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# Admission Test and Professional Licensure Examination Results of Bachelor of Science in Radiologic Technology Students at General Santos Doctors' Medical School Foundation, Incorporated, South Cotabato, Philippines, Cabatingan & Salinas (2024)

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The General Santos Doctors' Medical School Foundation, Incorporated (GSDMSFI) is one of the tertiary institutions accredited to the Commission on Higher Education. This school was established in 2001. The Bachelor of Science in Radiologic Technology (BSRT) is a four-year degree program designed was granted by the CHED last 2011 in GSDMSFI. Thus, this study sought to answer the following questions:

1.) What are the levels of the admission results of the Bachelor of Science in Radiologic Technology students at General Santos Doctors' Medical School Foundation, Incorporated?

2.) What is the average rating of the Professional Licensure Examination from AY 2015-2023 of the Bachelor of Science in Radiologic Technology students at General Santos Doctors' Medical School Foundation, Incorporated? And 3.) Is there a significant relationship between the admission test results and the average rating of the Professional Licensure Examination results of the Bachelor of Science in Radiologic Technology students at General Santos Medical School Foundation, Incorporated?

4.) Out of the results, what admission policy can be proposed for improvement of Bachelor of Science in Radiologic Technology students?

The researchers used a quantitative research design to determine the correlation between admission and licensure examination results. The study employed the 178 population of students from the Bachelor of Science in Radiologic Technology program from the Academic Year 2015-2023. The data was retrieved with the help of the Registrar and Guidance offices. This is retrospective data collection wherein they have to search the name of students' admission test results which is paired with the Professional Licensure Examination results. They gave the coded student name to the head coordinator of the BSRT program before it was submitted for analysis.

These are the following summary of the results: 1.) Most of the students from 2015-2023 are Stanine 4 of which 52 students got it out of 178 students. There is 1 student who got Stanine 7 and Stanine 8. 2.) The average results Professional Licensure Examination from 2015-2023 present that 2017 has the highest average result which is 76.01. The year 2019 has the lowest average of results. 3.) The average rate of Professional Licensure Examination results has a weak relationship with the admission test results of the takers.



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It implies that most students admitted to the program are slightly below average. And a least of considerably above average and Superior which are the Stanine 7 and 8, respectively. The results show the most promising of passers are in the year of 2019, 2017, and 2023. The challenging years of failures are in the year of 2016, 2015, and 2021. Also, it entails that the results of admission test have little correlation to the licensure examination results.

These are the recommendations: to future researchers that they may give an analysis of the academic performance of BSRT students in the Academic Year 2018-2023. The Guidance Counselor makes some intervention plans for the students who have low academic admission scores. To the academic Administrator, adapt and evaluate the proposed plan for admission and recruitment of incoming BSRT students.

#### **Background of the Study**

The General Santos Doctors' Medical School Foundation, Incorporated (GSDMSFI) is one of the tertiary institutions accredited to the Commission on Higher Education. This school was established in 2001. Moreover, the institution offers courses specializing in the medical field and produces graduates to be part of the healthcare team in the Philippines, and across the globe. Currently, the institution provides seven baccalaureate programs: Bachelor of Science in nursing, radiologic technology, psychology, medical technology, midwifery, physical therapy, and pharmacy. The Bachelor of Science in radiologic technology program of General Santos Doctors' Medical School Foundation Inc. started in the year 2008 and produced graduates from 2012 until the present.

The Bachelor of Science in Radiologic Technology (BSRT) is a four-year degree program designed was granted by the CHED last 2011 in GSDMSFI. It is govern by the Republic Act 7431 which is radiologic Technology Act of 1992. This RA 7431 entitled "An act regulating the practice of Radiologic Technology in the Philippines, Creating the Board of Radiologic Technology, Defining its powers and Functions and Other purposes."

The BSRT program will train students on how to operate medical imaging equipment such as X-rays, CT scanners, MRIs, sonogram machines, and 3D medical imaging programs among other computer and web-based software programs. Students are also taught how to perform associated clerical duties, including scheduling and maintaining paperwork for office and clinical machinery (finduniversity.ph, 2016). Radiologic Technology is the art and science of using radiation to provide images of the bones, organs, soft tissue and vessels that comprise the human body. These x-ray images, that are recorded on x-ray film or displayed on a video monitor, are then used as a tool to diagnose disease, injury or congenital deformity. Moorparkcollege.edu (2018) mentioned that medical imaging with radiation is an indispensable diagnostic tool of modern medicine; broken bones can be aligned, ulcers can be detected, and many other injuries, traumas and diseases can be diagnosed with x-ray imaging. Diagnosis and treatment of a patient depends on the accurate and precise production of a radiographic (x-ray) examination. The health professional responsible for performing radiographic examinations is the Radiologic Technologist. Radiologic Technologists are essential members of the health-care team, who work closely with physicians, nurses and other members of allied health.

