

# ACADEMIC PROCRASTINATION AND ACHIEVEMENT GOAL ORIENTATION AS PREDICTORS OF ACADEMIC PERFORMANCE OF SELECTED COLLEGE STUDENTS

Charmaine Abegail P. Tarin and Marie Christine R. Rio  
*Psychology Area, Colege of Liberal Arts and Sciences*

## ABSTRACT

*The purpose of this study was to explore Active and Passive Procrastination in relation to Mastery-Approach, Mastery-Avoidance, Performance-Approach, Performance-Avoidance Goal Orientations. It wanted to determine which among these predict college students' academic school performance. Data were collected and analyzed from 30 undergraduates – comprised of 17 dean's listers and 13 probationary students – from the Colegio de San Juan de Letran, Manila. The results indicated that there is a significant relationship between Procrastination and Achievement Goal Orientation. The results also indicated that Procrastination was a predictor of student's Academic Performance (GWA) in school. Implications and future recommendations of this study are discussed.*

**Keywords:** *Active Procrastination, Passive Procrastination, Mastery-Approach Orientation, Mastery-Avoidance Orientation, Performance-Approach Orientation, Performance-Avoidance Orientation, Academic Performance of College Students of Letran*

## INTRODUCTION

Nowadays, college students are given a number of school requirements, which they need to fulfill in a short period of time. Majority of them are able to submit their requirements before the deadline, but some fail to submit their requirements on time due to some internal (laziness, procrastination, task difficulty) or external (heavy traffic) factors. This in turn, affects their academic performance negatively.

In school, college students also fight a constant battle between procrastination and motivation. Students who are a chronic procrastinator may be at risk of underachieving academically. Procrastination is reported to have adverse effects; putting their academic work in jeopardy. And it became an obstacle to those students who gets demotivated and off-track whenever there is an undesirable event in school happens.

### Academic Procrastination

One possible factor that affects students' performance in school is the Filipino mañana habit (mamayana) or what we call as, Procrastination. The preponderance of procrastination research is most common among college students, estimating as high as 80-95% (Pfister, 2002; Steel, 2002; Ellis & Knaus, 2002). This phenomenon is ubiquitous for several researchers had studied its deleterious effects. A student who is a chronic procrastinator tends to have a low academic class standing and low grades (Solomon & Rothblum, as cited by Lee, 2005; Tice & Baumeister, 1997), affective and health problems (Tice & Baumeister, 1997), and may also lead to cheating and plagiarism (Roig & DeTomasso 1995), as cited by Beck, Koons & Milgrim, 2000).

One of the most troubling and pernicious phenomena in the academic setting is Procrastination. The study of Rabin, Fogel and Notter-Upham (2011) stated that academic procrastination is the prevalence of a self-perceived problem that reduces academic achievement and increases stress and poor value of life. This kind of dilatory behaviour is the students habit of delaying or postponing tasks that are much more important and putting it off for a later time. Research also states that students who are faced with hectic problems in school tend to procrastinate (Beck, Koons&Milgrim, 2000). Also, academic procrastinators are notorious for self-handicapping (Brownlow &Reasinger, 2000), in which students may attribute their failures in their exams due to their lack of studying, rather than their intellectual capacity. However, some tend to procrastinate due to fear of failure, aversiveness of the tasks given, or to some extent, enjoyment of spontaneity.

Procrastination is commonly conceptualized maladaptively because of its involvement in the failure of managing or regulating one's goal. Procrastination can also be adaptive – students use it as a coping mechanism against anxiety, whenever there is an unwanted stimulus or task approaching. Chun Chu and Choi (2005) differentiated two types of academic procrastination: Active and Passive. Active procrastinators are the ones who choose to delay tasks, mainly because they work effectively and productively under pressure (Chun Chu & Choi, 2005); thus, often produce satisfactory outcomes (Morales, 2010). Just like the non-procrastinators, active ones also demonstrated similar self-efficacy levels, coping styles and academic performance (Chun Chu & Choi, 2005). Peak experience and cognitive efficiency (Morales, 2010; Schraw, Wadkins&Olafson, 2007) are some of the adaptive aspects of procrastination. However, passive procrastinators end up delaying important tasks because of their inability to make decisions quickly (Chun Chu & Choi, 2005). They are also called the traditional ones who put things off because of having lower grades (Tice &Baumeister, 1997), anxiety, irritation and self-blame (Pychyl, Lee, Thibodeau& Blunt, 2000) than the non-procrastinators. These two types of procrastinations have a significant inverse relation wherein they differ in their ability to meet deadlines.

