Competence on Students' Performance: Evidence for Mediating Role of Achievement Motivation among Vocational Colleges Students' in Malaysia

Rosmaria Omar, Nor Aniza Ahmad, Siti Aishah Hassan, and Samsilah Roslan

***Abstract* -- The purpose of this study was to explore the impact of perceived teachers' competence on students' performance mediated by achievement motivation through students' perception among the vocational colleges students' in Malaysia. The sample for this study consists of 360 students from 13 selected vocational colleges all around Malaysia. Participants were between the age of 16-18 years old. Instrument for Teachers' Competency (ITC) and Achievement Motivation Scales (AMS) that have been adapted and adopted from the original version were used to measure the perceived of teachers' competence and achievement motivation, respectively. The data was analyzed using AMOS version 22.0 through Structural Equation Modeling (SEM) Analysis indicated that perceived of teachers' competence was predicted the students' performance and achievement motivation. The model fit was p=.000, RMSEA=.062, GFI=.925, CFI=.954, TLI=.936 and CMIN/df=2.397. Therefore, this study concluded that achievement motivation has a mediation effects on the relationship between teachers' competence and students' performance.**

***Keywords* – Teachers' competence, Students' performance, Achievement motivation, Vocational college students'**

I. INTRODUCTION

As Malaysia continues its ambitious journey towards becoming an advanced nation by 2020, the government was adopted Blue Ocean Strategy in its strategic planning and operations to deliver programs and services, to the public, that are high impact, low cost, and rapidly executed. The transformation of Technical and Vocational Education (TVET) upgrades some technical and vocational schools to vocational colleges in the beginning of 2013. The transformation is aimed of providing students with certain types of knowledge and skills that are expected to prepare students for specific jobs or types of work, often including practical and procedural activities. It enables them to come up with new ideas and skills. Generating new ideas is a key tenet of modern society.

As according to Finch and Crunkilton (1999), Technical and vocational education and training (TVET) refers to education and training that prepares persons for gainful employment.

Consequently, teachers are meant to involve and start preparing themselves to adapt to this new environment of transformation. Teachers need to be competent enough both in academic and technical fields. Teacher competency offers practical strategies and practices, in which to guide teachers in ways to improve student performance and the quality of the work experience. According to Jackson (1990), teachers must have expertise in a wide-ranging array of competencies in an especially complex environment where hundreds of critical decisions are required each day in order to maximize student learning. Therefore, it needs professionals who are culturally competent, talented, innovative and creative problem solvers, skilled and critical thinkers. As stated by Charlotte (2014), there were four domains in teacher competencies which consist of preparation, classroom environment, teaching, and teacher's responsibilities.

II. LITERATURE REVIEW

The quality of the teachers is decisive for the success of students. The quality of education depends on the quality of teachers (Châu, 1996) particularly in aspect of teacher competency. A Higher Education Leadership Academy (AKEPT) 2011, was conducting a qualitative study about teaching element in Malaysia. Over 125 observations of teacher competency in 41 schools throughout Malaysia, there were only 12% of teaching instruction in term of pedagogical practices delivered to a high standard, meanwhile, 38% were achieved a satisfactory standard, and 50% unfavorable. The research found that, there were inactive teaching styles, whereby, most of the teachers preferred teacher-centered lecture method compared to student-centered learning. They focused on student understanding but did not encouraged students with higher-order thinking skills (Tajularipin, Vickneswary, Diwiyah, Raidah, & Suzieleez Syrene, 2017). This scenario will affect the level of teacher competencies.

It is therefore, the Ministry of Education Malaysia (MOE) (2013), highlights the importance of relationships betw een student performances and teacher competence. For this purpose, teachers were evaluated using a new teacher evaluation instrument that was initiated in 2014. The dimensions that have been measured was an assessment of teaching and learning, professional activities outside the classroom, and teacher's professional contribution to community. Apart from that, teacher

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competency will also increase the level of students' motivation to learn.

