Humanities & Social Sciences Reviews
eISSN: 2395-6518, Vol 7, No 5, 2019, pp 1262-1271
https://doi.org/10.18510/hssr.2019.75165

FACTORS AFFECTING MALAYSIAN INTERNATIONAL HIGH SCHOOL STUDENTS' PERFORMANCE: THE MODERATING EFFECT OF TRANSFORMATIONAL LEADERSHIP

Reem Ismeil Alnawasreh[1], Mohamed Yusoff Mohd Nor[2], Ashairi Suliman[3*]
[1,2,3]Faculty of Education, Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor Darul Ehsan, Malaysia.
Email: *ash860629@yahoo.com

Article History: Received on 30th August 2019, Revised on 30th September 2019, Published on 12th November 2019

Abstract

Purpose of the study: This study intends to scrutinize the factors affecting Malaysian international high school students' academic performance.

Methodology: 117 responses were collected randomly using a questionnaire. The data were analyzed using Partial Least Square (PLS)

Main Findings: The findings revealed that future goals as the most crucial factor besides peers' support, teachers' support and self-efficacy. Furthermore, it was also disclosed that TL moderated only the self-efficacy on Academic Performance

Applications of this study: The study can be used in the context of international high school field or any educational institution as academic performance is a very broad issue discussed in the educational setting

Novelty/Originality of this study: Students' academic performance (AP) is a crucial issue for parents, schools, researchers, and governments. A number of past studies have highlighted the local university students' AP with less attention given to the performance of international high school students. Thus, this study provides insights pertaining to international high school students

Keywords: *Academic performance, Self-efficacy, Peer support, Future goals, Teacher support, Transformational leadership.*

INTRODUCTION

Academic performance (AP) is an appealing issue discussed widely and caught the attention of researchers, educational institutions and governmental policymakers (Nik Mustafa et al., 2015). This is due to the importance of AP for the progress and development of countries (Mushtaq & Khan, 2012). Students are the leaders of the future, and countries rely on them for future economic and social development (Nik Mustafa et al. 2015). AP is defined as the acquisition of academic knowledge by students (Zimmerman, 1990).

Many researchers have investigated the elements that may better AP. Earlier studies claimed that some of the factors affecting students' AP evolved on the characteristic of the classroom such as the size of the class, class schedules, technology used and the examination system (Kythreotis, Pashiardis, & Kyriakides, 2010; Matsumura, Garnier, & Spybrook, 2013). Similarly, studies have also indicated that socio-economic status as the affecting factor (Farooq et al., 2011; Mushtaq & Khan, 2012). On the contrary, previous studies have not come to a consensus regarding the factors that affect AP. Nevertheless, theories related to AP believed it to be the collaboration environment and the relationship with teachers, peers, and self-efficacy (Piaget, 1997; Vygotsky, 1978). Students moving overseas face several challenges and the new environment will affect their AP. It is commonly perceived that international students were insufficiently attuned to the education system in their host country, concerning their academic and social domains and performed lesser than the local students (Rienties et al., 2012; Rienties & Tempelaar, 2013).

Leadership is an emerging variable that has been intensively investigated in business literature (Chen et al., 2014; Engelen et al., 2015). Previous studies indicated that effective school leadership develops school cultures that provide shared values and beliefs besides promoting the elements of caring and trust among teachers and students and the outstanding educational outcomes performance (Dinham, 2005; Gurr, Drysdale, & Mulford, 2005). The principal has a vital role in creating a collaborative environment (Ibrahim & Al-Taneiji, 2013). As a result, leadership is a process of influencing a group of individuals towards a common goal or vision performance.

There are many types of leadership such as democratic and instructional (Adeyemi, 2013; Dinham, 2005; Obama et al., 2015). Previous studies focused on these types and examined their effects on AP. The new and emerging types such as transactional and transformational leadership (TL) were investigated slightly in the AP literature (Taleb, 2010). In addition, several past types of researchers tested the direct influence of leadership styles on AP. Moreover, few studies investigated the moderating effect of these types on AP. Furthermore, previous studies urged researchers to test possible relationships between school leadership styles and AP (Kythreotis et al., 2010).

In the field of educational management, researchers pointed out the need for adopting these types of leadership to smoothen educational institution's management (Ramsden, 2013). Nevertheless, the empirical studies in the educational field found that TL is more important than transactional leadership (Cohen, 2015; Ngang, 2011; Tajasom & Ariffin, 2013).

TL entitles leaders to take actions in order to elevate the awareness of what is considered right and important. Furthermore, it raises motivational maturity and moves beyond the persons' self-interests for the betterment of the school (Gardner et al., 2010). The moderating role of TL was tested in many business studies (Engelen et al., 2015; Jansen et al., 2008; Wang & Walumbwa, 2007). However, it is still not clear to what extent TL could affect AP in the educational field.

RESEARCH OBJECTIVES

Taking into account the aforementioned issues, this study intends to identify factors affecting the high school students' Academic Performance at three international schools. It also identifies the moderating role of Transform Leadership on the effects of the identified factors and students' Academic Performance.