In the field of Radiologic Technology, according to the article written by edukasyon.ph (2020) graduates may pursue a career path in different tertiary hospitals. After passing the licensure examination, they may apply as a radiologic technologist, computed tomography technologist, magnetic resonance imaging technologist, ultrasound technologist, positron emission tomography technologist, cardiovascular



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technologist, mammography technologist, interventional radiologic technologist, nuclear medicine technologist, radiation therapy technologist, or a digital subtraction angiography technologist. The profession of radiologic technology is part of a large workforce that provides health care services to the community. Furthermore, opportunities for practitioners could also be in education, free standing clinics, health research and medical sales and consulting.

The college admission for the BSRT program is very crucial in selecting the qualified students. They have to undergo some of the pressure on the curriculum which compose of several subjects to be completed. As cited in the study of Pambid and Agawin (2020) states that management sectors reveal that the educational background of a graduate is an index of the quality of the graduate as an individual. The kind of school the graduate represents, the training and instruction they get, all these have a bearing on the quality of the graduates. The school system prepares students for future occupations, develop their skills and provide them with the required knowledge, values and attitudes for the profession. The school must help students develop employability skills.

As to Ampaso, A., Abedin, S., Batalo, J., Ampaso, R., Abdullah, H., & Amer, N. (2022) that academic success is the key to any educational institution and the ingredient of success is preparation. When there is preparation, there should be an assessment as well. This assessment will measure the quality of the learning, especially of the courses which require clinical internship. In the field of radiology, re-validation examination is considered as comprehensive exam based on all the professional subjects and instructional activity drafted in the training program. Written and oral evaluation is given towards the end of the program to test the interns' knowledge after several months of clinical duties. The aforementioned evaluation is necessary because if the students perform well in the assessment, it implies their readiness to professional practice. Also, their efficacy equates to the quality of education that they have received in the training program.

Moreover, as cited by Cahapay (2021) that Navarro (2003) expressed a lament that significant difficulties challenging tertiary education in the nation have constantly emerged with the mass graduation of unprepared college graduates who do not exhibit minimum competence to address the labor needs of the country. This is manifested in the trends of the contemporary results of the national passing rates in the board examination.

In the radiologic technology program of GSDMSFI, it has already produced two hundred thirty five (235) graduates. And from the year 2012-2019, the RT departments first takers board passing rate were as follows, in 2012, the RT program got a board exam passing rate of 100%. In 2013 – 61%, 2014 – 58%, 2015 - 35%, 2016 - 29%, 2017 - 75%, 2018 - 57%, 2019 - 67%, 2021 - 33%, 2022 - 53%, 2023 - 61% passing rate. The school's Radiologic Technology curriculum and training are based on each discipline's memorandum from the Commission on Higher Education (CHED). Moreover, the curriculum of the institution was aligned to the school's vision, mission, core values, and institutional objectives.

The process of molding students through clinical internship requires a tremendous effort that will help them change personally and professionally. It is a mixture of intense physical and intellectual activities that could sometimes bring stress to the students, but nevertheless clinical internship is indeed essential for medical students.

This study is to found out the admission results of the students to make a suitable admission policy of the school which brought out the effectiveness of the learner's to learnt from the institution which they are presently enrolled.



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#### Statement of the Problem

The study aimed to analyze the admission test and professional licensure examination results of the Bachelor of Science in Radiologic Technology students at General Santos Doctors' Medical, Incorporated. The results of this study could potentially improve the academic and clinical experience of the students, as well as their institutional and community relationships. Thus, this study sought to answer the following questions:

What are the levels of the admission results of the Bachelor of Science in Radiologic Technology students at General Santos Doctors' Medical School Foundation, Incorporated?

What are the average rating of the Professional Licensure Examination from AY 2015-2023 of the Bachelor of Science in Radiologic Technology students at General Santos Doctors' Medical School Foundation, Incorporated?

Is there a significant relationship between the admission test results and the average rating of the Professional Licensure Examination results of the Bachelor of Science in Radiologic Technology students at General Santos Medical School Foundation, Incorporated?

Out of the results, what admission policy can be proposed for improvement of Bachelor of Science in Radiologic Technology students?

#### Hypothesis of the Study

At the level of 0.05 significant the hypothesis was tested.

There is no significant relationship between admission test results and average rate of the Professional Licensure Examination results from AY 2015-2023 of the Bachelor of Science in Radiologic Technology Students at General Santos Doctors' Medical School, Incorporated.

#### Significance of the Study

This study was undertaken to determine the admission and licensure examination results of the Bachelor of Science in Radiologic Technology program at General Santos Doctors' Medical School Foundation, Incorporated. The findings of this study will be beneficial for the following:

**Students.** The study's results can provide valuable insights into academic relations and clinical experiences based on admission and licensure examination outcomes.