As defined by Ryan & Deci (2000), achievement motivation is as an effort and individual desires to learn and work hard to achieve excellence results either in the academic fields or skills. Researcher Aydin & Coskun(2011) found that achievement motivation is one of the important elements to show either the students have reach their level or not in their achievement. Achievement motivation influences students' behavior and action. Hence, the students would tried their best to increase an effort in academic fields and skills especially for vocational colleges students (Mohd Effendi Ewan, Ahmad Zamri, & Nordin, 2015; Mohd. Rustam et al., 2014; Nasrin & Begum, 2013; Noor Erma & Eu, 2014). The study was supported by Siti Nor Idayu & Mohamad Hisyam (2015) who found that intrinsic motivation influences students to do better in their On Job Training (OJT). While, Lee (2010) reported that repeated reinforcement by teachers encouraged students to be more motivated in their study. Researcher Nasrin and Begum (2013) also agreed that there was a significant relationship between achievement motivation and students achievement either in academic fields or skills.

III. METHODOLOGY

This study is a quantitative correlation research. All participants were required to answer questionnaires which had been distributed and administered by the researcher. A permission to conduct the study was obtained from the Division of Research and Development (EPRD), Ministry of Education, Division of Technical and Vocational Education (BPTV) and subsequently from administers of each vocational colleges involved.

IV. THE PARTICIPANTS

The samples of this study were 360 students from 13 vocational colleges all around Malaysia. Samples were chosen by random stratified sampling technique. The sample size was determined by using sampling method of (Bartlett, Kotrlik, & Higgins, 2001; Cochran, 1977). A random stratified sampling technique was used to ensure the research samples were balanced with each layer of research population (Reeves, 1993).

V. DATA COLLECTION

All the data were collected using questionnaires through two instruments as follows:

i. Teacher Competency (IKG)vp by (Nor Aniza, Siti Aishah, Lay Nee, & Nor Hashim, (2016) which was consists of 94 items in four domains; planning and preparation (11 items), classroom climate (28 items), teaching (39 items) and profesional responsibilities (20 items).

ii. Achievement Motivation by (Vallerand, 1992) which was consist of 28 items in three domains; intrinsic motivation (12 items), extrinsic motivation (12 items) and amotivation (4 items).

While to measure student's performance, all the data were collected from Operation Unit, Technical and Vocational Education, Ministry of Education Malaysia.

VI. FINDINGS

Findings were based on the objective of the study:

Direct Relationships between Teacher Competency and Achievement Motivation with Students' Achievement

Hypotheses testing analysis was conducted to measure a direct relationship through Structural Equation Modeling (SEM) have showed that 31 percent of R^2 value were determined by teacher competency and achievement motivation. There was a positive significant relationship between teacher competency and students' achievement (β=.724, p<.001) and achievement motivation showed that there was a negative significant relationship between achievement motivation and students' achievement (β=-.450, p<.001). While, there was a positive significant relationship between teacher competency and achievement motivation (β=.647, p<.001).

TABLE 1: DIRECT RELATIONSHIPS FOR HYPOTHESES TESTING ANALYSIS

No.	Hypotheses	Relationship
1.	H1: There was a significant relationship between teacher competency and students' achievement.	TC → SA
2.	H2: There was a significant relationship between achievement motivation and students' achievement.	AM → SA
3.	H3: There was a significant relationship between teacher competency and achievement motivation.	TC → AM

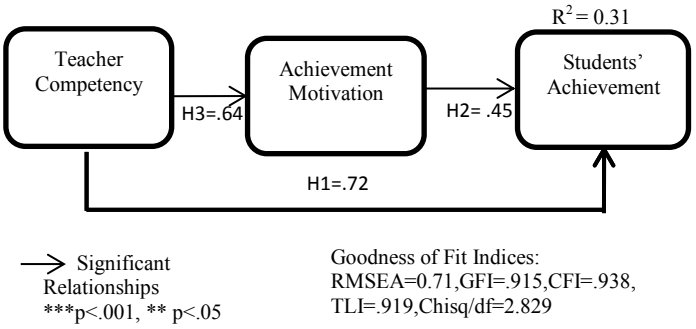

Figure 1. Results of Hypotheses Testing For Direct Relationships

Mediating Effects of Relationships between Teacher Competency and Achievement Motivation with Students' Achievement