LITERATURE REVIEW

Academic Performance (AP)

AP is related to the students' school results beyond interruption and failings (Lynch, Lerner, & Leventhal, 2013). It has special importance for policymakers and educational authorities and it is referred to in many expressions such as students' performance, AP and academic achievement (Kirschner & Karpinski, 2010). In the era of high uncertainty in terms of technology and globalization, education is considered as one of the effective methods to confront challenges faced by the nations. Education has an essential role in developing human capital, resulting in the individuals' wellbeing and a better standard of living (Battle & Lewis, 2002; Ford, 2011). The knowledge and skills acquisition of an individual leads to the increased contribution of the nation, later contributes to the country's economic growth, development, and prosperity(Alaaraj, Mohamed, & Bustamam, 2018; Alaarj, Abidin-Mohamed, & Bustamam, 2016; Alaarj, Mohamed, & Bustamam, 2017a, 2017b). As a result, the students' AP from all stages has been one of the top priorities for governments, educators and policymakers. This is because developing high-quality students will bring differences to both the home country and worldwide (Farooq et al., 2011).

AP can be a multifaceted construct that comprises different areas of learning. Accordingly, previous studies focused mainly on measuring AP using the Cumulative Grade Point Average (CGPA) (Kobal&Musek, 2001). However, this measurement showed a limitation. It does not reflect the real AP because it focuses on a particular area at a certain period of time. Thus, they suggested seeking the real AP, in which students are inquired on a set of questions related to their AP in general.

Researchers attempted to use subjective (Likert point) measurement in asking students about their AP. The subjective measurement evaluates AP based on the students' attitudes and others towards AP (Kobal & Musek, 2001). Cheung and Kwok (1998) have employed subjective measures to ask about AP among college students in Taiwan. Statements included "I have increased my interest in the subjects," "I have learned much about the subject matter," "I have learned something valuable in the course," and a question about expected grade point average (GPA) for the term. In addition, school performance could be measured with subjective tools such as perceived hitches in various skills or the perceived performance in comparison to peers.

York, Gibson, and Rankin (2015) who defined and measured the academic success in the educational institutions described the continuous measurement of AP using GPA is problematic and listed three reasons to support their claim. Firstly, previous studies described grades and GPA as not an accurate measure of learning. Second, GPA and grading are inconsistent and they differ to a great degree within and between universities. Third, GPA represents a narrow aspect of AP. Based on the above discussion, this study is measuring AP using subjective and objectives measurement. Cheung and Kwok (1998) who collected data using a set of subjective questions along with a question about the students' CGPA, used this approach.

Theoretical Framework

Cognitive Theory of Learning

Piaget (1997) developed the cognitive theory of learning. According to the theory, peers learn from one another and develop new knowledge or conceptual structures through the processes of dis-equilibration and re-equilibration (O'Donnell & O'Kelly, 1994). During the learning process, peers may experience cognitive conflict in terms of understanding other peers. Sorden (2012) argued that cognitive conflict exposes discrepancies between peers' own and others' knowledge, resulting in dis-equilibration. Different researchers agree that learning with peers is more productive to cognitive excellence than individual learning. Therefore, peer learning is something internal and encouraged throughout the formal learning settings (Golbeck & Sinagra, 2000). This theory is employed in this study as collaboration between peers is necessary for peers to exchange ideas. Peer can learn from each other within an instructional environment such as school. This study incorporates peer support as an independent variable and it expects peer supports to significantly affect students' AP.

Social Cognitive Theory

Social Cognitive Theory (SCT) claims that change in behavior is influenced by the environment and not focusing solely on

Humanities & Social Sciences Reviews
eISSN: 2395-6518, Vol 7, No 5, 2019, pp 1262-1271
https://doi.org/10.18510/hssr.2019.75165

personal factors and internal disposition. Therefore, it is perceived as a complex process influenced by both, internal and external factors (Bandura, 1994). SCT also highlights that self-efficacy is the most essential trait that changes human behavior. It is the degree or strength of an individual's belief concerning their ability and readiness to complete the tasks and goals. High self-efficacy individuals possess high expectations. This amounts to the results or effects of the tasks that need to be effective, valuable and beneficial. It makes them believe that they can exhibit such behaviors. Lastly, self-efficacy and their capabilities to achieve better AP could also become a factor that motivates them to enhance their AP (Bandura, 1994). Therefore, this theory could be employed in this context of study to support the incorporation of affecting factors as indicated earlier, self-efficacy, teacher's support, and future goals.

Conceptual Framework

Based on the aforementioned theories, the conceptual framework that supports this study is represented in Figure 1. Self-efficacy serves as one of the independent variables as it is proposed by past researchers. In addition, peer support where peer teaches and supports each other is also proposed to have a significant effect on students' AP. Furthermore, teacher support, as well as students' future goals, are also predicted to have a significant effect on students' academic performance. The TL is assumed to have a moderating effect on the relationships between the variables in the context of this study.

