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School Motivation and Learning Strategies of Freshmen Student-Athletes of Philippine Normal University: Basis for Intervention

ABSTRACT: Recruited athletes are often given an admissions advantage entering college, but with less impressive academic records. The study aimed to determine the school motivation and learning strategies, the admission scores as well as the academic profile of the freshmen student-athletes. Findings reveal that most of the student-athletes have moderately developed learning skills, average intrinsic motivation, common performance anxiety associated with testing, and do have reasonable listening and attention skills in the classroom environment. The study also showed significant difference in the Writing/Research Skills and Test-Taking Strategies between the male and female student-athletes, which means that females have better study skills than the male students. On the other hand, academic difficulty is noted as an increase in their deficiency occurred during the second semester due to incomplete, dropped, and failed ratings, while significant association is found between their PNUAT (Philippine Normal University Admission Test) scores and GPA (Grade Point Average). The above mentioned findings aid the researchers in developing an intervention program, which focuses in enhancing the student-athletes academic motivation and learning strategies essential to academic success.

KEY WORD: School Motivation; Learning Strategies; Academic Performance; Student-Athletes; Intervention Program.

INTISARI: "Motivasi Sekolah dan Strategi Belajar para Mahasiswa-Atlet dari Universitas Pendidikan Filipina: Basis untuk Intervensi". Perekrutan atlet sering memberikan keuntungan untuk masuk diterima di perguruan tinggi, namun dengan catatan akademis yang kurang mengesankan. Penelitian ini bertujuan untuk mengetahui motivasi sekolah dan strategi belajar, skor masuk, serta profil akademik para mahasiswa-atlet. Temuan mengungkapkan bahwa sebagian besar mahasiswa-atlet telah cukup mengembangkan keterampilan belajar, motivasi intrinsik rata-rata, kecemasan kinerja umum yang terkait dengan pengujian, serta harus mendengarkan dan memperhatikan keterampilan yang wajar dalam lingkungan kelas. Penelitian ini juga menunjukan perbedaan yang signifikan dalam Keterampilan Menulis/Meneliti dan Ujian Strategi antara mahasiswa-atlet pria dan wanita, yang mana bahwa mahasiswa-atlet wanita memiliki kemampuan belajar yang lebih baik daripada mahasiswa-atlet pria. Di sisi lain, kesulitan akademik terjadi peningkatan sebagai akibat kekurangan mereka selama semester kedua, karena tidak selesai, gagal, dan turun peringkat, sementara hubungan yang signifikan ditemukan antara skor PNUAT (Tes Masuk Universitas Pendidikan Filipina) dengan IPK (Indeks Prestasi Kumulatif) mereka. Temuan tersebut di atas membantu para peneliti dalam mengembangkan program intervensi, yang difokuskan untuk meningkatkan motivasi akademik dan strategi belajar yang penting bagi para mahasiswa-atlet dalam keberhasilan akademis mereka.

KATA KUNCI: Motivasi Sekolah; Strategi Belajar; Prestasi Akademik; Mahasiswa-Atlet; Program Intervensi.

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INTRODUCTION

Intercollegiate athletics are an integral component of life at many colleges and universities. Despite their relatively small representation on college campuses, they provide publicity to their universities and entertainment to the community, and they help develop and instill school pride (Sylwester & Witosky, 2004). Although the institutional benefits of college athletics are generally accepted, concerns over the academic and personal development of student-athletes have constantly surfaced. Student-athletes in general continue to show lesser forms of academic success than their nonathlete counterparts (Kramer, 2009); and yet the reasons why they struggle academically more often than their nonathlete peers are not well understood.

Studies conducted by J. Stone & C. Strange (1989); E.T. Pascarella *et al.* (1996); J.L. Gaston-Gayles (2004); P.D. Umbach et al. (2006); and E. Comeaux & K.C. Harrison (2011) have suggested that differences in academic performance are influenced by the college environment, such as purposeful engagement activities, e.g. participation in co- or extra-curricular activities, or noncognitive chatacteristics (Parham, 1993; Petrie & Russel, 1995; Simmons, Van Rheenen & Covington, 1999; and Gaston-Gayles, 2004). According to E. Aries et al. (2004), the time demands of athletic programs force student-athletes to sacrifice attention to academics, making it difficult for them to devote time to study or earn good grades (Aries et al., 2004). Greater commitment to the athletic role and less to academics is associated with lower grade point averages in college (Simmons, Van Rheenen & Covington, 1999).

K.J. Hildenbrand (2005) stated that one hypothesis for the poor performance is that athletes are not as well prepared to go to college as their non-athletic counterparts (Hildenbrand, 2005). This could be attributed to low high school academic standards, or high school teachers allowing athletes to underperform due to their status as an athlete, or lack of time for studying due to sport participation (Shulman & Bowen,

2001; and Unruh, 2001).

Recruited athletes are often given an admissions advantage entering college with less impressive academic records (Shulman & Bowen, 2001). Student-athletes, who were the participants of this study, were admitted to the university with much lower test scores and high school GPA (Grade Point Average) compared to their peers who are non-athletes.

Although previous studies help us understand the forces supporting and the obstacles confronting student-athletes' academic success, much remains unknown about these issues (cf Maningas, 2004; Alday, 2008; and Santrock, 2011). In particular, it would be important to explain, not simply describe, how certain factors influence student-athletes' academic success. Previous studies have neglected to clearly delineate the multiple characteristics and cumulative processes that influence varying forms of academic success for studentathletes. Some studies, for instance, have failed to distinguish between the influence of sport commitment, educational expectations, campus climate issues, and academic engagement practices on student-athlete academic success (cf Ceballo, 2006; Fortes et al., 2010; and Pascua et al., 2012).

Failure to distinguish between these multiple influences on academic success has frequently led to assumptions about student-athletes that too often present them through a deficit lens. These assumptions to some extent have a significant impact on the types of assistance that student affair leaders provide student-athletes for undergraduate completion (Comeaux, 2005).

This study aims to determine the profile of freshmen student-athletes in terms of their school motivation, learning strategies, and admissions test scores; and the relationship of these variables to their academic performance during the school year 2012-2013. Specifically, the study sought to answer the following questions: (1) What is the profile of the participants in terms of School Motivation and Learning Strategies, Admissions Test Scores, and Grade Point Averages; (2) Is there a significant difference among male and female participants in terms

Table 1:
Participants' Profile

Gender	Frequency	Percentage
Male	8	50%
Female	8	50%
Total	16	100%

of their School Motivation and Learning Strategies, Admissions Test Scores, and 1st and 2nd Semester Grade Point Averages; and (3) What is the relationship among school motivation, learning strategies, admissions test scores, and the GPA's of the participants?

This study adds to the limited body of knowledge by examining student-athletes' characteristics in terms of their motivation, learning strategies, and admissions test scores; and how these relate to their academic performances (Grade Point Average or GPA). Results obtained from this study will be used in developing the appropriate intervention program for them.