Academic Leaders. This study furnishes a reference for the institution to determine the results of admission tests and licensure examinations. Additionally, it guides on implementing practical enhancement programs to support radiologic technology students in improving their academic performance. Thus, the study serves as a guide on how to help students identify their strengths and weaknesses in knowledge and skills related to admission tests and licensure examinations.

Community. This can help aspiring medical professionals assess their capabilities, precisely in the radiologic technology field and their clinical relations by choosing the institution as their honing benchmark.

**Future Researchers.** The studies that were conducted will pave the way for future researchers to improve and broaden their research on the admission test results and licensure examination results of the Bachelor of Science in Radiologic Technology students. This research can be used to understand the factors that drive students to achieve better academic results on an individual level.

**The Researchers.** The researchers can promote the findings and results of the study. It may also help them to provide information to the practitioners and students about the related field that brings relevant to their



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future research. It may enhance their research capabilities by improving their interactions with the study scope, respondents, and skills.

#### **Scope and Delimitation**

The scope of the study is from academic year 2015 until Academic Year 2023. The limitation was in the AY of 2018 and AY 2020 in which there were no data gathered. During this time of academic year the graduates have not taken the Licensure Examination and there were no data available to be recorded and analyzed. It is the time were lock down was announced because of COVID-19 pandemic.

The OLSAT results was given by the guidance office upon the letter of request have been approved from the Dean's office. It was encoded with data safety and privacy. The data were coded for confidentiality purposes before it was handover for analysis.

#### **Conceptual Framework of the Study**

The research has a conceptual framework that includes three main components. The first component variable is the profession of radiologic technology for the students chosen career. It describes the life of radiologist and task that helps the community after graduation. The students will be trained according to their knowledge and skills to apply in the field of radiology program. The second component is the admission test results wherein students need to accomplish and finish the process of enrollment and be part of the training for radiology professional program.

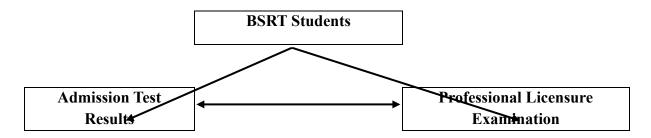


Figure 1. Conceptual Framework

It involves obtaining test results from entrance examinations or admission tests to identify in which level of intelligence they are and also, the rating of professional licensure examination results from the designated office who kept the record of the results per year.

Additionally, the component of variable of admission test result is associated to the ratings of the Professional License results. The significant relationship of the two variables is related to each other in which the Stanine scores has something to do with the failing or passing the board exam. In passing the board exam, they received a Professional License from the PRC in which it signified that they have passed the Philippine standard as Certified Radiologist in the country. Moreover, the output of this study is the proposed improvement of admission policy for Bachelor of Science in Radiologic Technology students. The admission policy will serve as a gauge of the institution in admitting students that later on they will take the board exam and to become a professional Radiologist in the community. The admitted students will be trained according to the Philippine standard given by Commission of Higher Education. The students have to undergo and passed the standard admission policy made for the target of making qualified students and accomplished all the necessary requirements given by the school. At the end of the 4years



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program and passed all the subjects given, they are permitted to graduation of the Bachelor of Science in Radiologic Technology program. They take the board exam and received a professional license and served the community bringing the learning they have from the institution where they are mold.

#### **Related Literature of the Study**

This section presents the different literature which is related in existing topic that brought importance to the study. This literature can include various article types, including theoretical articles, reviews, protocols, opinions and policy statements. Some of the articles may involve a wider issues, descriptions and explanations on the variables used in this study. This may start by discussing about the enumerated meaning of what is radiologic technology. The statements was gotten from academic search engines, such as Google Scholar, Scopus, or Web of Science, to find peer-reviewed articles and citations. It is also used subject-specific databases, such as PubMed, PsycINFO, or ERIC that found some of the related topic.

#### Radiologic Technology

Radiologic Technology or Radiography, or X-Ray as it may also be referred, is the art and science of using radiation to provide images of the bones, organs, soft tissue and vessels that comprise the human body. These x-ray images, that are recorded on x-ray film or displayed on a video monitor, are then used as a tool to diagnose disease, injury or congenital deformity.

Medical Imaging with radiation is an indispensable diagnostic tool of modern medicine; broken bones can be aligned, ulcers can be detected, and many other injuries, traumas and diseases can be diagnosed with x-ray imaging. Diagnosis and treatment of a patient depends on the accurate and precise production of a radiographic (x-ray) examination. The health professional responsible for performing radiographic examinations is the *Radiologic Technologist* (*R.T.*)