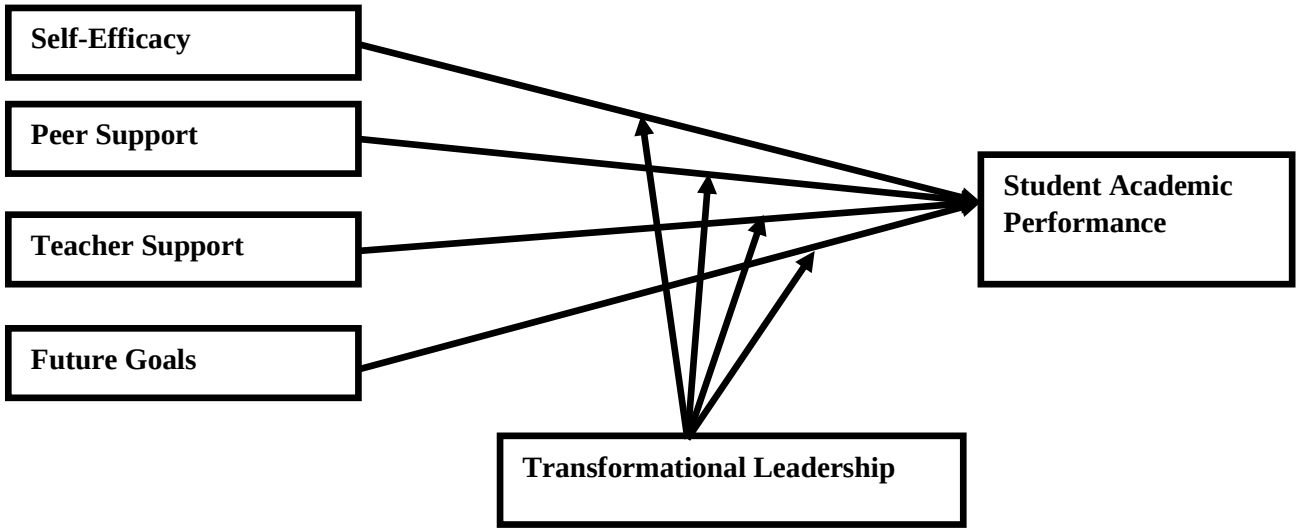

Figure 1: Conceptual Framework

Empirical Evidence

Self-Efficacy and Student Academic Performance

Self-efficacy is described as individuals' belief of what they are capable to do (Bandura, 1994). Researchers incorporated and tested the effect of self-efficacy on students' AP. For example, Joo, Yoon, and Jeung (2012) investigated the influence of self-efficacy on undergraduate students' AP. The findings indicated that there was a significant and direct influence of self-efficacy on the students' AP. Similarly, Joo, Yoon, and Jeung (2012) found that self-efficacy became a strong predictor of the AP. Several other researchers derived similar findings were Diseth (2011) and Merolla (2017). Based on the above discussion, students' self-efficacy is assumed to affect significantly the high school students' AP. Accordingly, the following can be hypothesized:

H_1: Students' self-efficacy has a positive effect on students' academic performance

Peer Support and Students' Academic Performance

Peer support is the ability of a student to give personal support to other students (Cohen, 2015). Mustaffa et al. (2011) commented that peer support enhances the diffusion of innovation among students as some peers will support the adoption of technology to help them in improving their AP. The support given by the more experienced students will enable others to complete the more complicated tasks than having to do them alone (Court & Molesworth, 2008).

Studies such as Hardré et al. (2006); Robinson (2006); Al-Rahmi and Othman (2013) showed that interaction with peers significantly affects motivational learning and their AP. Hence, peer support has an essential role in increasing students' knowledge and skills. Thus, it is hypothesized:

H_2: Peer support has a positive effect on students' academic performance *teacher Support and Student Academic Performance*

Teacher support is defined as the psychological and practical support during the teaching process (Fullan&Stiegelbauer, 1991). Alhazmi and Abdul Rahman (2013) noticed that teacher support for students could enhance their capabilities. The

teacher's knowledge of the subjects and the ability to engage the class as well as motivate them will have a significant impact on their AP (Mohamed Dahlan & Aaijaz, 2011). Previous studies found that a positive teacher-student relationship resulted in the improvement of academic and social performance (Kythreotis et al., 2010; Mattar, 2012). Hence, the teacher could play an essential role in the students' AP. Thus, it is hypothesized:

H3: Teacher support has a positive effect on students' academic performance

Future Goals and Students' Academic Performance

Future goals are defined as the nature of students' academic goals that influence their approaches to learning opportunities and their consequent learning and performance (Ames, 1992). Students usually set future goals for themselves using methods such as self-assessment (Sluijsmans, Dochy, & Moerkerke, 1999). Joo, Yoon, and Jeung (2012) pointed out that intrinsic value has significantly affected students' AP. Diseth (2011) viewed student's goal orientation as a motivator for them to achieve higher AP. Setting future goals helps the student to be self-regulated and focus their effort to achieve the goals by obtaining higher AP (Zuffianò et al., 2013). Hardré et al. (2006) future goal has a significant effect on the students' AP. Therefore, it is hypothesized:

H_4: Future goals of students have a positive effect on student's academic performance

Moderating Effect of Transformational Leadership

TL is defined as a leadership skill in someone who can direct the school to a new level at the hinge of school development (Kouzes, & Posner, 2012). Previous studies investigated the impact of leadership on students' AP. For example, Currie et al. (2009) indicated that result-oriented leadership has the most significant effect on the students' performance in the UK. Similarly, in Turkey Balyer, Karatas, and Alci (2015) found that school principals have significant roles in establishing professional learning communities.

Studies have found that TL has a direct effect on the school's culture, health environment, reducing bullying and increasing the students' AP (Ngang, 2011; Tajasom & Ariffin, 2013; Yang, 2014). Yang (2014) found that principal TL has supported the forming of ideas, building a shared vision, power-sharing, gaining credence and experiencing success. Cemaloglu (2011) found a positive relationship between TL acts of principals and organizational health. Furthermore, he also ascertained a negative relationship between the TL acts of principals and workplace bullying. Tajasom and Ariffin (2013) investigated the effect of TL on school climate and found that TL has an effect on four aspects of school climate: affiliation, innovation, professional interest, and resource adequacy.

There was an interaction effect of leadership as investigated by a few researchers in the educational field. While the majority of moderating studies are found in business-related studies (e.g. Jansen et al., 2008; Engelen et al., 2015). Nevertheless, previous studies in the educational field recommended researchers to investigate the possible effect of leadership style on the students' AP (Kythreotis et al., 2010). As a result, some studies that emerged in the literature investigated the moderating effect of TL. For example, Nir and Hameiri (2014) found that TL has a moderating effect between passive leadership style and school effectiveness. Kumako and Asumeng (2013) Investigated the moderating role of TL between psychological safety and learning behavior in Ghana. They found that TL played a moderating role between the variables. Similarly, the study of Malik and Farooqi (2013) found that TL moderated the effect of psychological empowerment and satisfaction.

