

School Engagement: It's Influence on the Academic Performance of College Students

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Abstract

Academic success is influenced by many factors, one of which is student engagement that this study explored in relation to the academic performance of 2nd year college students of Lourdes College. Specifically, the study determined the students' level of affective, behavioural, and cognitive engagement using a standardized assessment tool; their level of academic performance measured in terms of grade point average; and which domains of engagement predict academic performance. Data were analysed using descriptive statistics and Multiple Linear Regression Analysis. Findings reveal that the students were highly engaged behaviourally, affectively, and cognitively and that they had satisfactory academic performance during the last school year. Findings further reveal that among the engagement domains, only the behavioural domain predicted academic performance; thus, schools have to provide students with school-related activities that encourage active participation and develop some learning skills and abilities.

Keywords: Student engagement, school engagement, academic performance, academic success, engagement

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Successful student performance is a central concern in any educational institution. To date, myriad studies have been conducted to investigate institutional and student characteristics that predict academic achievement. One factor found in many studies as a predictor of academic achievement is student engagement in school. The value of student engagement as facilitative of good academic outcomes is now well recognized (Lam et al., 2014; Kahu, 2013; Gerber et al., 2013; Mazer, 2012; Reyes et al., 2012; Hu, 2011; Appleton, Christenson, & Furlong, 2008). Hence, it has been deemed necessary for academic players – teachers, counsellors, administrators – to determine the extent to which students engage themselves in school and the areas of engagement that need to be given focus so as to impact positively students' academic performance.

Given the academic challenge in college, schools have to engage academically their students for them to succeed. Student engagement can only be maximized if schools provide a very engaging school environment. An assessment of how engaged students are in school in relation to academic performance will provide academic players with information necessary in determining and designing school programs that promote student's interest, active participation, involvement and commitment to one's learning (Lam et al., 2014; Wimpenny & Savin-Baden, 2013). The aforementioned advantage of exploring students' school engagement and academic performance motivated the conduct of this study.

Framework

Student engagement is a multidimensional construct (Fredricks, Blumenfield, & Paris, 2004; Appleton et al., 2008; Sharma, Jain, & Mittal, 2014) that consists of affective, behavioural, and cognitive dimensions (Lam et al., 2014). Affective engagement refers to student's feelings about learning and feelings toward the school. High affective engagement means intrinsic motivation to learn and sense of belonging to one's school (Lam et al., 2014; Kahu, 2013). Specific indicators include among others eagerness, interest, belongingness, and pride for one's school. Behavioural engagement refers to student's active participation in academic and extracurricular activities (Lam et al., 2014; Gerber, Mans-Kemp, & Schlechter, 2013). High behavioural engagement indicates effort, diligence, and persistence in school-related tasks and activities (Lam et al., 2014). Cognitive engagement refers to the cognitive strategies employed by the student to master an academic material (Lam et al., 2014). High cognitive achievement depicts deep cognitive processing and substantive comprehension of the academic material, and self-regulated learning (Lam et al., 2104).

Student engagement is also viewed from the psychological and socio-cultural perspectives. The psychological perspective positions student engagement as a psychological process that mediates between contextual factor such as academic structure and support, and academic outcomes like grades, skills development, and adjustment (Gerber et al., 2013; Kahu, 2013; Lam et al., 2014). The socio-cultural perspective points to the contextual factor or social context under which the learning experience occurs. Social context is said to influence the nature and extent of student engagement (Kahu, 2013). For instance, a school's emphasis on high levels of performance may discourage

students who are less self-efficacious. Also, the existence of dominant groups in the school may alienate those who belong to the minority and eventually diminish the latter's participation and enthusiasm. These instances illustrate possible barriers to student engagement.

