

Engage More, Achieve Less? The Relationship between Student Engagement and Academic Achievement among Juvenile Delinquents at Malaysia Correctional Institutions

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Abstract

Student engagement has vital role to play and can profoundly affecting students' learning progress. A sound body of literature found student engagement is positively correlated with academic achievement and assume the underlying relationship implied student engagement lead to improvement of educational outcomes. The contemporary studies of student engagement are focused on aiming to enhance learning and teaching particularly in higher education level. Furthermore, the center attention of literature focused on secondary and university to examine the relationship between student engagement and academic achievement. However, very few studies were found on juvenile delinquents at correctional institutions. To bridge the research and knowledge gap, present study was took place at 4 correctional institutions (Integrity School and Henry Gurney School) under Malaysian Prison Department. The present study adopted multi-stage sampling, in which purposive sampling was employed as the targeted samples were juvenile delinquent students. Meanwhile, two-stage cluster sampling was adopted for the sample randomization, and preserved representative of the population. The present study was conducted on 154 juvenile delinquent students at these correctional institutions through self-report survey questionnaires. Finding from correlation analyses indicated significant relationship found between student engagement and levels of academic achievement. In addition, regression analyses revealed behavioral engagement has significant influence on juvenile delinquent student academic achievement. The study has implications on the role of teacher at correctional institutions, and the effectiveness of current practice pedagogy. Teachers may practice more on student centered learning due to the diversity of students' background.

Keywords: Student Engagement, Academic Achievement, Juvenile Delinquent, Student, Correctional Institution

Introduction

"A large number of youth who are incarcerated are also marginally literate or illiterate and have already experienced school failure" (Leone, Meisal & Drakeford, 2002).

Prison can be defined as a government institution that held people who found guilty by courts and have been sanctioned for convicted crime. Sometimes the term “prison” and “correctional institution” are used interchangeably. In Malaysia context, Prison Department holds responsibility to administer and manage correctional institutions, such as the Prisons Rehabilitations’ Centers, Drug Rehabilitation Centers, and schools for juvenile delinquents. Its primary objective is to incarcerate, confine, or at least rehabilitate, prisoners. According to the Prison Rules, 2000 stated in provision Rule 151, the Malaysian Prison Department holds responsibility to provide education opportunities for those who are detained in prison and willingly to pursue their studies during incarceration particular to young offenders such as juvenile delinquents.

It is not surprising that many people thought of prison and correctional institution as a place where criminals were locked up to repay for their crimes, but we often forget that correctional institutions are also a place to offer education to juvenile delinquents for reintegration with the outside world. Howard Becker (1963) has argued the life of imprisonment is “symbolically forced outside the normal life of the social group” (p. 192) so that he becomes an outsider, or “other”. The public expects correctional institutions to provide proper guidance and education in helping juvenile delinquents to reform and rehabilitate, rather than merely keeping them incarcerated and isolated from the general population.

A group of people held the belief that juvenile delinquents are not entitled for “normal” life, as such being sanctioned from the court is a means to separate juvenile delinquents from society and the advantages that it usually brings. But what these people are not aware of was most of the juvenile delinquents do not serve time in jail all their lives and will eventually be released. Juvenile delinquents return to society without education and rehabilitation, others may become victims and society could be at risk. What is more important is teaching juvenile delinquents with knowledge and skills so that they have alternative not to be convicted again. Empirical studies indicated that many juvenile delinquents come from particularly poor educational background.

Life for the released juvenile delinquents is a mass of difficulties. Released juvenile delinquents often find a community afraid to welcome them back; alienation from friends, neighbors and even close relatives is the result. Few people want to take the risk of employing a person with a criminal past, it is not difficult to believe that uneducated and unskilled juvenile delinquents are most likely to be unemployed after release. Regrettably, all too often, juvenile delinquents are treated less favorably or put at a disadvantage because of stereotyping and prejudice. General population does not aware of the identification of juvenile as student that occurs in school or elsewhere at correctional institutions.