Based on the above discussion, it can be seen that the principal plays a significant and essential role in the wellbeing of the school as well as the students. Therefore, it is hypothesized:

H_5: Transformational leadership moderates the relationship between self-efficacy and students' academic performance.

H_6: Transformational leadership moderates the relationship between peer support and students' academic performance.

H_7: Transformational leadership moderates the relationship between teachers' support and students' academic performance.

H_8: Transformational leadership moderates the relationship between future goals and students' academic performance.

METHODOLOGY

The population of this study is the international high school students in Malaysia. There are more than 15 international high schools in Malaysia in Klang Valley in particular. The population of this study is limited to Klang Valley area because it is the most urbanized area in Malaysia and the majority of the international high schools are located in this area. Due to the willingness of schools to cooperate, three international schools are involved in this study. The population of the three schools consists of 309 students. This study uses a random sampling technique because it is the least expensive and least time consuming (Malhotra & Birks, 2007).

It is a debatable issue concerning the sample size when the study attempts to use PLS. However, researchers tend to agree on the notion that it suffices to have a sample of 80 respondents in PLS (Hair, Ringle, & Sarstedt, 2011; Lowry & Gaskin, 2014). Nevertheless, according to Sekaran and Bougie (2003) for a population of 309 with 0.05 margin error and 0.95 confidence level, the sample size should be 171 respondents. Thus, this study gathered 171 responses.

The adapted questionnaire was utilized in this study. Self-efficacy consists of eight items and it was adapted from Robinson (2006). Meanwhile, peer support which has eight items and teacher support with nine items were adapted from Laghos et al. (2012). TL was adapted from Tajasom and Ariffin (2013) while students' AP was adapted from Cheung and Kwok (1998). All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A validation process was conducted with two experts. A pilot study was conducted and all measurements were reliable with Cronbach's Alpha ranging between 0.76 and 0.85.

A total of 171 questionnaires were distributed to high school students. Schools were asked for assistance in the data collection. The questionnaires were distributed and a period of one week was given for the students to complete the questionnaire. A box was assigned in each school for the returned questionnaire. A follow-up procedure was executed in the second week to encourage those who volunteered to answer the questionnaire. As a result, a total of 128 questionnaires were collected. 3 sets were removed due to missing value. The remaining 125 questionnaires were examined for outliers and a total of 8 responses were omitted. Thus, there were 117 completed and usable questionnaires, with a response rate of 68%. The number is sufficient for the purpose of analysis and it meets the rule of thumb for using PLS (Hair et al. 2011). There were 117 students who participated in this study. Their age is less than 18 years and with a distribution of 47% male and 53% female. All respondents are international students with the majority of 81.3% obtaining a CGPA of more than 70%.

RESULTS AND ANALYSIS

Measurement Model

For the purpose of assessing the measurement model, researchers must ensure that the factor loading of all items scores better than 0.70. Next, Cronbach's Alpha, convergent validity, composite reliability, and discriminant validity must also be checked (Hair et al., 2011). In this study, the factor loading was recorded to be better than 0.70. In addition, the composite reliability of all variables recorded a value greater than 0.70 as well as Cronbach's Alpha. The table also shows the average variance extracted (AVE) of the variables was greater than 0.50 indicating that the convergent validity was achieved. The factor loading as well as the AVE, CA, and CR are presented in Table 1.

Table 1: Factor Loading, Cronbach's Alpha, Composite Reliability and Average Variance Extracted Results

Variables	Items	FL >0.70	CA >0.70	CR>0.70	AVE>0.50
Academic Performance	AP1-AP9	0.838-0.906	0.955	0.962	0.761
Future Goals	FG1-FG8	0.804-0.873	0.929	0.943	0.701
Peer Support	PS1-PS8	0.841-0.956	0.954	0.963	0.814
Self-Efficacy	SE1-SE8	0.730-0.907	0.935	0.947	0.720
Transformational Leadership	TL1-TL15	0.772-0.904	0.962	0.967	0.709
Teacher Support	TS1-TS8	0.770-0.882	0.914	0.933	0.699

On the contrary, discriminant validity is assessed using the output of the measurement model. Hair et al. (2011) pointed out that discriminant validity is obtained whenever the diagonal value (as presented in bold and underlined in Table 2) is higher than the value stated in its row and column. The table depicts that it was successfully achieved.

Table 2: Discriminant Validity

	AP	FG	PS	SE	TL	TS
Academic Performance	**0.872**					
Future Goals	0.542	**0.837**				
Peer Support	0.510	0.564	**0.902**			
Self-efficacy	0.441	0.395	0.413	**0.849**		
Transformational Leadership	0.535	0.579	0.328	0.428	**0.842**	
Teacher Support	0.453	0.453	0.344	0.351	0.244	**0.836**

Humanities & Social Sciences Reviews
eISSN: 2395-6518, Vol 7, No 5, 2019, pp 1262-1271
https://doi.org/10.18510/hssr.2019.75165

Structural Model

In this section, the test of the direct hypotheses, as well as the moderating hypotheses, is conducted.

Direct Effect

As four main hypotheses were proposed in this study, Table 3 presents the hypotheses testing.

