Abreasting the Academic Performance of the Graduates of Bachelor of Science in Criminology

Daryl Don P. Taguba

Cagayan State University, Aparri Campus daryldontaguba@gmail.com

Abstract

Student education gives a more diverse tapestry of information, a more thorough understanding of facts, a more broad repository of wisdom, and a more profound understanding of life, all of which help to the development of more responsible and upright human beings. To determine the academic performance of the respondents in disciplines covered by the Professional Education Components, the researcher utilized an ex-post facto research design in this study. It appears from the academic performance of graduates along the CDI courses that they have developed the concepts and skills that they were meant to have gained from the courses in this topic component of the CDI. Correct application of the fundamental principles of criminal investigation in a variety of crime circumstances, as well as the application of scientific knowledge in the field of criminal investigation, are essential for the successful detection and prevention of crime. In light of their exposure to the actual job of a law enforcement agent and an investigator, the graduates' performance levels indicate that they have successfully maintained their knowledge of the features of necessary law enforcement and investigative work. Provisions of adequate learning facilities and equipment contribute to the improvement of licensure performance of Criminology graduates.

Keyword: academic performance, graduates, professional education components, criminal investigation, law enforcement

Introduction

Education is the foundation of any nation's development, and the overall asset of a nation is comprised of the people that live there. This is the foundation upon which a government makes significant investments in the edification of its population, understanding that what the citizens achieve determines the character of the nation. Education is beneficial in harnessing an individual's skills and aptitudes in order for them to become a prolific and valuable member of the human race; as a result, the entire advancement of an individual is the classic endeavor of education, as stated by Azurin (2008). Consequently, improving human capital is a crucial component of the task of nation-building that must be completed. An educated and informed public is therefore essential for the long-term development of a nation.

Education provides students with a richer tapestry of information, a more comprehensive awareness of facts, a more extensive repository of wisdom, and a more profound understanding of life, all of which contribute to the development of more responsible and upright human beings espoused by AL-Mutairi, (2011). The learner is the central figure in the educational system when it comes to the process of learning. Because of this ambition, schools were formed in all possible regions to quench man's thirst for greater information and to help him achieve his maximum potential. In fact, the school's awareness of the enormous benefits of education led to the establishment of a variety of courses, particularly at the higher level.

One such topic of study is criminology, which is a highly intellectual field mostly due to the fact that the majority of the job's tasks are based on identifying and deciphering criminal patterns. As a scientific subject, criminology is concerned with investigating crimes and their causes as well as the meaning of crime in the legal system and how people react to crime in their communities. The scientific study of criminals and criminal conduct is also a part of the field's scope. Even more than that, criminology is a dynamic profession as well as a multi-disciplinary scientific discipline. Criminology is rapidly rising in popularity among students, and as a result, it is being given at both the undergraduate and graduate levels by a growing number of schools and universities across the United States and Canada propounded by Nabe, Revisa, & Serion, (2011). The board examination is one among the aspects that considered to be the critical stage of school performances. This is a primordial status to consider in order to get the full impact of academic performance of a course.

The purpose of this study was to determine the correlates of performance in the Licensure Examination for Criminologists among Criminology Education graduates of Cagayan State University-College of Criminal Justice Education in four campuses, specifically in Piat, Sanchez Mira, Gonzaga, and Aparri, from the Calendar Year 2014-2015 to the Calendar Year 2016-2017, in the four campuses.

Statement of the Problem and Hypotheses

Specifically, the study sought to answer the following questions:

1. What is the level of academic performance of the graduates in the following components in the Criminology curriculum according to year taken and campus?

A. Criminal Law and Jurisprudence (CLJ)

B. Law Enforcement Administration (LEA)

C. Criminalistics (CTS)

D. Crime Detection and Investigation (CDI)

E. Sociology of Crimes and Ethics (SCE)

F. Correctional Administration (CA)

G. Practicum 1 and 2

2. Is there a significant difference on the academic performance of the graduates according to year taken and campus?

Hypothesis: There is no significant difference on the academic performance of the graduates according to year taken and campus.

Methodology

Research Design

The research design employed in this study was ex-post facto. The ex post facto research design, as defined by Gay (1976) and mentioned in Sanchez (1998), is defined as study in which the researcher strives to uncover the causes or explanations for existing variations in the behavior or social status of groups of persons. In this study, the researcher used an ex-post facto research design to determine the academic performance of the respondents in subjects under the Professional Education Components such as Sociology of Crimes and Ethics (SCE), Law Enforcement Administration (LEA), Crime Detection and Investigation (CDI), Criminalistics (CTS), Criminal Law and Jurisprudence (CLJ), Correctional Administration (CA), and Practicum 1 and 2 (Practicum 1 and 2). (PRC 1 and 2).