Many studies are directed towards understanding and establishing the connection between student engagement and achievement. In particular, factors that bring about student engagement were identified from the self-reports of participants, namely level of academic challenge, active and collaborative learning environments, student-faculty interaction, enriching educational experiences, and campus environment (Evans, Hartman, & Anderson, 2013). Accordingly, student's engagement is promoted and maintained when they are presented with creative and intellectually challenging academic work, are provided with opportunities to apply with others what has been learned in different settings, are mentored by teachers who also serve as students' role models, are taught using different learning pedagogies and exposed to the communities, and thrive in a supportive relationships with co-students, school administration and personnel (Evans et al., 2013). Subsequently, educational outcomes of student engagement were determined. In the National Survey of Student Engagement (2013), persistence, retention, and completion of college education were cited as indicators of student success. Other surveys on student engagement categorized educational outcomes into higher order thinking, general learning outcomes, career readiness, grade, departure intention, satisfaction, self-esteem, peer acceptance, and lack of conduct problems (Kahu, 2013; Lam et al., 2014). Studies also show that successful academic outcomes further increase student engagement and which in turn ensures sustained academic success (Kahu, 2013). Thus, the more engaged a student is, the greater is the academic achievement (Hu, 2011), an assumption this study takes.

Studies on learning and academic success are mostly founded on the concept of motivation. Motivation theory views the learning process as active and involves contextual factors or the social context, the learner's psychological processes (e.g., thoughts, feelings, goals, expectancies, motivations), and the resultant outcomes of the interaction of the contextual factors and learner's psychological processes. Self-determination theory (SDT) by Deci and Ryan provides this study with a framework to explain the construct of student engagement.

Self-determination theory views an individual as an active organism motivated by an inherent need to actualize the self or bring about growth and positive change (Miserandino, 2012). Deci and Ryan (Miserandino, 2012) posited three fundamental needs of man, that is, autonomy, competence, and relatedness. Autonomy is experienced when a person feels free to make choices, to decide on a course of action, and be self-regulating. The need for autonomy is satisfied when autonomy support is given as when a person's unique perspective is recognized, choices are provided, support is given for choices made, and initiative is encouraged. A person is competent when one feels effective in the task at hand, and has the opportunities and experiences to exercise and express ones abilities. This need is satisfied when structure such as clear goals, clear contingencies, and feed backing is presented, and when tasks are optimally challenging.

Engagement in such tasks accordingly leads to a flow experience (Miserandino, 2012). Flow is complete absorption in the task and deep enjoyment (Miserandino, 2012). Relatedness needs refers to feeling connected to others, of giving care to others and also receiving care from them. This is satisfied when others (e.g., school administration and personnel, peers, teacher), foster involvement as when they show interest and invest time and energy for the student. Feeling autonomous, connected to others, and competent give an individual the motivation to engage in various tasks persistently and positively. In sum, the school or academic environment where the student belongs provides one with the context (i.e., structure and optimal challenge, autonomy support, and involvement) by which to satisfy the three fundamental psychological needs (i.e., competence, autonomy, and relatedness). When these needs are met, the student feels motivated for action, experiences positive emotions (e.g., enjoyment, curiosity), and engages in tasks productively (e.g., active participation and involvement in curricular and extra-curricular activities, attention, and effort). Otherwise, the person experiences disengagement and disaffection (e.g., boredom, frustration, depression). Consequently, motivation and engagement eventually lead to outcomes such as skills and abilities enhancement and well-being (Corr & Matthews, 2012).

Empirical studies that test the validity of the predictions of SDT exist. To cite, autonomy support was found to promote engagement among high level of performance in younger children. Groups of second graders were engaged in a drawing task. Results showed that the groups that received autonomy support enjoyed painting more than those who did not receive it. Children with autonomy support were also more artistic and creative, and had higher overall quality in their output (Koestner, Ryan, Bernieri, & Holt, 1984). In another study, students who perceived autonomy support from their teachers were found to have a higher self-efficacy and academic self-concept that led to a deeper engagement in learning, and consequently school achievement (Mih&Mih, 2013). In the aspect of relatedness, research showed that student's behavioural and emotional engagement mediated students' sense of relatedness and their grades (Appleton, 2008).

The student's sense of belongingness to the school (a component of the affective dimension of student engagement) is further explained by the construct of school bonding. School bonding includes student's connection and interest to the school and its ideals, and involvement in school activities (a component of the behavioural dimension of student engagement) (Maddox & Prinz, 2003). Studies indicate a positive relationship between school bonding and academic performance. For instance, a drug prevention program that enhanced school bonding was found to increase students' GPA and to reduce absenteeism (Maddox et al., 2003). Findings of these studies underscore the influence of the affective and behavioural dimensions of student engagement on academic performance.