METHOD

Research Design. The correlational design was used in this study. The researchers have been chosen this, because it is appropriate in measuring the relationship between the school motivation and learning strategies of the freshmen college student-athletes, as derived from the SMALSI (School Motivation and Learning Strategies Inventory), and their academic performance in for school year 2012-2013.

In correlational research designs, investigators use the correlation statistical test to describe and measure the degree of association between two or more variables or sets of scores (Creswell, 2008). In this design, the researchers do not attempt to control or manipulate the variables as in an experiment; instead, they relate using the correlation statistic, two or more scores for each individual. Moreover, this design allows to predict an outcome, such as the prediction that ability, quality of schooling, student motivation, and academic coursework influence student achievement (*cf* Anderson & Keith, 1997; and Levin *et al.*, 2010).

Participants and Sampling Plan.

This study employed non-probability sampling, where the researchers select individuals because they are available, convenient, and represent some characteristics the researchers seek to study. In particular, the purposive sampling or judgment sampling technique in which sample elements judged to be typical, or representative, which are chosen from the population (Creswell, 2008).

This design chose individuals as samples according to the purpose of the researchers to determine the academic motivation and performance of the freshmen student-athletes enrolled in school year 2012-2013. A total of 16 student-athletes participated in this study. These student-athletes were under a special program for sports and belong in the same section.

In this case, the researchers cannot say with confidence that the individuals are representative of the population (Creswell, 2008). However, the sample can provide useful information for answering questions and hypothesis. See table 1.

The profile would show that half of the student-athletes populations are male, while the remaining 50% are females.

Instruments Used. The SMALSI (School Motivation and Learning Strategies Inventory) developed and validated by K.C. Stroud & C.R. Reynolds (2006) was administered to the participants of this study. It is important to be aware that the SMALSI explicitly excludes measurements of popular learning process dimensions or preferences such as learning styles and learning modalities (Stroud & Reynolds, 2006). Instead, the SMALSI focuses on measuring the actual strategies that are actively used by students for learning and test taking. Each of the strategies included in

the instrument has been solidly established as related to academic success by the research community over the past 30 years. Most importantly, each of the strategies can be targeted directly that could aid in the development of interventions for students.

Learning strategies are herein defined as the "purposeful behaviors of a learner that are intended to facilitate the acquisition and processing of information" (Orlando & Clermont, 2013). The term includes reference to study skills and study strategies specific to the school learning environment. It does not include cognitive strategies that are applied more globally. The term also does not refer to a unitary dimension, but to multiple related areas. Thus, no single overall summary score is provided by the SMALSI, but multiple scores are derived, each of which can be used directly for planning specific interventions (Stroud & Reynolds, 2006).

The SMALSI, which will be administered to the freshmen college student-athletes, consists of the following scales:

First, **Student Strengths Subscales**. It is consisted of: Study Strategies, Note-Taking and Listening Skills, Reading and Comprehension Strategies, Writing and Research Skills, Test-Taking Strategies, Organizational Techniques, and Time Management. Each variable is described as follows:

Study Strategies. Study strategies are behaviors specifically focused on reviewing and learning material, such as habitual use of mnemonics and other memory aids. These are study strategies that significantly enhance a student's ability to encode and retrieve information (Scruggs & Mastropieri, 1992).

Note-Taking and Listening Skills. Notetaking skills and text-marking strategies are specific learning strategies associated with the ability to distinguish between important and non-important information. Effective note-taking involves reconstructing information in a way that is most meaningful to the learner (Porte, 2001).

Reading and Comprehension Strategies. Comprehension strategies include previewing texts, self-quizzing, and mapping ideas (Paris & Oka, 1989; and Miranda, Villaescusa & Vidal-Abarca, 1997). Although instruction in this area is considered essential to the academic success, it appears that very little instructional time is focused on it. Comprehension strategies are arguably the most important of learning strategies, and their mastery becomes increasingly necessary as an individual progress through school.

Writing and Research Skills. This area includes the ability to gather information from a variety of resources, developed an organized plan, integrate ideas, make appropriate revisions, and complete increasingly complex research tasks in a library or other archived information storage source.

Test-Taking Strategies. Test-taking strategies are specific strategies manifested as actual behaviors used while taking a test. Eliminating unlikely choices and learning how to allocate time between difficult versus easy items are examples of test-taking strategies. Instruction in test-taking strategies has been shown to be helpful for any student, but particularly for such special populations as minority students or those for who English is their second language (cf Scruggs & Tolfa, 1985; Scruggs & Mastropieri, 1986; and Hughes, 1993).

Organizational Techniques.
Organizational techniques are specific strategies used to organize learning materials, ranging from preparation before each class to systematic recording of daily assignments. Basic techniques for categorizing and arranging learning tasks can be taught to students in preparation for more complex organizational tasks (Stroud & Reynolds, 2006).

Time Management. Time management is a metacognitive technique that involves recognizing the most efficient ways to use time. This skill is often neglected until a student enters college, when he or she leaves behind parental supervision and at the same time confronts more choices as to how time will be spent. Mastery of time management skills in high school or earlier can have a strong impact on student's motivation to complete tasks. This skill contributes

to a sense of control and eases transition to progressively less structured learning situations.

Second, **Student Liabilities Subscales.** It is consisted of: Low Academic Motivation, Test Anxiety, and Attention and Concentration Difficulties. Each variable is described as follows:

Low Academic Motivation. Academic motivation is the desire to acquire information. It is a modifiable characteristic that has long been linked to academic achievement. Attributions for success and failure, specific achievement goals, and perceptions about incentives all contribute to a student's academic motivation (Karabenick & Collins-Eaglin, 1997). Motivation reflects a student's investment in the process of learning, influencing which learning strategies are used and the effort expended to carry them out. This construct helps to explain the different uses of learning strategies by different students in different learning situations (Tobias, 2005; and Carter, 2012).

Test Anxiety. Test anxiety is a modifiable factor that interferes with a student's ability to show that information has been learned. Test anxiety is associated with difficulty applying other learning strategies (Hembree, 1988). The construct as measured by the SMALSI (School Motivation and Learning Strategies Inventory) encompasses the two traditional components of test anxiety: worry and emotionality (Liebert & Morris, 1967; and Cassady & Johnson, 2002) as well as impaired social learning and poor study habits (Jones & Petruzzi, 1995).

Attention and Concentration Difficulties. Attention and concentration are precursors to memory and learning: a student must attend in a focused way before learning can occur. Difficulties attending or concentrating arise from various environmental and personal factors. Intervention in this area can significantly improve both the use of learning strategies and emotional adjustment (Borden *et al.*, 1987).

Data Collection Process. A letter was presented to the University Registrar asking for a copy of the 1st semester and 2nd semester

grades of the participants. The copy of grades was released after 2 weeks, and then the researchers computed for the GPA (Grade Point Average) of each student-athlete.