## Theoretical Framework

The Flow Theory of MihalyCsikszentmihalyi explains how adaptive and maladaptive differs from each other. Flow is described as "*the state of total involvement in an activity that consumes one's complete attention*". Adaptive procrastinators show a deep state of flow where they are more likely to engage in challenging activities and work under pressure because they are more focused on achieving one goal (Schraw et al., 2007). This is in contrast to the idea of Schraw (2007) and Lee (2005) which states that students who experience procrastination, conceptualized maladaptively, are less likely to experience the flow state of learning processes.

Moreover, students today have different approaches when faced with difficulties in academics because this plays a significant role in their academic success (Hsieh, Sullivan & Guerra, 2007). The Achievement Goal Theory explains the different goal orientations of students (Ramnarain, 2013).

Achievement Goal Theory is a motivation theory that assumes goal as cognitive representations and a direction for students who are trying to accomplish something. This also explains their purpose for doing such task. Achievement goals explain how people differ in terms of adapting, approaching and responding into achieving a task. Elliot and McGregor (as cited in Eum& Rice, 2011) posited a "2x2 achievement goal framework", in which there are four types of goal orientation. Mastery Goal is associated with positive learning strategies and attitudes (Barzegar, 2012), acquiring knowledge and

improved competence (Mastery-Approach) (Eum& Rice, 2011) or to lose competence (Mastery-Avoidance). Having Mastery Goals may result in one's self-development (Bulus, 2011), in which they believe that exerting their efforts leads to success and enhancement of important skills. In Performance Goals, students compare their current performance to others and try to perform better (Performance-Approach) (Eum& Rice, 2011). It is also associated with avoidance of difficult task, where they perform poorly relative to others (Performance-Avoidance) (Barzegar, 2012).