Self-determination further explicates the regulation of behaviour. Motivation for Deci and Ryan exists in a continuum (Corr et al., 2009), from amotivation to intrinsic motivation. On one hand, a student may be amotivated, or not having any motivation at all to engage in a task (Corr et al., 2009). The student's regulatory process is viewed as nonintentional, nonvaluing, lacking in control, and incompetent. On the other hand, a

student may engage in activities either due to extrinsic or intrinsic reasons. Individuals who are extrinsically motivated do so because of external pressure such as rewards or punishments, yet may not be enjoying what they are doing and may not be performing at their best. However, an intrinsically motivated student engages in a task because the activity itself is seen as interesting and enjoyable, and engaging in the activity is inherently satisfying. This means that an intrinsically motivated individual is self-regulated and is internally controlled (Corr et al., 2012). Student engagement, earlier defined as a student's interest, active participation, involvement and commitment to one's learning, is an intrinsically motivated and regulated experience (Kahu, 2013). Testing the beneficial outcomes of intrinsic motivation, an experiment was conducted in a high school Tae Bo class. Results showed that students with an intrinsic goal for learning Tae Bo put in more effort than those with extrinsic goals, performed the exercises better when tested days later, persisted more, and were more willing to demonstrate Tae Bo exercises in another class (Vansteenkiste, Simons, Soenens, & Lens, 2004). In addition, several studies were conducted to understand how the social environment affects intrinsic motivation. These studies indicated that positive feedback enhanced intrinsic motivation, and imposed goals, deadlines and surveillance undermined it (Corr et al., 2012). All these studies validate the SDT view that intrinsic motivation is closely associated with positive performance and well-being outcomes.

Thus far, student engagement literature and related studies agree that there is a positive and bi-directional relationship between student engagement and academic performance.

Objective of the Study

The study determined the influence of school engagement on the academic performance of 2nd year students enrolled during SY 2015-2016 in Lourdes College. The study specifically determined the following: (1) the students' level of school engagement along the affective, behavioral, and cognitive domains during the last school year; (2) the students' academic performance during the last school year; and (3) which of the student engagement domains predict academic performance.

METHOD

The study used the descriptive-correlational research design as it described the students' engagement in school, the independent variable, and their academic performance, the dependent variable, as well as explored the relationship between those variables.

The participants of the study were the randomly selected 155 second year students enrolled during the 2nd semester of SY 2015-2016. Coming from the different programs, the participants comprised 65% of the total population (239) of the second year students.

Data on students' school engagement were obtained using a standardized questionnaire, while the students' academic performance was determined using their cumulative Grade Point Average for the preceding two semesters. The items of the standardized questionnaire were reviewed for their suitability to the local setting and all were deemed

suitable; hence, no modification of the questionnaire was made. Nevertheless, the questionnaire was run for further reliability testing, which yielded a Cronbach alpha of 0.709, establishing further the questionnaire's reliability.

Data were analyzed using descriptive (percentage, mean, and standard deviation) and inferential statistics (Multiple Linear Regression Analysis).

RESULTS AND DISCUSSION

This section presents the data and their interpretations and implications in the order of the stated objectives of the study.

Students' Academic Performance

Table 1. Distribution of Students as to Academic Performance (n=155)

	Range	Description	F	%
1	1.24 - 1.0	Outstanding	0	0
2	1.25 – 1.49	Superior	13	8.3
3	1.5 – 1.74	Very Good	33	21.2
4	1.75 – 1.99	Good	33	21.2
5	2.0 – 2.24	Satisfactory	37	23.7
6	2.25 – 2.49	Slightly satisfactory	24	15.4
7	2.5 – 2.74	Acceptable	7	4.5
8	2.75 – 2.99	Fair	2	1.3
9	3.0 – 3.49	Marginal	2	1.3
10	3.5 – 4.99	Conditional	4	2.6
11	5.0	Failure	0	0

Overall GPA: 2.03 (Satisfactory)

Table 1 reveals that on the average the students had satisfactory academic performance as reflected by the overall GPA of 2.03. The table further shows that the highest percentage of the students obtained a GPA within the satisfactory range (23.7%), followed by those whose GPA was within the very good (21.2%) and good (21.2%) ranges. None obtained superior and failing GPAs. It can be inferred from the data that the students generally performed slightly well in their academics.