The same procedure was followed in requesting for the PNUAT (Philippine Normal University Admission Test) of the participants of this study, the scores were made available after a couple of weeks.

After securing the original copies of the SMALSI (School Motivation and Learning Strategies Inventory) test booklets and profile sheets administration of the said standardized test took place. The participants are requested to select a response category that best corresponds to their reaction to each statement: N = Never, S = Sometimes, O = Often, or A = Almost always.

After administering the SMALSI to the participants, the inventories were scored using the template designed for it. The raw scores were converted to T-scores after which its classifications were determined. After gathering the data needed, data analysis was made by the researchers. An interview was conducted to determine what certain circumstances did the student-athlete experience that might affect their academic and athletic performance. The data gathered from the interview were used to understand the difficulties experienced by the student-athletes.

Based on the data and the result obtain from its analysis a program was developed to enhance the school motivation and learning strategies of the student-athletes that will help them to have a better academic performance.

Statistical Tests. To come up with the findings, the following statistical tools were applied: (1) to determine the school motivation and learning strategies profile of the participants, frequency distribution, and percentage was employed; (2) to find out the academic performance of the participants mean was used; (3) to identify the difference among the male and female participants in terms of their: school motivation and learning strategies, admission test scores, and 1st and 2nd semester academic

 Table 2:

 Profile of the Freshmen Student-Athletes in the Various Study Strengths Scale

Classification	A	В	C	D	E	F	G
Extremely well developed (71 and higher).	6	25	19	-	6	-	19
Very well developed (61 to 70).	38	44	44	12	25	44	44
Average in development (40 to 60).	56	31	37	76	69	56	37
Below average in development (30 to 39).	-	-	-	12	-	-	-
Inadequately developed (29 and lower).	-	-	-	-	-	-	-

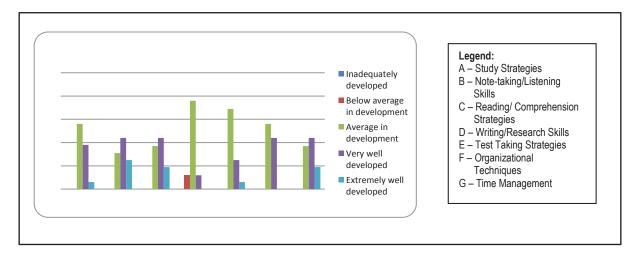


Figure 1: Percentage Distribution of the Student-Athletes in the Various Study Strengths Scale

nonparametric statistics was used particularly the Mann-Whitney U Test; and (4) to figure out the relationship between the school motivation and learning strategies, admission test scores and the GPA or Grade Point Average's of the student-athletes Spearman Coefficient Correlation was used.

RESULTS AND DISCUSSION

The following data present the analysis and interpretation of results in accordance with the sequence of problems. Tables and graphs are presented for a clear presentation of data. See table 2 and figure 1.

The results obtained by the studentathletes in the Study Strength scale of the SMALSI (School Motivation and Learning Strategies Inventory) entail that most of the participants obtained scores that fall within moderately (40T to 60T) developed learning strategies and skills. This would mean that student-athletes have the ability to develop a strategy and apply it, as well as to identify information, make associations when learning. Moreover, they know how to research topics in a variety of ways, organize writing projects as well as monitoring and self-checking for errors.

Likewise, these student-athletes have good test taking strategies that which includes seeing key points in the instruction, strategic guessing, and allocating time between difficult versus easy items. A good percentage of student-athletes are found to have average developed techniques in organizing learning materials, ranging from preparation before each class to systematic recording of daily assignments.

A good percentage also possesses remarkable (T-scores above 60) strategies and skills, particularly in the Note-Taking/Listening Skills (69%), Reading/Comprehension Strategies (63%), and Time Management (63%) subscales. These students are found to make use of learning strategies associated with the ability to distinguish between important and non-important information.

Table 3:
Profile of the Freshmen Student-Athletes in the Various Study Strengths Scale (in Percentage)

Classification	Н	I	J
Extremely problematic (71 and higher).	-	-	-
Moderately problematic (61 to 70).	19	12	-
No more problematic than for most students (40 to 60).	75	88	88
Less problematic than for most students (30 to 39).	6	-	12
Minimally problematic (29 and lower).	-	-	-

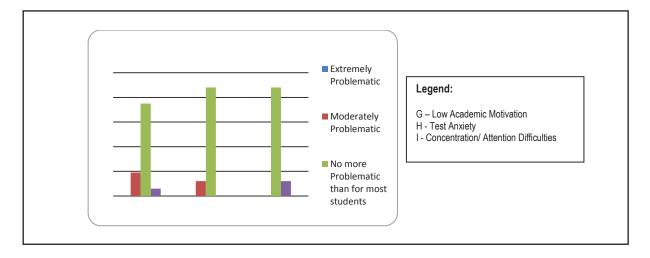


Figure 2: Percentage Distribution of the Student-Athletes in the Various Study Liabilities Scale

Likewise, they are good in previewing, monitoring, and reviewing tests, including self-testing to ensure understanding. Also, these student-athletes were taught how to allocate time and develop realistic schedules for studying or working on assignments in or out of the classroom.

Note, however, that 12% of the studentathletes have poor writing and research skills compared to those who have remarkable abilities on the said area. These studentathletes are likely to experience significant problems in systematic use of search and reference materials and to display difficulties in organizing what they do find. Thus, remediation should be given to the said students. See table 3 and figure 2.

As regards the study liabilities scale, it is also observed that majority of the population have average intrinsic motivation, common performance anxiety associated with testing, and related structured evaluation procedure. They also have the ability to self-monitor and adjust in a learning environment, which is also an important task in the development of effective learning strategies.

However, a good percentage of studentathletes expresses having difficulties specifically in the Low Academic Motivation (19%): and Test Anxiety (12%) subscale indicative of their T-scores above 60 classified as Moderately Problematic. While the former would mean that these studentathletes show greater academic motivation where internal locus of control is evident, the latter has significant anxiety present for testing activities. These student-athletes usually experience difficulty demonstrating their knowledge, skills, and learning during formal examination, especially in the context of timed standardized tests that could extend for some students to teacher-made classroom tests. See figure 3.

So, figure 3 displays the distribution of the student-athletes in reference to their PNUAT (Philippine Normal University Admission

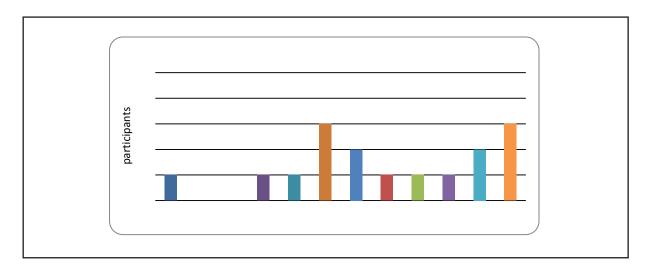


Figure 3:Distribution of Participants Based on Their Admission Test Scores

Test) scores with an interval size of 4. It can be seen that the participants' PNUAT scores were short by few points in reaching the passing rate set by the University: 3 or 18.75% obtained scores within 52-55 and 76-79; while 2 or 12.5% got score in the 56-59 and 72-75 ranges. Moreover, 1 or 6.25% had scores ranging within 32-35, 44-47, 48-51, 60-63, 64-67, and 68-71.