Population and Locale of the Study

All the 336 graduates of the College of Criminal Justice Education of Aparri, Piat, Sanchez Mira and Gonzaga who took the Licensure Examination for Criminologists from April 2015 up to December 2017 examination periods for the first time whether passed or failed comprised this study. The list of the Campus registrars and the list of takers from the Professional Regulation Commission (PRC) were used as a basis in the identification of the respondents. Moreover, all regular and Part-time regular faculty having regular loads from Calendar Year 2014-2015 up to 2016-2017 were likewise treated as participants in this study. A total of twelve (12) faculty members were treated as respondents in this study.

Data Gathering Tool/s

The researcher made use of documents, the ratings issued by the Professional Regulation Commission and the individual grades of the graduates from Registrar's office of the four

campuses, as the main sources of data. The data were obtained from the documents available at the Registrar's Office and were recorded using Microsoft Excel. The individual grades of the graduates from the different subjects under the Professional Education Component of the Criminology Education curriculum such as in Criminal Law and Jurisprudence (CLJ), Law Administration Enforcement (LEA), Criminalistics (CTS), Crime Detection and Investigation (CDI), Sociology of Crimes and Ethics (SCE), Correctional Administration (CA) and Practicum 1 and 2 were included as obtained from the individual Transcript of Records of the graduates.

Data Gathering Procedure

A formal letter, which was endorsed by the Dean of the Graduate School of Criminal Justice and Public Safety, was prepared by the researcher stating thereat that he is undergoing a study to determine the correlates of performance in the CLE of the Criminology graduates. The letter was given first to the President of the Cagayan State University, the Campus Executive Officer and the Dean of the College of Criminal Justice Administration of CSU-CCJE at Aparri, Piat, Sanchez Mira and Gonzaga. After the approval, the researcher prepared a formal letter, as noted by the University President, addressed to the Campus Registrar of the four campuses, asking permission to gather the pertinent information needed which included the roster of graduates of the Bachelor of Science in Criminology from Calendar Year 2014-2015 up to 2016-2017 and their individual Transcript of Records. From the file of the Transcript of Records in the Registrar's Office of the various campuses, the average grades of the graduaterespondents were computed and recorded as per respondent.

Treatment of the Data

The study made use of the descriptive statistics research tools as to frequency counts, percentages, weighted mean and the standard deviation, which were used to describe the academic performance of the graduates in each component of the Criminology curriculum and the level of performance in the Criminologist Licensure Examination (SOP 1, 2 and 3).

For specific problem number one and two, which focuses on the level of academic performance of the graduates.

Scale Qualitative Interpretation

97-100%

Excellent

93-96% Very good 88-92% Good 83-87%

Satisfactory

75-82% Fair 74 and below Poor/Failed

DISCUSSION OF RESULTS AND FINDINGS

Academic Performance of the CSU Graduates of the Criminology Education Program

Aligned with CHED Memorandum, the Cagayan State University Criminology Education curriculum is composed of six (6) professional education components namely: Criminal Law and Jurisprudence (CLJ); Law Enforcement Administration (LEA); Criminalistics (CTS); Crime Detection and Investigation (CDI); Sociology of Crimes and Ethics (SCE); and, Correctional Administration (CA). Apart from the general education courses and other subjects (electives) which enhance the curriculum, these courses make up the essentials and are the core contents of the Criminologist Licensure Examination.

Academic Performance of Graduates According to Year Taken

Table 1 displays the overall academic performance of Criminology Education graduates according to the year taken, which is 85.4541, interpreted as satisfactory. Further, the table shows that 2015 obtained the highest general weighted average of 85.9918 while the lowest is in 2016 with a general weighted average of 84.8732. Although a difference of 1.1186 was noticed, both means belong to the same category within the satisfactory level.

The finding implies that the academic performance of Criminology graduates is on the

average level. Further, the performance of graduates is attributed to factors such as study habits, internal classroom factors, learning facilities, and socio-economic factors.

Mushtaq and Khan (2012) agreed that internal classroom factors, which includes students' competence in English, class schedules, class size, English textbooks, class test results, learning facilities, homework, environment of the class, complexity of the course material, teacher's role in the class, technology used in the class and exams systems; and learning facilities strongly affect the students' performance. Also, Hansen (2000) stated that students' performance depends on many factors, and one of which is learning facilities, that can affect student performance.

On the other hand, Raychauduri et al. (2010) claimed that socio-economic factors like attendance in the class, family income, mother's and father's education, teacher-student ratio are factors affecting the performance of students.

In the overall analysis, as shown in Table 1, considering the year taken, Practicum 1 and 2 consistently garnered the highest mean in 2015, 2016, and 2017, among the professional courses while Criminal Law and Jurisprudence is consistently the lowest within these three years.