Studies show that juvenile delinquents want to participate in education during incarceration (Eikeland, Manger, & Asbjørnsen, 2009). Education is the key to success but as for juvenile delinquents, education is the key for survival. Imprisonment to juvenile delinquents could be the second chances of the onset of their education. The need of education in correctional institution is mandatory by the Malaysia Prison Department and Ministry of Education to ensure juvenile delinquents receive education while being incarcerated as many of them are at risk students that dropped out from schools which meant

these juvenile delinquents failed to complete their secondary education before being incarcerated.

The greater the opportunities juvenile delinquents learn to appreciate education and see the possibilities in them, the greater the chances they can break the cycle of incarceration not just for themselves but as for the nation, society, and future young generations. Education in correctional institutions therefore, should embed juvenile delinquents with knowledge and skills needed to achieve their full potential, and become a useful person to society.

Problem Statement

Juvenile delinquents is a minority group that usually come from lower education background compared to the general population, even illiterate in many cases. Public have a tendency to subject juvenile delinquents as a guilty person who was incarcerated in a correctional institution for the safety of others. Tendencies of stereotyping have no multiple identities for juvenile delinquents, a stigmatization of identity as just juvenile delinquents who were detained and served sentence in correctional institutions.

However, just like the rest of the general population, juvenile delinquents can be students as well. Perhaps, being a student is more desperate for them than others. Knowledge change fate, this is especially true for juvenile delinquents, correctional institutions can be served as a place for second chances for juvenile delinquents to acknowledge the importance of learning and education. The cruel reality for juvenile delinquents without education is that there isn't much hope for them to be employed after being released from imprisonment. The thought of being incarcerated does not limit one's abilities, but rather provides a person with not only rehabilitation but also time for education.

Numerous studies have been done in seeking to explain the relationship between student engagement and academic achievement (e.g., Klem and Connell, 2004; Shernoff and Schmidt 2008; Appleton et al. 2006). Many of the previous studies have been conducted were took place at higher education or secondary school setting. Furthermore, studies on juvenile delinquents relevant to student engagement are more prone to be done through qualitative than quantitative designs. To bridge the research and knowledge gap, the present study focuses on juvenile delinquents especially in extending our understanding of the relationship between their engagement and academic achievements at correctional institution.

The Three-Factor Model (Fredricks, Blumenfeld, Friedel, & Paris, 2004)

Although there are several theories within the paradigm and scope of student engagement, the study only focuses on Fredricks, et. al (2004) three factor model that emphasizes on three components of engagement: emotional, cognitive, and behavioral engagement. However, these sub-components are not always integrated to each other, which means a student can be positive in one component but negative in other or even not being engaged at all.

Emotional engagement is displayed by affection such as interest, feelings of belongingness, and satisfaction. A portion of researchers prefer to address emotional engagement as psychological engagement (Appleton, Christenson, Kim & Reschly, 2006). The cognitive engagement can be referred to as the efforts of student being dedicated to school and

given tasks, for instance, by applying various types of strategies during lesson or learning activities. These behavioral engagements are marked by the academic and extracurricular involvement of students.

Three-factor model explains how and why some of the students are more successful in school while others are not. Each of the sub-components has its own representation of different dimensional of human heart (emotion), cognitive (mind), and body (behavioral) which provide more adequate links to conceptualize engagement. Previous studies implicated the possibility of emotional engagement precedes the other two engagements, while cognitive and behavioral engagements have more directive impact on academic outcome.

Furthermore, Three-factor model stress on the notion of the greater engagement in student will lead to greater academic achievement, and proposed specific ways to increase student engagement. Among those being suggested are supports from adults, adequate lesson structures that support students' autonomy development, opportunities for active learning together with peers, and interesting learns activities with challenges.

