Study habits and scholastic performance of junior student-athletes in educational district IV

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ABSTRACT
This study was undertaken to determine the study habits and scholastic performance of junior student-athletes in Educational District IV. The researcher examined the profile of the respondents, scholastic performance in terms of their final average and their study habits in textbook reading, notetaking, reviewing, memorizing, preparing for tests, time management and concentration, using descriptive evaluative correlation approach for a comprehensive analysis of the study. In this study, the researcher utilized an adapted, modified survey-questionnaire which underwent pilot testing, validation and reliability test. The researchers found out that there was a significant relationship between student-athletes’ textbook reading, notetaking, reviewing, memorizing, time management and concentration and scholastic performance while there is no significant relationship in their preparation of tests and their scholastic performance. This signifies that the grade obtained by the student-athletes does not have anything to do with how they prepare for their tests. Based on the findings, the researchers noted that most of the respondents were Grade 10, males, and majority are into athletics. Moreover, the researcher concluded that the perception of student-athletes in different domains of study habits are all in the description of Sometimes. This implies that most of the student-athletes are not inclined to their study because they focus more on trainings as preparation for the competitions. Furthermore, the study revealed that the scholastic performance of student-athletes (M=83.43, SD=6.25) indicated that they still manage to obtain a passing grade. Moreover, the study also revealed that the most observed study habit is Memorizing (M=3.24, SD=0.48) while Taking Notes is the least observed study habit (M=3.00, SD=0.60). The researchers recommend that the results of this study be used in the preparation of the School Improvement Plan (SIP), as well as the Annual Implementation Plan (AIP) of each school for sports and academic support for student-athletes in line with the realization of schools’ mission and vision.

KEYWORDS
study habits; scholastic performance; student-athletes; Bulacan; Philippines

Received: 17 May 2022
Accepted: 8 August 2022
Published: 26 August 2022

Introduction
There has been a longstanding debate concerning the effect of student’s involvement in athletic activities to his or her scholastic performance. Numerous researchers state that direct participation in athletics or sport activities actually aid in the academic performance of students whether in the high school or collegiate level (Montecalbo-Ignacio, Ignacio III & Buot 2017; Lumpkin and Favor 2012; Sitkowski 2008). Moreover, Garcia and Subia (2019) expressed that the involvement of the students in any sports activities does not only improve the students physically but also have relevant influence on their academic performance. However, there exists a general but unestablished awareness that athletic students perform less or poorer than their athletic colleague athletes’ study because they focus more on trainings as preparation for the competitions. Furthermore, the study revealed that the scholastic performance of student-athletes (M=83.43, SD=6.25) indicated that they still manage to obtain a passing grade. Moreover, the study also revealed that the most observed study habit is Memorizing (M=3.24, SD=0.48) while Taking Notes is the least observed study habit (M=3.00, SD=0.60). The researchers recommend that the results of this study be used in the preparation of the School Improvement Plan (SIP), as well as the Annual Implementation Plan (AIP) of each school for sports and academic support for student-athletes in line with the realization of schools’ mission and vision.

However, he recognized the effect of social background, degree in participation in sports, and the framework of sports activities in relation to academic attitudes and activities. A good economic status would help provide for the physiological and other needs of a student since diet, health, and well-being affect academic performance (TOP Foundation, 2016). Degree of participation would determine the time spent by an individual and whether it is effectively and/or efficiently spent. Athletic activities completely detached from academics could do more rather than good, especially the skills and values learned from it could not be applied in the curricular performance of the student.

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The determination of the relationship between the study habits and school performance of the student-athletes serve as a guide to the teachers in enhancing their teaching strategies especially if they are handling student-athletes.

**Theoretical framework**

This study is grounded on the Theory of Multiple Intelligences (Bodily-Kinesthetic Intelligence) by Howard Gardner.

The Theory of Multiple Intelligences suggests that traditional psychometric views of intelligence are too limited. Gardner first outlined his theory in his 1983 book *“Frames of Mind”: The Theory of Multiple Intelligences,* where he suggested that all people have different kinds of *“intelligences”*. Gardner proposed that there are eight intelligences (Visual-Spatial, Linguistic-Verbal, Interpersonal, Intrapersonal, Logical-Mathematical, Musical, Bodily-Kinesthetic and Naturalistic) and has suggested the possible addition of a ninth known as “existentialist intelligence”.

In order to understand the full range of abilities and talents that people possess, Gardner theorized that people do not have just an intellectual capacity, but have many kinds of intelligence, including musical, interpersonal, spatial-visual, and linguistic intelligences.

According to Gardner, the implication of the theory is that learning/teaching should focus on the particular intelligences of each person. For example, if an individual has strong spatial or musical intelligences, they should be encouraged to develop these abilities. Gardner pointed out that the different intelligences represent not only different content domains but also learning modalities. A further implication of the theory is that assessment of abilities should measure all forms of intelligence, not just linguistic and logical-mathematical.

