

# Academic Performance in Criminalistics Courses of Senior BS Criminology

**ESTEE LOUISE G. ALDAY**

aldayestee@gmail.com  
Bicol College  
Daraga, Albay, Philippines

**YSRAEL M. MEDIOS**

mediosysrael@gmail.com  
Bicol College  
Daraga, Albay, Philippines

**MARLON M. ROSIN**

rosinmarlon@gmail.com  
Bicol College  
Daraga, Albay, Philippines

**MARRY JANE Q. ADRA**

<https://orcid.org/0000-0003-3171-0008>  
marryjaneadra27@gmail.com  
Bicol College  
Daraga, Albay, Philippines

Originality: 100% • Grammar Check: 95% • Plagiarism: 0%



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

---

## ABSTRACT

Researchers are finding the weaknesses and strengths of the students to find the factors to enhance the student's learning performance at school. This study dealt with the academic performance of Senior BS Criminology students in their

criminalistics courses and the activities of 26 males and 24 female students. A descriptive method of research was used in the study. The survey questionnaire was used. Percentage, weighted mean, and ranking the statistical tools were employed to treat the data. Results show the senior BS Criminology students got above average grades in their criminalistics courses. The identified factors affecting their academic performance were the student and teacher-related factors. Listening attentively, motivation to get high grades, and studying were some of the student-related factors, while mastery of the subject is the topmost factor affecting their performance in terms of teacher-related problems. The students excel in their criminalistics courses, but rooms for improvement must be made. The academic performance of the students was affected by the relationship between teachers and students in the classroom.

**Keywords** — Criminology, Academic performance, criminalistics courses, descriptive method, Daraga, Albay City, Philippines

## INTRODUCTION

Variations in the academic performance among students at all levels of education have attracted the attention of many researchers for years now. This has prompted researchers and educators to find out what factors or reasons can be attributed to these variations (Alshammari, Saguban, Pasay-an, Altheban, & Al-Shammari, 2017). The students' performance (academic achievement) plays an important role in producing the best quality graduates who will become great leaders and manpower for the country, thus responsible for the country's economic and social development (Mustahq and Khan, 2012). The academic achievement of any student is the result of a complex interplay of various factors, such as study habits, personality traits, and personal interest of the student as well as teaching skills of concerned faculties (Arora & Singh, 2017). Thus, students have to put the greatest effort into their study to obtain good grades and to prepare themselves for future opportunities in their career at the same time to full the employer's demand (Olufemi, Adediran & Oyediran, 2018).

Academic performance is an essential factor in the success of the post-education period with respect to employment. The ability to predict students' academic success has been the subject of increasing interest. The knowledge regarding expected academic performance is also valuable input for educators and school administrators, as this information can be used to identify and target

vulnerable students at risk of dropping out or in need of additional attention (Kassarnig, Bjerre-Nielsen, Mones, Lehmann, & Lassen, 2017). It remains to be measured through the ordinal scale of the general weighted average (GWA) and continues to be the best predictive variable pertaining to academic success. A student is often labeled as high achieving, average, and low achieving based on his or her GWA (Magpily & Mercado, 2014). Many factors can affect a student's quality of academic achievement may it be inside or outside the school premises. These factors may be termed as student factors-family factors, school factors, and peer factors (Junio & Liwag, 2016). Motivational variables interact with cognitive, behavioral, and contextual factors to upset self-regulation (Gbollie & Keamu, 2017). In the study of Shahzadi and Ahmad (2011), a fitted model for college students was tested to determine their academic performance. The fitted model showed that academic performance depends on learning skills, and learning skills depend on the home environment.

The Bachelor of Science in Criminology students under the College of Criminal Justice Education is a 4-year college degree program intended for individuals who wish to have a career in the fields of law enforcement, security administration, and crime detection and prevention. The Commission on Higher Education had recognized Criminology Education Program through the Commission on Higher Education (CHED) memorandum order No. 21.S. 2005 establishing the Standard and Guidelines for Criminal Justice Education in accordance with the pertinent provision of RA. NO. 7722, otherwise known as the "Higher Education Act of 1994", Article 1 Section 1 of the Scope and Coverage of CMO no. 21. s. 2005 states (Commission on Higher Education, 2005).

### **Literature Review**

In Brunei Darussalam, the single parent may have profound negative impacts on a student's academic performance as parents play an important role in most children's academic development. Previous research indicates that children from both parents perform better than children from a single parent due to the limited time a single parent has to spend on their child's academic work (Yaw, 2016). The research study of Metussin (2017) indicates that there are gender similarities in practices of good academic performance at school, teaching methods and school facilities and environment may affect students' academic performance, problems or challenges faced in academic performance or achievement at school,

and lastly early entry to the workplace. The study of Mundia (2011) discussed that students with a psychological and mental health problem are often accorded with low status and priority compared to peers with other disability because they need to undergo voluntarily testing, self-referred counseling, and mounting an active mental health promotion campaign, they also have pastoral care program. The study of Hamid, Shahrill, Matzin, Mahalle, & Mundia (2013) is about the learning styles and study strategies scores of secondary school students wherein highly anxious students scored higher on the social-individual learning style than their less anxious peers. The study of Abdullah and Osman (2010) is to determine the inventive thinking skills of students in Brunei and to compare the inventive thinking skills with regard to gender, and school location wherein the primary students in Brunei demonstrated low mean scores on creativity, higher-order thinking, and sound reasoning.

In Cambodia, the study of Sothan (2018) discussed that term-time employment and family size have an adverse impact on academic performance and that personal backgrounds played a potential role in predicting the academic performance of undergraduate students. The study of Ngin, Pal, Tuot, Chhoun, Yi, and Yi (2018) discussed that family-related, individual behaviors and attitudes are the key factors associated with depressive symptoms. According to Chhuon, Dosalmas, and Rinthapol (2010), the perceptions of self-competence were positively associated with higher educational expectations and that students' sense of positive classroom environment to teacher support was important for the motivation of Cambodian American students. The motivation and future academic expectations were also associated with students' perceptions of their own academic self-competence. The study of Heng (2014) is about the interaction effect existed between students' pre-college academic experience and geographical origins. The factors of positive predicted student achievement of Cambodia are the following: the importance of students investing more effort in homework or given-tasks or whole-class participation, students' pre-college academic experience, teachers' teaching experience, and finally, the course workload and difficulty. According to Sao (2012), Cambodian rural and city parents' involvement in their education is influencing the academic performance of the child, especially if parental participation in their children's education is likely to contribute to the development of their children, and as well as to the development of quality of education in the nation in Cambodia.