Table 3: Test of Direct Hypotheses

Hypothesis	D.V	I.V	β	STDEV)	T-Value	P- Values	Status
H_1	Academic Performance	Self-efficacy	0.178	0.063	2.827	0.005	Sig
H_2	Academic Performance	Peer support	0.224	0.107	2.083	0.037	Sig
H_3	Academic Performance	Teacher support	0.197	0.081	2.438	0.015	Sig
H_4	Academic Performance	Future goals	0.256	0.128	1.989	0.047	Sig

Note: Sig: significant

For the first hypothesis, the study proposed that the effect of students' self-efficacy affects AP positively. The findings revealed the effect is significant (β= 0.178, T-value=2.827, P-value= 0.005). Similarly, the second hypothesis predicted that peer support has a significant effect on students' AP. Peer support has direct and positive effect on students' AP (β= 0.224, T-value=2.083, P-value= 0.037). For the third hypothesis, the teacher support was found to have a significant and positive effect on students' AP (β= 0.197, T-value=2.438, P-value= 0.015). For the last hypothesis, the future goal of the student was found to affect students' AP directly and significantly (β= 0.256, T-value=1.984, P-value= 0.047). Thus, all four hypotheses (H_1- H_4) are accepted.

Moderating Role of Transformational Leadership

TL was proposed as a moderator between the variables of this study (self-efficacy, peer support, teacher support, and future goals) and AP. Table 4 demonstrates the result of hypothesis testing.

Table 4: Testing the Moderating Effect

Direct hypotheses	β	STDEV)	T-value	P-Values
FG -> AP	0.097	0.178	0.544	0.587
PS -> AP	0.374	0.180	2.079	0.038
SE -> AP	-0.068	0.119	0.566	0.572
TS -> AP	0.185	0.099	1.865	0.062
TL -> AP	**0.596**	**0.215**	**2.768**	**0.006**
Moderating Hypotheses				
TL*FG -> AP	-0.069	0.294	0.234	0.815
TL*PS -> AP	-0.468	0.405	1.155	0.248
TL*SE -> AP	0.672	0.250	2.692	0.007
TL*TS -> AP	0.083	0.190	0.439	0.661

Based on Table 4, the result indicated that TL only moderated positively the self-efficacy effect on AP (β=0.672, T-value =2.692, P-value=0.007). Thus, H5 is accepted. For H6, H7, and H8, the hypotheses were rejected on the ground that the T-value of the moderation is less than 1.96 and the P-value is higher than 0.05. Thus, H6, H7, and H8 were rejected. Surprisingly, it was found that the direct effect of TL is significant and positive (β=0.596, T-value =2.768, P-value =0.006). This implies that TL plays a moderating role between self-efficacy and AP and has a direct effect on AP.

DISCUSSION

The findings disclosed that the self-efficacy effect on AP is positive and significant. Thus, the increase of self-efficacy will lead to an increase in AP. This finding supported past studies such as Joo, Yoon, and Jeung (2013). The study also revealed that there was a positive and significant effect on AP by peer support. This indicates the more interaction and learning among peers, the better students' AP. Previous studies are in agreement with the findings of this study. Peer support enables students to accomplish more difficult tasks (Court & Molesworth, 2008).

The findings also indicated that teacher support has a positive and significant effect on AP. This advocates that an increase in teacher support will contribute to the increase of the international high school students' AP in Malaysia. Teacher support can enhance their capabilities and improve their AP (Alhazmi & Abdul Rahman, 2013). Teachers' knowledge and capabilities to engage students to participate in topics will lead to better AP (Mohamed Dahlan & Aaijaz, 2011). Having

future goals or ambitions in the future will increase AP to achieve these goals. Sluijsmans et al. (1999) pointed out that future goals could play a motivator role for students to improve their AP to achieve these goals. Diseth (2011) pointed out that the role of future goals is clear when students strive to achieve these goals by enriching their knowledge and equipping themselves to reach these goals.

The findings of this study also indicate that TL can moderate the self-efficacy effect on international high school students' AP. In addition, the finding also showed that TL has a direct effect on AP. Previous studies called for researchers to investigate the possible role of TL (Kythreotis et al., 2010). This study found that TL could play the role of moderator and predictor of AP. Several researchers found that TL has a direct effect on AP as well as the outcome of the school (Currie et al., 2009; Balyer et al., 2015; Tajasom&Ariffin, 2013; Yang, 2014). The moderating effect of TL was found in the study of Nir and Hameiri (2014) and in the study of Kumako and Asumeng (2013).

This study has enriched the literature on AP as well as TL in the high school context. Studies dealing with AP focused on the undergraduates and most of the studies focused on TL in business organizations. This study focused on high school students in educational institutions. International students studying abroad received less attention. This study has explored and tested the factors that affect their AP. In addition, the majority of the previous studies focused on either the teachers or principals' perspective, yet this study focused on the students' perspective.

The study incorporated factors such as peer support, self-efficacy, teacher support, and future goals. The study supports the applicability of the cognitive learning theory by Piaget (1997). In addition, the study supported the applicability of social cognitive theory by Bandura (1994). The future goal is the most important factor that affects AP. Decision-makers and parents have to focus on developing the intrinsic motivation of the students. From an early age, parents should place ambition and career for their children which would direct them to have goals and guide them to the methods to achieve these goals.

Peer support is a crucial factor in students' AP. Creating a group of students to support each other will lead to better AP. Teachers have also a responsibility in encouraging and supporting the participation of students. Self-efficacy is also one of the important factors. Self-efficacy comes from the knowledge and confidence of the students. Encouraging learning and enriching students' knowledge will increase their self-efficacy. Policymakers can evaluate students and suggest courses that can increase their self-efficacy. The role of the school principal is important in many ways. TL is found to have a direct effect on AP. The principal can encourage and motivate students by providing lectures and leading by example to enhance AP. The relationship between self-efficacy and AP will increase when the TL of the principal increases.

