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Self-Efficacy and Academic Performance of Secondary Schools Students in Perak: An Exploratory Outlook

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Abstract

Self-efficacy is an important entity in elevating someone to a better level. Without efficacy, individuals will not be able to face difficulties in life. In the context of secondary school students in Perak, there were different perspectives on self-efficacy between male and female students. Female students were more optimistic when facing difficulties in their studies compared to male students. This may be due to the nature of gender itself. They were inherently easier in putting trust to a certain degree higher than male students. Trust and confidence were easily developed among the female students. They easily absorb the words of encouragement and motivation given by teachers, parents and others to them. They can be easily shaped by the circumstances while male students were rather restricted to their original values. However, male students exhibited a higher level of efficacy in mathematics, computer and social science compared to the female students who had a higher level of efficacy in the literature and language. Although students were different in term of gender, the efforts to strengthen the quality of students' academic achievement in Malaysia should always be balanced without any comparison between students' gender. Students' success is our success. Their failure in academic should be overcome so that the future of the state is not threatened by those who were reluctant to acquire knowledge.

Keywords: Self-efficacy, Academic Achievement, Gender, National Secondary Schools

Self-Efficacy

Self-efficacy generally refers to the trust an individual has towards himself to produce certain tasks or responsibilities properly and effectively (Bandura, 1977; Lee & Mendlinger, 2011). Self-

efficacy is an evaluation of the ability to perform a certain behavior in certain circumstances (Pajares, 1994). Academic self-efficacy refers to students' assessment towards their own ability to organize and implement learning behavior to achieve the chosen level of academic achievement; for example, to pass the exam (Bandura, 1986, 1997). Yusuf (2011), on the other hand, argues that academic self-efficacy makes students to always think about the most effective ways to accomplish each task. It refers to the level of confidence and self-belief of a student to complete a task and to produce something at its best according to their respective capabilities. Self-efficacy is also a crucial aspect in achieving an outstanding achievement in all fields explored by students; including academic.

Many studies have proved that self-efficacy or optimism (self-confidence) can give a positive impact in many aspects including students' academic achievement (Bresslere et al., 2010; Kluemper et al., 2009; Mahyuddin et al., 2006; Siddique et al., 2006). High self-efficacy will cause teenagers to always have good behavior and will not show any problematic personality. Women who suffer from miscarriage will be better if they have high efficacy. Similarly, counselors with high efficacy will be able help their clients more effectively. Self-efficacy will also make one able to withstand pain and constantly improve their health, to quit smoking, put out of one's mind about the cancers they are suffering from, leave the habit of drinking alcohol, and reduce their sensitivity to the effects of HIV (Philipchalk, 1995; Yaacob & Shah, 2009),

In other situations, employees who are always optimistic will have powerful expectations on their ability to succeed despite the challenging new work environment. They will constantly feel confident of success. These types of workers have a high sense of responsibility in carrying out any task by demonstrating an earnest effort. They are always positive in order to achieve high performance goals. Efficacy is also a critical element that represents a personal assessment of the ability to meet the standards of an organization. Efficacy is also important in training workers to improve their skill level to achieve better performance (Yaacob & Shah, 2009). An individual decision in choosing the right career is also influenced by the ones high level of self-efficacy (Abdul Rahim, 2010).

In this context, the results of a study conducted by Hamat (2011) regarding self-efficacy in preaching showed that the level of appreciation towards Islam and self-efficacy in preaching is very high among the movement of Orang Asli community in Negeri Sembilan. In preaching, their passion and dedication to influence the target group did not only depend on the method used but also demanded one's extent of self-efficacy to deal with these groups. To achieve the target, every preacher should feel happy with his chosen career. They always show a positive attitude towards the involvement of their career as a preacher. The negative attitude of the society will have no impact or even discourage them to continue preaching.