In Indonesia, recent empirical findings reveal the impact of positive mood on the performance of the students in processing information. Positive mood

facilitates complex cognitive functions requiring flexibility, integration, and utilization of cognitive material such as memory, categorization, creative problem solving, and decision-making and learning (Febrilia & Warokka, 2011). The study of Tanujaya, Mumu, and Margono (2017) is about the significant relationship of HOTS (Higher Order Thinking Skills) to the academic performance of students wherein they reveal that the higher the HOTS of students, the more successful their academic achievement or performance are. The study of Prasetyo, Azis, Fadhilah, and Fauziah (2017) discussed the importance of improving cognitive ability, mental attitude, and the lecturer's professional competencies to enhance the academic performance of students in Indonesia. The study of Hadna and Kartika (2017) is about the influence of the Program Keluarga Harapan (PKH) in Indonesia on the academic performance of poor students in elementary and junior high schools wherein PKH significance on the attendance of students a must. However, basic education is still unable to address the issues of the teacher's absents and lack of quality educational facilities. The study of Sakitri (2020) reveals that students' stress negatively affects academic performance, and Type A personality has proven to have a positive effect on academic performance. The University of Indonesia must build a competency map to students' personality that cause stress and present the stress management practice to lead students to cope up with stress.

In the Philippines, the sports enthusiasts were claiming that participation in any sports help the student-athletes to have "a sound mind and a sound body," individual but some people in the academe believed that sports participation hindered students ability to excel in their academic courses because most of their times were allotted into sports commitments such as training and competitions than studying alone (Montecalbo-Ignacio III, and Buot, 2017). The study conducted about nurses' course concludes that the students' academic performance in their baccalaureate program and their performance in the pre-board examination are significant bases in determining the success and failure of students' licensure examination performance (Ong, Palompon, and Bañico, 2012). The study of Carbonel (2013) revealed that defined learning style and established study period are two things that help direct learners to improve their capabilities in learning Mathematics, and this study focuses on the perceptual learning style, study habits, and its significance to the students' academic performance, particularly in College Algebra. Educational Institutions should continue to seek professional development ventures for the improvement of teaching competence and professional preparations. Then, they come out with quality output in the

success of board examination leading graduates towards employment (Chan-Rabanal, 2016). The cooperating teachers have significantly higher perceptions of the pedagogical competence of the pre-service teachers themselves except along the domains Diversity of Learning and Curriculum. The result of this study can be used as a basis for curriculum enhancement geared toward quality teacher training programs (Vecaldo, Andres, Carag, and Caranguian, 2017). With the advent of using internet technology, social communication using the internet has become the frontier of daily communication, collaboration, and networking. The study found that SNSs (Social Networking Sites) usage had no significant relationship on student academic performance and the improvement in grades relies on other factors within the teaching-learning process. The SNSs can't attribute a well on the better academic performance of students (Isaac M. Morallo, 2014). Mobile gaming addiction is a growing concern that increases the user's risk for physical and psychological health problems. Internet Gaming Disorder (IGD) has been linked to the poorer academic performance of students in educational institutions (Fabito, Rodriguez, Diloy, Trillanes, Macato, and Octaviano Jr., 2018).

In Vietnam, the parenting of the child is left to grandparents because they play the same role as biological parents. They significantly affect the educational functioning, developmental outcomes, and well-being of their grandchildren. The more grandparents are involved in their grandchildren's educational process, and the more likely their grandchildren are to achieve academic success (Nguyen, 2018). The factors affecting the behavior of literature learning of secondary high school students in Vietnam are gender, learning motivation, student living place, academic performance, and teacher's teaching method (Tung & Ly, 2020). There are seven key determinants found in the academic performance of students in Dong Nai Province, Vietnam, namely social environment, family and friends, learning environment, personal perception, personal ambitions, living viewpoint, and living location. To enhance students learning motivation, there must be sets of the foundation for rational proposals towards academic faculty, education institution, students, and their families (Nguyen, 2019). The research study of Wheaton, O'Connell, and Yapa (2016) reveals that inter-teaching may be a more effective method of teaching resulting in an improved academic performance in the auditing course. This study will contribute towards the effectiveness of student learning, and improvement in pass rates, and overall greater student satisfaction in advanced accounting courses. The study of Tran, Berkel, IJzendoorn, and Alink (2017) discussed the child maltreatment, emotional, cognitive, and physical

health affects the academic performance of the student in Vietnam, which result in the poor performance of the child because of the harsh discipline practice or “tiger parenting” in their country. It has been the reason why the students have a poor understanding of the lessons since they can only get little knowledge cause half of their mind is the trauma of the tiger parenting they experience.

Thailand is facing challenges with the tradition of passive learning, which has led to concerns that Thailand will be ready to launch what they call “Thailand 4.0.” The students choose active learning, and the regression analysis indicated that there was a strong association between active learning and academic learning and academic achievement when controlling for demographic variables. This study will imply that the use of active learning concepts was linked with positive increases in student’s attitudes toward their academic achievement (Sanitchai & Thomas, 2018). Sereetrakul, Wongveeravuti, and Likitapiwat (2013) determine if the time spent on Facebook and the purpose for which Facebook was used had any impact on the academic achievement of the students. The conclusion that students used Facebook on average of one hour and thirty minutes for the purpose of communication and collaboration, that the number of hours spent on Facebook had no effect on their academic achievement, that using Facebook for communication impaired academic achievement, and that using Facebook for collaboration did not impair academic achievement. Time management is a key predictor to determine the students’ academic achievement. Thomas (2016) is about to assess student’s perceptions of cellphone addiction and academic stress. The study shows that there is no difference in cellphone addiction and academic stress for class and gender, but there was a difference by major. Men are mostly affected by cellphone addiction and academic stress than women. Na, Petsangsri, and Tasir (2020) are about the implementation of E-learning in universities, and motivation is an important factor contributing the successful learning. The majority of students were found to have upper to medium motivation levels in E-learning, and there is a weak positive correlation between motivation level and academic achievement. Limanond, Jomnonkwao, Watthanaklang, Ratanavaraha, and Siridhara (2011) is about if the ownership of private vehicles affects the academic performance of students in universities. The study reveals that those students who own a vehicle tend to spend less time for academic purposes and more on leisure and social activities than non-owner students.

In Singapore, Luo, Paris, Hogan, and Luo (2011) are about how the achievement goals are combined to affects’ learning. Their findings suggest that the goal profile with high mastery and performance-approach goals combined

with low-performance avoidance goals is most beneficial for learning, whereas high-performance approach goals, when associated with performance-avoidance goals, have some negative effects on affective outcomes. Chew, Yu, Chua, and Gan (2016) is about the effect of background music on learning and academic performance of working memory and language tasks in Singapore. The study reveals that there is no significant effect was found in the interaction between music and language conditions. Depending on the task, familiarity but not the language of music affected learning and task performance when compared to the no-music condition. Zhao, Yuping, Maideen, Moe, and Nasirudeen (2018) is about the use of smartphones and how it affects the academic performance of students in Singapore. The female students used smartphones frequently for learning than male students, and international students frequently used smartphones for learning than local students. Seow, Pan, and Tay (2014) are about how academic achievement, critical thinking, admission interview, mathematical aptitude, and gender affect the success of academic performance. This study reveals that all the factors given above give academic success to students and administrators of schools. Akther and Robinson (2014) are about academic performance in Australia, New Zealand, Canada, and Singapore, and wherein there is a disadvantage in the academic performance of immigrant students within countries with selective migration policies. Jayanthi, Balakrishnan, Siok Ching, Latiff, and Nasirudeen (2014) discussed the academic performance of students in a tertiary institution in Singapore wherein the researcher use the following factors such as age, gender, the nationality of student, part-time employment, extracurricular activities, and their interest in pursuing higher studies affected academic success.