Mediating effects was tested by Multi Modal Analysis (MMA) through Structural Equation Modeling (SEM) with

Amos. According to Hayes and Preacher (2010) to identify the mediating effects, indirect relationships must excluded zero values and mediator will occurs in each of the relationships when direct relationships and indirect relationships has been measured. Full mediation will occurs when indirect relationships was insignificant but direct relationships was significant (Pearl, 2001; Wang, Jackson, Gaskin, & Wang, 2014).

Partial mediation effects occurred when indirect relationships (β=0.124) > direct relationships (β=0.117). Table 2 showed that achievement motivation as a mediator in relationships between parental involvement and students' achievement when direct relationships was insignificant (*p*=.936) towards students' achievement after achievement motivation was included in the model. While, indirect relationships showed a significant value (*p*=.001). At the same time, there is decreasing in *Beta (β)* values which is .323 for direct relationships model $(X \rightarrow Y)_1$ to .005 for full mediation model $(X \rightarrow Y)_2$.

TABLE 2: MEDIATING EFFECTS OF RELATIONSHIPS BETWEEN TEACHER COMPETENCY AND ACHIEVEMENT MOTIVATION WITH STUDENTS' ACHIEVEMENT

Path Hypotheses	B	SE	Beta	CR	P
Direct Relationships Model:					
Teacher Competency → Students'Achievement $(X \rightarrow Y)_1$	.74	.12	.58	6.35	00
Full Mediation Model:					
Teacher Competency → Students' Achievement $(X \rightarrow Y)_2$	.69	.10	.32	6.63	.00
		.11	.55	7.39	.00
Teacher Competency → Achievement Motivation (X→M)	.80	.07	(.28)	(3.62)	.00
Achievement Motivation→ Students' Achievement (M→Y)	(.25)				

* Results: There is partial mediation occurs

VII. DISCUSSION

From the results, there were significant relationships between teacher competency and achievement motivation, teacher competency and students' achievement, and achievement motivation and students' achievement. Teacher's practice in classroom such as preparing class early in the morning, having a good pedagogy skills, maintaining classroom environment and doing their profesional responsibilities towards students will motivate the students to understand the lessons effectively. Students will give their attention in their study and encourage them to think on what is the benefits of their studies for the future. It is supported by Furrer & Skinner (2003) were stated that teacher's involvement was central to children's experience in the classroom and that teacher provision of both autonomy and support optimal structure predicted children's motivation throughout the year. This indicates that students-teacher relationship will improve the achievement among the students. Previous study by Guvenc (2015) also indicates that motivational support provided by teachers has an effect on the students' motivation orientation and active class participation. There are many factors that will contribute to student's achievement for instance motivation, parental involvement and teaching practices. Research on factors influences student's achievement in technical and vocational school in Johor founds that teaching styles was contribute to student's achievement (Noor Erma & Eu, 2014).

While, motivation can be defined as the driving force behind all the actions of an individual. The influence of an individual's needs and desires both have a strong impact on the direction of their behavior. Motivation is based on our emotions and achievement-related goals. There are also more negative forms of motivation. Achievement motivation can be defined as the need for success or the attainment of excellence. Individuals will satisfy their needs through different means, and are driven to succeed for varying reasons both internal and external. The findings between achievement motivation and students achievement (AM→ SA, β=-.450, *p*<.001) was found that there was a significant relationships between achievement motivation with students' achievement. However, the relationships was negative which contradicted with the theory of achievement motivation (McClelland, 1985). This negative relationship means that when students' motivation was increased, at the same time students' achievement will decrease. This situation occurred because of students' achievement among vocational colleges were measured for both academic and skills. In vocational colleges, students' were exposed with 40 percent academic and 60 percent skills. Skills were required for students to have high competency and commitment at the colleges. Even though, the motivation among students was high, but the factor was not influenced the skills that they have to learn. There were many external factors that encourage students' to excel in their education for example peers and environmental (Zaidatol Akmaliah & Afsaneh, 2011).This finding supports a research by Elliot & Church (1997) that proved competency was rejected to avoid performance goals and as a result the achievement motivation among students will decrease even though their performance were high. Competency among students will cause low achievement especially in academics. This findings were in line with research by Habibah & Wan Rafaei (1995) among the universities students which negatively significant in coursework.