In terms of academic achievement, a study by Sugahara et al (2010) proved that programs or courses such as accounting give impact in improving one's self-efficacy. Other factors such as work experience and the use of English language as a native language also influence the high self-efficacy in improving the general skills of students. When examined in detail, the self-efficacy

model that recommends expected self-goals also specify that self-efficacy does contribute to one's achievement (Betz, 2004). In addition, efficacy could also be a factor to mediate an outcome. Self-efficacy has been proven as a reliable predictor that can increase the one's motivation and performance in carrying duties. Due to the importance of achievement efficacy, this theory has been widely applied in fields such as education, human resource management, organizational behavior, sport, health and many others.

In the context of the learning environment for secondary and primary school students, students with high self-efficacy regard failures as not putting in enough efforts, while those with low efficacy regard failure as their incompetence to achieve some things successfully (Bandura, 1993; Collins, 1982). Hines and Kritsonis (2010) stated that students who learned from teachers who have high self-efficacy obtained highest test scores than students who had teachers with low efficacy. The higher the students achievement in the CGPA, the more conservative and cautious these students in exams. Students who are more pessimistic in their achievement will allocate less time to study (Tho, 2006).

According Heidari et al (2012), students with high level of self-efficacy have a positive and significant relationship with the vocabulary learning strategy and the memorizing strategy compared to students with low self-efficacy. These findings demonstrated the importance of nurturing self-confidence in students to ensure the effectiveness of learning and their achievements. Self-efficacy is also an important entity that distinguishes between high achievers, intermediate achievers and low achievers (Usher & Pajares, 2006; Yip, 2012). A study by Bembenuity (2011) also proved that there is a positive correlation between homework assignments given by teachers with self-confidence and the sense of responsibility in students. He stated that the assignments and self-learning skills or self-regulated learning can help students' academic performance, while helping them to improve time management and learning environment effectively as well as maintain one's focus on learning. This in turn can help students to improve their efforts in realizing the learning system and a better quality and excellent academic achievement.

Furthermore, it is also concerned that students who have high self-efficacy (in reading and writing) often adopt strategic and in depth learning strategies, while students with low self-efficacy level only practice basic approaches. They consistently make changes in their learning approach from time to time and feel comfortable to practice more overtime learning. However, students who have low self-efficacy showed no change in their learning approach (Prat Sala & Redford, 2010). In fact, students' trust towards their academic ability is greatly influenced by their perceptions towards the assessment task, whether it is compatible with the planned learning system and based on validity, reliability, and diversity. All of this has a significant positive effect on students' self-efficacy and confidence (Alkharusi et al., 2014).

The findings of a study also explained that self-efficacy is a determinant factor that affects work performance the most and can be applied in the local context and public services (Halim, 2012). Self-efficacy factor is identified as a full mediator to the influence of achievement

motivation on work performance. It is as an extremely important component to perform a given task until the desired level of performance is achieved.

Regardless of domain, research shows that self-efficacy helps to predict motivation and performance, and studies testing causal models highlight the important role played by self-efficacy. Students with high level of self-efficacy also possess a higher level of academic motivation. In this case, difficult goals enhanced motivation. Students who received difficult goals displayed the highest self-efficacy and performance (Schunk, 1995). In other words, self-efficacy and motivation are the important entities in enhancing students' academic excellence.

Basically, there are two important components in self-efficacy should be emphasized by every individual to ensure things to do can be done steadily and confidently. Both components mentioned are academic optimism and encouragement of self-efficacy. Both of these components are very important and constantly emphasized by previous researchers in their writings based on surveys and observations that had been carried out. Thus, in order to generate individual self-confidence against any burdening academic tasks, students need to instill self-confidence and trust towards their own abilities. Without a solid foundation of confidence, students may not be able to face the challenges of education and their envisioned ambitions may go down in the middle of the road.