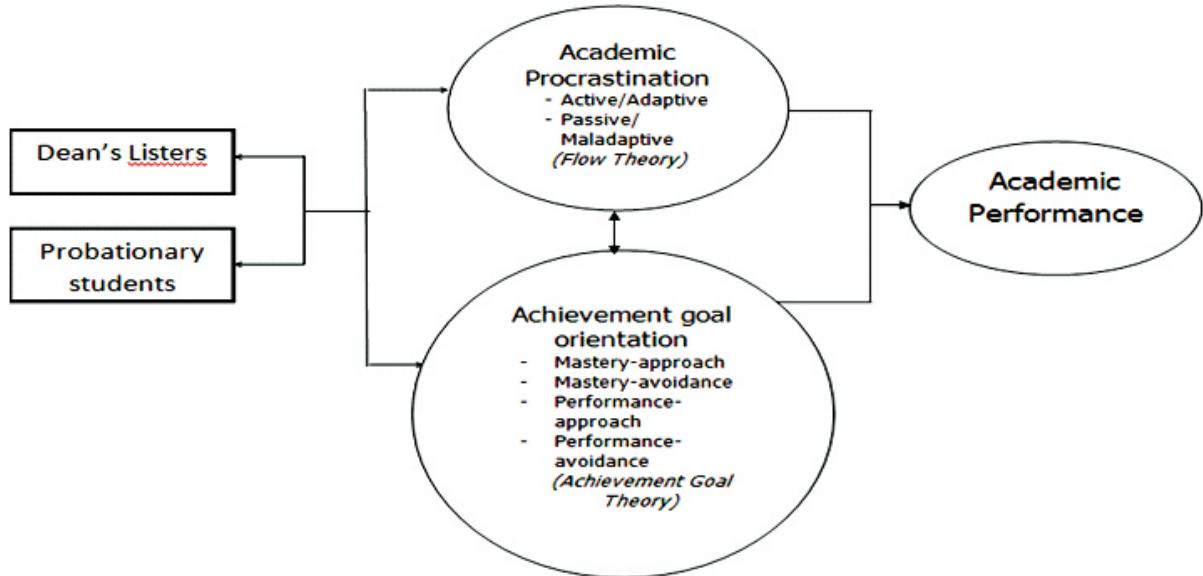


Figure 1: Conceptual Framework

## The Current Study

Only few studies have investigated the relation of procrastination (maladaptive) to the four goal orientations (Howell & Buro, 2009; Howell & Watson, 2007). Corkin, Lindt and Yu (2009) stated that, as of now, there are no studies or research that examines the relation between Active Procrastination and the four facets of Achievement Goal Orientation. Guided by this view, this study explored Active (Adaptive) and Passive (Maladaptive) Procrastination in relation to the four goal orientations. It determined which among these predict college students' academic performance.

By observing these variables, educators were better informed of their student's reasons for succeeding or failing in school. This identifies the learning behaviours of the students, which serves as an input for the educators to create a conducive teaching and learning environment (Yahaya et al., 2010).

## Research Objectives:

1. To find out which type of Academic Procrastination is evident among college students.
2. To find out which type of Achievement Goal Orientation is manifested among college students.
3. To determine how Active and Passive Procrastination are related to the four (4) types of Achievement Goal Orientation.
4. To ascertain if Academic Procrastination and Achievement Goal Orientation predict Academic Performance of college students.

5. To compare if there is a difference between high and low achievers in Procrastination and Achievement Goal Orientation.

### **Research Hypothesis:**

H1 – Procrastination was positively related to Achievement Goal Orientation.

H2 - Active/Adaptive Procrastination is positively related to Mastery Approach and Avoidance.

H3 - Passive/Maladaptive Procrastination is positively related to Performance Approach and Avoidance.

H4 - Procrastination was positively related to Achievement Goal Orientation by type of respondent.

H5 - Active/Adaptive Procrastination is positively related to Mastery Approach and Avoidance by type of respondent.

H6 - Passive/Maladaptive Procrastination is positively related to Performance Approach and Avoidance by type of respondent.

H7 – Academic Procrastination and Achievement Goal Orientation are predictors of Academic Performance.

H8 – Procrastination significantly differs by type of student.

H9 – Achievement Goal Orientation significantly differs by type of student.

## **METHOD**

### **Research Design**

The study used the Comparative-Correlational-Causal Modeling Design to determine how Academic Procrastination was related to Achievement Goal Orientation. Moreover, it also was used to determine if Academic Procrastination and Achievement Goal Orientation were predictors of Academic Performance of college students.

### **Participants**

30 student participants (mean age= 17.47, SD= 4.869) from different programs in Colegio de San Juan de Letran – Manila took part in the survey. There were 11 male students and 19 female students. They were divided into two groups and were categorized as high performers (dean's listers) and low performers (probation). They had at least a load of 18 units and above during the course of the semester. Dean's listers are those students who have at least a regular load prescribed for the semester and do not have a grade below 85% in any academic and theology subjects; while probationary students are those who have incurred outstanding failures (failing grades, Unauthorized Withdrawals, and Incomplete grades) of at least 12 units at the end of a given semester (CSJL Student's Handbook Collegiate Department, 2006-2007).