This finding was lead to contribute the body of knowledge in theoretical aspect. Previously, achievement motivation theorists focus their research attention on behaviors involving competence. Here, the aspect of competency was measured in students' achievement among vocational colleges' student. They were aspire to attain competence or may strive to avoid incompetence, based on the earlier approach-avoidance research and theories. The desire for success and the desire to avoid failure were identified as critical determinants of aspiration and behavior by a theorist, McClelland (1985) when he proposed that there were two kinds of achievement motivation, one oriented around avoiding failure and the other around the more positive goal of attaining success.

Students' will perform from a given task by a teacher. A task involvement goal that focused on the development of competence and task mastery was one the approach, and the other being a performance or ego involvement goal directed toward attaining favorable judgments of competence. The avoidance orientation involved an ego or performance goal aimed at avoiding unfavorable judgments of competence.

Presently, achievement goal theory was the predominant approach to the analysis of achievement motivation. First, most theorists institute primary orientations toward competence, by either differentiating between mastery and ability goals or contrasting task and ego involvement. A contention was raised toward the achievement goal frameworks on whether or not they were conceptually similar enough to justify a convergence of the mastery goal form (learning, task involvement and mastery) with the performance goal form (ability and performance, ego involvement, competition). Secondly, most modern theorists characterized both mastery and performance goals as approach forms of motivation, or they were failed to consider approach and avoidance as independent motivational tendencies within the performance goal orientation (Elliot & Church, 1997). The type of orientation adopted at the outset of an activity creates a context for how individuals interpret, evaluate, and act on information and experiences in an achievement setting. Adoption of a mastery goal is hypothesized to produce a mastery motivational pattern characterized by a preference for moderately challenging tasks, persistence in the face of failure, a positive stance toward learning, and enhanced task enjoyment. A helpless motivational response, however, is the result of the adoption of a performance goal orientation. This includes a preference for easy or difficult tasks, effort withdrawal in the face of failure, shifting the blame of failure to lack of ability, and decreased enjoyment of tasks. Some theorists include the concept of perceived competence as an important agent in their assumptions. Mastery goals were expected to have a uniform effect across all levels of perceived competence, leading to a mastery pattern. Performance goals can lead to mastery in individuals with a high perceived competence and a helpless motivational pattern in those with low competence (Elliot & Church, 1997).

While, achievement motivation as a mediator between parental involvement and students' achievement were also in line with findings by (Chen et al., 2015; Gonida & Cortina, 2014; Hayes & Preacher, 2010). They were agreed that teacher competency was influenced directly but when achievement motivation comes in between, it would give a better impact in students' achievement. Students would give more effort because they were cleared with their goals and fully supported by teachers. Encouragement, attention and collaboration by teachers were part of the intrinsic and extrinsic motivation that was measured in this study. Researcher Charlotte (2014) also found that teachers who always maintained all the dimension in teaching observations to the students will encourage them to get better results in examination. Competency value from teachers will give better direction to students and comprehend them why they need to learn and go to colleges.

VIII. CONCLUSION

This paper was provided a short discussion on the findings of teacher competency, achievement motivation and students' achievement in this research. There were relationships between variables that have been measured and the model was achieved the goodness of fit indices. On the other hands, the model was contributed as an additional literature on teacher competency and the body of knowledge on achievement motivation theory in the context of Malaysian education. However, further study should be conduct to improve the implementation of teacher competency especially when it was related to achievement motivation in order to increase the achievement among the vocational colleges.

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