Radiologic Technologists are essential members of the health-care team, who work closely with physicians, nurses and other members of allied health. Radiologic Technology is not for everyone, it can be physically and emotionally demanding, but for those individuals who are team players, dedicated, compassionate and enjoy helping others, this is a rewarding and satisfying career. (Moonparkcollege.edu) The Republic Act No. 7431, is an act regulating the practice of radiologic technology in the Philippines, creating the board of radiologic technology defining its powers and functions and for other purposes. In which define section 3.b that "Radiologic technology" is an auxiliary branch of radiology which deals with the technical application of radiation, such as x-rays, beta rays, gamma rays, ultrasound and radio frequency rays, in the diagnosis and treatment of diseases; (c) "X-ray technologist" is a bona fide holder of a certificate of registration for x-ray technology issued by the Board of Radiologic Technology in accordance with this Act; (d) "Radiologic Technologist" is a bona fide holder of a certificate of registration for radiologic technology issued by the Board of Radiologic Technology in accordance with this Act; (e) "Radiology" is a branch of medical science which deals with the use of radiation in the diagnosis, treatment and research of diseases; (f) "Radiologist" is a licensed physician who specializes in the diagnosis or treatment of disease with the use of radiation; (g) "Medical physicist" is a physicist who specializes in the application of the principles and techniques of physics in medicine.

Moreover, in section 5 states that the practice of radiologic technology shall include any and all acts by which one renders, furnishes, or contracts to render or furnish professional service as a radiologic technologist. A radiologic technologist shall also be considered in the practice of his profession if the nature and character of his employment requires professional knowledge in the art and science of



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radiologic technology, and such employment or position requires that the holder thereof be a radiologic technologist. Nothing in this Act shall be construed to disqualify other professionals duly registered with the Professional Regulation Commission from performing any of the acts abovementioned: Provided, That under the law or laws governing their respective professions, they may perform the said acts: Provided, further, That no person shall use the title "Radiologic Technologist" or any other title conveying the impression that he is a radiologist technologist without having been issued a certificate of registration as radiologic technologist by the Commission in the manner provided in this Act.

Furthermore, in section 15. Requirement for the Practice of Radiologic Technology and X-ray Technology. Unless exempt from the examinations under Sections 16 and 17 hereof, no person shall practice or offer to practice as a radiologic and/or x-ray technologist in the Philippines without having obtained the proper certificate of registration from the Board.

In section 17. Exemption from examination in Radiologic Technology. Examination shall not be required of the following persons: (a) The first members of the Board of Radiologic Technology as provided in Section 7(b) hereof, (b) Radiologists from other countries invited for lectures of consultation or as visiting or exchange professors to colleges or universities duly recognized by the Government: Provided, That such radiologic technologists are legally qualified to practice as such in their own state or country: Provided, further, That they shall first secure a special permit from the Board which shall be valid as the Board may determine: Provided, finally, That the privilege granted in this subsection shall be given only to radiologic technologists from countries giving similar privilege to their Filipino counterparts.

In section 18, it states that examination required except as otherwise specifically allowed under the provisions of this Act and other exiting laws, all applicants for registration as radiologic technologists and x-ray technologists shall be required to undergo an examination which shall be given once a year by the Board, through the Commission, according to its rules and regulations and at such time and place as may be determined by the Commission. Sec. 19. Qualifications for Examination. Every applicant for examination under this Act shall, prior to admission for examination establish to the satisfaction of the Board that he: (a) Is a Filipino citizen: (b) Is of good moral character and has not been convicted of a crime involving moral turpitude; and (c) Is a holder of a baccalaureate degree in radiologic technology from a school, college or university recognized by the Government if he applies for the radiologic technology examination or is a holder of an associate in radiologic technology diploma from a school, college or university recognized by the Government if he applies for the x-ray technology examination.

In the article shared in simpli.com (2024) that Radiology technicians, also known as radiologic technologists or radiographers, play a crucial role in the healthcare industry by operating diagnostic imaging equipment to capture images of patients' internal structures. Aspiring individuals interested in pursuing a career in this field often want to know about the average salary for radiology techs. However, it is important to understand that several factors can impact their earnings. In this article, we will explore these factors and shed light on why salaries may vary within this profession. The level of education and training achieved by a radiology tech can significantly affect their earning potential. Most entry-level positions require at least an associate degree in radiologic technology from an accredited program. However, some employers may prefer candidates with a bachelor's degree or higher. Radiology techs who pursue additional certifications or specialized training beyond their formal education often have an advantage when it comes to salary negotiations. Certifications such as the Registered Radiologic Technologist (RRT) or specific modality certifications like Magnetic Resonance Imaging (MRI) or Computed Tomography (CT) can demonstrate expertise and may lead to higher-paying job opportunities.