Bodily/Kinesthetic Intelligence refers to the use of body for expression. It is also described as the potential of using the body and its part in mastering problems or creation of products. Athletes, professional dancers, mechanics, physical education instructors are in this group. These individuals discover information through active “hands-on” approach. They gain knowledge from interaction in the physical world (Sener & Cokaliskan, 2018).

Howard Gardner explained bodily-kinesthetic intelligence using the *“Babe Ruth”* Theory which describe the story of young Babe Ruth who went on to become one of sports history’s greatest baseball players, and indeed, perhaps history’s top athlete. Those with strong bodily kinesthetic intelligence learn best by doing—they are most able to grasp new concepts when they have the chance to physically manipulate objects that represent those concepts.

**Literature review**

This chapter presented the literature and studies related to Study habits and scholastic performance of student-athletes.

**Study habits of student-athletes**

Study habit refers to the student-athletes’ way of carrying out the task of studying by using various techniques and ways in the field of study to keep him afloat along with the wise use of his/her time in studying. Either the study habit is systematic or unsystematic there could always be an impact to student-athletes’ academic performance. According to Nagaraju (2004) cited Sharma & Vyas (2018) “study habit serves as the vehicle of learning and poor study habit creates anxiety in the student. He also explained that if the student have a good study habit it make them to have a good performances”.

Since the learning factor that extremely influences students’ academic achievements is the study habits, establishing its foundation regardless on his level of education is very important because it aids him to increase its capability to be self-directed and self-disciplined, Ebele and Olofu (2017). When students have established good study habits, they would expect to be less stressed and not worried during exam day, thus students who also organize and adhere to their established study programs are more confident and appeased at test-taking time and yield better grades.

In the view of Agba (2013), unserious students do study anyhow without definite techniques, and he admits that such students are most likely to perform below average. Thus, he concludes that good study habits help students to: attend classes very often and do so on time. It also helps them to submit their assignment on time, read or prepare very well for tests and exams, take down notes and develop the points independently, ask relevant questions in class; thereby having good grades at the time of the term or semester. Writing on bad study habits maintains that developing study habits in school will help students succeed in class and achieve educational goals.

Generally, study habits can be classified into two—good study habits, and poor study habits. According to Sharma & Vyas (2017) good study habits can be defined as to have a clean, organized area for studying, keeping good notes, reading textbooks as well as studying at the same time each day. Learning to listen anything discussed and remembering detail are important beginning of developing good study habit. Children develop good study habit in school by completing minor task and by building an eagerness for learning. Good study habits include many different skills: time management, concentration, memorization, organization of notes, and reviewing. Poor study habit included cutting class, not doing their work at time, usually read without recognizing meaning, messy in their paperwork. In general term, study habits are the application of mental faculties to acquire knowledge. Reading is one of the skills that require good study habit. Bocar and Tizon (2017) declared reading as makes an individual understand
the message, a way that a person will be challenged to think, recall and communicate ideas to other people. Moreover, he revealed reading as an art and through reading students could interact clearly.

Study habits as conceptualized by Esia-Donkoh et al. (2017), embraces competences in the areas of homework and assignment, time allocation, reading and note-taking, study period procedures, concentration, written work, examination taking and teacher consultations. Using his study habit inventory, he concluded from several researches that study habit variables correlated positively with academic performance. Other researchers such as Tope (2011), Bagongon and Connie (2009) and Salami and Aremu (2006) used Bakare’s (1977) study habit inventory and established a relationship between study habits and academic performance. Osa-Edoh & Alutu (2012) in a study, also established a high correlation between study habits and learners’ academic performance. These findings suggest that students academic performance is likely to improve when they cultivate proper study habits.

**Scholastic performance of student-athletes**

The scholastic performance of student athletes has been a major topic of discussion over the years and across many different venues and audiences. Many individuals believe that participation in sport will inhibit students-athletes’ ability to achieve academically due to barriers such as travel commitments, days of practice, and required participation in night games (Bageant, 2017). Critics observed that participation in sports may reduce the time available for studying and learning, since student-athletes were having difficulties in managing their time between hectic schedules of sports training and requirements of academic subjects. However, sports enthusiasts claimed that sports participation can motivate student-athletes to achieve harder, raise scholastic ambition, can keep them attending school, can improve students’ academic grades, develop awareness the benefits of good health, fitness and exercise, and understanding the spirit of team work, sportsmanship and camaraderie.