In Myanmar, Usagawa (2018) is about the use of e-learning to enhance more the academic performance of students in school. There is a rapid development of information systems and internet technology that bring many educational innovations that can eliminate the boundaries of conventional teaching and learning. Thae Su Mo (2019) discussed the interrelationship of loneliness, social desirability, and academic achievement of adolescents in Myanmar, wherein the results show that loneliness had a negative correlation with both social desirability and academic achievement. At the same time, social desirability was positively correlated with academic achievements, whereas girls had higher social desirability than boys did. Khine, Fraser, Afari, Zeya Oo, and Kyaw (2017) discussed the student's perception of their science classroom environments with giving questionnaire "What is Happening in this Class" (WIHIC) wherein the

researcher suggests that future studies must include measures of student attitudes and academic achievement to permit investigation of associations between the learning environment and student outcomes in Myanmar. Oo (2015) reveals that undergraduate medical students in Myanmar are in urgent need to improve their academic performance, and the existing attendance policy must be reviewed and reinforced. Then (2013) discussed how the double orphans in Myanmar cope up with the stress they encounter in life and how it affects their academic performance in school.

In Malaysia, Al-rahmi, Othman, and Yusuf (2015) discussed the way social media contributes enhancement to collaborative learning among researchers in Malaysian higher education. Their study used the theory of technology acceptance model to connect the positive and significant impact intention of collaborative learning. Siraj, Salam, Hasan, Jin, Roslan, and Othman (2015) is about internet usage can be used and affect the academic performance of Malaysian public University. Internet usage helps the students to broaden their knowledge in terms of research and assignments, but there is a risk of overused it. Ng, Hassan, Nor, and Malek (2017) discussed the use of smartphones to support their school-related learning and how these activities relate to CGPA. The results show that the more students use their smartphones, the lower their CGPA. The study of Al-rahmi, Othman, Yusof, and Musa (2015) discussed the significant effect of social media on the students' academic performance with good collaborative learning as the mediating variable.

The study of Ainin, Naqsbandi, Moghavvemi, Jaafar (2015) discussed the positive relationship between Facebook usage and student's academic performance. There is a good effect of Facebook usage on the academic performance and socialization of the students. The study of Helou and Rahim (2014) reveal that social networking sites have a positive impact on their academic performance. In Laos, the study of Souriyavongsa, Rany, Abidin, and Mei (2013) is about the students'-teachers' weakness towards English language learning as their second foreign language. The students don't practice speaking English with English native, and then the class environment is crowded and noisy that distracts the students from learning.

Kim J., Kim T., and Shin (2019) discussed how Dr. Lee Jong-wook-Seoul Project on a medical student in Laos helps with their academic performance, especially when they took the training they give for one year. Pengpid and Peltzer (2019) are about the school truancy among adolescents that can negatively impact academic achievement or performance of the students, and high internalizing

behavior increased the odds for school truancy. The protective factors, peer support, and high parental or guardian supervision decreased the odds for school truancy in Laos. Siharath (2010) reveals that resources for maintenance, renovation, infrastructure improvement, academic, and staff development are virtually nonexistent (excepting external aid) are the problem encountered by Laos in terms of education to improve their knowledge and skills.

Yi, Peltzer, Pengpid, and Susilowati (2017) reveals that using the illicit drug among the university students has been recognized as a global public health issue in recent years that lead to poor academic performance, in return leads to poor productivity in their later life. The use of drugs for health purposes to help the students with their health problems but must observe the effect of drugs on the behavior of the student and drinking alcohol during class must be prohibited to prevent their poor academic performance.

In Nigeria, Omoruyi (2014) discussed that there is a significant difference between single-parenting and academic performance of the adolescents; and a significant difference between parental socio-economic status and academic performance. There's a significant relationship between adolescents from broken homes and academic performance.

## **FRAMEWORK**

Academic performance or academic achievement is the extent to which a student, teacher, or institution has attained their short or long-term educational goals. The completion of educational benchmarks such as secondary school diplomas and bachelor's degree represent academic achievement. Academic achievement is measured through examinations or continuous assessments, but there is no general agreement on how it is best evaluated or which aspects are most important, like procedural knowledge skills, declarative knowledge, and facts (Ward, Stoker, & Murray-Ward, 1996).

Academic performance is associated with the evaluation tests results that are corresponding to student's IQ, and leaving aside other personal characteristics (Martin, Ines, Garcia, & Pastrana, 2017). The use of the nature of the motivation and learning strategy improves student learning outcomes (Gbollie & Keamu, 2017). The academic performance is estimated for any student by its home environment, learning skills, academic interaction, study habits, and home environment (Shahzadi & Ahmad, 2011). The most useful information gathered is based on social ties, and there is better model performance collected than

individual characteristics, including personality and class attendance on academic performance of the student which affect them on their studies (Kassarnig, Mones, Nielsen, Sapiezynski, Lassen, & Lehmann, 2018).

The variable of interest in this study is academic performance perceived by administrators, professors, and Senior BS students of Bicol College, Albay, Philippines. The study focused on the academic performance of graduating students of Criminology courses wherein the data gathered on the board examination coming from PRC on Rawis are the basis of their achievement that recognizes the great academic performance of the school. The performance of the Senior BS Criminology students represents the quality of teaching of Professors and how the administrator of the school improved or enhanced the learning system of their students. The field studies of the students are one way to improve their skills in facing the people of the community, especially they are working in the community because of the course they choose to study. The instructional materials used by the Professor to encourage the student to read and the pre-examination of the students related to board examination is preparation and giving the students more knowledge of what they are going to take the test in the future once they finish their studies. The perceptions of self-competence were positively associated with higher educational expectations and that students' sense of positive classroom environment to teacher support was important for the motivation of students. The motivation and future academic expectations were also associated with students' perceptions of their own academic self-competence (Chhuon, Dosalmas, and Rinthapol, 2010). The significant relationship of HOTS (Higher Order Thinking Skills) to the academic performance of students wherein they reveal that the higher the HOTS of students, the more successful their academic achievement or performance are (Tanujaya, Mumu, and Margono, 2017). The importance of improving cognitive ability, mental attitude, and the lecturer's professional competencies to enhance the academic performance of students is a must to achieve the goal of the students to have good academic performance (Prasetio, Azis, Fadhilah, and Fauziah, 2017).