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Moreover, experience plays a vital role in determining the average salary for radiology techs. Those who have been working in the field for several years tend to earn higher wages compared to those just starting their careers. With experience comes increased proficiency, confidence, and the ability to handle complex cases efficiently. And, specializing in a particular area of radiologic technology can also impact salary levels. Some popular specializations include mammography, cardiovascular-interventional technology, nuclear medicine, and radiation therapy. These specialized areas often require additional training and certifications but can lead to higher salaries due to the increased demand for these skills. The geographic location of employment is another crucial factor affecting the average salary for radiology techs. Salaries can vary significantly from one state or city to another due to differences in cost of living, demand for healthcare services, and regional economic factors. Metropolitan areas with higher populations typically have more job opportunities for radiology techs, but they may also have a higher cost of living. This can result in relatively higher salaries compared to rural or less densely populated regions. It is essential for radiology techs to consider the local market conditions when evaluating potential job offers and relocating. The work setting and industry in which a radiology tech is employed also influence their salary. Radiology technicians can work in various healthcare settings, including hospitals, diagnostic imaging centers, outpatient clinics, and physicians' offices. Hospitals often offer competitive salaries due to the larger patient volume they handle and the comprehensive range of services provided. On the other hand, smaller clinics or private practices may offer lower salaries but provide a more specialized or personalized work environment. Furthermore, certain industries outside traditional healthcare settings hire radiology techs. These industries include research facilities, industrial testing laboratories, and government agencies. While these alternative settings may offer unique opportunities, they might not provide salaries comparable to those offered by healthcare institutions.

In conclusion, several factors impact the average salary for radiology techs. Education level, certifications obtained, experience gained over time, specialization within the field, geographic location of employment, and the specific work setting all contribute to variations in earnings. It is crucial for aspiring radiology techs to consider these factors when planning their career path and negotiating compensation packages. In the study of Codomiz, et.al (2017) problems encountered in hiring and retention of radiologic technologists in selected hospitals in the national capital region shows that their study used the descriptive research design to determine the encountered problems in hiring and retention of radiologic technologists in selected hospitals in the NCR specifically in the cities of Las, Pinas, Manila, Muntinlupa, Paranaque, Pasig, and Quezon. The chief radiologic technologists of the participant hospitals were then given a threepart questionnaire that had undergone validation, they were selected using purposive sampling. The data gathered were subjected to statistical treatments such as frequency, percentage, mean, standard deviation, and t-test for independent means. Based on the findings of the study the conclusions were drawn: 1) Majority of the participants were privately owned hospitals; 2) The top five problems encountered in hiring of radiologic technologists in NCR were the following: difficulty in finding qualified applicants with skills, choosing between experience versus education of the healthcare workers, brain drain and lack of qualified and experienced people in the local pool, competition with other hospitals and hospital's ability to accommodate the staff/employees; 3) The top five problems encountered in retention of radiologic technologists included: competitive pay and salary, fast international global competitiveness, job satisfaction, work relationship with co-employees, and growth and promotion; 4) The findings reveal that there was a significant difference in the problems encountered in hiring of radiologic technologists when they were grouped according to type of hospital. Private hospitals encountered more problems in the hiring



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of radiologic technologists than in government hospitals; 5) The findings reveal that there was no significant difference in the problems encountered in retention of radiologic technologists when they were groups according to the type of hospital.

The study determined the problems encountered by radiologic technologists handling pediatric patients of different age groups subjected for radiographic examination in three tertiary-level hospitals in Cebu City for the month of June to December 2006. Study Design: This study utilized the descriptive survey method. Setting: This study was conducted in the radiology department of three tertiary level hospitals in Cebu City namely: Cebu Doctors' Hospital, Vicente Sotto Memorial Medical Center and Cebu Velez General Hospital. Subjects: The radiologic technologists from three tertiary-level hospitals in Cebu City that served as respondents to the survey. The number of pediatric patients was obtained from the X-ray examination report from the said hospitals from the month of June 2006 to December 2006 were also utilized. Procedure/Interventions: The researchers utilized the records of the radiology department of the three hospitals to gather the necessary information on the following: The number of pediatric patient subjected for radiographic examination from the months of June to December 2006, different age group of patients, the experience and difficulties in dealing with pediatric patients, age range where difficulty are encountered most. Radiographic examination performed on pediatric patients. Research Instrument: The study utilized a record sheet where data were documented. The record sheet included that age range of the patient and the date of the examinations. Another data sheet contained the sorted and gathered data from the questionnaires answered by the radiologic technologists. Result: there were 2,073 pediatric patients subjected for radiographic examinations from June 2006 to December 2006 from the three tertiary-level hospitals. All 21 (100%) of the radiologic technologists on the three hospitals have experienced performing radiographic examination on pediatric patients, 17 (86%) of the respondents have difficulties with pediatric patient, among the difficulty encountered by the radiologic technologist, 17 (81%) of the respondents have difficulty with patient motion. In regard with the comparison between pediatric patients and adult, 20 (95%) of the respondents have agreed that pediatric patients are less cooperative than adult patients. Conclusion: For the period covering June 2006 to December 2006, there was sizeable number of pediatric patients that underwent radiographic examinations on the three hospitals. Seventeen (81%) radiologic technologists had difficulty handling pediatric patients. Majority of the problems is the difficulty with immobilizing pediatric patients.(Buot, et. al; 2007).