The graduates' overall mean GPA for 2015, 2016, and 2017 which tantamount to a satisfactory overall academic performance suggests that the graduates of the three batches have acquired the basic concepts and skills that should be attained after exposure to the different courses under each subject component. Specifically, the knowledge, skills, attitudes, and values essential to the practice of Criminology in the fields of Criminal Law and Jurisprudence (CLJ), Law Enforcement Administration (LEA), Criminalistics (CTS), Criminal Detection and Investigation (CDI), Criminal Sociology and Ethics (SCE), Correctional Administration (C.A.), and On-the-Job Training (OJT).

Looking closely at the professional courses presented in Table 1, Criminal Law and Jurisprudence has the lowest mean within the three-year duration. The finding implies that there is still a need to strengthen the teaching of CLJ which comprises specifically the general provisions of the Revised Penal Code of the Philippines; rules of court in Criminal Procedure; fundamental principles of criminal evidence

which includes observation, enactment and the participation of police officers in judicial processes (CMO 21, s. 2005).

Another implication of having observed a passing but low GPA along CLJ is the difficulty the graduates might have encountered during their stint as students along with the different individual subjects of the CLJ; specifically, difficulties in the attainment of the concepts and skills on Criminal Law, Criminal Procedure and Criminal Evidence.

Along Law Enforcement Administration, the academic performance of 2015, 2016 and 2017 CSU graduates was satisfactory, with a mean of 84.8374. The finding implies that the graduates had an excellent performance under Police Organization and Administration; Industrial Security Management: Intelligence; Police Patrol Operations with Police Communication System; Police Personnel and Records Management; and Comparative Police System.

Further, the performance attained by the graduates suggests that they have achieved a good level of mastery on the concepts along with the organization, operation, and management of a patrol force. There could also be a deeper understanding of the critical police role in crime prevention through the familiarization of the different patrol methods and tactics.

Along Criminalistics, the academic performance of the CSU graduates corresponds to satisfactory. These results suggest that the graduates have attained a satisfactory level along the concepts and necessary skills supposedly developed after going through the individual subjects which are fundamental study of ancient and modern methods of personal identification; advance photography system and its application to police work; firearm identification with the use of laboratory examination; methods identification and examination of questionable documents; lie detection and interrogation; and the application of medical science in crime investigation. Such subject components include the courses: Personal Identification; Police Photography, Forensic Ballistics, Questioned Documents Examination, Polygraphy, and Legal Medicine.

Individually, the graduates have satisfactorily acquired the competencies

developed in the course, such as: (1) explain the basic principles in the field of Forensic medicine fully; (2) describe fully the method of examination conducted with regards Forensic Medicine; (3) explain the different aspects of Legal Medicine fully; (4) apply the basic concepts of Legal Medicine in crime investigation; and (5) submit complete and well-written crime investigation reports on time (CMO 21, s. 2005.

Along Crime Detection and Investigation, the academic performance of the graduates of the three batch, namely, 2015, 2016 and 2017 is satisfactory with a mean of 84.9584. The subjects under this component include Fundamentals of Criminal Investigation, Traffic Management and Accident Investigation, Special Crime Investigation, Organized Crime Investigation, Drug Education and Vice Control and Fire Technology and Arson Investigation.

The academic performance of the graduates along the CDI courses suggests that the graduates have developed the concepts and skills supposedly acquired from the courses under this subject component. Correctly, the concepts and skills on the basic principles of criminal investigation as applied in various crime situations and the utilization of scientific knowledge in the field of a criminal investigation for the successful detection and prevention of crimes.

The finding implies that the graduates had excellent performance along Introduction to Criminology and Psychology of Crimes, Philippine Criminal Justice System, Ethics and Values, Juvenile Delinquency and Crime Prevention, Human Behavior and Crisis Management, and Criminological Research and Statistics.

The academic performance further implies that the graduates have proper assimilation of the essentials of criminology as a body of knowledge about the causes of crime, the development of laws in controlling and preventing crimes and the penalty of criminal offenders.

The finding implies that the graduates had an average performance on Correctional Administration (C.A.), which is a professional component that provides students with the knowledge and understanding regarding

Institutional Correction and Penal management in the Philippines to include Bureau of Jail Management and Penology (BJMP), Provincial Jails and Bureau of Corrections (BUCOR), the handling and treatment of criminal offenders in line with established standards of treating offenders; and focuses in the understanding of Probation Law of 1976 (P.D. 968), its operation and linkages with the other pillars of the Criminal Justice System (CMO 21, s. 2005). The courses included in the Correctional Administration are Institutional Corrections and Non-institutional Corrections.

The performance showed that the graduates had satisfactorily been able to integrate the concepts and skills learned about the historical development of penology, punishment and its purpose, the role of Corrections, standard rules in treating prisoners and rehabilitation program for prisoners and the legal aspects that pertain to it; and basic concepts, principles, and philosophy of the Probation System.