Students' School Engagement

Table 2. Students' Level of School Engagement along the Affective Domain

Indicators		Mean	SD	
1.	I am very interested in listening.	3.31	0.46	Agree
2.	I think what we are learning in school is interesting.	3.44	0.52	Agree
3.	I like what I am learning in school.	3.56	0.52	Strongly Agree
4.	I enjoy learning new things in class.	3.66	0.53	Strongly Agree
5.	I think learning is boring.	3.25	0.76	Agree
6.	I like my school.	3.41	0.58	Agree
7.	I am proud to be at this school.	3.47	0.61	Agree
8.	Most mornings, I look forward to going to school.	3.21	0.62	Agree
9.	I am happy to be at this school.	3.45	0.56	Agree

Overall Mean: 3.42 (Agree)

SD: 0.36

Table 2 shows that overall the students' level of affective engagement in school was high ($M=3.42$). Most salient of the indicators were liking what they were learning in school ($M=3.56$) and enjoying learning new things in class ($M=3.66$), indicating that the students find their learning experience in school pleasurable. High ratings for all indicators indicate the students' high intrinsic motivation to learn. Motivation is a strong driving factor for academic success. As Miserandino (2014) explained, students who are motivated in school and have positive attitude towards what they do highly engage themselves in school-related tasks. In turn, motivation and engagement eventually result in skills and abilities enhancement (Corr & Matthews, 2012) necessary for students to succeed in school. Moreover, it is encouraging to note that the students had intrinsic motivation to learn, which is found to be more powerful and lasting than extrinsic motivation. As found in a study, students who had an intrinsic goal for learning performed better and persisted more in what they did than those with an extrinsic goal (Vansteenkiste, Simons, Soenens, & Lens, 2004).

Table 3. Students' Level of School Engagement along the Behavioral Domain

	Indicators	Mean	Sd	
1.	I try hard to do well in school.	3.48	0.56	Agree
2.	In class, I work hard as I can.	3.39	0.52	Agree
3.	When I'm in class, I participate in class activities.	3.14	0.48	Agree
4.	I pay attention in class.	3.22	0.58	Agree
5.	When I'm in class, I just act like I'm working.	2.66	0.82	Agree
6.	In school, I do just enough to get by.	2.33	0.7	Disagree
7.	When I'm in class, my mind wanders.	2.38	0.74	Disagree

Cont'.

8.	If I have trouble understanding a problem, I go over it again until I understand it.	3.26	0.59	Agree
9.	When I run into a difficult homework problem, I keep working at it until I think I've solved it.	3.2	0.57	Agree
10.	I am an active participant of school activities such as sport day and school outreach.	2.79	0.76	Agree
11.	I volunteer to help school activities such as sport day and school outreach.	2.71	0.75	Agree
12.	I take an active role in extra-curricular activities in my school.	2.79	0.87	Agree

Overall Mean = 3.0 (Agree)

Table 3 reveals that overall the students had high behavioral engagement in school (M=3.0). Most salient indicators were trying hard to do well (M=3.48) and working hard as able in the class (M=3.39). A close look at the data reveals consistency in the students' ratings as made evident by very low ratings the students gave to the indicators – doing just enough to get by (M=2.33) and having wandering minds during class (M=2.38) – indicators that run contrary to the rest of the indicators. Ratings of the other indicators of

behavioral engagement indicate the students' active participation in school and in class activities. Such high level of behavioral engagement is desirable for that provides students with sense of belongingness and makes school experience even more fun and meaningful – factors that enhance students' persistence and diligence in their studies (Lam et al., 2014).

Table 4 discloses that overall the students' cognitive engagement in school was high (M=3.96). Among the indicators, most salient were figuring out the usefulness of information in the real world (M=4.12) followed by connecting what is learned to personal experiences (M=4.11) and understanding a material by relating it to what is already known (M=4.09). High means of all cognitive engagement indicators indicate that students employed reflective, self-regulated, and associative learning. Such cognitive strategies for learning a material are deemed to be of high level. As cited by Lam et al. (2014), high cognitive achievement is attributable to high cognitive processing of learning material. However, such high self-reported cognitive engagement of the students does not indicate the extent of quality of such engagement, which this study did not measure.