### **Measures**

#### **Academic Procrastination Scale**

The Academic Procrastination Scale is a 65-item scale ( $\alpha=0.926$ ) that measures both adaptive and maladaptive aspects of procrastination that is appropriate for Filipino students. It has three

subscales, namely: structured procrastination (adaptive), unstructured procrastination (maladaptive) and non-procrastination. The new scale could distinguish structured procrastination with desirable outcomes and unstructured procrastination with undesirable outcomes. This scale was developed by Romel Morales in 2010. The three subscales shows good internal consistency reliabilities with structured procrastination (adaptive) getting a reliability coefficient of  $\alpha=0.928$ , unstructured procrastination (maladaptive)  $\alpha=0.914$ , and non-procrastination  $\alpha=0.792$ . All questions are measured on a 6-point Likert scale (1=strongly disagree (SD); 6=strongly agree (SA)). Sample items includes: "It is easy to keep myself motivated when working near deadlines", "I don't get things done on time" and "I usually accomplish all the things I plan to do in a day".

### Achievement goal orientation

The 2x2 Achievement Goal Orientation Questionnaire is a 12-item scale that is comprised of mastery-approach, mastery-avoidance, performance-approach and performance avoidance goals. Items are rated on a scale ranging from 1 (not at all true of me) to 7 (very true of me). Elliot and McGregor (2001) reported evidence attesting to the reliability of the mastery-approach ( $\alpha=.87$ ), mastery-avoidance ( $\alpha=.89$ ), performance-approach ( $\alpha=.92$ ) and performance-avoidance ( $\alpha=.83$ ) dimensional scales.

### Academic performance

The participants' general weighted average (GWA) was obtained from the schools files.

### Procedure

The names and grades of the students were obtained from the concerned departments in the Colegio. Participants were informed about their involvement in the study via text message which consists of the date, place and time of the testing session.

Inside the testing area, they were informed that the study entails a series of paper-and-pencil questionnaires and takes approximately 30-40 minutes. Participation in the study was voluntary and confidential. First, they completed the demographic profile, which includes their names, age, sex, year level and their course. Participants completed the following tests in the following order: (a) Academic Procrastination Scale and (b) Achievement Goal Orientation. The test results were encoded and processed. Statistical analysis ensued.

### Statistical Analysis

Correlation analysis was conducted through Kendall Tau, to test the relationship between Academic Procrastination and Achievement Goal Orientation; while Linear Regression was used to show if Academic procrastination and/or Achievement Goal Orientation predict students' Academic Performance in school. Mann-Whitney U test was used to determine if there are differences between dean's listers and probationary students in Procrastination and in Achievement Goal Orientation. The level  $p < .05$  was considered as the cut-off value for significance.

## Significance of the Research

Since there are limited researches about procrastination and achievement goal orientation in the Philippines, the study contributes to the procrastination and goal orientation literature in the field of educational psychology. Specifically, the study will benefit the following:

*For the students.* This study will help them to cope and to learn more about procrastination. They will be more aware of their goal and their procrastination level. It will help them to adjust in their studies.

*For the professors.* This study will help them identify who among their students are using active and/or passive procrastination, in line with how they achieve one's goal. They may also construct a program about procrastinators. Educators will be better informed of their student's reasons for succeeding or failing in school.

*For future researchers.* This study might be able to help them in their respective researches and serve as a reference. They may also gain knowledge and effective ways or approach about the problems that the students are facing today.

*In the field of Educational Psychology.* The study will add to the growing literature of procrastination and achievement goal orientation in the Philippine setting.

## RESULTS

**Table 1**  
**Descriptive Statistics (N=30)**

<b>Variable</b>	<b>Dean's Listers</b>		<b>Probation</b>	
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>
Structured Procrastination	3.60	.624	3.99	.835
Unstructured Procrastination	2.66	.807	3.51	.922
Non-procrastination	3.41	.852	4.27	.608
Performance-approach	4.78	.993	5.61	1.01
Performance-avoidance	5.71	1.24	5.82	.959
Mastery-avoidance	5.25	1.26	5.51	.801
Mastery-approach	6.00	.799	5.85	.835

Table 1 reports of the descriptive statistics for all the measures. Probationary students were non-procrastinators ( $M= 4.26$ ,  $SD= .608$ ), whereas deans listers fall under the structured procrastination category ( $M= 3.60$ ,  $SD= .624$ ). Chu & Choi (2005) suggested that Active and Non-procrastinators have the same personal characteristics and outcomes. They just differ on the degree or level of procrastination. However, both sets of respondents; deans listers ( $M= 6.00$ ,  $SD= .799$ ) and probationary students ( $M= 5.85$ ,  $SD= .835$ ), possessed a mastery-approach goal orientation.