Literature

Student Engagement

Student engagement have been a constant core focus of researchers who are working in the field of education as a lot of attentions have been given to examine the significant role of student engagement on educational environment and academic achievement (e.g., Newmann, 1992; Steinberg, Brown, & Dornbusch, 1996). Student engagement theory assumes that the environment has a vital role to play and can profoundly affect students' learning progress.

Despite research on the area of student engagement is getting more attention from both educators and social scientists, it is rather difficult to more adequately conceptualize the nature of student engagement (Appleton, Christenson, & Furlong, 2008; Fredricks et al., 2004; Jimerson, Campos, & Grief, 2003). Different researchers may have different views on the definition of engagement. Some define engagement as "the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes" and is related to the effort institutions devote to using effective educational practices" (Kuh, 2007). Harper and Quaye (2009) further highlight "Engagement is more than involvement or participation it requires feelings and sense-making as well as activity".

There are various differences in opinions on the number of composites of engagement, including different conceptualizations. A category of scholars suggested a two-dimensional model of engagement, only behavior and emotion aspect of engagement were included (Finn, 1989; Marks, 2000; Skinner, Kindermann, & Furrer, 2008). Another types of perspectives are from a three-component model of engagement that consist of cognitive, emotion, and a behavior facets (i.e., learning method employ to study, monitoring one's own learning habits, and effort to perform academic tasks) (e.g., Archaumbault, 2009; Fredricks et al., 2004; Jimerson et al., 2003; Wigfield et al., 2008).

Someresearchers conceptualized engagement to four dimensions: academic, behavioral, cognitive, and psychological (Appleton, Christenson, Kim, & Reschly, 2006; Reschly & Christenson, 2006). Other than the above mentioned, there is another different point of view that is alienated from the mainstream variations, which argued that the construct of engagements comprise of active participation, communication, experiences, and support student perceived from learning environment (e.g. Coates, 2007).

To synthesise these perspectives, it can summarised that although there are different variations and assumption on the subcomponents of engagement, most of the scholars have agreed with the notion of engagement is multidimensional in nature. Student engagement can be defined as educational self devotion process that involved participation in activities that improve learning performance and eventually lead to desire educational outcome. A more engaged student will result in better learning outcome; engagement not only drives learning but predicts students' academic achievement as well. Literatures often characterized engagement resulting positive academic outcome but lacking in suggestions for minority groups such as those are with learning disability and juvenile delinquents.

Relationship between Student Engagement and Academic Achievement

Academic achievement refers to the observed and measured aspect of a student's mastery of skills and subject contents as measured with valid and reliable tests (Joe, Kpolovie, Osonwa & Iderima, 2014). The term of academic achievement is sometimes used interchangeably with academic performance and is considered the outcome of education as it is indicated the extent to which the student has achieved the predetermined education goal. Evaluation of academic achievement is indispensable for effective formal and even non-formal education (Kpolovie, 2014a). Moreover, academic achievement is a measurable index that depicts a student's cognitive, affective and psychomotor domains in an educational setting.

Foley (2001) conducted a study to review the academic characteristic of juvenile delinquents reported that these adolescents were academically lacking behind one year to several years compare to their non-incarcerated counterparts. Another study was conducted by Zamora (2005) to determine the academic level of 327 juvenile delinquents male age 10 to 17 years. Zamora found that despite 86.6% of the juvenile delinquents were secondary students, the result indicated that nearly half of the respondents performed at primary school level.

Akey (2006) highlighted higher level of student engagement not only took place in classroom setting, engagement also happens through the active participation of outside classroom learning activities. Academic achievement is often regarded as the important performance index of student learning outcome. It is through engagement in various forms of classroom activities to enhance students' social, emotional, behavioral and academic achievement (Klem and Connell, 2004). Despite many empirical studies conducted in seeking to explain the relationship of student engagement on academic achievement, the result often inconsistent.