This observation is supported by some researchers which state that recruited athletes are often given an admission advantage entering college with less impressive academic records (*cf* Stuart, 1985; Hood, Craig & Ferguson, 1992; and Shulman & Bowen, 2001), because of the greater commitment to the athletic role and less to academics is associated with lower grade point averages in college (Covington *et al.*, 1999).

According to J.L. Shulman & W.G. Bowen (2001), a typical student is admitted to college for the potential to benefit from an institution's programs and educational opportunities (Shulman & Bowen, 2001). In many institutions, student-athletes are admitted for their potential to provide athletic benefits for the institutions. This conflict of interest has been in higher education, since athletics first became a fixture among colleges and universities.

The concept of amateurism was a British

ideal that did not work with the founding of democracy and a society that celebrated individual triumph. The problems associated with 21st century big-time athletic enterprises also existed when intercollegiate athletics were first formed. The unsuccessful resolution of these issues has caused them to simmer under the surface and begin to boil. Student-athletes in revenue-generating sports at some of the most successful universities are rarely expected to be stellar in the classroom, as long as they display their skills on the playing field (Bayot, 2001; Dembo & Seli, 2008; and Al-Qaisy, 2010). See table 4.

Table 4 displays the GPA (Grade Point Average) obtained by the student-athletes during the 1st and 2nd semester of school year 2012-2013. The former have GPA ranging from 77 to 84, while the latter have 75 to 89. However, an increase in their deficiency is evident in the 2nd semester wherein 12 or 75% of the student-athletes obtained a failing grade, an incomplete rating, were dropped by their Professors, due to absences and/or had an unauthorized withdrawal as compared to their 1st semester academic performance, where 37.5% had academic deficiencies. In entirety, the freshmen student-athletes GPA for the school year 2012-2013 fall with 77 to 86.

Out of the 16 student-athletes 3 or 18.75% had a failing grade and 1 or 6.25%

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Student Name	1 st Semester GPA	Remarks	2 nd Semester GPA	Remarks	1 st year GPA SY 12-13
A	80	3 units Failed	81	3 units Failed	80
В	79	3 units INC	79	10 units Failed, 3 units INC	79
C	84	-	89	-	86
D	80	3 Units Failed	82	3 units Failed, 3 units INC	81
E	82	3 units Failed, 3 units INC	78	7 units Failed	80
F	81	3 units INC	86	-	84
G	83	3 units Failed	86	-	85
Н	81	-	79	3 units Failed	80
I	82	-	86	3 units Failed	83
J	81	-	81	4 units INC	81
K	82	-	85	1 unit Failed	84
L	81	-	79	4 units Failed, 6 units INC	80
M	80	-	79	4 units Failed, 6 units INC	80
N	80	-	81	3 units Failed	81
O	83	-	81	-	82

75

Table 4: GPA (Grade Point Average) Obtained by the Freshmen Student-Athletes School Year 2012-2013

were marked Incomplete in G-MAT 01
Fundamentals of Mathematics. Likewise,
2 or 12.5% were Incomplete in G-ENG 01
Academic Listening and Speaking in English.
Moreover, there were student-athletes
who obtained a failing grade in G-HUM 01
Humanities. These academic deficiencies
can be attributed to the responses of some
student-athlete during their interview,
wherein most of them had trouble adjusting
to their class and training schedule. One
student-athletes said, as follows:

[...] sobrang aga ng pasok namin, after class may training pa, tas pasok nanaman, bawal ma-late kasi sobrang terror ng Prof namin (interview with Respondent A, 2/10/2012).

Likewise, another student-athlete state that:

[...] sa mga problema na naranasan ko unang una na dito ang aming schedule noong 1st semester dahil syempre po dala ng pagod sa training hindi maiwasan talaga na mahuli sa unang subject namin (interview with Respondent B, 9/10/2012).

On the other hand, there were studentathletes who experienced difficulty in doing their requirements, as one student-athlete said as follows:

9 units Failed, 7 units INC

[...] ang hirap pala ng college kasi maraming ginagawa (interview with Respondent C, 16/10/2012).

As stated also by one student-athlete, as follows:

[...] may mga araw minsan na feeling ko hindi ko na kaya dahil sa mga Gawain sa school sabayan pa ng araw-araw naming training, minsan gabi na umuwi, tapos may tatapusin pa akong assignments, reports, visual aids para sa kapakanan ng marka ko (interview with Respondent D, 23/10/2012).

Evident in their 2nd semester academic performance is the increase in deficiency in the different subjects/courses due to Failure: Incomplete rating (INC), Unauthorized Withdrawal (UW), and/or Dropped (DRP). More than half or 62.5% of the student-athletes were failed in G-MAT 02 Contemporary Mathematics, 31.25% were dropped while 12.5% were INC in PERS ED 2 in Education. Likewise, 31.25% were INC, 6.25% had an UW, and another 6.25% was failed in G-SS 02 Economics Education,

wherein according to a student-athlete stated, as follows:

[...] nahihirapan ako sa Economics dahil lagi akong late sa pagpasok (interview with Respondent E, 30/10/2012).

Moreover, 4 or 25% of the studentathletes were INC in GPEd 02 Rhythm and Dance, as one student-athlete said as follows:

[...] medyo nahihirapan kami ngayong sem kumpara nung last sem katulad na lamang sa PE puro pampalakas lang nung last sem ngayon puro sayaw tapos karamihan sa section namin mga lalake nahihirapan silang gumalaw lalo na yung galaw pambabae (interview with Respondent F, 6/11/2012).

While 6.25% had deficiency in G-ENG 02, G-FIL 02, and G-VEd 01. The increase in academic deficiency during the second semester can be credited in the preparation of the student-athletes for the SCUAA-NCR (State Colleges and Universities Athletic Association – National Capital Region), which was held January 11-18, 2013. The student-athletes allot ample time in their trainings and tune up games to put them in perfection condition in able to succeed in their respective event and to give honor to the University.

This is further supported by the study conducted by J. Covington *et al.* (1999), where student-athletes are required to devote upwards of 25 hours per week when their sport is in season, miss numerous classes for university-sanctioned athletic competitions, and deal with fatigue and injuries as a result of their athletic participation (Covington *et al.*, 1999). These factors detract from the realistic likelihood of academic success, which in turn affects their academic motivation to succeed.