On-the-Job Training and Community Immersion (PRC 1 and 2) is aimed at providing students hands-on learning experiences on the psychology and sociology of crimes, crime detection, and investigation and Criminalistics through their exposure into the actual operation of a police station/ department, jail or penal institutions, fire departments and security agencies and such other agencies comprising the five (5) pillars of the criminal justice system in conjunction with the academic program (CMO 21, s. 2005).

The performance levels suggest that the graduates have successfully kept themselves abreast with the features of the necessary law enforcement and investigative work as a result of their exposure to the actual work of a law enforcement agent and investigator.

It is noted that among the professional courses, Practicum 1 and 2 is the highest since this is a course where students are allowed to apply in the field what they have learned; the time when they are hands-on unlike with the other professional components which are theory-based. Further, this is also anchored on the theory of Vygotzky (1978) as cited in Benneth (2010) and Shimerda (2012) "Zone of Proximal Development" which states that the experiences gained by the students with the assistance of

teachers enabled the learners to build on existing knowledge and understanding and confront misconceptions. Thus, with the experiences obtained by the students in their field assignments (police stations, Bureau of Jail Management and Penology, Bureau of Fire Protection, Regional Trial Court, Disaster Reduction and Risk Management, etc.), they were able to construct

knowledge which add to what they have accommodated while they were in the four walls of the classroom.

Table 1 presents the overall academic performance of the Criminology Education graduates according to year taken.

Table 3

Academic Performance of Criminology Education Graduates According to Year Taken

	nal Course	Mean	raduates According to Description	Std Deviation
CLJ	2015	83.6844	S	2.95364
	2016	82.0569	F	3.16986
	2017	80.8853	F	3.27779
	Total	81.9258	F	3.34804
LEA	2015	84.8495	S	3.38692
	2016	84.4340	S	4.03658
	2017	85.1187	S	3.52388
	Total	84.8374	S	3.66373
CTS	2015	84.5881	S	3.54112
	2016	85.1722	S	3.12627
	2017	84.3868	S	2.65149
	Total	84.6837	S	3.04488
CDI	2015	86.0561	S	4.61225
	2016	84.5980	S	3.83646
	2017	84.6243	S	3.12052
	Total	84.9584	S	3.78883
SCE	2015	85.2829	S	3.25327
	2016	84.6756	S	3.13107
	2017	85.2717	S	3.82884
CA	Total	85.0856	S	3.48622

J ,,,11	2016	84.8732	S	2.58901
GWA	2015	85.9918	S	2.78654
	Total	90.2943	G	4.42673
	2017	92.9441	VG	2.46032
	2016	86.6740	S	5.10275
PRAC 1& 2	2015	90.1688	G	2.45701
	Total	86.4520	S	4.33971
	2017	85.9615	S	4.70850
	2016	86.5032	S	4.39597
	2015	87.2948	S	3.35633

Legend: Level of Performance: 97-100% (Excellent); 93-96% (Very good); 88-92% (Good); 83-87% (Satisfactory); 75-82% (Fair); and 74 and below (Poor/Failed)

Table 2 presents the Analysis of Variance conducted to determine if there are differences in the level of academic performance of Criminology graduates according to the year taken. The computed p-value (.014) is less than the alpha level of .05. The null hypothesis is therefore not confirmed. This indicates that there are significant differences in the means of academic performance of graduates according to the year taken. Table 5 reveals that there is a significant difference in the performance of the graduates according to year taken in the areas of CLJ, p=.000; CDI, p=.014; and PRAC 1 and 2 = .000.

The differences may be attributed to several factors observable among the graduates that may explain the variations in the OJT

performance. This was supported by Anoyo et al. (2015) when they found out that one main factor that affects the performance of criminology interns is the "Individual factor." This set of factors consists of the attitude of the interns towards the work like volunteering on tasks, positive attitude towards work, initiative, acceptance of constructive criticism, adjustment to work environment and performance of tasks to their best.

It is noted in Table 2 that there are no significant differences along Law Enforcement Administration, Criminalistics, Sociology of Crimes and Ethics, and Correctional Administration.

Table 2 shows the comparison of the level of academic performance of graduates according to the year taken.