## **OBJECTIVES OF THE STUDY**

The objectives of this study are the following: (1) to determine the level of academic performance in criminalistics courses, (2) to describe a teacher and student attributes, and (3) to recommend measures to improve the academic performance of the Senior BS Criminology students.

## METHODOLOGY

### Research Design

The study used a descriptive-evaluative method of research. The descriptive-evaluative method was used to describe the characteristics of a population or phenomenon being studied. It determined the performance of the senior BS Criminology students in Criminalistics subjects using a four (4) part survey questionnaire to determine the academic performance of the students on the six (6) Criminalistics subjects in Criminology program. The data needed in this study were gathered from primary and secondary sources. In choosing the respondents of the study, the random sampling technique was used. The respondents were the enrolled regular senior BS criminology students for the academic year 2017-2018 of Bicol College, Daraga, Albay. It has twenty-six (26) males and twenty-four (24) female students with 50 respondents. The researchers used the five (5) point Likert scale, and the statistical tools used are percentage, weighted mean, and ranking.

### Research Site

The study was conducted at the Bicol College, Inc., Daraga, Albay, Philippines. Bicol College is a private, non-sectarian educational institution located in Daraga, Albay. It was established in 1941 and had a branch in Juban, Sorsogon, called Juban Institute. This school offers undergraduate and graduate programs. The courses in the fields of Education, Library Science, Nursing, Criminology, Accountancy, Hospitality Management, and Law are available to students who intend to study in the institution. In addition, the tertiary level programs, the school also provides elementary and secondary education. Bicol College and its programs are recognized by various agencies in the country. The school is accredited by the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA), the Department of Education (DepEd), and the Commission on Higher Education (CHED). Since its foundation, Bicol College has always been committed to serving the community, molding its students into individuals equipped with the skills and knowledge necessary for national development. In 2016, the school celebrated its diamond anniversary.

### Participants

The participants of this study were the administrators of the school, criminology professors, and the senior BS Criminology students. This study

dealt with the academic performance of Senior BS Criminology students in their criminalistics courses and the factors affecting their academic performance of twenty-six (26) males and twenty-four (24) female students with a grand total of 50 respondents. The survey questionnaire was used by the researchers, while percentage, weighted mean, and ranking the statistical tools were employed to treat the data. The analyzed data show that senior BS Criminology students got an above-average grade in their criminalistics courses. The identified factors affecting their academic performance were the student and teacher-related factors. It was observed that student-related factors had a greater impact than the teacher-related factors.

### **Instrumentation**

The survey questionnaires used are about criminalistics subjects using a four (4) part survey questionnaire to determine the academic performance of the students on the six (6) Criminalistics subjects in the Criminology program. The researchers asked permission from the administrator of the school regarding this research study to determine the results of the study about the academic performance of graduating students at Bicol College. The survey questionnaire provides easier and smooth use of the instrument, like putting the Likert scale and percentage for BS Criminology students to respond properly and appropriate to the questions asked by the researcher.

Those responses of the Senior BS Criminology students were based on their experience in school that they see on the choices given on the questionnaire. These answers consist of the academic performance of the students on every subject that was included on their board examination. The survey questionnaire consists of the level of academic performance in criminalistics courses of the students, factors that affect the academic performance of students, and the ways recommended to improve the academic performance of the Senior BS Criminology students.

## **RESULTS AND DISCUSSION**

### **Level of Academic Performance in Criminalistics Courses**

The final grade of the student is the combination of their participation in the subject, their term exams, quizzes, and projects. It can be seen that students excelled in Polygraphy as having the highest TWM of 3.96 and an interpretation of Above Average. Next, is the Personal Identification having a TWM of 3.90 and an interpretation of Above Average followed by Police Photography and

Forensic Ballistics. However, students got an average interpretation in their Questioned Document Examination and Forensic Chemistry. The high academic performance of the students can be achieved through the help of the teachers, the parents, and students as well. It is in consonance with the study of Akessa and Dhufera (2015), where they found that the students perform well if they are properly guided by their parents and teachers. The more the students know well about their abilities and their competences then, he will be performing well in their academic performance.

Table 1. Level of Academic Performance in Criminalistics Subjects of BS Senior Criminology Students

| Course                          | 5            |    | 4            |      | 3            |      | 2            |    | 1            |   | TWM  | Adjectival Interpretation |
|---------------------------------|--------------|----|--------------|------|--------------|------|--------------|----|--------------|---|------|---------------------------|
| <i>Grading Scale</i>            | <i>90-95</i> |    | <i>84-89</i> |      | <i>78-83</i> |      | <i>75-77</i> |    | <i>70-74</i> |   |      |                           |
| Personal Identification         | 5            | .5 | 35           | 2.8  | 10           | .6   | 0            | 0  | 0            | 0 | 3.9  | AA                        |
| Police Photography              | 0            | 0  | 37           | 2.96 | 13           | .78  | 0            | 0  | 0            | 0 | 3.74 | AA                        |
| Forensic Ballistics             | 3            | .3 | 27           | 2.16 | 20           | 1.2  | 0            | 0  | 0            | 0 | 3.66 | AA                        |
| Questioned Document Examination | 0            | 0  | 9            | .72  | 26           | 1.56 | 15           | .6 | 0            | 0 | 2.88 | A                         |
| Polygraphy                      | 5            | .5 | 38           | 3.04 | 7            | .42  | 0            | 0  | 0            | 0 | 3.96 | AA                        |
| Forensic Chemistry              | 0            | 0  | 11           | .88  | 39           | 2.34 | 0            | 0  | 0            | 0 | 3.22 | A                         |

5 – Excellent, 4 – Above Average, 3 – Average, 2 – Below Average, and 1 - Poor

**Student Related Attributes.** Table 2 revealed that listening attentively to the lectures of the teachers, getting high grades on quizzes, class participation, projects, and major examinations, and trying their best to exert effort in studying their lessons were rated as “ALWAYS.”

Listening attentively to the teacher is one of the factors that become a hindrance to the learning process of the student. Distractions can cause less concentration on the discussion of the teacher. These distractions may result in a much bigger problem that a student is facing. Being disturbed by other

factors that are experienced by the student may lead to poor performance in school. Next, getting high grades on quizzes, class participation, projects, and major examinations is also a factor that affects the performance of the student. Students' lack of motivation to study and unpreparedness may result in poor performance and failing grades. The level of motivation is destroyed when students have low self-confidence, self-esteem, high anxiety, and inhibition—the willingness towards the lesson of the students affected when the teachers show a negative attitude towards students. Then showing non-supportive classroom environments damage student's willingness to learn—the negative learning of students was influence by the teacher's shortage of positive reinforcements, approval, and appreciation (Di şlen, İfadeleri , & Moti vasyon 2013).