Tubic et al., (2015) that the mechanism which explains the positive correlation between sports engagement and academic achievement concerns the increase due to neurohormonal balance and reduction of boredom, which in turns results in increased attention and concentration. An increased level of physical activity may additionally be related to higher self-perception which also affects the fulfillment of school obligations and thus academic achievement too. Moreover, he also added that a positive correlation between sports engagement and academic achievement can also be enlightened in terms of personality traits developed in a person due to sports, which range from emotional stability and motivation for achievement to combined functions such as conscientiousness, responsibility etc. for example, a person who has learned from sports how to cope with stress, how to fight his way to achieve goals, how to show his capabilities develop through hard work, will have trust to his own abilities, which contributes to higher efficiency of learning process. These traits, that have been developed through sport, are reflected in school conditions and other spheres of like alike.

Kohs (2015), conducted a study on the effect of being a student-athlete on academic performance and he hypothesized that student-athletes demonstrate a significantly greater level of confidence than the non-athlete students and as a result, have a significantly greater GPA than the non-athlete students among genders and overall.

Many factors influence the scholastic performance of junior high school student athletes and most of these barriers are issues that student athletes must confront and address on a daily basis. Among these challenges are time demands, eligibility requirements, and personal development. While the personal development of student athletes has a major influence on their academic achievement and the responsibility for academic success or failure ultimately falls on the student athletes themselves, it is notable that coaches can have a major influence on the development of the student athletes with whom they work. Banwell & Kerr (2016), discuss how the coaches who participated in their research define personal development as academic success and learning life skills. Coaches also reported that time management was a crucial life skill that leads to personal development and success in the classroom.

According to Stucko (2018), it is important to recognize the manner in which participation in competitive high school sports contribute to the development and enhancement of a student-athletes’ behavior and habits outside the realm of sport. Bradley and Conway (2016), believe that, “Being part of an organized school team, practicing several times per week and representing the school competitively will promote self-esteem, self-concept and social capital within the student and develop a strong level of school connectedness”. They also added that characteristics like these are built and reinforced through athletic participation, along with motivation, perseverance, self-control, coping, and creativity that are thought to emphasize success in an academic setting. Moreover, Buot (2014) added that if the student-athletes’ spent majority of their lives participating in sports were considered themselves as naturally competitive individual not just in sports but also in academic grades as well.

**Relationship between study habits and scholastic performance of student-athletes**

Student-athletes study methods affect their learning and scholastic performance, and the resultant process plays a role in the development of mental and practical skills, and eventually their future career. Determining student-athletes study habits and the relationship between their study habits and their scholastic performance can, therefore, improve their academic achievement, support and change their study habits.

According to Bentil et al. (2018) cited Crede & Kuncel (2008) and Nuthana & Yenagi (2009) states that study habits impact academic performance of students. They further revealed that students who are better in reading and note-taking, well prepared for the board examination and have concentration may have better academic achievement.
The results of these studies suggest that good study habits enhance academic performance whilst poor study habits stifles students academic performance. Study habits contribute significantly in the development of knowledge and perceptual capacities. Study habits tell a person that how much he will learn and how far he wants to go, and how much he wants to earn. These all could be decided with the help of one’s study habits, throughout the life. Therefore, it is assumed that the study habits are correlates of scholastic or academic achievement. According to Issa, et al. (2012) cited Rabia, et al. (2017) recommended that everyday reading activities in which students engage influence their studying skills and subsequent academic performance.

According to Looyeh, et al. (2017), study habits are the most important predictor-variables in academic performance. Sakirudeen & Sanni (2017), stated that the value of a nation depends upon the quality of its citizen while the quality of citizen depends of its education which in turn depends on the study habits of the students.

The level of preparation and learning strategies developed and employed consciously by students, go a long way to influence their level of academic performance (Ebele & Olofu, 2017).

Thus, study habit is one of the greatest students or learning factors that hugely influences students’ academic achievements. If undermined by students at all levels, teachers, administrators, parents and guardians, school counselors and the government, then, the trend and menace of students’ abysmal performance in both internal and external examinations would continue to boom and become more devastating and alarming cited Badau (2018).

**Problem statement and hypothesis**

The research investigated the study habits and scholastic performance of junior student-athletes. Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
   1.1. Sex,
   1.2. Grade level, and
   1.3. Type of Sports?

2. What are the study habits of the student-athletes based on the following domains:
   2.1. Reading Text Books,
   2.2. Taking Notes,
   2.3. Studying,
   2.4. Memorizing,
   2.5. Preparing for Tests,
   2.6. Management of Time; and
   2.7. Concentration

3. What is the scholastic performance of the respondents in the School Year 2018 to 2019?

4. Is there a significant relationship difference in the profile of the respondents and scholastic performance?

**Hypothesis of the study**

There is no significant relationship between the study habits of the respondents and their scholastic performance.

**Methods**

**Research design**

This study used descriptive evaluative, correlation research design to assess the study habits of student athlete and their scholastic performance in EDDIS IV. Werner, et al. (2018) made clear that a study is descriptive when it is devoted to the gathering of data about prevailing situations for the purpose of description and interpretation.