The researchers on the relevant field of interest generally separated into two sides. One perspective argued that student engagement is positively correlated with academic

achievement and assume the underlying relationship implied student engagement lead to improvement of educational outcomes (Crossan, Field, Gallacher, & Merrill, 2003). Additionally, the argument between different constructs of student engagement also in great debate among these researchers whereby some of them have stressed that due to the observable nature of behavioral engagement, it is much easier for fellow of researchers to find relationship with academic achievement comparing to affective and cognitive engagement which are abstract in nature (Furrer & Skinner, 2003). Nevertheless, these researchers support the notion of different aspect of student engagement can establish different form of relationships with academic achievement.

Contrary to above perspective of view, other researchers have taken rigid stance and proposed that there are no conclusive evidences to support student engagement and academic achievement are positively correlated (e.g., Shernoff and Schmidt, 2008; Appleton et al., 2006). These researchers argued students are able to achieve better grades simply because they have mastered learning skills that enable them to learn necessary content quickly, while their counterparts who did not master the skill were unable to achieve even as they attempted to engage more.

Another possible explanation for the inconsistent findings from previous studies is due to the difference in methods of reporting, cultural values, and personal factors (e.g., Fredricks, Blumenfeld, & Paris, 2004; Marks, 2000; Shernoff & Schmidt, 2008). Empirical studies have implicated a great deal of differences between self-reported or other-reported measures research method, particularly in students' affective and behavioral engagement aspects. (e.g., Fall & Roberts, 2012; Furrer & Skinner, 2003).

Previous studies done on juvenile delinquents and student engagement were many in qualitative studies. It is not easy to measure student engagement and quantifying factors that facilitate student engagement through simple indicators. For example, school climate indicators correlate with student engagement (Benner, Graham, & Mistry, 2008). Yet the specific ways this indicator facilitate student engagement is quite elusive. Most of the studies were done on individual risk or background factors such as low attendance, and low involvement school activities (Appleton, Christenson, & Furlong, 2008). The attention of these previous studies was mostly on positive academic outcomes, school dropout rates, and negative delinquency behaviors.

It is clear from the literature, the level of student engagement has been related with academic achievement (Li & Lerner, 2010). It is also noteworthy there is still ongoing debate on the different dimension of student engagement may or may not lead to same academic outcome. For instance, study conducted by Jelas, et al. (2016) on Malaysian adolescents proposed that cognitive engagement best predict student academic achievement. Wang and Holcombe (2010) study proposed the impact of student engagement play a significant role to perceive learning environment and influence academic achievement direct or indirectly.

Higher level of engagement not only promotes academic performance but also reduce the drop-out rate of students (Perdue, Manzeske, & Estell, 2009). Low level of student engagement often relate with problematic behaviors. Conversely, higher levels of student engagement frequently result in better academic achievement (Hirschfield & Gasper, 2010).

Student engagement was found to be closely tied with academic achievement. Student engagement mediated both gender and learning support with achievement (Jelas, et. al., 2014).

Numerous contemporary studies have considered student engagement as a predictor of academic achievement, inferring that being disengaged, or disaffected from school, causes poor academic achievement. Other studies found less consistent result, for instance, a study conducted by Shernoff and Schmidt (2008) denoted student engagement did not predict grade point average among African-Americans. Some researchers argued the different in results can be explained by disparity of mastering learning skill and foundation of knowledge rather than student engagement. The significance of the study is to bridge the knowledge and research gap of the relationship between student engagement and academic achievement among juvenile delinquents at Malaysia context due to our understanding of this relationship was very limited.

Research Questions

1. What is the relationship between student engagement and academic achievement among juvenile delinquents at Integrity School and Henry Gurney School?
2. What are the influences of student engagement to academic achievements among juvenile delinquents at Integrity School and Henry Gurney School?