**Teacher Related Attributes.** Under teacher-related factors, mastery of the subject and open to suggestions and opinions were rated by the respondents as “ALWAYS.” Teacher-related factors had a greater impact on the academic performance of the students. In the study of Alshammari, Saguban, Pasay-an, Altheban, Al-Shammari (2017), it was found out that teachers play the most significant role in student performance and are therefore greatly responsible for poor or good student performance. This further indicates that the respondents felt that teaching strategies, student-teacher relationship, and communication barrier hinder their academic performance. Mastery of the subject of the professor hinders the student learning capability of students, thus, reflect in their academic performance.

Ganyaupfu (2013) indicates that teacher competence in teaching is a combination of paradigms that sense the measure of a variety of interrelated aspects in teaching. This includes subject matter expertise, lesson preparation, presentation, and effective communication. The students frustrate when there is a lack of knowledge in the course material by the teacher, and their expectations are not fulfilled with their academic performance is compromised that cause to develop what the teacher's attitude shows to them. Another factor is the openness of the teacher to suggestions and opinions that will lead the students to be more interested in the class.

According to Barr (2016), instructors should always consider how their behaviors can be interpreted by the students and keep the focus of the students in the lessons when developing courses and lessons. By doing this action is increasing positive outcomes for students as well as the level of satisfaction of the instructor. The most effective teachers convey enthusiasm for their subjects and courses and conduct courses in an engaging and professional manner. One simple way to

meaningfully convey enthusiasm is to engage students with examples of relevant recent news and popular culture of the real world. The teacher must utilize a variety of examples to help students with a wide range of learning styles and backgrounds of the world now (Beuning, Besson, & Snyder, 2014).

Table 2. Student and teacher attributes

| <b>INDICATORS</b>   |          |            |                                  |
|---|----------|------------|----------------------------------|
| <b>Student Related Factors</b>  | <b>f</b> | <b>TWM</b> | <b>Adjectival Interpretation</b> |
| Listening attentively to the lectures of the teachers                                       | 30       | 2.60       | Always                           |
| Actively participate in the discussion  | 5        | 2.00       | Sometimes                        |
| Wanted to get high grades on quizzes, class participation, projects, and major examinations | 40       | 2.56       | Always                           |
| Study the missed lessons during absences  | 10       | 2.20       | Sometimes                        |
| Take time to study and prepare for quizzes and major examinations                           | 5        | 2.10       | Sometimes                        |
| Trying their best to exert effort in studying their lessons                                 | 35       | 2.70       | Always                           |
|   |          | 2.34       | Always                           |
| <b>Teacher Related Attributes</b>   |          |            |                                  |
| Establishing a good relationship with the Professors and students                           | 9        | 2.14       | Sometimes                        |
| Shows confidence and firmness in making decisions   | 42       | 2.84       | Sometimes                        |
| Explains the objectives of the lessons clearly  | 12       | 2.04       | Sometimes                        |
| Open to suggestions and opinions  | 48       | 2.96       | Always                           |
| Uses various strategies, teaching aids devices, techniques in presenting lessons            | 42       | 2.84       | Sometimes                        |
| Mastery of the subject matter   | 40       | 2.80       | Always                           |
|   |          | 2.60       | Sometimes                        |

\*3 – Always, 2 – Sometimes, and 1 - Never

### 3) Measures that can be recommended to improve the respondent's academic performance.

To improve the student's academic performance, the following measures were recommended by the respondents and the researcher. One of them is **Adopting a Good Learning Strategy of the teacher to the students**. In the study of Kafadar and Tay (2014), it has been recognized that students' learning strategies are changing according to the learning styles they have. Teachers must be innovative enough to attract the student's attention. The teaching-learning processes among the roles of the teacher in active learning mode are during activating and motivating the learners. Activating the learners must involve asking or answering questions, working in groups, assisting other learners, demonstrating critical and creative thinking. The teachers must not focus on students to receive or listen to what the teacher has explained, but they must do some actions to improve the learning of the child.

Teacher creativity is essential to facilitate effective learning. One study suggests that creativity as part of normality is part of everyday actions and ideas. This kind of creativity is necessary to facilitate effective teaching in the daily teaching-learning process where a teacher is able to overcome common problems faced by learners, such as being frightened to ask a question or to do a presentation, being shy to discuss within a group, being hesitated to join the role play, and afraid of making mistakes. Creative teachers can do the creative design that can be joyful to teaching the students wherein complex things are explained in simple ways, or uninterested learners can become interested in the teaching process, or they can be even able to accept examples to clarify unclear topic for learners (Manurung, 2012).

**Students must develop a good study habit.** Lack of interest in studying may result in poor study habits. In the study of Renzulli (2015), it was found out that the study participants were unprepared for the rigors of postsecondary study. Those who struggled academically in the public university is showing a distinctive pattern of individual similarities and differences. The students are not ready for completing the basic tasks that predict success in their post-secondary lives, just like attending class regularly, communicating with their professors, completing the required reading, employing minimal study, self-regulation, and time management skills.

**Attend all Classes and Be on Time.** Class attendance is critical in a student's learning. It will facilitate new knowledge, and studying will be easy on the part of the student. Fadelelmoula (2018) emphasized that lecture attendance has a

positive effect on students' academic performance, and hence a mandatory attendance policy is important. Students who attend more classes earn higher final grades. It is also supported by the study of Kassarnig, Bjerre-Nielsen, Mones, Lehmann, and Lassen (2017), the different academic performance levels suggest that attendance is an effective predictor of failing on class of the student, this indicates that differentiation at higher orders among good performers indeed requires more detailed knowledge regarding the individuals themselves.

## **CONCLUSIONS**

Student's academic performance can be measured by how well students perform in their class. The driving force to study and be well-prepared in their class may be affected both by student and teacher factors. Student's motivation is lacking for them to perform well in class. The teachers' motivation to the students and their expertise attracts students to perform well in class. Student's participation depends on how the teachers apply a certain teaching strategy that will engage the students to focus and be motivated to listen and learn.

## **TRANSLATIONAL RESEARCH**

To achieve academic excellence and high quality of education among students, students must acquire high academic performance. The educators particularly must develop new learning strategies like creative learning to engage students' interest and attention into learning and studying. The students as well must be motivated enough to pursue their studies as it may be beneficial for their academic success and future employment. Being responsible enough to do the tasks and responsibilities of a student may be of help in achieving high academic performance.

The use of the internet is in demand because of the big help it gives to the students, especially when answering the assignments and research. The use of the internet is very important, especially now that we are facing a pandemic, the business transacts using this, teacher's meeting online, and student's meeting online with their teacher, and, most of all, doing research about their lessons on school. This is the number one source of information for students, employers, employees, parents, and teachers.