ANOVA on the Level of Academic Performance of Graduates According to Year Taken

Indicator	Sum Squares	of df	Mean Square	F	p-value	Decision
CLJ Between Groups	394.705	2	197.353	19.652	.000	Reject Ho

Within Groups	3203.511	319	10.042			
Total	3598.216	321				
LEA Between Groups	27.921	2	13.961	1.040	.335	Retain Ho
Within Groups	4280.825	319	13.420			
Total	4308.746	321				
CTS Between Groups	37.647	2	18.824	2.044	.131	Retain Ho
Within Groups	2938.447	319	9.211			
Total	2976.095	321				
CDI Between Groups	121.992	2	60.996	4.337	.014	Reject Ho
Within Groups	4486.042	319	14.063			
Total	4608.035	321				
SCE Between Groups	25.098	2	12.549	1.033	.357	Retain Ho
Within Groups	3876.251	319	12.151			
Total	3901.349	321				
CA Between Groups	89.361	2	44.681	2.393	.093	Retain Ho
Within Groups	5956.054	319	18.671			
Total	6045.416	321				
Pract 1 & 2 Between Groups	2342.101	2	1171.050	94.616	.000	Reject Ho
Within Groups	3948.206	319	12.377			

Total	6290.307	321				
GWA Between Groups	58.903	2	29.452	4.301	.014	Reject Ho
Within Groups	2184.516	319	6.848			
Total	2243.419	321				

Table 3 presents that there are significant differences in the performance of graduates along CLJ, Practicum 1, and Practicum 2 in 2015, 2016, and 2017.

Along CDI, significant differences were noted between 2015 and 2016, and 2015 and 2017 while there is no significant difference between 2016 and 2017. Along GWA, no significant differences were noted between 2015 and 2017, and 2016 and 2017; while a significant difference was noted between 2015 and 2016.

One reason which can be attributed to the differences noted in the academic performances

is the number of graduates according to year: 81 in 2015, 106 in 2016, and 149 in 2017. The grade point average of graduates is higher in 2015 because there were only a few of them to be managed during this year; thus, better instruction, interaction and classroom management because there are fewer students to be supervised, hence more individualized teaching and instruction may have been done.

Table 3 shows the result of post hoc analysis of the academic performance according to year taken using Tukey HSD.

Post hoc Analysis of the Academic Performance According to Year Taken Using Tukey HSD

Area	Pairwise comparison	p-value	Decision
CLJ	2015 vs 2016	.002	Significant, reject Ho
	2015 vs 2017	.000	Significant, reject Ho
	2016 vs 2017	.013	Significant, reject Ho
CDI	2015 vs 2016	.028	Significant, reject Ho
	2015 vs 2017	.020	Significant, reject Ho
	2016 vs 2017	.998	Not significant, retain Ho
PRAC12	2015 vs 2016	.000	Significant, reject Ho
	2015 vs 2017	.000	Significant, reject Ho
	2016 vs 2017	.000	Significant, reject Ho
GWA	2015 vs 2016	.014	Significant, reject Ho
	2015 vs 2017	.505	Not significant, retain Ho
	2016 vs 2017	.096	Not significant, retain Ho

Academic Performance of Graduates According to Campus

Table 4 shows the overall academic performance of Criminology Education graduates according to campus.

Academic Performance of Criminology Education Graduates According to Campus

	erformance of Criminology Ed Professional Course		Description	Std Deviation
CLJ	Aparri	80.4889	F	3.35629
	Gonzaga	81.1127	F	3.80945
	Piat	84.3068	S	2.30487
	Sanchez Mira	82.0404	F	2.66665
	Total	81.9258	F	3.34804
LEA	Aparri	87.5754	G	2.97934
	Gonzaga	83.9527	S	3.27928
	Piat	85.9389	S	2.16756
	Sanchez Mira	81.6044	F	2.65926
	Total	84.8374	S	3.66373
CTS	Aparri	86.1511	S	3.15366
	Gonzaga	84.9782	S	2.97562
	Piat	85.4085	S	1.87620
	Sanchez Mira	82.3953	F	2.35837
	Total	84.6873	S	3.04488
CDI	Aparri	86.6569	S	3.54610
	Gonzaga	84.5418	S	3.05909
	Piat	87.0126	S	2.17657
	Sanchez Mira	81.7961	F	3.24138
	Total	84.9584	S	3.78883
SCE	Aparri	87.6719	G	2.57922
	Gonzaga	84.6564	S	3.49353
	Piat	85.4334	S	2.10144
	Sanchez Mira	82.3389	F	3.07179

	Total	85.0856	S	3.48622
CA	Aparri	86.7727	S	3.65982
	Gonzaga	89.3764	G	2.84696
	Piat	87.8774	G	2.17129
	Sanchez Mira	83.2809	S	5.05323
	Total	86.4520	S	4.33971
PRAC 1& 2	Aparri	90.6364	G	6.20312
	Gonzaga	91.0545	G	2.19780
	Piat	91.0811	G	2.56294
	Sanchez Mira	88.8697	G	4.01488
	Total	90.2943	G	4.42673
GWA	Aparri	86.5646	S	2.28323
	Gonzaga	85.6080	S	2.59408
	Piat	86.7308	S	1.26960
	Sanchez Mira	83.1893	S	2.37661
	Total	85.4541	S	2.64364

Legend: Level of Performance: 97-100% (Excellent); 93-96% (Very good); 88-92% (Good); 83-87% ((Satisfactory); 75-82% (Fair); and 74 and below (Poor/Failed)

Table 5 displays the overall academic performance of Criminology Education graduates according to campus, which is 85.4541, interpreted as satisfactory. Further, the highest mean obtained on the academic performance of Criminology Education graduates belongs to Piat, which is 91.0811, interpreted as good. On the contrary, the lowest mean belongs to Aparri, which is 80.4889, interpreted as fair.