**Research locale and population and sampling**

This study was conducted among student-athletes in Educational District IV (EDDIS IV) of the Schools Division of Bulacan. School A has 85 student-athletes while school B has 70 student-athletes. School C has 65 student-athletes, School D has 58 student-athletes, School E has 54 student-athletes, School F has 50 student-athletes and School G has 48 student athletes.

**Ethical considerations**

To ensure that the research is in line with the ethical and scientific standards, it underwent ethical review from the Institutional Ethics and Review Committee of Our Lady of Fatima University (OLFU-IERC).

Moreover, the researcher considered some ethical principles in research while conducting the study. The researcher observed the principle of confidentiality, anonymity, and data protection. These principles are included in
the Philippine Data Protection Act of 2012 (RA 10173).

**Research instruments**

This study adapted the survey questionnaires of Abion, 2014. The researcher modified and translated to Filipino the survey questionnaires through the help of his co-teachers in the Filipino department. The descriptive survey questionnaires consisted of two parts. Part I is about the profile of the respondents which includes the field of sex, gender, grade level and type of sports, and Part II is the Study Habit questionnaire which was used to determine the assessment of student-athletes themselves in terms of their study habits. Originally, the questionnaire utilized a three-point rating scale in which the respondents affirmed their point of view of their study habits through Rarely (1), Sometimes (2), and Often (3). For this study, the questionnaire was modified to include a four-point rating scale ranging from Always (4), Sometimes (3), Seldom (2), and Never (1).

**Validation and reliability of the instrument**

The adapted survey questionnaire was subjected to a validation to determine the appropriateness of the test items to the Philippine public school setting. The researcher sought the opinions and advice of experts from the Department of Education to include: Head Teacher III and Master Teacher I of a national high school and Master Teacher I of a technical-vocational high school.

The questionnaire was subjected to Chronbach Alpha Reliability Test. The results for the computation for the domains consisting of 30 items are: Reading Text books (.769), Taking Notes (.910), Studying (.774), Memorizing (.795), Preparing for Test (.795), Management of Time (.776), and Concentration (.784). The over-all recommendation for all the domains is Acceptable with a reliability coefficient of 876. The questionnaire’s data were analyzed based on existing literature and the study’s context in relation to the interplaying variables being considered.

**Results**

Table 1 presents the frequency and percentage distribution of the demographic profile of the respondents according to sex. Seventy (N=70) student-athletes were surveyed. The results of the study reveal that most of the respondents were males 40 (57.1%) while female respondents were 30 (42.9%).

| Sex   | Frequency (f) | Percentage (%) |
|-------|---------------|----------------|
| Male  | 40            | 57.1           |
| Female| 30            | 42.9           |
| Total | 70            | 100            |

There were more male student-athletes who were the respondents compared to females because boys generally show greater sports interest than girls. They also differ in their use of competitive modes especially in intrasexual or same sex competition. This is similar to the study of Benenson (2013), as cited by Deaner, et al. (2015) which mentioned that males are more likely than females to use high stakes physical bellicosity (e.g., fighting), whereas female’s aggression more often involves indirect or relational tactics, such as conversing.

Table 2 presents the frequency and percentage distribution of the demographic profile of the respondents according to grade level. In Table 2, Grade 10 had the highest number of 36 (51.4%). The least number 3 (4.30%) was in Grade 7.

Most sports require that an athlete’s body mature enough for his/her performance to reach a level expected for high level elite student-athletes. Grade 10 student-athletes had a higher level of growth, maturity, and development that enables them to perform tasks and meet demands of training and competition compared to Grades 7, 8 and 9.

| Grade Level | Frequency (f) | Percentage (%) |
|-------------|---------------|----------------|
| Grade 7     | 3             | 4.30           |
| Grade 8     | 14            | 20.0           |
| Grade 9     | 17            | 24.3           |
| Grade 10    | 36            | 51.4           |
| Total       | 70            | 100            |

This was supported by the point of view of Kearney, et al. (2019) who said that in sports systems, young athletes are generally grouped according to their birth year with the purpose to provide opportunities and experiences during competitions. Furthermore, Romann and Cobley, (2015) in Brustio, et al. (2019) pointed that in accordance with the maturation-selection hypothesis, relatively older athletes may have more advantageous anthropometric and physical features in comparison with relatively younger athletes.
Table 3 presents the frequency and percentage distribution of the demographic profile of the respondents according to type of sports. Majority of the student-athlete respondents were into athletics 16 (22.9%). On the other hand, 1 (1.40%) student-athlete was into taekwondo. There are many student-athletes in the athletics events because of the easy selection process which does not require weight and height standards as well as bodily physique compared to taekwondo.