Kendall Tau, a non-parametric measure of correlation, was used to test the relationship between two measured variables. Correlational analyses were used to examine the relationship between the following variables:

- ❑ Procrastination and Achievement Goal Orientation
- ❑ Procrastination and Achievement Goal Orientation by type of student
- ❑ Structural Procrastination and Mastery-approach and avoidance
- ❑ Unstructured Procrastination and Performance-approach and avoidance
- ❑ Structural Procrastination and Mastery-approach and avoidance by type of student
- ❑ Unstructured Procrastination and Unstructured Procrastination to Performance-approach and avoidance by type of student

**Table 2**  
**Summary of Intercorrelations**

Variables	P-value	Correlation Coefficient	Decision	Conclusion
Procrastination and AGO	.120	.203	Accept HO	No significant relationship
Procrastination and AGO (DL)	.967	-.008	Accept HO	No significant relationship
Procrastination and AGO (probi)	.037	.442*	Reject HO	Significant relationship
Structured Procrastination and Mastery-approach	.663	.060	Accept HO	No significant relationship
Structured Procrastination and Mastery-avoidance	.773	.039	Accept HO	No significant relationship
Unstructured procrastination and Performance-approach	.280	.145	Accept HO	No significant relationship
Unstructured procrastination and Performance-avoidance	.601	-.071	Accept HO	No significant relationship
Structured procrastination and Mastery-approach (DL)	.314	-.188	Accept HO	No significant relationship
Structured procrastination and Mastery-avoidance (DL)	.111	-.298	Accept HO	No significant relationship
Unstructured procrastination and Performance-approach (DL)	.738	-.062	Accept HO	No significant relationship
Unstructured procrastination and Performance-avoidance (DL)	.151	-.269	Accept HO	No significant relationship
Structured procrastination and Mastery-approach (Probi)	.090	.373	Accept HO	No significant relationship
Structured procrastination and mastery-avoidance (Probi)	.048	.427*	Reject HO	Significant relationship
Unstructured procrastination and Performance-approach (Probi)	.242	.252	Accept HO	No significant relationship
Unstructured procrastination and Performance-avoidance (Probi)	.349	.204	Accept HO	No significant relationship

\*p-value is sig. at 0.05 level

(Legend: AGO – Achievement goal orientation; DL – Dean's lister; Probi – Probation)

Table 2 Presents the correlations among the variables used in this study. Results between Procrastination and Achievement Goal Orientation was not statistically significant ( $r=.120, p>0.05$ ). Likewise, the association between Procrastination and Achievement Goal Orientation of Dean's listers was also not significant, having a p-value of .967 and a correlational coefficient of -.008. However, it was found that there was a significant relationship between Procrastination and Achievement Goal

Orientation of probationary students, having a p-value of .037 and a correlational coefficient of .442. This reveals that there is a direct and moderate relationship between the probationary students' Procrastination level and Achievement Goal Orientation.

Results also revealed that there was no significant relationship between Structural Procrastination in relation to Mastery-approach ( $r = .663, p > 0.05$ ) and avoidance ( $r = .773, p > 0.05$ ); Unstructured Procrastination in relation to Performance-approach ( $r = .280, p > 0.05$ ) and avoidance ( $r = .601, p > 0.05$ ); Structural Procrastination in relation to Mastery-approach ( $r = .314, p > 0.05$ ) and avoidance ( $r = .111, p > 0.05$ ) of dean's listers; Unstructured Procrastination in relation to Performance-approach ( $r = .738, p > 0.05$ ) and avoidance ( $r = .151, p > 0.05$ ); Structural Procrastination in relation to Mastery-approach ( $r = .090, p > 0.05$ ); and Unstructured Procrastination in relation to Performance-approach ( $r = .242, p > 0.05$ ) and avoidance ( $r = .349, p > 0.05$ ). However, it was found that there was a significant relationship between Structural Procrastination and Mastery-avoidance of probationary students, having a p-value of 0.048 and a correlational coefficient of .427, showing a direct and moderate relationship between probationary students Structural Procrastination and Mastery-avoidance.