For the Aparri graduates, of the seven (7) professional courses, the graduates had a University academic performance level of good on three courses (LEA, SCE, Practicum 1 and 2), satisfactory on three courses (CTS, CDI, CA), and passing on one course (CLJ). The highest mean is 90.6364, which is Practicum 1 and 2, interpreted as good while the lowest is Criminal Law and Jurisprudence, with a mean of 80.4889, interpreted as fair.

Differences in the academic performances of the graduates are attributed to the number of respondents in the different campuses, as well as the graduates' exposure to the different subjects of the criminology education courses which is supposed to prepare him/her for the practice of the profession, likewise the chance to qualify for the CLE. This is supported by Kolb's Learning Cycle which states that the basis for the level of accomplishment of a learning task is seen on the learning outcomes (cited in Delos Angeles, 2014).

For the Gonzaga graduates, the highest academic performances were obtained in the courses: Correctional Administration (CA) and on the On-the-Job-Training; both with a good description, while satisfactory academic performance was obtained in the courses: LEA, CTS, CDI, and SCE. An overall GPA equivalent

to satisfactory academic performance was observed. A striking result is shown in the barely passing performance of the Gonzaga graduates in the course, Criminal Law and Jurisprudence.

As explained in the preceding discussion, having a performance level of good in this subject component implies that there is sufficient acquisition of the concepts and skills in crime investigation and application of the concepts to the successful detection and prevention of crimes.

For the Piat graduates, they have good academic performances in two professional courses while satisfactory performances in five professional courses, including the general weighted average.

For Sanchez Mira, the graduates' academic performances are generally categorized under passing.

Generally, the academic performances of the graduates are satisfactory; however, it was noticed that one of the factors which affected the differences in the academic performance of graduates as observed by the researcher is facilities/laboratories. The graduates corroborated this during the informal interview conducted with them in which they claimed that facilities affected their academic performance. Olakoya (2004) supported the interview result, contending that in an educational environment, it is indisputable that school plant and facilities such as furniture, laboratory equipment and materials have a significant influence in the teaching and learning process because without them, the empty buildings and structures no matter how attractive cannot be used for educational purposes; hence, school plant and facilities are no doubt an essential part of educational planning without which students' academic achievement cannot be enhanced.

Table 5 presents the comparison of the academic performance of graduates according to campus.

ANOVA on the Level of Academic Performance of Graduates According to Campus

Indicator	Sum of	df	Mean	F	p-value	Decision
CLJ Between Groups	Squares 661.504	3	Square 220.501	23.877	.000	Reject Ho
Within Groups	2936.712	318	9.235			
Total	3598.216	321				
LEA Between Groups	1857.514	3	619.171	80.326	.000	Reject Ho
Within Groups	2451.232	318	7.708			
Total	4308.746	321				
CTS Between Groups	749.071	3	249.690	35.654	.000	Reject Ho
Within Groups	2227.024	318	7.003			
Total	2976.095	321				
CDI Between Groups	1547.425	3	515.808	53.593	.000	Reject Ho

Within Groups	3060.610	318	9.625			
Total	4608.035	321				
SCE Between Groups	1390.451	3	463.484	58.699	.000	Reject Ho
Within Groups	2510.898	318	7.896			
Total	3901.349	321				
CA Between Groups	1576.177	3	525.392	37.383	.000	Reject Ho
Within Groups	4469.238	318	14.054			
Total	6045.416	321				
Pract Between 1 & 2 Groups	279.957	3	93.319	4.937	.002	Reject Ho
Within Groups	6010.350	318	18.900			
Total	6290.307	321				
GWA Between Groups	726.195	3	242.065	50.735	.000	Reject Ho
Within Groups	1517.224	318	4.771			
Total	2243.419	321				

Table 5 shows the Analysis of Variance which reveals that there are significant differences in the academic performance of the graduates according to campus in all areas, p <.05.

The finding implies that campus significantly affected the academic performances of graduates. It can be concluded then that the school where a graduate completed his degree has an effect in their performance. This was reinforced by Ibrahim et al (2017) when they said

that although availability of school plant and facilities alone is not sufficient condition for good performance, it is clear that schools which are better equipped with adequate provision of plant and facilities are more likely to produce a higher level of learning and motivation among the learners as compared to others.

Table 6 presents the result of post hoc analysis of the academic performance according to campus using Tukey HSD.