Academic Optimism

Academic self-efficacy or academic optimism is defined as the ability of students to complete assignments, regulating learning activities, and meet the achievement expectations and goals (Zare & Mobarakeh, 2011). Academic optimism is the heart in the model of achievement and school success. This concept is in line with the three essential components of a school's success which are efficacy, confidence and academic emphasis (Wu & Hoy, 2013). The concept of self-efficacy is also considered to be one of the factors that make a huge impact on the teaching and learning process (Ates, 2011). This academic optimism is rooted from social cognitive, self-efficacy, and organizational culture literature (Bevel & Mitchell, 2012).

Students believed that their academic self-confidence is inculcated through 'verbal' persuasion and achievements. They also noted that the psychological state and existing experiences can help them to develop self-efficacy from the lowest level (Arslan, 2012). The students also thought that their efficacy towards academic progress increase and improve after attending certain courses (Ates, 2011). According Ortactepe (2006), Bandura stated that the confidence of individuals towards their efficacy can affect all actions, choices, initiatives, efforts, persistence, pressure, and their experiences in dealing with environmental demands and achievements. Therefore, the level of an individual efficacy must be studied as a determinant of educational excellence. Self-confidence determines the way humans think, feel, act, and carry out their respective roles (Bandura, 1994).

In another context, students who receive career information more often have a higher level of career decision self-efficacy than students who receive less frequent career information. The more information gathered will contribute to the increase of career decision self-efficacy

(Abdul Rahim, 2010). However, according to Stupnisky, Renaud, Daniels, Haynes, and Perry (2008), there are many students who have a low level of learning environment control. These students are categorized as less responsible, easier to fail academically, and also easier to decide to give up and stop learning. However, students who have a high level of learning environment control use more effective learning strategies that will guarantee the quality of excellent academic achievement. They are more optimistic about the subjects that challenge their academic ability.

Academic optimism owned by students indeed has a significant impact on their performance (Moran et al., 2013). For example, a study conducted by Kirby and DiPaola (2010) on students' academic optimism in 35 urban schools category in a region in Virginia, USA found that their students can be successful even if hindered by low socioeconomic status. With the collectively community involvement and integrated cooperation by the local community, students may be able to reach a better chance to achieve academic excellence at a higher level even though they are overwhelmed by poverty.

Hence, in order to ensure the efforts in achieving academic excellence, optimism component should not be underestimated or trivialized. Students should have a solid foundation of self-confidence so that every challenge and obstacle in the quest of gaining knowledge can be faced successfully. Being optimistic towards self-ability is the basis of success in any field that one wants to endeavor.

Encouragement towards Self-Efficacy

Encouragement towards self-efficacy is also an important component that needs to be focused on. In this case, teachers should always give encouragement and advice to students; both in the classroom and in informal situations outside school hours. Teacher's leadership behavior often indicates a positive and significant relationship upon students' creativity. Teachers need to help their students properly, determine their activities and identify the needs and resources required to generate and develop new ideas. In addition, teachers should make an assessment of the students' efforts and encourage their involvement in the learning process. By doing so, students will tend to focus their full energy and time to perform each task.

In addition, teachers should allow students to choose activities or programs that they are interested in, or try to provide students with projects that they find interesting and challenging. In other words, it is important to determine the appropriate level for students in order to achieve level of efficiency and creative achievement. Teachers should have skills in solving technical problems to increase students' creativity. Students need a facilitator who has the potential to help them in solving their tasks. Teachers should also take the time to evaluate students' works and provide them with constructive feedback (Afshari et al., 2012).

The results of the *SEM* analysis (*Structured Equation Modelling*) of a study conducted by Sahil & Hashim (2011) suggested that supports from teachers and parents have a significant relationship towards adolescents cognitive growth through their academic self-efficacy that will

in turn support the full mediation model, which also stated that the peer support also has a direct relationship with their cognitive growth. Teachers play an important role and contribution in providing the academic confidence and motivation to students which will affect their academic performance.

A teacher's role can actually be translated into different contexts. The role played by teachers will be able to produce a feeling of self-efficiency and a sense of security among teenagers in a classroom setting. This allows teenagers to use a strategy that will lead them to their cognitive relationship. Therefore, teachers need to be sensitive to the importance of instilling a sense of confidence and high self-efficacy among their students. Interesting teaching procedure will increase the students' confidence (Sahil & Hashim, 2011).

