

# Difference in Academic Engagement among College Students as a function of Learning Environment

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#### Abstract:

Academic engagement of students, as an important point in the learning process because of the students attachment to their learning environment, have been documented in various studies to be guided by emotions, which is subsequently grounded in Self-Determination Theory (SDT). SDT and further studies emanating from the theory emphasize that students can achieve academic engagement from a learning environment that puts premium on learners' emotional needs through psychological relatedness. Using survey data gathered from 177 Filipino university students enrolled in an Oral Communication subject, the present study investigated whether academic engagement differs significantly as a function of their classroom learning environment when they perceive their classroom as either autonomy-supportive or teacher-controlled. Findings from MANOVA test, revealed significant differences in academic engagement between types of learning environment. Students who perceived their learning environment to be autonomy-supportive showed significantly higher academic engagement in their oral communication classes compared to their teacher-controlling counterparts. Positive outcomes in a learning environment are stimulated and negativities are prevented when teachers support their students and engage them in decision-making activities and setting of class rules. Teachers may introduce more autonomy-supportive learning environments as an alternative to improve their instructional practices and improve students' engagement.

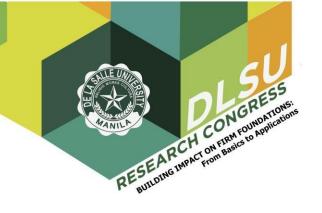
Key Words: Learning Environment; Classroom Management; Academic Engagement

## 1. INTRODUCTION

Over a decade, studies have come together on the scope of Academic engagement as the main predictor on learners' academic achievement (Fredricks, Blumenfield, & Paris, 2004). Individuals have changing emotional, cognitive and social needs and personal goals as they mature. Educational institutions have to change to bring its learners on a societal context that will inspire and make them involved as they grow. This growth mostly happens in the smallest unit in school, classroom. It is the place where various levels of contexts like organizational, social, instructional relationship among learners and the educator as well as the learners' academic engagement can be solved (Eccles et al., 1993).

Learning Environment and Academic Engagement

In an Asian study, it was found that learners who experience high levels of classroom engagement and peer support are likely to take on engagement and supportseeking coping when faced with academic difficulties (Shih, 2015). The effects of

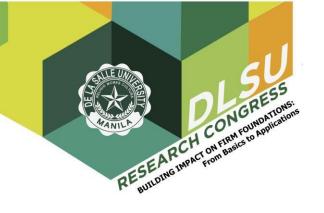


perceived learning environment on learners' practice of engagement approaches were positive. Learners who have obtained higher levels of supportive learning environment displayed higher engagement than those in the other classes which reported lower levels supportive learning environment (Shih, 2015). Highly autonomous students are more engaged in school, achieve higher academic performance and stay in school until graduation (Grolnick, Gurland, DeCourcey, & Jacob, 2002; Hardre & Reeve, 2003). Some research says that teachers can make the students feel autonomous in their learning environment (e.g., Johnson, Crosnoe, & Elder, 2001). Learners' sense of belongingness can be supported through having educators who give prompt feedback to their students and by pushing their limits. Educators can make the students self-directed or autonomous positive internalization when they have achieved (APA, 1997), which can be achieved through designing their learning environments in a more encouraging and inspiring atmosphere that enriches this type of learning involvement. It has been drawn in the academic adaptation of students regardless of where they come from, and has a vital part in advocating competent behavior in the classroom in general such as lessening the effect of classroom-related distraction and giving care and breaking away in any form of unease (Suarez-Orozco, Pimentel, & Martin, 2009).

Academic engagement is an essential factor for learners' perseverance in a learning environment (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Through an autonomy supportive learning environment, that is grounded from an SDT Perspective, the learners will have an active participation (Lane, & Beebe-Frankenberger, 2004), climate of respect, voices will be heard such as cooperatively developed rules, logical consequences and a focus on the rights and wellbeing of both educators and learners (Shaughnessy, et al, 2012; Manning, & Bucher, 2013).

There are certain cultures or subgroups where context has significant consequences in terms of cognitive, affective and motivational outcomes. Studies in different countries showed varied results about the relationship between Academic engagement and students' perceived learning autonomy. In a study conducted with 1,906 students in seven universities in South America that the supportive learning climate emerged as the most significant predictor of behavioral engagement which includes attending school, participating in classes and completing homework (Pineda-Baez, et al. 2014). In another North American study on the importance of school attachment in Academic engagement and achievement of newcomer immigrants from 51 schools of high concentration of immigrants, it revealed that out of several variables (i.e., school- based supportive relationships, academic self- efficacy. cognitive engagement, behavioral engagement, school violence, demographic data) that were tested emotional school-based relationships from teachers, school personnel, peers and from the family obtained a positive correlation. It was also supported by its qualitative narratives that school-based relationship is a major influence on students' Academic engagement (Orozco, Pimentel, & Martin, 2009). In another American research among 10,586 students in middle school and high school, Hispanic Americans and African Americans were seen to be more attached and engaged in school than Caucasians which presents no relationship. Similarly, it was reflected within the high school level. Students from the West in reference to the Southern US were the groups who were significantly engaged, whereby there were more Hispanic Americans, compared to the other locations such as the Midwest and Northeast (Johnson, Crosnoe, & Elder, 2001).