**Table 3. Frequency and Percentage Distribution of the Demographic Profile of Respondents according to Type of Sports**

| Type of Sports | Frequency (f) | Percentage (%) |
|----------------|---------------|----------------|
| Arnis          | 3             | 4.30           |
| Athletics      | 16            | 22.9           |
| Badminton      | 9             | 12.9           |
| Basketball     | 10            | 14.3           |
| Chess          | 9             | 12.9           |
| Futsal         | 2             | 2.90           |
| SepakTakraw    | 5             | 7.10           |
| Table Tennis   | 8             | 11.4           |
| Taekwondo      | 1             | 1.40           |
| Volleyball     | 7             | 10.0           |
| **Total**      | **70**        | **100**        |

Athletics also consists of different events such as running events, hurdles, high jump, shot put, javelin throw and discus throw were the student-athletes can freely choose depending on their abilities. This was parallel to the study of Kearney, et al. (2018), cited by Brustio, et al. (2019). In many nations, track and field events or athletics are characterized by a significant over-representation of athletes born close to the date of selection. This was affirmed by Brazo-Sayavera, et al. (2017) on the selection in Spanish National Athletics Federation training camps.

Table 4 shows student-athletes’ assessment of study habits in terms of Reading Text books domain. Most of the respondents answered item 1 which states, *I browse the headings, pictures, charts, questions and summarizes before I start reading a chapter* \((M = 3.27, SD = 0.76)\). On the other hand, respondents rated item 3 which states, *I try to get the meaning of new words as I see them for the first time*, \((M = 2.76, SD = 0.62)\) the least. Student-athletes occasionally summarized concepts and comprehended the meaning of new words.

**Table 4. Means and Standard Deviations Scores of Study Habits of Student-Athletes in Terms of Reading Text Books**

| Reading Text Books | Mean (SD) | Interpretation |
|--------------------|-----------|----------------|
| 1. I browse the headings, pictures, charts, questions and summarizes before I start reading a chapter. | 3.27 (0.72) | Sometimes |
| 2. I make questions from a chapter before, during, and after reading it. | 3.07 (0.69) | Sometimes |
| 3. I try to get the meaning of new words I see them for the first time. | 2.76 (0.62) | Sometimes |
| 4. I look for familiar concepts as well as ideas that spark my interest as I read. | 2.94 (0.76) | Sometimes |
| 5. I look for the main ideas as I read. | 3.10 (0.80) | Sometimes |
| **Overall Mean** | 3.03(0.47) | Sometimes |

Scale: 1.0 - 1.49 Never; 1.50 - 2.49 Seldom; 2.50 - 3.49 Sometimes; 3.50 - 4.00 Always

The data presented in Table 4 were supported by the point of view of Ameyaw & Anto (2018) who expressed that reading is the demonstration of getting meaning from printed or composed words, which is the reason for learning and one of the key elements in regular daily life. Furthermore, they opined that reading is the ability to comprehend words contained in a printed or non-printed material and made use of the data for self-improvement and progress.

Table 5 shows student-athletes’ assessment of study habits in terms of Taking Notes domain. Most of the respondents answered item 7 which states, I take notes during class lectures \((M = 3.41, SD = 0.75)\). On the other hand, few respondents rated item 6 which states, I take notes as I read my text books, \((M = 2.79, SD = 0.96)\). Student-athletes occasionally took down notes and organized ideas into meaningful method.

**Table 5. Means and Standard Deviations Scores of Study Habits of Student-Athletes in Terms of Taking Notes**

| Taking Notes | Mean (SD) | Interpretation |
|--------------|-----------|----------------|
| 6. I take notes as I read my text books. | 2.79(0.96) | Sometimes |
| 7. I take notes during class lectures. | 3.41(0.75) | Sometimes |
| 8. I rework, rewrite, or type up my notes. | 3.00(0.83) | Sometimes |
| 9. I compare my notes with a classmate. | 2.80(1.00) | Sometimes |
10. I try to organize main ideas and details into a meaningful method.

| Overall Mean | Interpretation |
|--------------|----------------|
| 3.00(0.78)   | Sometimes      |

Scale: 1.0 - 1.49 Never; 1.50 - 2.49 Seldom; 2.50 - 3.49 Sometimes; 3.50 - 4.00 Always

The results of Table 5 are similar to the study of Lee, et al. (2013), cited by Vijayan & Krishnan (2018), who said that students who are able to record quality notes exhibit expanded understanding of material and a later review of the same.