Linear regression was carried out to explore the cause and effect relationship between the independent variables (Procrastination, AGO) and the dependent variable (GWA). Table 3 shows that Achievement Goal Orientation is not a predictor of students General Weighted Average (GWA), with a p-value of .708. However, Procrastination, having a p-value of 0.11, was found to be a significant ( $p < .05$ ) predictor of students General Weighted Average (GWA), with an obtained  $t$  of -2.731. Furthermore, statistical results revealed that there was a weak effect size yielded between the predictor (procrastination) and the dependent variable (GWA), which corresponded to a 16.3% of explained variance.

**Table 3 Predictors of GWA**

Variable	Model B	Decision	Conclusion
Constant	8.707		
Procrastination	.011	Reject HO	Predictor
Achievement Goal Orientation	.708	Accept HO	Not a predictor
Adj. R <sup>2</sup>	.163		
F	3.832		

\*p-value is sig. at 0.05 level

a. Dependent variable: GWA

**Table 4 Comparison of Dean's Listers and Probationary students**

Variable	M rank <i>Dean's Listers</i>	Z value <i>Probation</i>	p-value	Decision	Conclusion
Procrastination	11.24	-3.035*	.002	Reject HO	Significant difference
Achievement Goal Orientation	14.12	-.990	.322	Accept HO	No significant difference

\*p-value is significant at 0.05

Mann Whitney U test was used to determine the differences between dean's lister and probationary students in Procrastination and in Achievement Goal Orientation.

There were significant ( $p < .05$ ) differences between dean's lister and probationary students in Procrastination, having a p-value of .002. Furthermore, there were no significant ( $p > .05$ ) differences between dean's lister and probationary students in Achievement Goal Orientation, having a p-value of .322.

## DISCUSSION

Initially, it was proposed that there is a positive relationship between Procrastination and Achievement goal orientation; having students, who habitually procrastinates, a room for long term achievement goals. There seems to be a discrepancy between student's goals or plans. This contention was supported with the present study. Based on the results, there is a significant relationship between Procrastination and Achievement goal orientation, but it was only evident to probationary students. The finding of the study was consistent with Kennedy (2009), who asserted that "goals reflect intentions whereas plans reflect implementation of those intentions" (p.147). It suggested that the implementation of these goals is affected by a person's tendency to procrastinate, whether it is adaptive or maladaptive in nature. Furthermore, there is a possibility for a procrastinating student to express a desire for achievement goals.

As predicted, Active/Structured Procrastination was positively related to Mastery-avoidance goal orientation. This finding is consistent with previous researches (Wolters, 2003; Howell & Watson, 2007; Seo, EunHee, 2009) that mastery avoidance goal determines students' procrastination, if taken as a whole. In the study of Van Yperen (2006), mostly 33.6% of the students preferred mastery-avoidance goals. This goal was largely neglected in the achievement goal research (Elliot & McGregor, 2001), or often labeled as work avoidance orientation (Wolters, 2003). Cao (2012) also illustrates that active procrastinators tend to have a low mastery-approach goal and intrinsic motivation, whilst high on work-avoidance goal. The positive association between the two variables was only evident to students who were on academic probation. This finding contradicts the study of Hsieh, Sullivan, & Guerra (2007) stating that students who were on academic probation tend not to endorse mastery goals and often adopt goals that debilitate their learning in school, unlike those students who were in good academic standing (achievers). Mastery-avoidance may seem to be negative, but it is malleable and not as harmful to a person's well-being and performance (Wissing, 2013). However, Mastery-approach did not correlate with Active/Structured Procrastination as opposed to previous researches.