CONCLUSION

The objective of this study is to investigate the factors affecting AP among international high school students in Malaysia. The findings showed that students' future goals as the most fundamental factor followed by peer support, teacher support, and self-efficacy. TL moderated only the self-efficacy effect on the students' AP. In addition, the findings showed that TL has a direct significant effect on AP.

LIMITATION AND STUDY FORWARD

This study investigated international students and only 117 students participated in this study. Thus, the findings of this study are limited to the perception of international students. As for future studies, researchers are recommended to investigate the local students' perspective and increase the number of respondents. In this study, only three schools participated. Future researchers are advised to expand the study to include other geographical areas or to replicate the study in other countries to allow for a comparison between the findings. The findings of the study are limited to variables such as self-efficacy, peer support, teacher support, and future goals. Future researchers are advised to incorporate more variables such as culture and parents' background to increase the explanatory power of the model.

REFERENCES

1. Adeyemi, T. O. (2013). Principals ' Leadership Styles and Student Academic Performance in Secondary Schools in Ekiti State , Nigeria. *International Journal of Academic Research in Progressive Education and Development*, *2*(1), 187–198.
2. Alaaraj, S., Mohamed, Z. A., & Bustamam, U. S. B. A. (2018). External Growth Strategies and Organizational Performance in Emerging Markets: The Mediating Role of Inter-Organizational Trust. *Review of International Business and Strategy*,*28*(2). https://doi.org/10.1108/RIBS-09-2017-0079
3. Alaarj, S., Abidin-Mohamed, Z., & Bustamam, U. S. B. A. (2016). Mediating Role of Trust on the Effects of Knowledge Management Capabilities on Organizational Performance. *Procedia - Social and Behavioral Sciences*, *235*,729-738. https://doi.org/10.1016/j.sbspro.2016.11.074
4. Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2017a). Do Knowledge Management Capabilities Reduce the Negative effect of Environment Uncertainties on Organizational Performance? A Study of Public Listed Companies in Malaysia. *International Journal of Economic Research*, *14*(15), 443–456.
5. Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2017b). The Effect of Knowledge Management Capabilities on Performance of Companies : A Study of Service Sector. *International Journal of Economic Research*, *14*(15), 457–470.
6. Alhazmi, A., & Abdul Rahman. (2013). Facebook in Higher Education: Students' Use and Perceptions. *Advances in Information Sciences & Service Sciences*, *5*(15), 32–41.