Methodology

Research Design

Quantitative correlation research was conducted to examine the relationship between student engagement and levels of academic achievement. Quantitative research was employed in the study, survey method and questionnaire had been used to investigate the relationship between student engagement and academic achievement among juvenile delinquents at Malaysia Integrity School (IS) and Henry Gurney School (HGS). Questionnaire was employed as data collection instrument, in which the instrument was adapted from an existing student engagement questionnaire originally developed by Lam et al. (2009), which consists of 33 statements measuring three sub-component variables (cognitive, affective, and behavioral) of student engagement.

The administered language was originally English, but in order to ensure the instrument matches the literacy level of juvenile delinquents, the language of questionnaire has been translated into Malay language and the final version of questionnaire consists of both English and Malay language. Three person panels of expert were appointed based on their field of expertise to be the instrument validators to confirm the suitability of the translated statements, and interpretation of items (Sperber 2004). Pilot test showed the research instrument scored 0.917 Cronbach's Alpha value, and all of the sub-components have Cronbach's Alpha value from 0.7 to 0.9 and above.

Participants

The population is set to allow researcher to generalize the findings (Noraini, 2010). The targeted population in the study is 154 juvenile delinquents who were currently attending Henry Gurney Schools (HGS) and Integrity School (IS), who are currently under detention or serving sentence. Only juvenile delinquents who are in their form 4 year during the period of

the study was carry out are entitled to be selected because of two reasons: form 3 and form 5 juvenile delinquents were busy preparing for sitting Malaysia national exam Pentaksiran Tingkatan 3 (PT3) and Sijil Pelajaran Malaysia (SPM); form 4 juvenile delinquents are more mentally and psychologically well prepare to participate the study than their younger peers at HGS and IS.

Findings

In this section, the findings will be presented through two inferential analyses, spearman rho and multinomial regressions. The bivariate analysis is to examine the relationship between the variables, whereas the regression analysis was conducted to determine the influence of predictor variables to outcome variable. Each of the statistical analyses is addressed to answer the research questions of present study respectively.

The Relationship between Student Engagement and Levels of Academic Achievement

In respond the first research question, the relationship between student engagement and academic achievement among juvenile delinquents at IS and HGS. The findings were reported on following table 1.

Table 1:

The Relationship between Student Engagement and Levels of Academic Achievement. (n = 149)

Academic Achievement	Spearman Correlation Coefficient	Affective Engagement	Behavioral Engagement	Cognitive Engagement	Overall Student Engagement
Low	p	.835	.789	.610	.975
	r_s	-.132	-.160	-.067	-.130
Medium	p	.108	.051	.419	.114
	r_s	.193*	.274**	.168*	.242**
High	p	.019	.001	0.41	.003
	r_s	-.115	-.202*	-.166*	-.193*
	p	.164	.014	.044	.018

Correlation is significant at the 0.01 level (2-tailed).**

Correlation is significant at the 0.05 level (2-tailed).*

Based on the table 1, there was no significant relationship found between low level academic achievement and student engagement. Conversely, medium level academic achievement has showed significant but weak positive relationship to overall student engagement and its sub-components: affective engagement ($r_s = .193$; $p \leq .05$), behavioral engagement ($r_s = .274$; $p \leq .05$), cognitive engagement ($r_s = .168$; $p \leq .05$), overall student engagement ($r_s = .242$; $p \leq .05$).

Interestingly, except for affective engagement, significant but weak negative relationships was found between high level academic achievement and student engagement. Behavioral engagement ($r_s = -.202$; $p \leq .05$), cognitive engagement ($r_s = -.166$; $p \leq .05$), overall student engagement ($r_s = -.193$; $p \leq .05$) which indicated student engagement have inversely relationship with high level of academic achievement.

The Influence of Student Engagement to Levels of Academic Achievement

Table 2:

Multinomial Logistic Regression Analysis of Student Engagement in Predicting Levels of Academic Achievement.