What were recognized in the previous studies are relationships between the students' perceived learning environment and Academic engagement in different international contexts. The literature also includes the inseparable relatedness of affective and behavioral engagement. Although studies cited the several correlation of learning environment and Academic engagement, the literature still needs to explain the diverse scope. Experimental studies which are generally focus on collective dimensions of engagement on a single construct (Marks, 2000). The practices of combining items onto broader scales prevent the possibility of classifying the different types of engagement and other learning-related outcomes (Jimerson, Campos, & Greif, 2003). Also, the context of having different learners may require some explanation. If there are diverse perspectives of Academic engagement, there must be also different sets of learners to examine how learning environment contexts work differently not just on the general average but something that could work to a single individual (Richters, 1997; Bergman, von Eye, & Magnusson, 2006).



In Asian contexts, there are several instances that a controlling learning environment is working and is not bad as it was perceived in the Western countries (e.g. Ku, 2012; Shih, 2015). These instances include influential family support, respect for the power and wisdom of parents and teachers and the belief that education does not necessarily to be entertaining nor engaging (Ku, 2012), in which the students are seen to persist and to succeed.

# **Conceptual Framework**

It is clear that students' academic engagement is influenced by their perceptions of their learning environment. But in a country that is highly influenced by the Western colonization but is still grounded on its Oriental culture, it is vague in the Philippine context if college students' Academic engagement differs as a function of their perceived learning environment. The phenomenon could be explained from the two SDT mini theories: Basic Needs Theory and Causality Orientations Theory (COT). The Basic Needs Theory (Deci, & Ryan, 2002) says that regardless of orientation, all humans must meet their emotional needs of relatedness (Baumeister, & Leary, 1995; Deci, & Ryan, 2002; Chirkov, Ryan, Kim, & Kaplan, 2003), competence (White, 1963; Harter, 1978; Deci & Ryan, 2002), and autonomy (deCharms, 1968; Deci, 1975). Individuals are born with the need to experience to be competent (Grolnick & Ryan, 1987; Skinner, & Connell, 1993; Hardre & Reeve, 2003), self-directed and related in making decisions with the setting they are into which they will feel the sense of mastery (Elliot, & Dweck, 2005). Teachers may provide some opportunities where students can experience these elements by giving them involvement, considerations and/or choices in house rules and classroom-related activities. Teachers can share a considerable level of power that can be handled by their students (Weimer, 2002). When students perceive that their teachers provided these elements in the learning environment they are in, learners will feel trusted by their teachers, giving them the ability of handling a certain decision. Thus, learners will have perceptions of believing in oneself, competence and control which are positive predictors of academic engagement (Eccles & Midgley, 1989; Anderman, 1999). This is how students' perception of learning environment could revitalize their motivation and be academically engaged. Another would be the Causality Orientations Theory that focuses on the personality differences in global motivational orientation.

It states that people distinguish on how they generally perceive their basis of their motivational orientation either autonomous or controlled (Vansteenkiste, Zhou, Lens, & Soenens, 2005). Before students perceive their learning climate to be autonomy-supportive or teacher-controlled, their teachers design the instructional activities cautiously for the learners to be involved in the class (Weimer, 2002). During the instructional planning, teachers can provide academic engagement by considering their learners' background to become motivated intrinsically or use their subject teaching mastery to ensure that the lessons will be obtained optimally using effective extrinsic motivational programs.

Learners perceive their learning climate to be autonomy-supportive when learners' prior knowledge, beliefs and interest are considered to develop the learners' untiring psychological need for motivation and development (Deci, & Ryan, 1985). When learners feel their teachers understand their background such as talent. delight, potential, and desires, upbringings, students agree on their self- endorsed values. Thev perceive it as autonomy supportive. They become intrinsically motivated and capable of communicating their circumstances and desires encouragingly (SDT; McCombs & Whisler, 1997; Wohlfarth, et.al 2008); their motivation levels improve intrinsically.