In this case, teachers motivate, structure and evaluate the students' learning process. Giving students motivation and structuring learning properly both can encourage students to make progress and create a positive interdependence among other students in the class. Giving rewards is a reinforcement step in the learning structure as a means to motivate students. The teacher's behavior is the application of behaviorism theory that shows encouragement given by teachers is an external motivation for students so that they can cooperate more actively (Slavin, 1995; Aziz, & Bustam, 2011).

In addition, teachers also need to have a high level of understanding about the content of their teaching, being able to apply learning that suits both the content and depth of standards with the curriculum objectives; have effective communication strategies to facilitate students' learning, able to use a variety of assessments, expert in analyzing effective evaluation methods, can provide meaningful feedback on students' works, have the ability to develop a marking scheme for measuring students' performance, able to convey the assessment information to students in order to motivate them to learn; and able to understand the issues of law and ethics related to assessment practices in the classroom (Alkharusi, et. al., 2014).

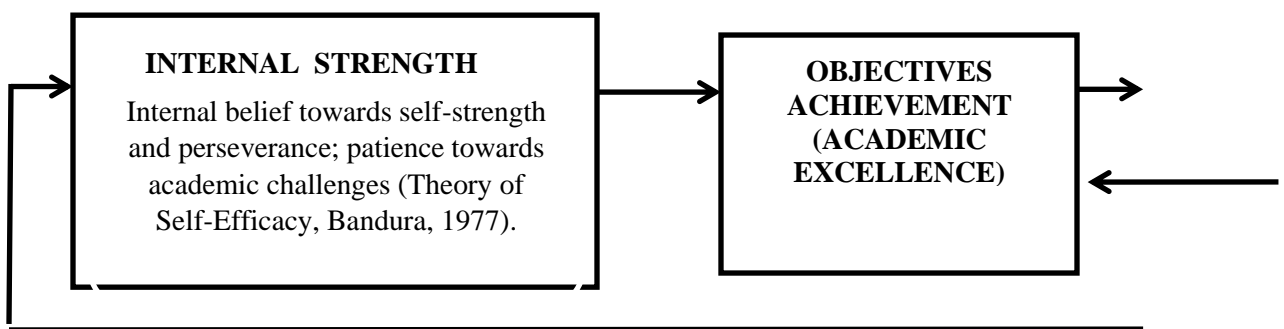
Therefore, school leaders, especially principals should cooperate with teachers to create and reform the school environment that can foster students' interest in learning and improve their academic performance better. Teachers need to maximize the time on the tasks and the opportunity to learn, remove the barriers to students' achievement, and providing tools and support to students in need. Teachers need to give additional practice to meet the demands and needs of all students. For schools that are located in the cities especially, where teaching and learning are often pressured by various other challenges, it is important for school leaders to put a time limit to provide space for teaching and learning process to be the maximum as possible. Teachers need to be given guidance, specifically in building a serious learning community to create a generation of students who cooperate in meeting the high expectations of academic success (Kirby & DiPaola, 2010; Slavin, 2001).

For schools that adopt effective collective efficacy, teachers those schools will continuously monitor students with learning disabilities. Teachers will try to make every effort to

address the students' problem and assist them in resolving it together. However, for schools that have teachers with low collective efficacy, they are more likely to point the finger at the students, parents and the community for the failure. These teachers also give up easily, and rarely seek for students with learning disabilities to provide guidance (Bevel & Mitchell, 2012).

Based on these findings, it is clear that self-efficacy plays an important role in strengthening the students in their studies. Regardless of what course and type of subjects studied in school, students need to have a strong self-efficacy level so that they are more confident in their learning no matter how difficult it is.