Post hoc Analysis of the Academic Performance According to Campus Using Tukey HSD

Area	Pairwise comparison	p-value	Decision
CLJ	AP VS G	.614	Not significant, retain Ho
	AP VS P	.000	Significant, reject Ho
	AP VS SM	.003	Significant, reject Ho
	G VS P	.000	Significant, reject Ho
	G VS SM	.276	Not significant, retain Ho
	P VS SM	.000	Significant, reject Ho
LEA	AP VS G	.000	Significant, reject Ho
	AP VS P	.001	Significant, reject Ho
	AP VS SM	.000	Significant, reject Ho
	G VS AP	.000	Significant, reject Ho
	G VS P	.000	Significant, reject Ho
	G VS SM	.000	Significant, reject Ho
	P VS SM	.000	Significant, reject Ho
CTS	AP VS G	.043	Significant, reject Ho
	AP VS P	.263	Not significant, retain Ho
	AP VS SM	.000	Significant, reject Ho
	G VS P	.798	Not significant, retain Ho
	G VS SM	.000	Significant, reject Ho
	P VS G	.798	Not significant, retain Ho
	P VS SM	.000	Significant, reject Ho
CDI	AP VS G	.000	Significant, reject Ho
	AP VS P	.878	Not significant, retain Ho
	AP VS SM	.000	Significant, reject Ho
	G VS SM	.000	Significant, reject Ho
	P VS G	.000	Significant, reject Ho

P VS SM .000 Significant, reject Ho SM VS P .000 Significant, reject Ho SCE AP VS G .000 Significant, reject Ho	
SCE AP VS G .000 Significant, reject Ho	
AP VS P .000 Significant, reject Ho	
AP VS SM .000 Significant, reject Ho	
G VS AP .000 Significant, reject Ho	
G VS P .407 Not significant, retain F	lo
G VS SM .000 Significant, reject Ho	
P VS SM .000 Significant, reject Ho	
CA AP VS G .000 Significant, reject Ho	
AP VS P .223 Not significant, retain F	lo
AP VS SM .000 Significant, reject Ho	
G VS P .113 Not significant, retain F	lo
G VS SM .000 Significant, reject Ho	
P VS G .113 Not significant, retain F	lo
P VS SM .000 Significant, reject Ho	
PRAC12 AP VS G .940 Not significant, retain F	lo
AP VS P .910 Not significant, retain F	lo
AP VS SM .026 Significant, reject Ho	
G VS P 1.000 Not significant, retain F	lo
G VS SM .017 Not significant, retain F	lo
P VS SM .006 Not significant, retain F	lo
GWA AP VS G .047 Significant, reject Ho	
AP VS P .960 Not significant, retain F	lo
AP VS SM .000 Significant, reject Ho	
G VS P .022 Significant, reject Ho	
G VS SM .000 Significant, reject Ho	
P VS SM .000 Significant, reject Ho	

Table 6 presents that among the professional courses, there are significant differences in the academic performance of graduates along LEA according to campus.

The finding implies that Police Organization and Administration, Industrial Security Management; Police Intelligence, Police Patrol Operations with Police Communication System, Police Personnel and Records Management, and Comparative Police System were taught with the use of different strategies and approaches, and such use of varied strategies and approaches may be caused the differences in the academic performances of graduates. As Adunola (2011) quoted, regular poor academic performance by the majority of students is fundamentally linked to the application of ineffective teaching methods by teachers to impart knowledge to learners. Also, Asikhia (2010) found that the qualification of teachers and students' environment factors do not influence students poor performance but teachers' methods teaching influence poor academic performance.

Conclusions

Provisions of adequate learning facilities and equipment contribute to the improvement of licensure performance of Criminology graduates.

The higher the academic performance of students, the more the possibility of improved rating in the Criminologists Licensure Examination.

Suggestions given by the faculty members are all geared toward helping increase the percentage of qualifiers in the licensure examination.

Recommendations

In light of the preceding findings and conclusions, the following are recommended:

- 1. The factors which affect graduates' performance should be reviewed in order to improve the deteriorating performance of Criminology graduates.
- 2. The teachers should regularly update their knowledge and competencies along with the subject areas being handled in order to contribute to the increase passing rate.

REFERENCES

Adunola, O. (2011). "The Impact of Teachers' teaching Methods on the academic performance of primary school pupils in Ijebu-Ode local cur area of Orgun State," Ego Booster Books, Ogun State, Nigeria. *International Journal of Business and Management: Vol.* 8, No. 2.

AL-Mutairi, Abdullah. (2011). 'Factors Affecting Business Students' Performance in Arab Open University: The Case of Kuwait'. International Journal of Business and Management: Vol. 6, No. 5.

Ali, Norhidayah, Jusoff, Kamaruzaman, Ali, Syukriah, Mokhtar, Najah and Salamt, Azni Syafena Andin. (2009). 'The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia'. *Canadian Research & Development Center of Sciences and Cultures: Vol.3*, No.4.