Choa and Andres (2020) shares a study about the radiology research situation in the Philippines in identifying the barriers and limitations for future directions, it is a descriptive-cross sectional study was conducted under the approval of an institutional review board with informed consent of the participants. The study involved a nationwide scope of radiology residents and employed the use of a validated 34-item printed questionnaire with informed consent form. Respondents were asked to grade their level of agreement with the statements using a Likert Scale. A space for free-text comments and/or opinions was provided at the end of the survey. Appropriate statistics were employed in the analysis of data. Trainees agreed that research should be part of their training (73.0%) and should be a requirement for all trainees (66.8%). Majority also agreed (82.7%) that workshops and trainings will enhance their competence in producing quality research. Protected time (86.4%), sufficient administrative (86.8%) and financial (84.7%) support and accessible facilities (90.3%) are also important in developing meaningful research. Having a research mentor (93.6%) and senior consultants who are also researchers (85.2%) are helpful in guiding trainees and motivating them to also become researchers. Respondents believe that doing research is a part of their success (57.9%) and growth as a competent radiologist (66.7%). Publishing a



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successful research is a greatly fulfilling (76.8%) and exciting experience (66.8%) for the trainees and is a way that they are able to contribute to society (72.4) and help their patients (73.0%).

In conclusion that several factors contribute to the constant problems being faced by residents in producing quality research. Total departmental, institutional and society efforts must be made in order to encourage trainees to do research and produce research-oriented specialists that will secure the future of radiology.

Ganseña, et. al. (2021) presents the study on psychological distress and burnout of radiologic technologists in Batangas province amidst the covid-19 pandemic. The existence of COVID-19 pandemic challenges the healthcare system not just physically but also mentally. This research study is conducted to evaluate the current mental health status of the radiologic technologists in the province of Batangas as they are part of the medical front line and one of the responsible in the early diagnosis and monitoring of COVID-19. The presence of depression, anxiety, stress, and burnout were determined and addressed in this research study as well as its correlation with the socio-demographic profile of the respondents. The survey questionnaire was composed of DASS-21 scale for the measurement of the psychological distress and the CBI questionnaire for the evaluation of burnout among the respondents. It was formulated in google forms and disseminated online. 51 responses were collected from the radiologic technologists who were working for at least 6 months during this pandemic in any hospital around Batangas province. The results revealed that the anxiety is the leading psychological distress being experienced by almost half of the total respondents ranging from mild to extremely severe. On the other hand, almost half of the participants experiencing mild to extremely severe depression while a quarter were experiencing mild to severe symptoms of stress. The radiologic technologists were also experiencing personal, work and COVID-19 pandemic related burnout. COVID-19 related burnout scores the highest among the three with fear of contagion as the leading reason. Majority of the variables under the socio-demographic profile were also found to be correlated with the psychological distress and burnout. This concluded that the presence of COVID-19 pandemic affects the mental health of the radiologic technologists of Batangas province.

Cruz (2008) presents the study on problems encountered by the radiologic technology interns during 2nd semester of their internship program S.Y. 2007-2008. Descriptive method of research was used. Using convenience sampling technique, a total of 49 respondents participated in the study. The researchers used an adapted questionnaire from the study of Camplon et al. (2006). Statistical measures used to analyze specific problems were standard deviation, mean, frequency distribution, percentage and t-test. Based on the findings of this investigation, the following conclusions are drawn: (1) Most of the respondents are female, senior interns and assigned in Hospital A; (2) Problems encountered by the radiologic technology interns in terms of hospital assignment, x-ray facilities and supplies and relationship with patients, cointerns and chief radiologic technologist were homogenous; (3) Problems encountered by the respondents in hospitals assignment, x-ray facilities and supplies, relationship with parents, co-interns and chief radiologic technologist and in general have no significant difference in terms of gender; (4) The problems encountered of the respondents in hospitals assignment, x-ray facilities and supplies, relationship with patients, co-interns and chief radiologic technologist and in general have no significant difference in terms of hospital assigned.

Over the last year, radiologic technologists have become substantial part of the clinical therapeutic managements of patients. According to Cannavale, Santoni, Mancarella, Passariellob, and Arbarello (2013), this implies new liabilities and duties related to interventional procedures which are now added to already existing professional liability from diagnostic exams. In clinical practices there are many errors



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that may harm patients that will lead to medical malpractice lawsuits. Medical malpractice generally related to two issues: improper medical care leading bodily harm or the physician-patient relationship. Identification and reduction of diagnostic error provides a measure of efficiency of the healthcare system, as it reduces mortality, morbidity, length of hospital stay and additional healthcare costs. In accordance with Cannavale et al. (2013), awareness of main medical issues may help Radiographers to improve their quality of healthcare service and improve their growth in their chosen fields. Medical malpractices may affect the behavior of the technologists to enhance the global care of the patient reducing the risk errors and troubles in the Radiology Department.