Theoretical Framework



In order to enhance students' self-confidence, self-efficacy theory plays an important role. Without a solid foundation of self-confidence, students will be easily shaken when they are facing difficult and challenging situations. Students' learning motivation strongly depends on the students' internal strengths. Those who are always optimistic towards challenges or failures will always assume that it is the first step to move forward. On the other hand, students who are pessimistic about their own ability will easily deterred, kept silent and finally sit back without doing any effort to improve their academic progress. In order to strengthen the students' efficacy, students' academic optimism and encouragement received from teachers are the critical components that need to be present among students as the building blocks for strong self-confidence. Academic optimism is born in the students themselves, while the encouragement received from the teacher is an external aid to help in boosting the motivation level of students' learning.

Problem Statement

Interests and tendency to increase concentration and motivation towards academic subjects are also different between genders (Edward, 2011). In western countries for example, the achievement gap among African American students shows a significant difference between genders in which the performance of female students is better than the performance of male students. The achievement gap is also evident in a number of variables including the graduation rates in colleges. Out of all male African Americans students enrolled in college, only 34.2% passed compared to 44.7% of female African Americans students who successfully graduated

(Education Trust, 2007; Uwah et al., 2008). Not only did they not graduate unemployed, but they were also engaged in immoral activities and imprisoned.

Based on the Malaysia Education Blueprint 2013-2025, the gender gap is also found to have widened and improved. Female students consistently outperform male students (The Malaysia Education Blueprint, 2013-2025, 2012). The difference in performance is already evident in UPSR and increases throughout the student's academic career. In addition, male students are more likely to drop out, resulting in a situation where the male-female ratio for a cohort decreases from Year 1 to Form 5. At university level, female students comprise 70% of the cohort entry in some universities. The gender gap has widened for PMR and SPM during the last five years and if the trend is allowed to continue it would constitute a risk of marginalization towards male students' achievement.

Factors such as 'active engagement' (Shernoff et al., 2003) and the influence of gender is among the factors to be studied because they have an influence on the effectiveness and increase of student academic achievement. In order to deal with this problem, the Ministry of Higher Education has allocated grants to the universities to conduct studies and research on gender imbalance upon entering higher education institutions. Studies such as these are also intended to identify the factors that cause the gender imbalance in which the number of female students outnumber male students.

Interviews with parents, teachers, and principals or head teachers also found that some male students struggle with the mainstream academic curriculum, and are more likely to lean towards vocational training or coursework. However, the lack of places in vocational and technical schools prevents this from occurring. This problem is compounded by the fact that male students from poor families are also more likely to drop out of school to start work early to support their families. The lack of involvement of male students in the education system raises the Ministry's concern. Marginalized youth is a source of social and political instability, as seen around the world in recent times. Malaysia needs to find a way to engage boys in education to ensure that they become a valuable source of human capital, rather than a cause for concern (Malaysia Education Blueprint, 2013-2025, 2012).

Therefore, this study aims to review students' level of self-efficacy towards their academic. The study also aims to identify whether there is a difference of students perspective based on gender on self-efficacy that influences academic achievement. Given this kind of research, it is expected that the level of self-efficacy of students in Malaysia will be refined and furthermore the learning problems and self-confidence of the students will be overcome and improved to a better level and effectiveness.

Research Analysis

The results of this test showed the comparison of self-efficacy from the perspective of male and female students. The hypothesis of the study was based on the research question: Is there a difference of perspective students based on gender on self-efficacy that affect academic

achievement? In order to determine the views of significance between male students and female students, the null hypothesis was developed and tested. The analysis used to mean differences between boys and girls is the t-test. This test is used to test the following hypothesis: There is no significant difference in students' perspective based on gender on self-efficacy that influences academic achievement.

Based on Table 1, it showed the results of t-test for self-efficacy for male and female students. The findings showed that there is a difference between self-efficacy among male students (mean = 4.02) and female students (mean = 4.15), a value $t(586) = -2.50, p < 0.05$. Based on the statistical analysis of this inference, the null hypothesis stating that there is no difference in self-efficacy between boys and girls is denied. These findings show that there is a difference between self-efficacy in boys and girls, and this is clearly evident in both components of self-efficacy that were studied.