In contrast, learners perceive their learning environment to be teacher-controlled when they have less independence and are likely to agree with extrinsic or intrinsic directives. Hence, this regulates the learners' behavior through using force, demand or order (Vansteenkiste, Zhou, Lens, & Soenens, 2005). The (pressure; intimidation; teachers' supervisory acts the fail; comparison; passing exams not to instructors' wisdom and expertise, etc.) manages the class to run seamlessly, less-chaotic, well-behaved. In time, these forms of extrinsic motivation become intrinsic through consistent repetition and relevant engagement. When learners perform it habitually in their learning environment, the classes get busy and very productive. Hence, they get involved to accomplish academic-related goals for their own sake (Markus, & Kitavama, 1991). Thus, in time, this will also lead to a relatively high Academic engagement.



Statement of the Problem

The researcher aims to find out the difference between the perceptions of their learning environment will be able for the Filipino college students to work at their best situations. The researcher aims to respond to this question:

Are students more academically engaged when they perceive their learning environment as more autonomy supportive or teacher controlled?

## Hypothesis

In the current study, it was hypothesized that students who perceived their learning environment to be autonomy-supportive will have a significantly higher difference in academic engagement than those who perceived their learning environment to be controlling.

# 2. METHODOLOGY

## 2.1 Research Design

Cross-sectional design was used in the study to observe the difference on the Filipino college learners who have the same income groups, age bracket, and educational level in terms of varying perceptions on their learning environment as either autonomy-supportive or teacher-controlled. This study gives a glimpse of assessing the difference between the perceived learning environments at one point in time.

## 2.2 Participants

To achieve this, Cross- sectional design was used in the study to observe the difference on the 177 Filipino college learners from different courses who are enrolled in a general subject but have different perceptions on their learning environment in either autonomy-supportive or teachercontrolled at one point in time.

#### 2.3 Measures

Learning Self-Regulation Questionnaire (SRQ-L). This scale is used in a particular learning environment for college or more mature learners. SQR-L measures the learners' academic regulation based on his perceived

Despite the formidable relationship of autonomy-supportive learning environment on academic engagement in several studies, there are also some studies in the Asian context where it is not viewed as relatively bad as compared to the West (e.g. Ku, 2012; Shih, 2015). In the Philippine context, there were several features that are relatively both Eastern and Western. One Filipino trait that is relatively Eastern is group harmony, (Schrier, et al., 2010). Filipinos are generally collectivistic (Bochner, Parkes, & Schneider, 2001) and have a social need to have a sense of making a decision (Reeve, Bolt, & Cai, 1999). This is also important similar Asians from the mentioned studies who prioritize similar qualities of valuing relationships, family ties, sets expectations not only for self but also for opinions of others. In a classroom, a student would always love to follow the directives and avoid negative impression to his teacher. Another would be a student who believes the capacity and mastery of the teacher to give the directions on how a task should be performed; power distance is also very tolerable and there is no resistance against power abuse by superiors (Hofstede, 2011).

As once a colony by the Westerners for four centuries, Filipinos have relatively similar way of perceiving how society should be driven and short-term orientation to its colonizers as compared to our Asian neighbors. Contrary to Filipinos' collectivism, they have a strong similarity from the Americans (North and Latin America) that culture is determined by competition, success being identified by the best in field - a value mechanism that begins in school and prolongs all the way through lifetime. Aside from the similarity on the perception in terms of how society works in the Americas, Filipinos have relatively similar low long-term orientation which they focus on fast results (Hofstede, 2011). Another Filipino attribute related to these Western perspectives of competition and short-term orientation is crab mentality. Any member who performs beyond others out of envy or competition is being weakened (Dy, 1994; Shanker, 1994). An example could be students do not want to be the last in the class ranking. These are some usual classroom phenomena yet conflicting features of autonomysupportive and teacher-controlled learning environments that happen simultaneously in Philippine classrooms.



learning environment mainly: Controlled Regulation (extrinsic or introjected motivation) and Autonomous Regulation. (intrinsic motivation). The was scale designed to have the validation of the two major categories of learning environment regulation. This instrument has Cronbach's alpha reliability of 0.75 and 0.80 for controlled regulation and autonomous regulation respectively and an internal consistency of a= .91 (Aubrey, Brown, & Miller, 1994). The scale presented was developed for the study conducted in a tertiary education in a communication class with a topic related to job interviewing where students will learn to do job interviewing. The scale was adapted slightly for college students learning medical interviewing (Williams, & Deci, 1996) and organic chemistry (Black & Deci, 2000). The same scale was adapted though some items were changed from chemistry to oral communication. The questionnaire consists of 12 items where seven means very true, four means somewhat true and one means not all true. The analyses of the first instrument can be performed using a Relative Autonomy Index by deducting the controlled subscale score from the autonomous subscale score. (Black, & Deci, 2000).