## LITERATURE CITED

- Abdullah, M., & Osman, K. (2010). Scientific inventive thinking skills among primary students in Brunei. *Procedia-Social and Behavioral Sciences*, 7, 294-301. Retrieved from <https://doi.org/10.1016/j.sbspro.2010.10.041>
- Ainin, S., Naqshbandi, M. M., Moghavvemi, S., & Jaafar, N. I. (2015). Facebook usage, socialization and academic performance. *Computers & Education*, 83, 64-73. Retrieved from <https://doi.org/10.1016/j.compedu.2014.12.018>
- Akessa, G. M. & Dhufera, A. G. (2015). Factors that Influences Students Academic Performance: A Caseof Rift Valley University, Jimma, Ethiopia. *Journal of Education and Practice*, 6, (22), 55 -63. Retrieved from <https://bit.ly/2CMDibU>
- Akther, A., & Robinson, J. (2014). Immigrant Students' Academic Performance in Australia, New Zealand, Canada and Singapore. *Australian Association for Research in Education*. Retrieved from <https://eric.ed.gov/?id=ED596765>
- Al-Rahmi, W. M., Othman, M. S., Yusof, L. M., & Musa, M. A. (2015). Using social media as a tool for improving academic performance through collaborative learning in Malaysian higher education. *Rev. Eur. Stud.*, 7, 265. Retrieved from <https://heinonline.org/HOL/LandingPage?handle=hein.journals/rveurost7&div=78&id=&page=>
- Al-Rahmi, W., Othman, M. S., & Yusuf, L. M. (2015). The role of social media for collaborative learning to improve academic performance of students and researchers in Malaysian higher education. *The International Review of Research in Open and Distributed Learning*, 16(4). Retrieved from DOI: <https://doi.org/10.19173/irrodl.v16i4.2326>
- Alshammari, Saguban, Pasay-an, Altheban, Al-Shammari (2017). Factors affecting the academic performance of student nurses: A cross-sectional study. *Journal of Nursing Education and Practice*, 8 (1), 60-68. DOI:10.5430/jnep.vjnep.v8n1p60. Retrieved from: <https://doi.org/10.5430/jnep.v8n1p60>
- Arora, N. & Singh, N. (2017). Factors affecting the academic performance of college students. *Journal of Educational Technology*, 14 (1). DOI: 10.26634/jet.14.1.13586

- Barr, J. J. (2016). Developing a Positive Classroom Climate. IDEA Paper# 61. *IDEA Center, Inc.* Retrieved from <https://bit.ly/2ZI9UMG>
- Beuning, P. J., Besson, D. Z., & Snyder, S. A. (2014). *Teach Better, Save Time, and Have More Fun: A Guide to Teaching and Mentoring in Science*. Research Corporation. Retrieved from <https://bit.ly/2ZJCH3J>
- Carbonel, L. G. I. (2013). Learning styles, Study Habits, And Academic Performance of College Students at Kalinga-Apayao State College, Philippines. *International Journal of Advanced Research in Management and Social Sciences*, 2(8), 245-258. Retrieved from <https://bit.ly/2Gisbt1>
- Chan-Rabanal, G. (2016). Academic achievement and LET performance of the bachelor of elementary education graduates, University of Northern Philippines. *International Journal of Scientific and Research Publications*, 6(6), 455-461. Retrieved from <https://bit.ly/36iGj0g>
- Chew, A. S. Q., Yu, Y. T., Chua, S. W., & Gan, S. K. E. (2016). The effects of familiarity and language of background music on working memory and language tasks in Singapore. *Psychology of Music*, 44(6), 1431-1438. Retrieved from <https://doi.org/10.1177/03057356166636209>
- Chhuon, V., Dosalmas, A., & Rinthapol, N. (2010). Factors supporting academic engagement among Cambodian American high school youth. *Journal of Southeast Asian American Education & Advancement*, 5. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.663.4418&rep=rep1&type=pdf>
- Commission on Higher Education. (2005) Article 1 Section 1 of the Scope and Coverage of CMO no. 21. Retrieved from <https://ched.gov.ph/wp-content/uploads/2017/10/CMO-No.21-s2005.pdf>
- Dişlen, G., Ve, Ö., İfadeleri, Ö., & Motivasyon, I. (2013). THE REASONS OF LACK OF MOTIVATION FROM THE STUDENTS'AND TEACHERS'VOICES. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.680.9919>
- Fabito, B. S., Rodriguez, R. L., Diloy, M. A., Trillanes, A. O., Macato, L. G. T., & Octaviano, M. V. (2018, October). Exploring mobile game addiction, cyberbullying, and its effects on academic performance among tertiary

- students in one university in the Philippines. In *TENCON 2018-2018 IEEE region 10 conference* (pp. 1859-1864). IEEE. Retrieved from <https://s3-us-west-2.amazonaws.com/ieeeshutpages/xplore/xplore-shut-page.html>
- Fadelelmoula, T. (2018). The impact of class attendance on student performance. *International Research Journal of Medicine and Medical Sciences*, 6(2), 47-49. Retrieved from <https://bit.ly/2OHCV56>
- Febriana, I., Warokka, A., Abdullah, H. H., & Indonesia, C. (2011). University students' emotional state and academic performance: New insights of managing complex cognitive. *Journal of e-Learning and Higher Education*, 2011. Retrieved from DOI: 10.5171/2011.879553
- Ganyaupfu, E. M. (2013). Teaching methods and students' academic performance. *International Journal of Humanities and Social Science Invention*, 2(9), 29-35. Retrieved from <https://bit.ly/3jksJgK>
- Gbollie, C., & Keamu, H. P. (2017). Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students learning. *Education Research International*, 2017. Retrieved from DOI: <https://doi.org/10.1155/2017/1789084>
- Hadna, A. H., & Kartika, D. (2017). Evaluation of poverty alleviation policy: Can conditional cash transfers improve the academic performance of poor students in Indonesia?. *Cogent Social Sciences*, 3(1), 1295548. Retrieved from <https://doi.org/10.1080/23311886.2017.1295548>
- Hamid, M. H. S., Shahrill, M., Matzin, R., Mahalle, S., & Mundia, L. (2013). Barriers to Mathematics Achievement in Brunei Secondary School Students: Insights into the Roles of Mathematics Anxiety, Self-Esteem, Proactive Coping, and Test Stress. *International Education Studies*, 6(11), 1-14. Retrieved from <https://eric.ed.gov/?id=EJ1068753>
- Helou, A. M., & Rahim, N. Z. A. (2014). The influence of social networking sites on students' academic performance in Malaysia. *International Journal of Electronic Commerce Studies*, 5(2), 247-254. Retrieved from <https://pdfs.semanticscholar.org/3da5/9375e816f8e5db6179eb7070572243106c34.pdf>
- Heng, K. (2014). The relationships between student engagement and the academic achievement of first-year university students in Cambodia. *The*