Agudo (2019) study on the risk management in radiology is primarily developed and fostered to help safeguard patients, working personnel, and the entire organization. This research was conducted to determine the factors contributing to errors in radiographic imaging. Descriptive-correlational design was used to obtain information and determine relationship of professional and personal factors to the demographic profile. The study was conducted at the Philippine Orthopedic Center and the St. Frances Cabrini Medical Center. The data gathering tool used was an adapted researcher-made type consisting of several parts. The first part is the adapted tool, which is about professional and personal factors contributing to errors in radiographic imaging and the second part is self-made which is answerable by yes or no. Results show that majority of the respondents are aged 20 to 40 years old and are junior radiographers in their hospitals. Most of them finished bachelor's degree with five to 10 years of service. Professional and personal factors have no significant relationship with the demographic profile in committing errors in radiographic imaging, except for the position in the hospital (for public hospitals). The higher the length of service the less they perform quality healthcare service due to familiarization in their workload.

The Philippine Star gave a news about the shortage of radiologist threatens delivery of health care services by Jaymalin (2015). The Licensed radiologists in the country are becoming fewer and threatening the delivery of health care services, a teleradiology provider warned yesterday. Mediarchives Philippines Inc. (MAPI) said unread X-ray, CT scan and biopsy results are piling up in healthcare facilities in the provinces due to lack of licensed radiologists. "The backlog in unread or unanalyzed X-ray results, which runs from six months to eight months, is also hurting government's continuing effort to stop the spread of tuberculosis (TB), which could only be property detected through an X-ray test," MAPI added. MAPI attributed the shortage to the discouraging passing rate in radiology board examinations conducted by the Professional Regulation Commission. "Fewer students are opting to enter the radiology profession and augment the diminishing population because of the low passing rate," it said. Last year alone, only 72 radiology graduates passed the licensure examination out of hundreds of batches during previous years. MAPI estimates that there are only 1,500 radiologists in the country, while many other graduates have gone abroad or have shifted to more lucrative jobs. "This means only 1,500 radiologists could provide help to 100 million Filipinos when the national ratio should be one radiologist doctor per 10,000 population. We're missing at least 85 percent coverage," MAPI explained. The Philippine College of Radiology has only 902 members of "good standing" on its list.

As reported by Yu (2024) in Rapler.com that the Philippines, like many other countries around the world, is struggling with a shortage of radiologists. But innovations in medical artificial intelligence might help with that. The Philippines has more than 110 million people spread out over thousands of islands. But that population is served by about 2,500 radiologists, Dr. James delos Santos, president of the Philippine College of Radiology, told Rappler. That means the Philippines only has about 2 radiologists per 100,000



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Filipinos. To put that in perspective, developed countries like the United Kingdom and Singapore have 8.5 per 100,000 and 7.6 per 100,000, respectively, and they're already grappling with their own radiologist shortages. In light of the shortage, an all-Filipino company hopes to use AI-assisted equipment to help the country's few radiologists do more. Advance ability is bringing what it calls a "portable AI-driven X-ray system" that has the ability to detect diseases in minutes and serve more patients with shorter waiting times. Partnering with Indian AI medical imaging firm DeepTek, the X-ray system distributed by Advanced Abilities can detect 32 pathologies and conditions, including tuberculosis. The system can conduct 200 scans in eight hours, with each scan showing an AI-powered percentage prediction of possible conditions. "These technologies are not here to replace, but to aid. It's a tool. It makes our productivity and outputs more efficient," Advanced Abilities chief executive officer and president Angelo Antonio Buendia said.

Even with the new technology, a radiologist would still be required to verify, approve, and sign the generated report. What the AI helps with is speeding up the process and allowing a single radiologist to do more scans than they could before. "This solution is already being used in Chennai City, India, where 500 in every 100,000 patients are getting a diagnosis, demonstrating a 25 times increased yield of detecting tuberculosis. This kind of result can now be replicated here in the Philippines with the help of AI Smart Scan," Buendia said, adding that it is already being deployed in some Maxicare clinics. The AI also has a triaging feature which lets radiologists know which scans to prioritize. For instance, if a radiologist has dozens of scans lined up, the AI system can bump up certain scans in the queue based on the suspected morbidity of the cases.

Like many AI solutions, DeepTek's AI works by aggregating data from the scans of many patients, but the system promises to follow ethical and responsible AI guidelines. It is designed so that a radiologist can see whether a person's age, group, ethnicity, weight, or gender could affect the accuracy of the scan's result – transparency that can help avoid bias in the AI's model. "AI is still in its early stage, and AI accuracy might change from location to location," said DeepTek CEO Ajit Patil. "This responsibly gives you full transparency into what is the realworld accuracy of your AI on a day-to-day basis." The AI system has secured regulatory approval in the United States, Thailand, India, and Kenya. In the Philippines, the Department of Science and Technology's Health Technology Assessment Council is also examining the system "The AI already has US [Food and Drug Administration] approval. We are currently in the application process for Philippine FDA. For the X-ray machine, we are fully compliant with all necessary permits and certifications, including Philippine FDA and [Bureau of Customs] requirements for important," Buendia told Rappler.