Table 6 shows student-athletes' assessment of study habits in terms of Reviewing domain. Most of the respondents answered item 11 which states, I study where it is quiet and has few distractions (M = 3.59, SD = 0.60). On the other hand, few respondents rated item 15 which states, I study at least two hours every time I am in class each week, (M = 3.00, SD = 0.78).

| Reviewing | Mean (SD) | Interpretation |
|-----------|-----------|----------------|
| 11. I study where it is quiet and has few distractions. | 3.59(0.60) | Always |
| 12. I study for a length of time then take a short break before returning to studying. | 3.20(0.81) | Sometimes |
| 13. I have all my supplies handy when I study, such as pens, paper, calculator, etc. | 3.01(0.81) | Sometimes |
| 14. I set study goals such as the number of problem I will do or pages I will read. | 3.09(0.78) | Sometimes |
| 15. I study at least two hours every time I am in class each week. | 3.00(0.78) | Sometimes |
| Overall Mean | 3.18(0.48) | Sometimes |

Scale: 1.0 - 1.49 Never; 1.50 - 2.49 Seldom; 2.50 - 3.49 Sometimes; 3.50 - 4.00 Always

This was supported by Wolff (2003), cited by Anggiani & Heryanto (2018), that the atmosphere of a cushy environment campus affects the achievements of students in the learning process, both knowledge and skills.

Table 7 shows student-athletes' assessment of study habits in terms of Memorizing domain. Most of the respondents answered item 16 which states, I try to study during my personal peak energy time to increase my concentration level, (M = 3.50, SD = 0.56). On the other hand, few respondents rated item 15 which states, I summarize my notes into my own words, for better understanding (M = 3.13, SD = 0.74).

| Memorizing | Mean (SD) | Interpretation |
|------------|-----------|----------------|
| 16. I try to study during my personal peak energy time to increase my concentration level. | 3.50(0.56) | Always |
| 17. I summarize my notes into my own words, for better understanding. | 3.13(0.74) | Sometimes |
| 18. I test myself over material that could appear on future exams and quizzes. | 3.16(0.71) | Sometimes |
| Overall Mean | 3.26 (0.48) | Sometimes |

Scale: 1.0 - 1.49 Never; 1.50 - 2.49 Seldom; 2.50 - 3.49 Sometimes; 3.50 - 4.00 Always

The results are similar with the study of Brigitte, Claessens, Eerde, and Rutte (2005), as cited by Mohamed, et al (2018), who mentioned that time management is only possible through self-motivation: performance, ability and motivation.

Table 8 shows student-athletes' assessment of study habits in terms of Preparing for Tests domain. Most of the respondents answered item 19 which states, I study with classmate or group, (M = 3.51, SD = 0.72). On the other hand, few respondents rated item 20 which states, I easily identify what I have learned and what I have not learned before I take a test, (M = 3.07, SD = 0.67). The student-athlete respondents would like to study together with their peers. Studying with peers is perhaps one of the utmost effective ways to learn and process course material and ideas.

| Preparing for the Tests | Mean (SD) | Interpretation |
|-------------------------|-----------|----------------|
| 19. I study with classmate or group. | 3.51(0.72) | Always |
| 20. I easily identify what I have learned and what I have not yet learned before I take a test. | 3.07(0.67) | Sometimes |
21. I anticipate what possible questions may be asked on my tests and make sure I know the answers. 

Overall Mean 3.24(0.42) Sometimes

Scale: 1.0 - 4.00: 1.00 Never; 1.50 - 2.49: Seldom; 2.50 - 3.49: Sometimes; 3.50 - 4.00: Always

Collaborating with others in a learning setting is not a new or modern educational notion. Furthermore, opined that there is a time of coming together when group members work and doing—going over lecture notes, doing homework, preparing for tests, etc.

Table 9 shows student-athletes’ assessment of study habits in terms of Management of Time domain. Most of the respondents answered item 22 which states, I have enough time for school and fun, (M = 3.37, SD = 0.73). On the other hand, few respondents rated item 25 which states, I use a planner (or other method) to write down upcoming academic and personal activities, (M = 2.96, SD = 0.82).

Table 9. Means and Standard Deviations Scores of Study Habits of Student-Athletes in Terms of Management of Time

| Management of Time | Mean (SD) | Interpretation |
|--------------------|-----------|----------------|
| 22. I have enough time for school and fun. | 3.37(0.73) | Sometimes |
| 23. I take time to study every day. | 3.34(0.78) | Sometimes |
| 24. I start papers and projects as soon as they are assigned. | 3.04(0.67) | Sometimes |
| 25. I use a planner (or other method) to write down upcoming academic and personal activities. | 2.96(0.82) | Sometimes |
| Overall Mean | 3.18(0.48) | Sometimes |

Scale: 1.0 - 4.00: 1.00 Never; 1.50 - 2.49: Seldom; 2.50 - 3.49: Sometimes; 3.50 - 4.00: Always

Student-athletes must associate themselves with activities which are beneficial for them. Saqib, et al. (2018) suggested that students who participated in school based extra-curricular activities accomplish better at school. This statement was supported by the study of Massoni (2011) as cited by Bakoban and Aljarallah (2015) which described the role of ECA and their positive effects on students of all kinds.