Ali, N., Jusoff, K., Alis, S., Mokhtar, N. & Salamat, A. (2009). The Factors Affecting Students' Performance atuniversi teknologi MARA Kedah, Malaysia. *Management Science and Engineering*. (3) 4, 81-90.

Anoyo, J.C. V., Jimenez, J. I., Matunog, R. M., Mendoza, M. V., Sarmiento, R. S., & Mojares, R. E. (2015). Factors affecting work performance of criminology interns in an Asian university. *Studies in Social Sciences and Humanities, Vol.* 2 (4), 225.

Baang, M. A. (2011). Investigating the macro perspective affecting the passing rate in board examinations: A take-off point in designing a causal model. *International Journal of Learning, Teaching and Educational Research, Vol. 15*(4), 108-120.

Bajeta, A. A., Manalo, M. M., Montalbo, N. V. V., Vino, J.C. M., Mojares, R. E. (2015). Performance in the Criminology Licensure Examination as Basis for Improvement of one Private School in the Philippines. Batangas City: College of Criminal Justice, Lyceum of the Philippines. *College of Criminology Research Journal*, Vol. 6.

Bandura, A. (1973). *Aggression: A social learning analysis*. Oxford, England: Prentice-Hall.

- Bandura, A. (1997). A social learning theory. Oxford, England: Prentice-Hall.
- De Vaney Olvey, C., Hogg, A., & Counts, W. (2002).Licensure requirements: Have we raised the bar too far. *Professional Psychology: Research and Practice*, 33(3), 323.
- Figuerres, O. (2013). An analysis of the performance of the University of Northern Philippines in the licensure examinations for teachers. *IAMURE International Journal of Education*. Vol.6.
- Hafalla, V. Jr. & Calub, E. (2011). Modelling the Performance of Electronics and Communications Engineering Students in the Licensure Examination. *UB Research Journal. Vol. XXXV* No. 1
- Hasbullah, A.; Yussof, W. Z W.; Ismail, M.; & Vitasari, P. (2011). A framework study of school facilities performance in public primary school of Batubara district in Indonesia. Procedia Social and Behavioral Sciences. *International Journal of Advanced Research*, *3*(15), 3708-3712.
- Ibrahim, W. Y.; Umar, H. A.; & Clement, I. (2017). Impact of school facilities on students' academic achievement. *International Journal of Advanced Research*, *5*(12), 878-889.
- Jacoby, S and Ochs, E. (1995). Co-construction: An introduction. *Research on Language and Social Interaction*, 28, 171-183.
- Nabe, N., Revisa, W., & Serion, E. (2011). Performance of UM Criminology Graduates in Pre-Review Licensure Examination: Basis for an Intervention Scheme. *UM Research Journal*, 6(1).
- Navarro, R. R. and Rialubin, M.R. (2000). Perception on the success of the CPA licensure examination. *UNP Research Journal 2000*. UNP Vigan City.
- Nyangena, E., Getanda, A., & Ngugi, S. (2013). Factors influencing success of Bachelor of

- Science in Nursing graduates in nursing council of Kenya Licensure Examinations. *Baraton Interdisciplinary Research Journal*, *3*(1), 11-21.
- Olakoya, O. K. (2004). Effective instructional materials in teaching of business studies. *International Journal of Educational Research and Technology* 5(1), 51.
- Pachejo, S. & Allaga, W. (2013). Academic predictors of the licensure examination for Teacher's performance of the Rizal Technological University teacher education graduates. *International Journal of Educational Research and Technology*, 4(4), 31-39.
- Pariñas, M. M., Obrero, R. L., & Obrero, R. L. (2014).Relevance of the Topics in the Criminologist Licensure Examination Review Program of the University of Northern Philippines. *UNP Research Journal*, 21(1).
- Pascua, J. & Navalta, J. (2011). Determinants of LET performance of the teacher education graduates in a State University. *JPAIR Multidisciplinary Journal*, 6, 90-102.
- Soriano, H. (2009). Factors associated with the performance of USM college of education graduates in the 2007 licensure examination for teachers. *USM R & D*, *17*(2), 151-159.
- Titard, P.L. and Russell, K.A. (1989). Factors Affecting CPA Examination Success. *Accounting Horizons*, *3*(3), 53-59.
- Visco, D. (2015). Predictors of performance in the licensure examination for teachers of the graduates of higher education institutions in Abra. *International Journal of Management Research and Business Strategy*, 4(1), 181-191.
- Webb, C. T., Sedlacek, W., Cohen, D., Shields, P., Gracely, E., Hawkins, M., & Nieman, L. (1997). The impact of Non-academic variables on performance at two medical schools. *Journal of the National Medical Association*, 89(3), 173.