According to some researchers, the time demand of athletic programs force student-athletes to sacrifice their attention to academics (Meyer, 1990; and Parham, 1993); and making it difficult for them to devote time to study or earn good grades (Cantor & Prentice, 1996). Greater commitment to the athletic role and less to academic is associated with lower grade point averages in college (Covington *et al.*, 1999).

Additionally, L.P. Hollis (1997), as cited also by K.J. Hildenbrand (2005), did research examining the support services offered at Division I institutions in the United States of America (Hollis, 1997; and Hildenbrand, 2005). During her investigation, L.P. Hollis found that academic preparedness was a key component that positively affects student-athlete graduation rates. She concluded that the major obstacle in preventing higher graduation rates is the poor academic preparation of first-year student-athletes. L.P. Hollis (1997), then, postulated that:

[...] in order for institutions to meet the responsibility to reconstitute equal opportunity in education for student-athletes, these institutions need to address the poor academic preparation of some student-athletes (Hollis, 1997).

In table 5, results reveal that there is no significant difference between the male and female student-athletes in terms of the Student Strength subscales on: Study Strategies (STUDY), Note-Taking/Listening Skills (NOTE), Reading/Comprehension Strategies (READ), Organizational Technique (ORG), and Time Management (TIME) as reflected in their u-value of 15.5, 16.5, 15.5, 20, and 24.5; likewise, same result is evident in the Student Liabilities Subscale, specifically on their: Low Academic Motivation (LOMOT), Test Anxiety (TANX), and Concentration/Attention Difficulties (CONDIF) with obtained u-value of 32, 21.5, and 24.5 respectively.

On the other hand, significant difference is evident in the Student Strengths subscale on: Writing/Research Skills (WRITE) = 8.5, and Test-Taking Strategies (TEST) = 6.5. The female student-athletes seem to acquire well-developed skills compared to their male counterparts evident in their sum of ranks of 91.5 and 93.5, in contrast to the latter with sum of ranks of 44.5 and 42.5 respectively.

This is further supported by the NCES (National Center for Education Statistics) in 2003, where standardized achievement tests also show that females are better at spelling and perform better on tests of literacy, writing, and general knowledge (NCES, 2003).

Table 5:Obtained U Comparing the Male and Female Student-Athletes on the Different Scales of the SMALSI (School Motivation and Learning Strategies Inventory)

Student Strengths	U Obtained	Decision
STUDY	15.5	Accept Ho
NOTE	16.5	Accept Ho
READ	15.5	Accept Ho
WRITE	8.5	Reject Ho
TEST	6.5	Reject Ho
ORG	20	Accept Ho
TIME	24.5	Accept Ho
Student Liabilities	U Obtained	Decision
LOMOT	32	Accept Ho
TANX	21.5	Accept Ho
CONDIF	24.5	Accept Ho

Note: Critical values of U at .05 level of significance for two-tailed test = 13.

Table 6:Obtained U Comparing the Male and Female Student-Athletes' PNUAT (Philippine Normal University Admission Test) Scores

	U Obtained	Decision
PNUAT Scores	13.5	Accept Ho

Note: Critical values of U at .05 level of significance for two-tailed test = 13.

D.K. Leonard & J. Jiang (1999) suggest that females have better study skills than the male students. Other researchers have argued that woman received higher grades than men because they work harder and attend class more frequently (cf Wariner & Steinberg, 1992; Leonard & Jiang, 1999; and Wilberg & Lynn, 1999). Moreover, females tend to work more conscientiously and have a stronger work ethics than males. They also tend to have better language abilities including essay writing, vocabulary and word fluency which contribute to better course work (Wilberg & Lynn, 1999; and Ertürk & Daylolu, 2004).

Furthermore, K.D. Hopkins, C.A. George & D.D. Williams (1985) stated that boys' disregard for authority, academic work and formal achievement, differences in students' attitudes to work and their goals and aspirations, and girls' increased maturity and more effective learning strategies can support the results of this study (Hopkins, George & Williams, 1985). So, the intervention program to be implemented

to the student-athletes should focus on the skills and strategies of the male population in particular. See table 6.

Upon determining the difference among the male and female participants in terms of the PNUAT (Philippine Normal University Admission Test) scores, it is found out the there is no significant difference at .05 level of significance. This would mean that both group performed at par, as stated by K.J. Hildenbrand (2005), that athletes regardless of gender are chronically underprepared when they enter college (Hildenbrand, 2005). The problems become exacerbated by the time demand of athletics and the culturally approved stereotype of the "dumb jock" (cf Levitz & Noel, 1989; Shulman & Bowen, 2001; Unruh, 2001; and Jameson, Diehl & Danso, 2007).

Thus, underprepared athletes attend college classes filled with adequately prepared non-athletic peers and find themselves in a contest that no amount of athletic talent can overcome (Shulman & Bowen, 2001). They face a diminished

Table 7:Obtained U Comparing the Male and Female Student-Athletes' GPAs (Grade Point Averages)

	U Obtained	Decision
1 st Semester	20.5	Accept Ho
2 nd Semester	30.5	Accept Ho

Note: Critical values of U at .05 level of significance for two-tailed test = 13.

Table 8:Rs-Value of the Different SMALSI (School Motivation and Learning Strategies Inventory)
Scales and Academic Performance of Student-Athletes

	1st year GPA	
Student Strengths	Rs obtained	Decision
STUDY	.32	Accept Ho
NOTE	.201	Accept Ho
READ	.124	Accept Ho
WRITE	171	Accept Ho
TEST	.39	Accept Ho
ORG	.46	Accept Ho
TIME	.088	Accept Ho
Student Liabilities		
LOMOT	275	Accept Ho
TANX	.015	Accept Ho
CONDIF	.095	Accept Ho
PNUAT Scores	.620	Reject Ho

Note: Critical values of rs at .05 level of significance for two-tailed test = .503.

chance of experiencing success and victory, but instead have a heightened chance of defeat (Kramer, 1986).

Results in table 7 reveal that there is no significant difference between the 1st and 2nd semester GPA (Grade Point Average) among the male and female student-athletes for school year 2012-2013. This would mean that they consistently performed in the same range for both semesters. This result can be supported by the data gathered from the interview conducted to the student-athletes, where most of them had difficulty in adjusting to the athletic and academic demands of college life (interview with Respondent G, 13/11/2012; and interview with Respondent H, 20/11/2012).

According to S. Tao *et al.* (2000), students faced with the challenge of learning how to balance going to class, participating in activities, completing schoolwork on time, taking basic care of oneself, and having fun as well. Students are faced, often for the first

time, with the need to take more initiative to address responsibilities, e.g. scheduling classes, asking professors and staff for assistance or help (Tao *et al.*, 2000).