Table 10 shows student-athletes’ assessment of study habits in terms of Concentration domain. Most of the respondents answered item 30 which states, I concentrate when I study, (M = 3.40, SD = 0.62). On the other hand, few respondents rated item 27 which states, I study without feeling sleepy, (M = 2.90, SD = 0.82). Student-athlete respondents can concentrate when they study but have a tendency to sleep when studying.

Table 10. Means and Standard Deviations Scores of Study Habits of Student-Athletes in Terms of Concentration

| Concentration | Mean (SD) | Interpretation |
|---------------|-----------|----------------|
| 26. I focus on my work when I study. | 3.24(0.75) | Sometimes |
| 27. I study without feeling sleepy. | 2.90(0.82) | Sometimes |
| 28. I usually seek a quiet place to study. | 3.26(0.76) | Sometimes |
| 29. I study even if I don’t feel like doing it. | 2.94(0.76) | Sometimes |
| 30. I concentrate when I study. | 3.40(0.62) | Sometimes |
| Overall Mean | 3.15 (0.48) | Sometimes |

Scale: 1.0 - 4.00: 1.00 Never; 1.50 - 2.49: Seldom; 2.50 - 3.49: Sometimes; 3.50 - 4.00: Always

Generally, sleep is associated with academic performance in school. Sleep is an essential part of human existence, necessary for good health and well-being. Most importantly, sleep has been identified as a state that influences higher cognitive functions and optimizes the consolidation of newly acquired information in memory according to Born, et al. (2006). This was supported by the point of view of Orzech, et al. (2011), as cited by Okano, et al. (2019) who articulated that insufficient sleep has been related with lack of concentration and attention during class.

Table 11 shows the summary of domains of study habits of student-athletes. It can be seen in Table 11 that Memorizing ranked 1 with a mean of 3.26 and SD of 0.48, interpreted as Sometimes. This means that respondents simply rely on rote memory and remember the lessons by looking over the instructional material until they think they can recall it in order to pass the subjects. On the other hand, Taking Notes ranked 7 with a mean of 3.00 and SD of 0.60, interpreted as Sometimes. It signifies that the respondents are not able to write down their lessons because much of their time are focused on training.

Table 11. Summary of Mean and Standard Deviation Scores of Study Habits Domain

| Domains          | Mean (SD) | Rank |
|------------------|-----------|------|
| Reading Text Books | 3.03(0.47) | 6    |
| Taking Notes     | 3.00(0.60) | 7    |
Table 12 shows student-athletes scholastic performance ($M = 83.43$, $SD = 6.25$). It shows that 27 out of 70, corresponding to 38.57% of the total population have a final average ranging from 75 to 79 while two (2) students, corresponding to 2.86% of the total respondents obtained a final average ranging from 95 to 96. This signifies that the grade obtained by the student-athletes does not have anything to do with how they prepare for their tests.

Table 13 shows the relationship between scholastic performance and study habits of student-athletes. Scholastic performance and Reading Textbooks, $r(70) = .383$, $p < .05$, Taking Notes, $r(70) = .425$, $p < .05$, Reviewing, $r(70) = .349$, $p < .05$, Memorizing, $r(70) = .314$, $p < .05$, Management of Time, $r(70) = .378$, $p < .05$ and Concentration, $r(70) = .328$, $p < .05$ were positively correlated. This shows that if there is an increase in the study habit domains, there is an increase in scholastic performance.

Table 13. Test of Relationship of Scholastic Performance and Study Habits of the Student-Athletes

| Domains            | R     | p - value | Colton's Rule of Degree of Relationship | Interpretation           | Decision  |
|--------------------|-------|-----------|----------------------------------------|--------------------------|-----------|
| Reading Text Books | 0.383 | 0.001     | Fair degree of linear relationship     | Statistically related    | Reject H0 |
| Taking Notes       | 0.425 | 0.000     | Fair degree of linear relationship     | Statistically related    | Reject H0 |
| Reviewing          | 0.349 | 0.003     | Fair degree of linear relationship     | Statistically related    | Reject H0 |
| Memorizing         | 0.314 | 0.008     | Fair degree of linear relationship     | Statistically related    | Reject H0 |
| Preparing for Tests| 0.198 | 0.101     | Negligible                             | Statistically not related| Accept H0 |
| Management of Time | 0.378 | 0.001     | Fair degree of linear relationship     | Statistically related    | Reject H0 |
| Concentration      | 0.328 | 0.006     | Fair degree of linear relationship     | Statistically related    | Reject H0 |

*significant at .05 level

On the other hand, Preparing for Tests is the only domain in study habits which is not significantly correlated with scholastic performance, $r(70) = .198$, $p > .05$. The degree of relationship of Preparing for Tests is negligible while Reading Textbooks, Note Taking, Reviewing, Memorizing, Management of Time and Concentration had fair degree of linear relationship. The student-athletes’ are not really expected to do their best in taking tests since they are given considerations during major examination. They usually missed important information about the preparation for tests simply because much of their time is outside the classroom.