Procrastination was found to be a predictor of student's general weighted average (GWA). That is, the less that the student procrastinate, the higher the GWA is. Tice and Baumeister (1997) stated that students' that have a high level of procrastination receives low grades and high level of stress. Achievement Goal Orientation, however was not a significant predictor of GWA. On the contrary, previous studies have shown that self-efficacy was one of the strongest predictor of academic achievement (Lane & Lane, 2001; Hsieh, Sullivan & Guerra, 2007).

The analysis also reveals that there is a significant difference between the two groups of respondents – dean's listers and probationary students – in Procrastination. First, it reveals that dean's listers are active procrastinators. This supports the Flow Theory of Mihaly Csikszentmihalyi that explains

why achievers (dean's listers) are active procrastinators. Students intend to delay or to procrastinate because they work best under pressure. Whenever they prepare for a test for a later of time, they are more likely to experience a deep state of flow in the learning process (Seo, 2011) and will now increase the level of challenge that they are encountering (Csikszentmihalyi, 1997) and become more motivated. Active procrastination improves efficiency, challenge and flow (Morales, 2010), and it does not have a negative impact when it comes to the effectiveness of performing a task (Chu & Choi, 2005). Second, students under probation are non-procrastinators. Active Procrastinators and Non-procrastinators have the same personal characteristics and outcomes. Both have higher levels of purposive use of time, time control, and self-efficacy. They just differ on the degree or level of procrastination (Chu & Choi, 2005). If they are non-procrastinators, why do they have low grades? Self-efficacy and social support come into play. Previous researches suggested that these strongly influence student's academic performance in school. Cutrona and colleagues (1994), as cited by Yasin&Dzulkifli (2011), said that social support from family and peers may increase the perception and belief of the student to do better in their academics. Moreover, all respondents possessed a mastery approach goal orientation.

The scope of the study involved students coming from different programs in Colegio de San Juan de Letran – Manila. The participants were divided into two groups - 17 high performers (dean's lister) and 13 low performers (probation) - having at least a load of 18 units and above. The research finding generalize that all students, particularly dean'slisters and students under probation, possess some in the study. The study was only limited to the student's GWA during the past semester and it did not cover their intellectual capacity and/or the whole academic performance during their stay in the Colegio.

Findings of the study offer additional insights in understanding the difference between students who are on academic probation and those who are academically successful (achievers). It also provides information for researchers and educators on student's individual differences. Possible intervention to students who are under academic probation may help them in their academic performance in school.

## REFERENCES

- Barzegar, M. (2012). The relationship between goal orientation and academic achievement –Themediation role of self-regulated learning strategies - A path analysis. *International Conference on Management, Humanity and Economics (ICMHE'2012)*,112-115.
- Beck, B. L., Koons, S. R., & Milgrim, D.L. (2000). Correlates and Consequences of Behavioral Procrastination: The Effects of Academic Procrastination, Self-Consciousness, Self-Esteem and Self-Handicapping. *Journal of Social Behavior & Personality*, 15 (5), 3-13.
- Brownlow, S., & Reasinger, R. D.(2000). Putting off until tomorrow what is better done today: Academic procrastination as a function of motivation toward college work. *Journal of Social Behavior and Personality*, 15(5), 15-34.
- Bulus, M. (2011). Goal orientations, locus of control and academic achievement in prospective teachers: An individual differences perspective. *Educational Sciences: Theory & Practice*, 11 (2),540-546.
- Cao, L. (2012, July). Examining 'active' procrastination from a self-regulated learning perspective. *Educational Psychology*, 32(4), 515-545.
- Chun Chu, A. H., & Choi, J. N. (2005).Rethinking procrastination: Positive effects of "active" procrastination behavior on attitudes and performance.*The Journal of Social Psychology*, 145 (3),245-264.