Moreover, most of the student-athletes had difficulty managing their time, as stated by L.H. Anderman & T.M. Freeman (2004), freshmen typically experience changing demands on their time. Some freshmen feel they have virtually no time for themselves, because of the time and energy needed to manage multiple obligations especially in the case of student-athletes, in which they spend their time attending their trainings or practices (Anderman & Freeman, 2004). College classes may seem difficult and draining, and/or may involve more hours of studying and completing academic requirements.

In this study, results at the table 8 reveals that there is no association found between the academic performance as represented by the GPA (Grade Point Average) of the freshmen

student-athletes and the Student Strengths and Student Liabilities Scales of the SMALSI (School Motivation and Learning Strategies Inventory) at .05 level of significance. This would mean that there is no significant association between the school motivation and learning strategies to the academic performance of the student-athletes.

The aforementioned results can be attributed to the scores in the different subscales of the SMALSI obtained by the student-athletes, in which majority of them were identified having moderately to extremely developed learning strategies, average academic motivation, listening and attention skills in the classroom as well as common performance anxiety associated with testing however academic difficulty is noted in their numerous academic deficiencies as well in their GPA ranging from 77-86. Thus, other variables that affect their academic performance must be identified and be addressed in able to improve their performance.

In contrast, several studies show that learning and study strategies used by students (including university students, distance-learning students, and college students with learning disability) is one of the many important variables in predicting the respective academic performance (*cf* Weinstein, 1987; Entwistle & Waterson, 1988; and Yip, 2013).

For example, M. Garg (2011) found that the variable of time management was a good predictor for the academic performance of students (Garg, 2011). It is because self-regulated learners understand how to manage and use their rime efficiently in order to complete assignments and set learning schedule in a sensible way (Garg, 2011; and Calderon, 2012). On the other hand, there is a significant association between the PNUAT (Philippine Normal University Admission Test) scores and the GPA's of the student-athlete for school year 2012-2013.

CONCLUSION

From the findings obtained from the study, the researchers found that: most

student-athletes have average academic motivation and moderate learning skills which help them understand information and solve problems related to academics. These learning strategies focus on making the student-athletes more active learners by teaching them how to learn and how to use what they have learned to solve problems and be successful. Although few student-athletes possess underdeveloped strategies in writing and research, experienced low academic motivation, and anxiety during test; thus, remediation must be done to address these concerns.

The student-athletes obtained PNUAT (Philippine Normal University Admission Test) scores ranging from 34-77, which are points lower than the cut off score set by the University. Moreover, academic difficulty is noted in their numerous academic deficiencies as well in their GPA (Grade Point Average) ranging from 77-86.

Significant difference between the male and female student-athletes in the Write/Research Skills and Test-Taking Strategies under the Study Strength scale is evident. The female student-athletes hold profound learning strategies in contrast to the male participants. This result is further supported by the studies conducted by other scholars.

No significant difference between the male and female student-athletes is noted in their PNUAT scores, as stated by K.J. Hildenbrand (2005), that athletes regardless of gender are chronically underprepared when they enter college. Likewise, with their 1st semester and 2nd semester academic performance for school year 2012-2013, though an increase in academic deficiencies during the 2nd semester is evident due to failure, incomplete rating, unauthorized withdrawal, and dropped by their Professor were evident.

The preparation for the SCUAA-NCR (State Colleges and Universities Athletic Association – National Capital Region) season can be accountable to this, as student-athletes spend more time in their training. In addition, student-athletes had difficulty in their adjustment to the college athletic and academic demands as reflected

in the random interview conducted to the participants.

In this study, association does exist between the academic performance and in the different subscales of the SMALSI (School Motivation and Learning Strategies Inventory) in contrast to the studies conducted by some scholars. This result is related to the low GPA generated by the student-athletes for school year 2012-2013, while having moderately to extremely well develop learning strategies. Factors or variables that may affect these findings should be further investigated to identify appropriate intervention that can help the student-athletes improve their academic performance.

On the other hand, the significant association is evident between the PNUAT scores and the GPA's of the student-athletes evident in the former's scores ranging from 34-77 and 77-86 in the latter. It is found that academic preparedness was a key component that positively affects student-athlete graduation rates. It is also concluded that the major obstacle in preventing higher graduation rates is the poor academic preparation of first-year student-athletes.

The following recommendations were based on the above mentioned findings and conclusions:

First, develop an intervention program to enhance the learning strategies and to strengthen the academic motivation as well the academic preparedness of student-athletes should be implemented. The program should focus on developing their learning skills as well as empowering their Academic Motivation and to eradicate their Anxiety present in testing activities.

Second, Regular Academic Counseling/ Monitoring must be provided to the studentathletes to address the difficulties and problems that they encounter. Also to help them achieve their maximum potential in and off the court.

Third, encourage coaches, professors, and student services personnel – guidance staff, learning resources staff, etc. to assist student-athletes with making the most possible academic adjustment.

Fourth, support and guide the studentathletes to amend their incomplete subject/s in order to cope with their academic deficiency.

Finally, *fifth*, further studies on the phenomenological profile of the student-athletes should be conducted to identify the sources of difficulty that may be affecting their academic performance. Identifying the factors that influence academic performance can improve the targeting of interventions and support services for student-athletes at risk of academic problems.¹

References

- Alday, M.P. (2008). "Assessment of Collegiate Athletes' Problems and Difficulties: Basis for a Proposed Intervention Program". *Unpublished Master's Thesis*. Manila: Philippine Normal University.
- Al-Qaisy, L.M. (2010). "Adjustment of College Freshmen: The Importance of Gender and the Place of Residence" in *International Journal of Psychological Studies*, 2(1), pp.142-150.
- Anderman, L.H. & T.M. Freeman. (2004). "Students' Sense of Belonging in School" in P.R. Pintrich & M.I. Maehr [eds]. *Motivating Students, Improving Schools: The Legacy of Carol Midgley*. Amsterdam: Elsevier, pp.27-63.
- Anderson, E.S. & T.Z. Keith. (1997). "A Longitudinal Test of a Model of Academic Success for at-Risk High School Students" in *Journal of Educational Research*, 90, pp.259-268.
- Aries, E. *et al.* (2004). "A Comparison of Athletes and Non-Athletes at Highly Selective Colleges: Academic Performance and Personal Development" in *Research in Higher Education*, 45, pp.577-602. doi: 10.1023/B:RIHE.0000040264.76846.e9.
- Bayot, T. (2001). "The Relationship between Motivational Factors and Academic Achievement of Students in Special Science Classes in the National Capital Reagion, School Year 2000-2001". *Unpublished Master's Thesis*. Manila: Philippine Normal University.
- Borden, K.B. *et al.* (1987). "Achievement Attributions and Depressive Symptoms in Attention Deficit-Disordered and Normal Children" in *Journal of School Psychology*, 25(4), pp.399-404.
- Calderon, M.C. (2012). "Self-Regulation Capacity and Learning Strategies of 3rd Year Students with Academic Difficulties: Basis for Intervention Program Enhancement, School Year 2011-2012".