**Discussions**

The following are the significant findings of the study:

Majority of the student-athletes' respondents were males (57.1%); there is greater number of student-athletes' respondents in Grade 10 level, 36 (51.4%); majority of the student-athlete respondents are into athletics 16 (22.9%). There were more male student-athletes who were the respondents compared to females because boys generally show greater sports interest than girls. They also differ in their use of competitive modes especially in intrasexual or same sex competition. This is similar to the study of Benenson (2013), as cited by Deaner, et al. (2015) which mentioned that males are more likely than females to use high stakes physical bellicosity (e.g., fighting), whereas female's aggression more often involves indirect or relational tactics, such as conversing. Females played sports less often
because they had less free time than males. Similarly, studies of student’s leisure and extracurricular activities indicated that females’ lesser involvement in sports largely reflects their higher prioritizing of other activities, such as schoolwork.

The student-athletes’ assessment of study habits obtained the following mean: Reading Textbooks (3.03); Taking Notes (3.00); Reviewing (3.18); Memorizing (3.26); Preparing for the Tests (3.24); Management of Time (3.18); and Concentration (3.15). The results are similar to the study by Vijayan & Krishnan (2018), who said that students who are able to record quality notes exhibit expanded understanding of material and a later review of the same. This was supported Anggiani & Heryanto (2018), that the atmosphere of a cushy environment campus affects the achievements of students in the learning process, both knowledge and skills. Student-athletes must associate themselves with activities which are beneficial for them. Suggested that students who participated in school based extra-curricular activities accomplish better at school.

The student-athletes had an average scholastic performance of 83.43, with a standard deviation of 6.25. It shows that 27 out 70, corresponding to 38.57% of the total population have a final average ranging from 75-79 while two (2) students, corresponding to 2.86% of the total respondents obtained a final average ranging from 95-96. This signifies that the grade obtained by the student-athletes does not have anything to do with how they prepare for their tests.

Student-athletes’ Textbooks Reading, Note Taking, Reviewing, Memorizing, Time Management and Concentration are significantly related to their scholastic performance while Preparing for Tests is not significantly related. The results indicated that they still manage to obtain a passing grade. The respondents were not able to prepare for tests because much of their attention are in trainings outside the classroom. Being absent in class, not paying full attention and not listening to teachers’ comments about tests are some of the factors. The student-athletes' are not really expected to do their best in taking tests since they are given considerations during major examination. They usually missed important information about the preparation for tests simply because much of their time is outside the classroom.

Conclusion

From the aforementioned findings, the following conclusions are drawn:

The study revealed that the perceptions of student-athletes’ on the different domains of study habits are described as Sometimes.

The study revealed that majority of the student-athletes’ respondents were males (57.1%); there is greater number of student-athletes' respondents in Grade 10 level, 36 (51.4%); majority of the student-athlete respondents are into athletics 16 (22.9%).

The study revealed that the scholastic performance of the student-athletes (M = 83.43, SD = 6.25) indicated that they still manage to obtain a passing grade.

There was a significant relationship between Student-athletes’ Textbooks Reading, Note Taking, Reviewing, Memorizing, Time Management and Concentration while there is no significant relationship in Preparing for Tests and their scholastic performance.

Recommendations

In the light of the conclusions derived from the findings of the study, the following recommendations, which concern the student-athletes, parents, teachers, coaches, school heads and future researchers are hereby forwarded:

Student-athletes should enhance their study habits in Textbooks Reading, Note Taking, Reviewing, Memorizing, Time Management and Concentration to improve their scholastic performance based on the results of the study.

Parents must involve themselves in the scholastic performance of their children through focusing in Textbooks Reading, Note Taking, Reviewing, Memorizing, Time Management and Concentration to improve the scholastic performance of their children.

Teachers/Faculty shall provide an academic program and teaching strategies to enhance and improve the scholastic performance of the student-athletes.

Coaches should propose a school athletic program on how to handle and guide their athletes well with regards to their scholastic performances. They must see to it that they will religiously perform their roles towards the attainment of a positive level of performance of their student-athletes.

School Heads may consider the results of this study in their preparation of their School Improvement Plan (SIP) as well as their Annual Implementation Plan (AIP) for sports and academic support for student-athletes in line with the realization of the schools’ mission and vision.

Future Researchers may conduct and explore a parallel study on the relationship between the study habits and scholastic performance of student-athletes. Also, an equivalent study may be conducted in other public schools, as well as in private schools.

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