- Asia-Pacific Education Researcher*, 23(2), 179-189. Retrieved from <https://doi.org/10.1007/s40299-013-0095-8>
- Jayanthi, S. V., Balakrishnan, S., Ching, A. L. S., Latiff, N. A. A., & Nasirudeen, A. M. A. (2014). Factors contributing to academic performance of students in a tertiary institution in Singapore. *American Journal of Educational Research*, 2(9), 752-758. Retrieved from <https://bit.ly/30lgcSp>
- Junio, J. J. B., & Liwag, J. A. Factors Affecting students' performance In Physical Education Class In Lyceum Of The Philippines University-Laguna. Retrieved from <https://bit.ly/3eJbIcE>
- Kafadar, T., & Tay, B. (2014). LEARNING STRATEGIES AND LEARNING STYLES USED BY STUDENTS IN SOCIAL STUDIES. *International journal of academic research*, 6(2). Retrieved from DOI: 10.7813/2075-4124.2014/6-2/B.39
- Kassarnig, Mones, Nielsen, Sapiezynski, Lassen, and Lehmann (2018), Academic Performance and Behavioral Patterns, <https://epjdatascience.springeropen.com/articles/101140/epjds/s13688-018-0138-8>
- Kassarnig, V., Bjerre-Nielsen, A., Mones, E., Lehmann, S., & Lassen, D. D. (2017). Class attendance, peer similarity, and academic performance in a large field study. *PLoS one*, 12(11), e0187078. Retrieved from <https://doi.org/10.1371/journal.pone.0187078>
- Khine, M. S., Fraser, B. J., Afari, E., Oo, Z., & Kyaw, T. T. (2018). Students' perceptions of the learning environment in tertiary science classrooms in Myanmar. *Learning Environments Research*, 21(1), 135-152. Retrieved from <https://doi.org/10.1007/s10984-017-9250-0>
- Kim, J., Kim, T., & Shin, J. S. (2019). The Effect of the Dr. LEE Jong-wook—Seoul Project on Medical Student Academic Performance in Laos. Retrieved from DOI 10.17496/kmer.2019.21.1.31
- Limanond, T., Jomnonkwao, S., Watthanaklang, D., Ratanavaraha, V., & Siridhara, S. (2011). How vehicle ownership affect time utilization on study, leisure, social activities, and academic performance of university students? A case study of engineering freshmen in a rural university in

- Thailand. *Transport policy*, 18(5), 719-726. Retrieved from <https://doi.org/10.1016/j.tranpol.2011.01.007>
- Luo, W., Paris, S. G., Hogan, D., & Luo, Z. (2011). Do performance goals promote learning? A pattern analysis of Singapore students' achievement goals. *Contemporary Educational Psychology*, 36(2), 165-176. Retrieved from <https://doi.org/10.1016/j.cedpsych.2011.02.003>
- Magpily, M. P., & Mercado, J. ATINER's Conference Paper Series EDU2014-1123. Retrieved from <http://www.atiner.gr/papers/EDU2014-1123.pdf>
- Manurung, K. (2012). Creative teachers and effective teaching strategies that motivates learners to learn. *Indonesian Journal of Science Education*, 2(1), 1-8. Retrieved from <https://bit.ly/39jOr00>
- Martin Sanz, N., & Rodrigo, I. (2017). Exploring Academic Performance: Looking beyond Numerical Grades. *Universal Journal of Educational Research*, 5(7), 1105-1112. Retrieved from <https://eric.ed.gov/?id=EJ1147798>
- Metussin, H. (2017). Gender gap in academic achievement in Brunei tertiary education: Qualitative perspective. *European Journal of Social Science Education and Research*, 4(2), 29-42. Retrieved from DOI: <http://dx.doi.org/10.26417/ejser.v9i2.p29-42>
- Montecalbo-Ignacio, R. C., III, R. A. I., & Buot, M. M. (2017). Academic achievement as influenced by sports participation in selected universities in the Philippines. *Education*, 7(3), 53-57. Retrieved from <https://bit.ly/36k2h32>
- Mundia, L. (2011). Social desirability, non-response bias and reliability in a long self-report measure: illustrations from the MMPI-2 administered to Brunei student teachers. *Educational Psychology*, 31(2), 207-224. Retrieved from <https://doi.org/10.1080/01443410.2010.545049>
- Mushtaq, I., & Khan, S. N. (2012). Factors Affecting Students' Academic Performance. *Global journal of management and business research*, 12(9). Retrieved from <http://www.journalofbusiness.org/index.php/GJM BR/article/view/721>

- Na, K. S., Petsangsri, S., & Tasir, Z. (2020). The Relationship between Academic Performance and Motivation Level in e-Learning among Thailand University Students. *International Journal of Information and Education Technology*, 10(3). Retrieved from <http://www.ijiet.org/vol10/1360-OC3024.pdf>
- Ng, S. F., Hassan, N. S. I. C., Nor, N. H. M., & Malek, N. A. A. (2017). The Relationship between Smartphone Use and Academic Performance: A Case of Students in A Malaysian Tertiary Institution. *Malaysian Online Journal of Educational Technology*, 5(4), 58-70. Retrieved from <https://eric.ed.gov/?id=EJ1156718>
- Ngin, C., Pal, K., Tuot, S., Chhoun, P., Yi, R., & Yi, S. (2018). Social and behavioural factors associated with depressive symptoms among university students in Cambodia: a cross-sectional study. *BMJ open*, 8(9), e019918. Retrieved from <https://bmjopen.bmj.com/content/8/9/e019918.abstract>
- Nguyen, N. T. N. (2018). Grandfamilies in Vietnam: Grandparents' Engagements in Grandchildren's Academic Performance at School. Retrieved from <https://digitalcommons.wku.edu/theses/3054/>
- Nguyen, T. L. (2019). Enhancing students' learning motivation for better academic performance: An empirical case in Dong Nai Province, Vietnam. *Advanced and applied sciences*, 6, 3(March 2019), 17. Retrieved from <https://bit.ly/33hTlt5>
- Olufemi, O. T., Adediran, A. A., & Oyediran, W. O. (2018). Factors Affecting Students' Academic Performance in College of Education in Southwest, Nigeria. *British Journal of Education*, 6(10), 43-56. Retrieved from <https://bit.ly/2Y30jy>
- Omoruyi, I. V. (2014). Influence of broken homes on academic performance and personality development of the adolescents in Lagos State Metropolis. *European Journal of Educational and Development Psychology*, 2(2), 10-23. Retrieved from <https://bit.ly/2HHJ15c>
- Ong, M., Palompon, D. R., & Bañico, L. (2012). Predictors of nurses' licensure examination performance of graduates in Cebu Normal University, Philippines. *Asian Journal of Health*, 2(1), 130-141. Retrieved from <https://pdfs.semanticscholar.org/351f/5892ff36d1648ef93ce7f598296a45c47d1f.pdf>