^{&#}x27;Statement: We would like to declare that this article is our original work; so, it is not product of plagiarism and not yet also be reviewed and published by other scholarly journals.

- *Unpublished Master's Thesis.* Manila: Philippine Normal University.
- Cantor, N.E. & D.A. Prentice. (1996). "The Life of the Modern-Day Student-Athlete: Opportunities Won and Lost". *Paper* presented at the Princeton Conference on Higher Education, Princeton University, in Princeton, New Jersey USA [United States of America].
- Carter, C.M. (2012). Academic and Athletic Motivation as Predictors of Academic Performance of Division I College Student-Athletes. Oklahoma, USA [United States of America]: Published Dissertation, University of Oklahoma. Available online also at: http://gradworks.umi.com/35/08/3508065.html [accessed in Manila, Philippines: June 1, 2015].
- Cassady, J.C. & R.E. Johnson. (2002). "Cognitive Test Anxiety and Academic Performance" in Contemporary Educational Psychology, 27, pp.279-295.
- Ceballo, G.V. (2006). "The Effects of Motivation on Task Persistence and Performance Attainment of Fourth Year High School". *Unpublished Master's Thesis*. Manila: Philippine Normal University.
- Comeaux, E. (2005). "Predictors of Academic Achievement among Student-Athletes in the Revenue-Producing Sports of Men's Basketball and Football" in *The Sport Journal*, 8(3), pp.37-44.
- Comeaux, E. & K.C. Harrison. (2011). "A Conceptual Model of Academic Success for Student-Athletes" in *Educational Researcher*, 40(5), pp.235-245.
- Covington, J. *et al.* (1999). "Academic Motivation and the Student-Athlete" in *Journal of College Student Development*. Available online also at: http://www.highbeam.com/doc/1P3-39748309.html. [accessed in Manila, Philippines: May 14, 2015].
- Creswell, J.W. (2008). Educational Research:
 Planning, Conducting, and Evaluating
 Quantitative and Qualitative Research. London:
 Pearson Prentice Hall.
- Dembo, M.H. & H. Seli. (2008). *Motivation and Learning Strategies for College Students: A Self-Management Approach*. New York: Taylor & Francis, LLC.
- Entwistle, N.J. & S. Waterson. (1988). "Approaches to Studying and Levels of Processing in University Students" in *British Journal of Educational Psychology*, 58, pp.258-265.
- Ertürk, S. & M. Dayıolu. (2004). Gender Differences in Academic Performance in a Large Public University in Turkey. Ankara, Turkey: Published Thesis, Middle East Technical University. Available online also at: http://www.erc.metu.edu.tr/menu/series04/0417.pdf [accessed in Manila, Philippines: April 15, 2015].
- Fortes, J. et al. (2010). "Investigation of Academic and Athletic Motivation on Academic Performance among University Students" in *International Journal of Trade, Economics, and Finance*, 11(4), pp.367-372.
- Garg, M. (2011). "Peeping into the Learning World of Secondary Teacher Trainees: Can Their Academic Success be Predicted?" in Australian Journal of

- Teacher Education, 36.
- Gaston-Gayles, J.L. (2004). "Examining Academic and Athletic Motivation among Student-Athletes at a Division I University" in *Journal of College Student Development*, 45(1), pp.75-83.
- Hembree, R. (1988). "Experiments and Relational Studies in Problem Solving: A Meta-Analysis" in Journal for Research in Mathematics Education, 23(3), pp.242-273.
- Hildenbrand, K.J. (2005). An examination of College Student Athletes Academic Motivation. Kansas USA [United States of America]: Published Dissertation in Kansas State University. Available online also at: <a href="http://krex.k-state.edu/dspace/bitstream/handle/2097/138/KaseeHildenbrand2005.pdf?sequence=10="https://krex.k-state.edu/dspace/bitstream/handle/2097/138/KaseeHildenbrand2005.pdf?sequence=10="https://krex.k-state.edu/dspace/bitstream/handle/2097/138/KaseeHildenbrand2005.pdf?sequence=10="https://kaseeHildenbrand2005.pdf.sequence=10="https://kaseeHildenbrand2005.pdf.sequence=10="https://kaseeHildenbrand2005.pdf.sequence=10="https://kaseeHildenbrand2005.pdf.sequence=10="https://kaseeHildenbrand2005.pdf.sequence=10="https://kaseeHildenbrand20
- Hollis, L.P. (1997). "The Ultimate Triple Jump: The Psychosocial, Historical, and Current Dynamics Affecting African American Female Athletes' Identity and Success" in *Academic Athletic Journal*, 12(1), pp.11-19.
- Hood, A.B., A.F. Craig & B.W. Ferguson. (1992). "The Impact of Athletics, Part-Time Employment, and Other Activities on Academic Achievement" in *Journal of College Student Development*, 33(5), pp.447-453.
- Hopkins, K.D., C.A. George & D.D. Williams. (1985). "The Concurrent Validity of Standardized Achievement Tests by Content Area Using Teachers' Ratings as Criteria" in *Journal of Educational Measurement*, 22, pp.177-182.
- Hughes, C.A. (1993). "Test-Taking Strategy Instruction for Adolescents with Emotional and Behavioral Disorders" in *Journal of Emotional & Behavioral Disorders*, 1(3), pp.189-198.
- Interview with Respondent A, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 2 October 2012.
- Interview with Respondent B, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 9 October 2012.
- Interview with Respondent C, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 16 October 2012.
- Interview with Respondent D, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 23 October 2012.
- Interview with Respondent E, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 30 October 2012.
- Interview with Respondent F, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 6 November 2012.
- Interview with Respondent G, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 13 November 2012.
- Interview with Respondent H, a Freshmen Student-Athletes of PNU (Philippine Normal University), in Manila, Philippines, on 20 November 2012.
- Jameson, M., R. Diehl & H. Danso. (2007). "Stereotype Threat Impacts College Athletes' Academic