Academic Achievement ^a		B	Std. Error	Wald	df	Sig.	Exp(B)
Low	Intercept	-.866	2.205	.154	1	.694	
	Affective	-.096	.080	1.460	1	.227	.908
	Behavioral	.088	.063	1.983	1	.159	1.092
	Cognitive	.027	.054	.242	1	.622	1.027
Medium	Intercept	-3.123	2.073	2.268	1	.132	
	Affective	-.063	.073	.747	1	.387	.939
	Behavioral	.125	.057	4.735	1	.030	1.133
	Cognitive	.037	.050	.551	1	.458	1.038

a. The reference category is: high.

Multinomial logistic regression was performed to examine the relationship between the predictor and dependent variable. Based on Table 2, behavioral engagement was a significant predictor to the likelihood of falling into medium level academic achievement as opposed to the predictor of the likelihood falling into the baseline group which is the high level academic achievement. The beta value from table 2 has showed the influence of behavioral engagement toward academic achievement ($B = .125$, $p < 0.5$).

Hence, an individual who tended to have more behavioral engagement tended to indentify as medium level academic achievers relative to the high level academic achievers or other categories. In another word, an individual who identified as being higher in behavioral engagement also tended to indicate a greater likelihood of having medium level of academic achievement as opposed to falling into high level of academic achievement.

Discussion

Results from correlation analysis showed significant relationship found between student engagement and levels of academic achievement. Overall, low level academic achievement found no significant relationship to any forms of student engagement. Medium level academic achievement had showed positive relationship in comparing to high level academic achievement which exhibited negative relationship to overall student engagement. The relationship of student engagement to medium level academic achievement is more obvious as overall student engagement and its entire composite has showed significant positive relationship. On the other hand, significant negatively relationship has been found on high level academic achievement except for affective engagement.

One of the stereotypes held by others to juvenile delinquents is that they perform poorly in academic achievement. Negative relationship has been found in high level academic achievers, which gives implications that current teaching approaches adopted at Henry Gurney Schools and Integrity School are more suitable to catered medium level academic achievers. It is possible that high level academic achievers prefer creative approaches and are more open and flexible to learning environment for them to actively engage in academic challenges (Basque & Dare, 1998). A less ideal, constricted and highly-monitored learning environment may have inverse effect on academic achievement (Frenzel, et al, 2007).

Although, it is not too hard to understand correctional institution is never the best place to provide education, let alone the security and disciplinary issues that may arise if without proper caution. An alternative explanation would be relevant to school climate, in line with literature and several studies, it was pointed out that the school climate is likely to have impact on students' performance, academic achievement and on their positive and negative behavior (Gunuc, 2013; Finn, 1989; 1993; Finn & Voelkl, 1993).

Wang and Holcombe (2010) studied the relationship between the perceptions of school environment, engagement and performance in student at secondary school. They found that perceptions of the environment have directly and indirectly influence on academic achievement. This school climate also accounts on the duration times of an individual being able to adapt to the new environment. Evidence from empirical studies has revealed the influential effect of school environment on student engagement (Finn & Voelkl, 1993; Marks, 2000; Pellerin, 2005; Willms, 2003).

The adaptability to these changes are largely dependent on individuals, in which delay of adaption may cause difficulties in psychosocial adjustment to school environment and having feeling of inadequacy. The feeling of isolated (psychosocial stress) from others may negatively affect student engagement and academic performance. The time factor of adaptively to new environment can be further understood as there are 4 different stages set by the authorities targeting attitude to academic changes in juvenile delinquents. The situation is getting more complicated when incarcerated juvenile delinquents can be further categorized to remand, be imposed new sanction, and categorized according to seniority. The extent to which this could reflect on juvenile delinquents' academic achievement is unclear, but it is sound to presume the duration of detention may serve as one of the potential contributory factors.

The result emerged from regression analysis has showed behavioral engagement is a significant predictor and was positively predicting medium levels academic achievement. The characteristics of behavioral engagement often related to behavioral norms, such as participation in school activities and attending school which is self-explanatory because it is compulsory and obligated for juvenile delinquents at Henry Gurney Schools and Integrity School to attend programme and lessons set by the authorities. This finding has prompted the plausible speculation that behavioral engagement can be adequately explained by the reinforcement of daily routine school activities monitored by teachers and warden.