Table 4. Students' Level of School Engagement along the Cognitive Domain

	Indicators	Mean	SD	
1.	When I study, I try to understand the material better by relating it to things I already know.	4.09	0.76	Often
2.	When I study, I figure out how the information might be useful in the real world.	4.12	0.78	Often
3.	When learning new information, I try to put the ideas in my own words.	4.08	0.8	Often
4.	When I study, I try to connect what I am learning with my own experiences.	4.11	0.84	Often
5.	I make up my own examples to help me understand the important concepts I learn from school.	3.89	0.83	Often

Cont'.

6.	When learning things for school, I often try to associate them with what I learnt in other classes about the same or similar things.	3.81	0.81	Often
7.	I try to see the similarities and differences between things I am learning for school and things I already know.	3.94	0.74	Often
8.	I try to understand how the things I learn in school fit together with each other.	3.95	0.77	Often
9.	I try to match what I already know with things I am trying to learn for school.	3.95	0.79	Often
10.	I try to think through topics and decide what I'm supposed to learn from them, rather than studying topics by just reading them over.	3.84	0.76	Often
11.	When studying, I try to combine different pieces of information from course material in new ways.	3.75	0.83	Often
12.	When learning things for school, I try to see how they fit together with other things I already know.	3.88	0.76	Often

Overall Mean = 3.95 (Often)

Results of the Multiple Regression Analysis on Academic Performance in Relation to the Domains of School Engagement

Table 5 reveals that among the domains of school engagement, only behavioral engagement predicted academic achievement. Affective and cognitive engagement did not predict academic achievement. Data further reveal that 6.9% of the variance in students' academic performance can be attributed to their behavioral engagement, while 93.1% of the variance in academic achievement can be attributed to other factors that may include intelligence, academic support, and level of academic challenge of a program. Also revealed that that a unit increase in behavioral engagement will predict increase in academic performance by $-.234571$ (the lower the number, the higher the grade).

Finding of this study parallels that of Maddox and Prinz (2003) revealing that the behavioral dimensions of student engagement significantly influence academic achievement. It is a well-accepted contention that students who actively engage in school tasks, both curricular and extra-curricular, persistently and positively succeed in school. The rigors of college require students to be persistent, diligent, and active. Students' active participation in school activities not only gain for them credits helpful in passing their subjects but, more importantly, develop in them some learning skills and abilities that will help them succeed in college even more. Resultant outcomes of active participation or interaction may include increased self-esteem, personal satisfaction, self-actualization, sense of belongingness and identification, and peer acceptance – these and more lead students to engage more actively in school and thus ensure academic success (Hu, 2011).

Table 5. Results of the Multiple Regression Analysis on Academic Performance in Relation to the Domains of School Engagement

	Beta	Std.Err. - of Beta	B	Std.Err. - of B	t(151)	p-level
Intercept			3.702494	0.579713	6.38677	0.00000 0
A	-0.102206	0.087685	-0.139384	0.119582	- 1.16560	0.24561 4
B	-0.234571	0.086012	-0.413278	0.151539	- 2.72721	0.00714 4
C	0.007353	0.079739	0.006339	0.068744	0.09222	0.92664 9

R= .29443430 R²= .08669156 Adjusted R²= .06854636 F(3,151)=4.7777 p<.00328
Std.Error of estimate: .46965

CONCLUSION

Findings of the study support the contention that academic performance is influenced by student engagement in school, particularly behavioral engagement. That is, the more a student actively participates in school activities both curricular and extra-curricular, the better a student performs academically. Therefore, schools have to provide students with rich school-related activities to provide them with opportunities that enhance learning skills and abilities and to encourage them to be fully participative. However, other domains of student engagement in school have to be developed for learning is an outcome resulting from the interactions of interrelated contextual factors and learners' psychological processes.

Results of this study do not debunk findings of other studies and contentions that affective and cognitive engagement influence academic performance. Failure to find statistical evidence does not negate the predictive power of those domains. The finding of this study only further supports earlier findings that behavioral engagement does predict academic success.

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