Engagement Student Scale. The scale consists of nine affective engagement subscale that measures the likelihood for learning in class. It has a high level of reliability range from 80-.89 (Lam et al., 2014) .The 12-item behavioral engagement subscale measures the level of the students' efforts in learning and participation in classroom learning environment activities, while the 12item cognitive engagement items pertains to the relevance and usefulness of the lessons in class. These questions have been carefully selected and used in 12 countries (e.g. Skinner, & Belmont, 1993; Finn Pannozzo, & Voelkl., 1995; Greene, & Miller, 1996; Rao & Sachs, 1999; Dowson & McInerney, 2004; Wolters, 2004; Hill, & Werner, 2006; Bråten, & Samuelstuen, 2007). The Student Engagement Scale showed good internal consistency and test-retest reliability and the data from the 12 countries fit well to a second-order model with affective, behavioral and cognitive engagement as the first factors and student engagement as the second factor (Lam, et al., 2014). During the data screening, however, 33 participants were removed. Data from 144 participants were included in the final analysis.

# 2.4 Data analysis

Descriptive statistics and One-way MANOVA were used as analytic strategies for the study. Before performing the main analysis for this study, the interval data were transformed into categorical by finding out Relative Autonomy Index. This was obtained from deducting the controlled subscale score from the autonomous subscale score. The scores with the positive ones were considered on Autonomy- Supportive while the negative ones were grouped to teacher-controlled learning environment (Black & Deci, 2000). Assumptions of normality of the distribution were also inspected. Outliers were removed as well as the observations of Skewness and Kurtosis with greater than +/- 2.00. Shapiro Wilk Test was also performed to test for normality. And the results suggested a close to normal distribution (Affective .00, Behavioral, .03 and Cognitive, .03). Thus a Q-Q Plot was also inspected for validation of the normality test. The points plotted in a Q-Q plot were normal and light tailed when viewed from left to right.

## 3. RESULTS AND DISCUSSION

Preliminary to the main analysis, the data were tested for satisfaction of the assumptions of multivariate analysis of variance. The assumption of linearity was tested by finding out if there was a linear relationship between each pair of dependent variables for each group of the independent variable, and this was visible in the scatter plot matrices in SPSS. Furthermore, the results of Levene's test of homogeneity of variance was performed where it showed equal variances across samples, F(1,142) = .761, p = .385; 1.296, p = .257; 2.80, p = .096

MANOVA results showed that there was a statistically significant difference in Academic engagement between types of learning environment, Wilk's  $\Lambda = 0.928$ , partial  $\eta 2 = .07$ ; F (3, 140) = 3.61, p< .015. Students who perceived, their learning environment to be autonomy supportive showed significantly higher academic engagement in their oral communication classes than those who perceived their learning environment to be controlling.



# 3.2 Discussion

The controlling environments in the Philippine and other Asian contexts are not as detrimental, relative to the Western context. One reason why the Academic engagement in a teacher- controlled learning environment is still relatively high in Asian contexts could be the demand for learners to be academically engaged overtime externally or internally. The results of this study have revealed another key finding. After obtaining the linear combination of dependent variable, the univariate results were the also tested. It showed that students' perception of their learning environment as autonomy -supportive or teachercontrolled does not have a significant difference on Academic engagement, cognitively. Most of the their previous studies only showed significant relationship between the autonomy-supportive learning environment and students' Academic engagement that are categorized affective and behavioral under engagement. One students' cognitive explanation would be that required engagement is based on the tasks performance as set by their teacher regardless of their learning environment.

Teachers may introduce more autonomysupportive learning environments than teachercontrolled learning environments to improve their instructional practices and improve their students' engagement, based on results of the study. School administrators may start including this in their faculty development programs and continuing education programs. The present study can be also beneficial for teachers who are looking for alternative ways to improve their instruction and engage their students better. A good students' learning experience is not just about teachers who are good in creating curriculum and assessment. It can be also enhanced by establishing a learning environment that is anchored in students' values without compromising the institutional and curricular outcomes.

# 3.3 Limitations of the Study

The present study offers several opportunities such as using more precise self-report scale as a measurement of academic engagement for future research. Since the current study is embarked on a non-experimental design, establishing the causal nature between independent and dependent variables would be challenging. Further refinements in the variables and methodologies maybe undertaken in further studies to better map possible links between the variables used in this research.

## 4. CONCLUSIONS

The main outcome exposed that even though the positive values of both teacher-controlled and autonomysupportive learning climates showed positive impact on the tertiary students in the Philippine context, there is still a significant difference between these learning environments. Learners are likely engaged academically when they perceive their learning environment to be more autonomy-supportive than controlling.

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