- Performance" in *Current Research in Social Psychology*, Vol.12, No.5, pp.68-79.
- Jones, L. & D.C. Petruzzi. (1995). "Test Anxiety: A Review of Theory and Current Treatment" in *Journal of College Student Psychotherapy*, 10(1), pp.3-15.
- Karabenick, S.A. & J. Collins-Eaglin. (1997). "Relation of Perceived Instructional Goals and Incentives to College Students' Use of Learning Strategies" in *Journal of Experimental Educational*, 65, pp.331-341.
- Kramer, H.C. (1986). "Faculty Advising: Help for Student-Athletes?" in *NACADA Journal*, 6(1), pp.67-79.
- Leonard, D.K. & J. Jiang. (1999). "Gender Bias and the College Predictors of the SATs: A Cry of Despair" in Research in Higher Education, 44, pp.51-81.
- Levin, J. et al. (2010). Elementary Statistics in Social Research. London: Pearson Educ, Inc.
- Levitz, R. & L. Noel. (1989). "Connecting Students to Institutions: Keys to Retention and Success" in M.L. Upcraft & J. Gardner [eds]. *The Freshman Year Experience*. San Francisco: Jossey-Bass, pp.65-81.
- Liebert, R.M. & L.W. Morris. (1967). "Cognitive and Emotional Components of Test Anxiety: A Distinction and Some Initial Data" in *Psychological Reports*, 20, pp.975-978.
- Maningas, G.M. (2004). "The Relationship between Goal Orientation and Self-Efficacy to Academic Performance of Selected College Freshmen". *Unpublished Master's Thesis*. Manila: Philippine Normal University.
- Meyer, B.B. (1990). "From Idealism to Actualization: The Academic Performance of Female Collegiate Athletes" in *Sociology of Sport Journal*, 7(1), pp.44–57.
- Miranda, A., M.I. Villaescusa & E. Vidal-Abarca. (1997). "Is Attribution Retraining Necessary? Use of Self-Regulation Procedures for Enhancing the Reading Comprehension Strategies of Children with Learning Disabilities" in *Journal of Learning Disabilities*, 30(5), pp.503-512.
- NCES [National Center for Educational Statistics].
 (2003). National Assessment of Educational
 Progress 2003: The Nation's Report Card for the
 Nation and its States. Washington, DC: National
 Center for Educational Statistics, U.S. Department
 of Education.
- Orlando, J. & J. Clermont. (2013). "Academic Preparedness Assessment" in *Assessment, Counseling, and Therapy Center*. USA [United States of America]: Clinton E. Sims, Psy S., Inc. Available online also at: www.act4u.us [accessed in Manila, Philippines: April 15, 2015].
- Parham, W. (1993). "The Intercollegiate Athlete: A 1990s Profile" in *The Counseling Psychologist*, 21(3), pp.411-429.
- Paris, S.G. & E.R. Oka. (1989). "Strategies for Comprehension Text and Coping with Reading Difficulties" in *Learning Disability Quarterly*, 12, pp.32-43.

- Pascarella, E.T. *et al.* (1996). "Influences on Students' Internal Locus of Attribution for Academic Success in the First Year of College" in *Research in Higher Education*, 37(6), pp.731-756.
- Pascua, J. et al. (2012). "College Academic Performance of Teacher Education Students in a State University of Northern Philippines" in JPAIR Institutional Research, Vol.1. Available online also at: http://www.philair.ph/wp-content/ uploads/2012/05/3Juanita-B.-Pascua.pdf [accessed in Manila, Philippines: March 2, 2015].
- Petrie, T.A. & R.K. Russel. (1995). "Academic and Psychosocial Antecedents of Academic Performance for Minority College Football Players" in *Journal of Counseling and Development*, 73, pp.615-620.
- Porte, L.K. (2001). "Cut and Paste 101: New Strategies for Note-Taking and Review" in *Teaching Exceptional Children*, 34(2), pp.14-20.
- Santrock, J.W. (2011). *Educational Psychology*. New York: Mc-Graw-Hill Companies, Inc.
- Scruggs, T.E. & M.A. Mastropieri. (1986). "Improving the Test-Taking Skills of Behaviorally Disordered and Learning Disabled Children" in *Exceptional Children*, 53(1), pp.63-68.
- Scruggs, T.E. & M.A. Mastropieri. (1992). *Teaching Test-Taking Skills: Helping Children Show What They Know*. Brookline, MA: Brookline Books.
- Scruggs, T.E. & D. Tolfa. (1985). "Improving the Test-Taking Skills of Learningdisabled Students" in *Perceptual & Motor Skills*, 60(3), pp.847-850.
- Shulman, J.L. & W.G. Bowen. (2001). *The Game of Life: College Sports and Educational Values*. Princeton, NJ: Princeton University Press.
- Simmons, H.D., D. Van Rheenen & M.V. Covington. (1999). "Academic Motivation and the Student Athlete" in *Journal of College Student Development*, 40, pp.151-162.
- Stone, J. & C. Strange. (1989). "Quality of Student Experiences of Freshmen Intercollegiate Athletes" in *Journal of College Student Development*, 30, pp.148-154.
- Stroud, K.C. & C.R. Reynolds. (2006). SMALSI: School Motivation and Learning Strategies Inventory. London: WPS Publishers.
- Stuart, D.L. (1985). "Academic Preparation and Subsequent Performance of Intercollegiate Football Players" in *Journal of College Student Personnel*, 26, pp.124-129.
- Sylwester, M. & T. Witosky. (2004). "Athletic Spending Grows as Academic Funds Dry Up" in *USA Today*. Available online also at: http://www.usatoday.com/sports/college/2004-02-18-athleticspending-cover_x.htm [accessed in Manila, Philippines: December 19, 2014].
- Tao, S. *et al.* (2000). "Social Support: Relations to Coping and Adjustment during the Transition to University in the People's Republic of China" in *Journal of Adolescent Research*, 15, pp.123-144.
- Tobias, M.V. (2005). "Factors Affecting Academic Performance of the High School Students of National College of Business and Arts".

- *Unpublished Master's Thesis.* Manila: Philippine Normal University.
- Umbach, P.D. *et al.* (2006). "Intercollegiate Athletes and Effective Educational Practices: Winning Combination or Losing Effort?" in *Research in Higher Education*, 47(6), pp.709-733.
- Unruh, R.L. (2001). "Athletic Department Practices that Relate to the Academic Performance and Persistence of Student-Athletes". *Unpublished Doctoral Dissertation*. Eugene Oregon: University of Oregon.
- Wariner, H. & L.S. Steinberg. (1992). "Sex Differences in Performance on the Mathematics Section of the Scholastic Aptitude Test: A Bidirectional Validity Study" in *Harvard Educational Review*, 62, pp.323-336.

- Weinstein, C.E. (1987). LASSI User's Manual for those Administering the Learning and Study Strategies Inventory. Clearwater, FL: H & H.
- Wilberg, S. & R. Lynn. (1999). "Sex Differences in Historical Knowledge and School Grades: A 26 Nation Study" in *Perspective and Individual Differences*, 27, pp.1221-1229.
- Yip, M. (2013). "Learning Strategies and Their Relationship to Academic Performance of the High School Students in Hong Kong" in *Educational Psychology*. Available online also at: http://dxdoi.org [accessed in Manila, Philippines: March 11, 2015].



Freshmen Student-Athletes of the Philippines (Source: http://www.enderuncolleges.com, 15/4/2015)

Most student-athletes have average academic motivation and moderate learning skills which help them understand information and solve problems related to academics. These learning strategies focus on making the student-athletes more active learners by teaching them how to learn and how to use what they have learned to solve problems and be successful. Although few student-athletes possess underdeveloped strategies in writing and research, experienced low academic motivation, and anxiety during test; thus, remediation must be done to address these concerns.