7. Al-rahmi, W. & Othman, M. (2013). The Impact of Social Media use on Academic Performance among university students: A Pilot Study. *Journal of Information Systems4*,1–10.
8. Ames, C. 1992. Classrooms: Goals, structures, and student motivation.*Journal of Educational Psychology*, *84*, 261-271. https://doi.org/10.1037/0022-0663.84.3.261
9. Balyer, A., Karatas, H. & Alci, B. (2015). School Principals' Roles in Establishing Collaborative Professional Learning Communities at Schools. *Procedia - Social and Behavioral Sciences,197*, 1340–1347. https://doi.org/10.1016/j.sbspro.2015.07.387
10. Bandura, A. (1994). Bandura Self-efficacy defined. In V. S. Ramacahudran (Ed.), *Encyclopedia of Human Behavior* (pp. 71–81). New York: Academic Press.
11. Battle, J., & Lewis, M. (2002). The increasing significance of class: The relative effects of race and socioeconomic status on academic achievement. *Journal of Poverty*, *6*(2), 21–35. https://doi.org/10.1300/J134v06n02_02
12. Cemaloglu, N. (2011). Primary principals' leadership styles, school organizational health and workplace bullying. J*ournal of Educational Administration*, *49*(5), 495–512. https://doi.org/10.1108/09578231111159511
13. Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEOs' transformational leadership and product innovation performance: The roles of corporate entrepreneurship and technology orientation. *Journal of Product Innovation Management*, *31*(S1), 2-17. https://doi.org/10.1111/jpim.12188
14. Cheung, C. K., & Kwok, S. T. (1998). Activities and academic achievement among college students. *Journal of Genetic Psychology*, *159*(2), 147–162. https://doi.org/10.1080/00221329809596142
15. Cohen, E. (2015). Principal Leadership Styles and Teacher and Principal Attitudes, Concerns and Competencies regarding Inclusion. *Procedia - Social and Behavioral Sciences*, *186*, 758–764. https://doi.org/10.1016/j.sbspro.2015.04.105
16. Court, S., & Molesworth, M. (2008). Course-specific learning in Peer Assisted Learning schemes: a case study of creative media production courses. *Research in Post-Compulsory Education*, *13*(1), 123–134. https://doi.org/10.1080/13596740801903729
17. Currie, G., Lockett, A., & Suhomlinova, O. (2009). Leadership and institutional change in the public sector: The case of secondary schools in England. *Leadership Quarterly*, *20*(5), 664–679. https://doi.org/10.1016/j.leaqua.2009.06.001
18. Dinham, S. (2005). Principal leadership for outstanding educational outcomes. *Journal of Educational Administration*, *43*(4), 338–356. https://doi.org/10.1108/09578230510605405
19. Diseth, (2011). Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement. *Learning and Individual Differences*, *21*(2), 191–195. https://doi.org/10.1016/j.lindif.2011.01.003
20. Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial Orientation, Firm Performance, and the Moderating Role of Transformational Leadership Behaviors. *Journal of Management*, *41*(4), 1069–1097. https://doi.org/10.1177/0149206312455244
21. Farooq, M. S., Chaudhry, a H., Shafiq, M., & Berhanu, G. (2011). Factors Affecting Students' Quality of Academic Performance: A Case of Secondary School Level. *Journal of Quality and Technology Management*, *7*(2), 1–14.
22. Ford, D. Y. (2011). Closing the Achievement Gap: Gifted Education Must Join the Battle. *Gifted Child Today*, *34*(1), 31–34. https://doi.org/10.1177/107621751103400110
23. Fullan, M.& Stiegelbauer, S. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.
24. Gardner, W. L., Lowe, K. B., Moss, T. W., Mahoney, K. T., & Cogliser, C. C. (2010). Scholarly leadership of the study of leadership: A review of The Leadership Quarterly's second decade, 2000-2009. *Leadership Quarterly*, *21*(6), 922-958. https://doi.org/10.1016/j.leaqua.2010.10.003
25. Golbeck, S. L., & Sinagra, K. (2000). Effects of gender and collaboration on college students' performance on a piagetian spatial task. *Journal of Experimental Education*, *69*(1), 22–35. https://doi.org/10.1080/00220970009600647
26. Gurr, D., Drysdale, L., & Mulford, B. (2005). Successful principal leadership: Australian case studies. *Journal of Educational Administration*, *43*(6), 539–551. https://doi.org/10.1108/09578230510625647
27. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
28. Hardré, P.L., Chen, C.-H., Huang, S.-H., Chiang, C.-T., Jen, F.-L. & Warden, L. (2006). Factors Affecting High School Students' Academic Motivation in Taiwan. *Asia Pacific Journal of Education,26*(2), 189–207. https://doi.org/10.1080/02188790600937326
29. Ibrahim, A. S., & Al-Taneiji, S. (2013). Principal leadership style , school performance , and principal effectiveness in Dubai schools. *International Journal of Research Studies in Education*, *2*(1), 41–54. https://doi.org/10.5861/ijrse.2012.86
30. Jansen, J. J. P., George, G., Van Den Bosch, F. A. J., & Volberda, H. W. (2008). Senior team attributes and organizational ambidexterity: The moderating role of transformational leadership. *Journal of Management Studies*, *45*(5), 982–1007. https://doi.org/10.1111/j.1467-6486.2008.00775.x
31. Joo, B.K., Yoon, H.J. & Jeung, C.W. (2012). The effects of core self-evaluations and transformational leadership on organizational commitment. *Leadership and Organization Development Journal*, *33*(6), 564–582. https://doi.org/10.1108/01437731211253028
32. Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior,26*(6), 1237–1245. https://doi.org/10.1016/j.chb.2010.03.024
33. Kobal, D., & Musek, J. (2001). Self-concept and academic achievement: Slovenia and France. *Personality and Individual Differences*, *30*(5), 887–899. https://doi.org/10.1016/S0191-8869(00)00081-7
34. Kouzes, J. & Posner, B. (2012). Leadership Challenge. *Leadership Excellence,29*(8), 3–4.