- Oo, W. M. (2015). Academic Performance of Under-graduate Medical Students in Myanmar. Retrieved from <https://bit.ly/2Gpcttb>
- Peltzer, K., & Pengpid, S. (2019). The use of herbal medicines among chronic disease patients in Thailand: a cross-sectional survey. *Journal of multidisciplinary healthcare*, 12, 573. Retrieved from doi: 10.2147/JMDH.S212953
- Prasetio, A. P., Azis, E., Fadhilah, D. D., & Fauziah, A. F. (2017). Lecturers' professional competency and students' academic performance in Indonesia higher education. *International Journal of Human Resource Studies*, 7(1), 86-93. Retrieved from <https://bit.ly/3jgr1g9>
- Renzulli, S. J. (2015). Using learning strategies to improve the academic performance of university students on academic probation. *The Journal of the National Academic Advising Association*, 35(1), 29-41. <https://doi.org/10.12930/NACADA-13-043>
- Sakitri, G. (2020). The relationship among student stress, Type A personality, and academic performance in a business school in Indonesia. *Journal of Education for Business*, 95(3), 169-179. Retrieved from <https://doi.org/10.1080/08832323.2019.1627994>
- Sanitchai, P., & Thomas, D. (2018). The Relationship of Active Learning and Academic Achievement among Provincial University Students in Thailand. *APHEIT International Journal*, 7, 47-61. Retrieved from <https://bit.ly/3n1P3hd>
- Sao, N. (2012). *Cambodian rural and city parents' involvement in their children's education* (Doctoral dissertation, ResearchSpace@ Auckland). Retrieved from <https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm>
- Seow, P. S., Pan, G., & Tay, J. (2014). Revisiting the determinants of students' performance in an undergraduate accountancy degree programme in Singapore. *Global Perspectives on Accounting Education*, 11, 1-23. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2432904](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2432904)
- Sereetrakul, W., Wongveeravuti, S., & Likitapiwat, T. (2013). Gender differences in saving and spending behaviours of Thai students. *Research in Education*, 90(1), 68-81. Retrieved from <https://doi.org/10.7227/RIE.90.1.5>

- Shahzadi, E., & Ahmad, Z. (2011). A study on academic performance of university students. *Recent Advances in Statistics*, 255. Retrieved from <https://bit.ly/2HCohM1>
- Siharath, B. (2010). The higher education in Lao PDR and roles of international cooperation for its university development-National University of Laos. Retrieved from [https://www2.gsid.nagoya-u.ac.jp/blog/anda/files/2010/06/19\\_bounheng-siharath.pdf](https://www2.gsid.nagoya-u.ac.jp/blog/anda/files/2010/06/19_bounheng-siharath.pdf)
- Siraj, H. H., Salam, A., Hasan, N. A. B., Jin, T. H., Roslan, R. B., & Othman, M. N. B. (2015). Internet usage and academic performance: a study in a Malaysian public university. *International Medical Journal*, 22(2), 83-86. Retrieved from <https://bit.ly/3kZUDyE>
- Sothan, S. (2018). Foreign aid and economic growth: evidence from Cambodia. *The Journal of International Trade & Economic Development*, 27(2), 168-183. Retrieved from <https://doi.org/10.1080/09638199.2017.1349167>
- Souriyavongsa, T., Rany, S., Abidin, M. J. Z., & Mei, L. L. (2013). Factors causes students low English language learning: A case study in the National University of Laos. *International Journal of English Language Education*, 1(1), 179-192. Retrieved from <https://bit.ly/36iKYPO>
- Tanujaya, B., Mumu, J., & Margono, G. (2017). The Relationship between Higher Order Thinking Skills and Academic Performance of Student in Mathematics Instruction. *International Education Studies*, 10(11), 78-85. Retrieved from <https://eric.ed.gov/?id=EJ1159551>
- Than, N. J. (2013). A Path Analytic Study of the Direct and Indirect Influences of Social Support, Self-Esteem, and Self-Efficacy, being mediated by Coping Style, on the Academic Performance of Myanmar Adolescent Double Orphans in Shan State. *Scholar: Human Sciences*, 5(2), 9. Retrieved from <http://www.assumptionjournal.au.edu/index.php/Scholar/article/view/19>
- Thomas, D. (2016, October). Cellphone addiction and academic stress among university students in Thailand. In *International Forum* (Vol. 19, No. 2, pp. 80-96). Retrieved from <https://bit.ly/33fwlwo>
- Tran, N. K., Van Berkel, S. R., van IJzendoorn, M. H., & Alink, L. R. (2017). The association between child maltreatment and emotional, cognitive, and

- physical health functioning in Vietnam. *BMC public health*, 17(1), 332. Retrieved from <https://doi.org/10.1186/s12889-017-4258-z>
- Tung, N., & Ly, L. (2020). Factors affecting literature learning behavior of secondary high school students: Evidence in Vietnam. *Management Science Letters*, 10(14), 3265-3270. Retrieved from DOI: 10.5267/j.msl.2020.6.012
- Usagawa, T. (2018). Effectiveness of e-learning experience through online quizzes: a case study of myanmar students. *International Journal of Emerging Technologies in Learning (iJET)*, 13(12), 157-176. Retrieved from <https://onlinejour.journals.publicknowledgeproject.org/index.php/i-jet/article/view/9114>
- Vecaldo, R. T., Andres, A. B., Carag, C. G., & Caranguian, C. B. (2017). Pedagogical Competence and Academic Performance of Pre-Service Elementary Teachers in Tuguegarao City, Philippines. *Asia Pacific Journal of Multidisciplinary Research*, 5(1), 47-54. Retrieved from <https://bit.ly/36mcZGh>
- Ward, A., Stoker, H. W., & Murray-Ward, M. (1996). Achievement and ability tests-Definition of the domain. *Educational measurement*, 2, 2-5. Retrieved from <https://bit.ly/3475T5J>
- Wheaton, M., O'Connell, B., & Yapa, P. (2016). Inter-teaching: Improving the academic performance of Auditing students in Vietnam. *Australasian Accounting, Business and Finance Journal*, 10(4), 3-16. Retrieved from <https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1740&context=aabfj>
- Yaw, L. H. (2016). The effect of single parenting on student academic performance in secondary schools in Brunei. *The Social Sciences*, 11(5), 698-703. Retrieved from <https://bit.ly/30l6O1g>
- Yi, S., Peltzer, K., Pengpid, S., & Susilowati, I. H. (2017). Prevalence and associated factors of illicit drug use among university students in the association of southeast Asian nations (ASEAN). *Substance abuse treatment, prevention, and policy*, 12(1), 9. Retrieved from <https://doi.org/10.1186/s13011-017-0096-3>

Zhao, J., Yuping, W., Maideen, I., Moe, Z. K., & Nasirudeen, A. M. A. (2018). The Relationship between Smartphone Use and Academic Performance in a Sample of Tertiary Students in Singapore: A Cross-Sectional Study. *Journal of Educational Technology*, 14(4), 28-35. Retrieved from <https://eric.ed.gov/?id=EJ1179530>