Table 1

T-test. The Comparison of Self-Efficacy and Academic Performance According to Students' Gender

Components of Gender	Number	Min	Standard Dev	T-Value	df	Sig. Level	
Kendiri							
Academic Optimism	Male	233	4.00	0.65	-2.21	586	**0.02
	Female	355	4.11	0.58			
Self Efficacy	Male	233	4.04	0.83	-2.15	586	**0.03
Encouragement	Female	355	4.18	0.74			
Self-Efficacy	Male	233	4.02	0.63	-2.50	586	**0.01
	Female	355	4.15	0.58			

**Significant level at $p < 0.05$

A more detailed description of the components of self-efficacy showed that the mean score of male students for the component of academic optimism is 4:00, while the mean score for female students is 4.11. The t-test showed a significant difference where $t(586) = -2.21, p < 0.05$. Mean scores of boys against the component of encouragement of self-efficacy is 4.04 while the mean score for female students is 4.18. This component also showed significant differences at the stage 0:03 where $t(586) = -2.15, p < 0.05$.

Perception Differences between Male and Female Students against Components in Self Efficacy

This component demonstrates the differences between male and female students concerning self-efficacy. There is a difference in mean scores between male and female students, where female students showed higher mean scores than male students in all components of self-efficacy studied.

This is consistent with the findings by Abtholuddin (2013) who found a significant difference between male and female students in terms of levels of self-efficacy. Female students are seen

to have higher self-efficacy with (mean = 141.94) compared to male students with (mean = 114.45). In addition, it was also found that there was a strong positive correlation between the level of self-efficacy and learning skills among engineering students. If the self-efficacy increases, the skills learned will also increase. This may be caused by factors of the nature of one's own gender. Women are inherently easier to have trust values to a certain extent compared to men. The trust values meant here also include trust in oneself and also in others. In other words, self-confidence is built with ease within the female students. They are better at absorbing the words of encouragement and motivation given by teachers, parents and others to them. They are easier shaped by circumstances compared to male students who find it easier to hold fast to their original stands.

However, the study by Eric and Yu (2010) argue that male students who are more exposed to learning through ICT will become more confident and score more in their studies. Male students exhibit a higher level of efficacy in mathematics, computer and social sciences while female students have higher levels of efficacy than male students in literature and languages (Huang, 2013). However, these findings do not support the findings by Ali et al (2014) who found that there are no significant differences of perspectives between the genders concerning the self-efficacy of physical education teachers on the implementation of physical education lessons. Similarly, findings by Iskandar (2009) also found no differences in perspectives between gender and self-regulation of learning of 390 students from universities in Turkey. Results of a study conducted by Hassan & Rajoo (2012) are also not in line with these findings. They found that there were no significant differences in self-concept and well-being among the status of adolescence, gender and ethnic differences in adolescents.

Discussion and Conclusion

While findings vary among earlier researchers, efforts to strengthen and uphold the quality of students' academic achievement in Malaysia must nevertheless always be steady and balanced without differentiating the gender of the students. They should be helped irrespective of assistance in terms of energy, effort, time or money. Students are an invaluable national asset; they support the future of the Nation. Their motivation and self-optimism towards academic achievement should not be decreased and decayed. They must always be encouraged towards academic excellence throughout the time and phases. In their hands lie the fate of the future of the Nation, be it whether it will continuously soar to the pinnacle of excellence or fall down tumbling without defense. All parents, teachers, local authorities and non-governmental bodies should take the initiative in a holistic manner and take up the intensive mobilization efforts in strengthening the academic success of students. Success achieved by them will be success enjoyed together. Academic failure among students should be addressed so that the future Nation will not be threatened by those who are ignorant and do not wish to acquire knowledge. Science must be explored and conquered. Knowledge is a dignity highly regarded by the entire world.

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