35. Kumako, S. K., & Asumeng, M. A. (2013). Transformational leadership as a moderator of the relationship between psychological safety and learning behaviour in work teams in Ghana. *SA Journal of Industrial Psychology*, *39*(1). https://doi.org/10.4102/sajip.v39i1.1036
36. Kythreotis, A., Pashiardis, P., & Kyriakides, L. (2010). The influence of school leadership styles and culture on students' achievement in Cyprus primary schools. *Journal of Educational Administration*, *48*(2), 218–240. https://doi.org/10.1108/09578231011027860
37. Laghos, A., Zaphiris, P. & Almahjoub, A. (2012). Predicting Students' Communication in Online Learning Social Networks. *International Journal of Electrical Computer Sciences*,*12*(4), 1–9.
38. Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, *57*(2), 123–146. https://doi.org/10.1109/TPC.2014.2312452
39. Lynch, A. D., Lerner, R. M., & Leventhal, T. (2013). Adolescent Academic Achievement and School Engagement: An Examination of the Role of School-Wide Peer Culture. *Journal of Youth and Adolescence*, *42*(1), 6–19. https://doi.org/10.1007/s10964-012-9833-0
40. Malhotra, N. & Birks, D. (2007).*Marketing Research: An Applied Approach*. New York: Prentice Hall. https://doi.org/10.1108/S1548-6435(2007)3
41. Malik, I., & Farooqi, Y. A. (2013). Investigating the effect of transformational leadership as a moderator, between employee's psychological empowerment and employee's job satisfaction relationship. *International Journal of Multidisciplinary Science and Engineering*, *4*(7), 37–42.
42. Matsumura, L. C., Garnier, H. E., & Spybrook, J. (2013). Literacy coaching to improve student reading achievement: A multi-level mediation model. *Learning and Instruction*, *25*, 35–48. https://doi.org/10.1016/j.learninstruc.2012.11.001
43. Mattar, D. M. (2012). Factors affecting the performance of public schools in Lebanon. *International Journal of Educational Development*,*32*(2), 252–263. https://doi.org/10.1016/j.ijedudev.2011.04.001
44. Merolla, D. M. (2017). Self-efficacy and Academic Achievement. *Sociological Perspectives*,*60*(2), 378–393. https://doi.org/10.1177/0731121416629993
45. Mohamed Dahlan, I., & Aaijaz, N. (2011). Dynamics of Peer Assisted Learning and Teaching at an entrepreneurial university : an experience to share . *International Journal of Humanities and Social Science*, *1*(12), 93–99.
46. Mushtaq, I., & Khan, S. N. (2012). Factors Affecting Students' Academic Performance. *Global Journal of Management and Business Research*,*12*(9), 17–22. https://doi.org/10.1002/tea.3660200906
47. Mustaffa, N., Ibrahim, F., Mahmud, W. A. W., Ahmad, F., Kee, C. P., & Mahbob, M. H. (2011). Diffusion of innovations: The adoption of Facebook among youth in Malaysia. *Innovation Journal*, *16*(3).
48. Ngang, T. K. (2011). The effect of transformational leadership on school culture in male' primary schools Maldives. *Procedia - Social and Behavioral Sciences*, *30*(2011), 2575–2580. https://doi.org/10.1016/j.sbspro.2011.10.503
49. Nik Mustafa, M. A., Mohd Radzi, T., Hazlina, J., Wan Aida Rohana, M. S., & Mohd Nawawi, O. (2015). Principals' Instructional Leadership and Teachers' Commitment in Three Mara Junior Science Colleges (Mjsc) in Pahang, Malaysia. *Procedia - Social and Behavioral Sciences*, *191*(2015), 1848–1853. https://doi.org/10.1016/j.sbspro.2015.04.512
50. Nir, A. E., & Hameiri, L. (2014). School principals' leadership style and school outcomes: The mediating effect of powerbase utilization. *Journal of Educational Administration*, *52*(2), 210–227. https://doi.org/10.1108/JEA-01-2013-0007
51. O'Donnell, A. M., & O'Kelly, J. (1994). Learning form Peers: Beyond the Rhetoric of Positive Results, *Educational Psychology Review*, *6*(4), 321–349. https://doi.org/10.1007/BF02213419
52. Obama, M. O., Eunice2, L. A., & Orodho, J. A. (2015). Effect of Principals' Leadership Styles on Students Academic Performance in Public Secondary Schools in Homa-Bay County, Kenya. I*OSR Journal Of Humanities And Social Science*, *20*(3), 51–60.
53. Piaget, J. (1997). Development and learning. *Readings on the Development of Children*, 19–28. https://doi.org/10.1080/14767333.2011.617145
54. Ramsden, J. J. (2013). The moral leadership of universities. *Nanotechnology Perceptions*, *9*(1), 3–5. https://doi.org/10.4024/N06RA13A.ntp.09.02
55. Rienties, B., Beausaert, S., Grohnert, T., Niemantsverdriet, S., & Kommers, P. (2012). Understanding academic performance of international students: The role of ethnicity, academic and social integration. *Higher Education*, *63*(6), 685–700. https://doi.org/10.1007/s10734-011-9468-1
56. Rienties, B., & Tempelaar, D. (2013). The role of cultural dimensions of international and Dutch students on academic and social integration and academic performance in the Netherlands. *International Journal of Intercultural Relations*, *37*(2), 188–201. https://doi.org/10.1016/j.ijintrel.2012.11.004
57. Robinson, P.L. (2006). *Predicting Freshmen College Success: The Relationship Between Peer Learning, Help Seeking, Math Self-Efficacy, English Self-Efficacy and Institutional Integration*. Doctoral Dissertation, University of South California.
58. Sekaran, U. & Bougie, R. (2013).*Research methods for business: A Skill-Building Approach*. Wiley: New York
59. Sluijsmans, D., Dochy, F., & Moerkerke, G. (1999). Creating a learning environment by using self-, peer- and co-assessment. *Learning Environments Research*, *1*, 293–319. https://doi.org/10.1023/A:1009932704458
60. Sorden, S. D. (2012). The cognitive theory of multimedia learning. *Handbook of Educational Theories*, 1–31. https://doi.org/10.3102/0091732X09358129
61. Tajasom, A., & Ariffin, Z. (2013). Principals' leadership style and school climate: teachers' perspectives from Malaysia. *International Journal of Leadership in Public Services*, *7*(4), 314–333. https://doi.org/10.1108/17479881111194198

62. Taleb, H. M. (2010). Gender and leadership styles in single-sex academic institutions. *International Journal of Educational Management*, *24*(4), 287–302. https://doi.org/10.1108/09513541011045236
63. Vygotsky, L. S. (1978). Interaction between learning and development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souber-Man (Eds.), *Mind in Society: The Development of Higher Psychological Processes* (79-91). Cambridge, MA: Harvard University Press.
64. Wang, P., & Walumbwa, F. O. (2007). Family-friendly programs, organizational commitment, and work withdrawal: The moderating role of transformational leadership. *Personnel Psychology*, *60*(2), 397–427. https://doi.org/10.1111/j.1744-6570.2007.00078.x
65. Yang, Y. (2014). Principals' transformational leadership in school improvement. *International Journal of Educational Management*, *28*(3), 279–288. https://doi.org/10.1108/IJEM-04-2013-0063
66. York, T. T., Gibson, C., & Rankin, S. (2015). Defining and Measuring Academic Success. Practical Assessment, *Research & Evaluation*, *20*(5), 1–20.
67. Zimmerman, B. J. (1990). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*,*25*(1), 3–17. https://doi.org/10.1207/s15326985ep2501_2
68. Zuffianò, A., Alessandri, G., Gerbino, M., Luengo Kanacri, B.P., Di Giunta, L., Milioni, M. & Caprara, G.V. (2013). Academic achievement: The unique contribution of self-efficacy beliefs in self-regulated learning beyond intelligence, personality traits, and self-esteem. *Learning and Individual Differences*,*23*(1), 158–162. https://doi.org/10.1016/j.lindif.2012.07.010