- Csikszentmihalyi, M. (1997). *Finding Flow: The Psychology of Engagement with Everyday life*. Basic Books.
- Elliot, A. J. & McGregor, H. A. (2001). A 2x2 Achievement Goal Framework. *Journal of Personality and Social Psychology*
- Ellis, A., & Knaus, W. J. (1977). *Overcoming procrastination*. NY: Signet Books.
- Eum, K., & Rice, K. G. (2011). Test anxiety, perfectionism, goal orientation, and academic performance. *Anxiety, Stress, & Coping*, 24 (2), 167-178.
- Howell, A. J., & Buro, K. (2009). Implicit beliefs, achievement goals, and procrastination: A mediational analysis. *Learning and Individual Differences*, 19, 151-154.
- Howell, A. J., & Watson, D. C. (2007). Procrastination: Associations with achievement goal orientation and learning strategies. *Personality and Individual Differences*, 43, 167-178.
- Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics*, 18 (3), 454-476.
- Kennedy, G.J. (2009). The Influence of Academic Values and Belongingness Concerns on Achievement Goals, Self-efficacy, and Perceived Stress in First Quarter Freshmen: Relationships to Academic Performance and the Mediating Role of Procrastination. Dissertation. Graduate Program in Educational Policy & Leadership. The Ohio State University
- Lane, J., & Lane, A. (2001). Self-efficacy and academic performance. *Social Behavior and Personality*, 29(7), 687-693.
- Lee, E. (2005). The relationship of motivation and flow experience to academic procrastination in university students. *Journal of Genetic Psychology*, 166, 5-14.
- Morales, R. A. (2010). Development of an academic procrastination scale. *The Asia-Pacific Education Researcher*, 515-524.
- Pfister, T. L. (2002). The effects of self-monitoring on academic procrastination, self-efficacy and achievement. [Unpublished doctoral/dissertation], Florida State University, Tallahassee.
- Pychyl, T. A., Lee, J. M., Thibodeau, R., & Blunt, A. (2000). Five days of emotion: An experience sampling study of undergraduate student procrastination. *Journal of Social Behavior and Personality*, 15, 239-254.
- Rabin, L. A., Fogel, J., & Nutter-Upham, K. E. (2011). Academic procrastination in college students: The role of self-reported executive function. *Journal of Clinical and Experimental Neuropsychology*, 33 (3), 344-357.
- Ramnarain, U. (2013). The achievement goal orientation of disadvantaged physical sciences student from South Africa. *Journal of Baltic Science Education*, 12 (2), 139-151.
- Seo, E. (2009). The relationship of procrastination with a mastery goal versus an avoidance goal. *Social Behavior & Personality: An International Journal*, 37(7), 911-919.
- Seo, E. (2011). The relationship among procrastination, flow, and academic achievement. *Social Behavior & Personality: An International Journal*, 39(2), 209-217.
- Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things we do: A grounded theory of academic procrastination. *Journal of Educational Psychology*, 99(1), 12-25.
- Steel, P. (2007). The nature of procrastination. *Psychological Bulletin*, 133, 65-94.
- Tice, D.M., & Baumeister, R.F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8, 454-458.
- Van Yperen, N. W. (2006). A novel approach to assessing achievement goals in the context of the 2x2 framework: Identifying distinct profiles of individuals with different dominant achievement goals. *Personality and Social Psychology Bulletin*, 32, 1432-1445.

- Wolters, C. A. (2003). Understanding procrastination from a self-regulated learning perspective. *Journal of Educational Psychology*, 95(1), 179-187.
- Wissing, Marie P. (2013). Well-being research in South Africa. *Cross Cultural advancements in Positive Psychology*, Vol. 4.
- Yahaya, A., Yahaya, N., Ramli, J., Hashim, S., & Zakariya, Z. (2010). The effects of various modes of school formality culture and student learning style with secondary school students academics achievements. *International Journal of Psychological Studies*, 2 (1), 96-106.
- Yasin, M. A. S. MD., & Dzulkifli, M. A. (2011). The Relationship between Social Support and Academic Achievement. *International Journal of Humanities and Social Science*, 1(5), 277-281.