It is perhaps not surprising that affective and cognitive engagement yielded no significant influences in predicting all levels of academic achievement. One interpretation of

the insignificant result in predicting juvenile delinquents' academic achievement would be the unique school environment factor. It is highly possible that many juvenile delinquents experienced difficulties to develop sense of belonging to the school due to the nature of correctional institution. This in part explains why some of juvenile delinquents were having difficulties to develop closeness or strong relationship to school, teachers, peers, and consequently lacked affective engagement.

Simultaneously, the lack of cognitive engagement in predicting students' academic achievement may be well the case relevant to the teacher center learning approaches adopted by the correctional institution. Teachers and educators are well aware there will never be one teaching method fit for all. Present study findings have prompted the plausible speculation that the current adopted teaching approach in correctional institutions has its limitation to cater to all students.

One suggestion, through purely conjecture, might be that student engagement of juvenile delinquents may not happen actively if under the highly monitored environment. It is through the reinforcements of teachers, warden, and prison environment mandate the engagement might happen. This brings us to the question of whether a conditioning of 'inactive' engagement that can be considered as student engagement. At present there is yet a consensus on how to answer this question. The researchers would like to remind one cause for concern, whether this 'inactive' conditioning engagement is a temporary phenomenon.

This temporary phenomenon can be explained as a drawback of maladjustment to the new school environment. Student engagement is closely related to the interaction between individual students in responsive to the changes of school environment that incorporate with educational and social context (Kenny et.al, 2003). This may imply that student engagement can happen from conditioning and transform from an inactive engagement to an active engagement, but as for correctional institution this may happen through the dominant behavioral engagement.

Conclusion

It has been demonstrated repeatedly from empirical studies that student engagement is a significant contributor to academic achievement. While this may be true to some extent for low level academic achievers, the study found insignificant relationship between engagement and academic achievement with them. However, this does not mean that these juvenile delinquents are not susceptible to student engagement. It is noteworthy that, the schools do not have specialist or expert to identify learning disabilities among these students which could be one of the reasons for low in academic functioning.

Findings from regression analysis in present study have indicated behavioral engagement was found to be the significant predictor for medium level academic achievement. In other words, an individual who was identified as being higher in behavioral engagement also tended to indicate a greater likelihood of having medium level academic achievement. A possible explanation of behavioral engagement dominant in present study might be attributed to the reinforcement of daily routine, and learning activities that is highly monitoring by teachers and warden.

It is also worth bearing in mind that, the association of student engagement with high level academic achievement may be attributed to the constricted and highly monitor learning environment at Henry Gurney Schools and Integrity School. Higher level academic achievers prefer more open and flexible learning environment and creative teaching approaches to engage them in learning. Teacher's intervention in children's learning is necessity, but it is the quality of the teacher-learner interaction, which is seen as crucial in that learning.

Based on the findings from the study, we can ascertain the significant of student engagement toward academic achievement exist within correctional institutions. The study has implications on the role of teacher at correctional institutions, and the effectiveness of current practice pedagogy. Teachers may practice more on student centered learning due to the diversity of students' background. Additionally, teaching and learning in correctional institution should have surpassed beyond exam orientated but provoke critically thinking and cultivate a lifelong love of learning.

This study contributes to our understanding of the status quo on the relationship of student engagement and academic achievement among juvenile delinquent. This study focuses on student engagement and academic achievement using juvenile delinquent respondents, which is rarely found from literature and has less study done on this topic especially in Malaysia. This study also expanded the three-factor model of student engagement (Fredricks, et. al, 2004) that emphasizes on the cognitive, affective, behavioral aspects of student engagement on typical student to juvenile delinquent population, and provided further possibilities for the direction of future study in the field.

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