Before we rush to embrace AI as the solution to the country's problems, there are some important considerations. For instance, while it's true that the Philippines lacks radiologists, Philippine College of Radiology president Delos Santos emphasizes that it's a "relative sort of shortage." The country's radiologists and the expensive equipment that they need are mostly based in the cities, which means the challenge is getting both the doctors and the tools to the provinces. "In the peripheries, yes, you would expect that there will be less radiologists because as you see the practice of radiology is not just like an internist nor a family medicine physician that you see patients, you get consultations, you do physical examination and give medications," Delos Santos told Rappler. "We are technologically based. So, if you lack machines in a certain outskirt, it's also difficult for you to have a radiologist because the radiologist cannot work on anything," he added. This gap of equipment and radiologists is where AI X-ray systems like Advanced Abilities' hope to come in, but even then, a radiologist would still be needed to double-



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check results. Since radiologists would still be needed to check the scans, Delos Santos said that we should see what improvements AI could offer over existing practices.

For instance, it's worth checking whether the portable X-ray and AI system is really more cost-effective than setting up a mobile clinic with an X-ray. By using the mobile clinic and tele-radiology, a digital copy of the X-ray scan could also be sent to a radiologist based elsewhere – such as the city – to be read. Mobile clinics also have the advantage of being able to accommodate machines for other tests like mammography and ultrasound. "AI can aid in the diagnosis of tuberculosis, but I think what's more important is actually to tap your radiologists, and at the same time using another old technology, which is tele-radiology. Basically it's just a simple way of sending the image to the radiologist for it to be read, and it can be transported back agad (immediately)," Delos Santos told Rappler. There's also the question of the effectivity of the AI system. While DeepTek said that it's AI performs above global standards with "90% specificity and 90% sensitivity," Delos Santos cautioned that AI always has a learning curve. For instance, he said that when trying to diagnose tuberculosis, one has to be wary of "an entire gamut of diseases" that can similarly present itself in the upper lobes of certain patients. "If it will be based on AI alone, then there can be some fault in the diagnostic process. That's why you need a radiologist on top of the AI to be able to really check and verify if this is really [tuberculosis] or not," he said.

Radiologic technologists are essential members of any health care team from the emergency department (ED) to cardiology and pediatrics. The work they do, both with the patient and behind the scenes, impacts patient outcomes, as well as the function and operational success of the radiology department on a daily basis. As stated by gehealthcare.com, When times get tough, heroes emerge. Especially true during the global pandemic, radiologic technologists worked tirelessly to image many sick patients so clinicians could quickly diagnose and treat patients infected with the virus. The frantic pace and high volumes of patients coming to EDs became the new normal for hospitals and health facilities. Many patients received X-Ray or CT exams that were critical to the detection of COVID-19. Even before the pandemic crisis, however, the demand for imaging was growing. An estimated 4.2 billion imaging procedures were performed in 2019. X-Ray and ultrasound tests make up slightly more than 80 percent of that total. (2019, Global Imaging Outlook Report)

Smith-Bindman, Miglioretti, Johnson E, et al(2012). More than 80 percent of all hospital and health system visits include at least one imaging exam. Radiologists and X-Ray technologists are often the first encounter a patient has when they present to the ED or to their physician with abnormal symptoms and need an answer. Answers to patients' clinical questions depend on accurate imaging exams and the technologists who acquire them, making X-Ray technologists a vital part of the radiology medical team. Earlier this year, GE Healthcare launched the X-Ray Technologist Awards and a call for entries to celebrate technologists who have dedicated their time and talent to advance the quality of patient care. Highlighting some of the excellent submissions, GE Healthcare would like to shine a light on the work that X-Ray and radiologic technologists are doing to enhance patient care and streamline the radiology workflow.

On the other hand, under Republic Act No. 7722, the Commission on Higher Education (CHED) is mandated to promote quality education, broaden access to higher education, protect academic freedom for continuing intellectual growth, and ensure advancement of learning and research. Under the overall supervision of CHED, access to higher education in the Philippines is provided by both private and public higher education institutions (HEIs). Private HEIs may be classified as non-sectarian and are owned and operated by private entities that are not affiliated to any religious organization, while those classified as sectarian are usually non-stock and nonprofit entities. Both types are duly incorporated under the



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Corporation Code of the Philippines. In general, private HEIs are covered by the policies, standards and guidelines set by CHED in terms of programme offerings, curricula, administration and faculty academic qualifications, among others. Public HEIs are state universities and colleges, local universities and colleges, and other special government schools. State universities and colleges are chartered public HEIs established by law and administered and financially subsidized by the government. Local universities and colleges are established by the local government through resolutions or ordinances and are financially supported by the local government concerned. Special HEIs provide specialized training in areas such as military science and national defence and fall under the responsibility of the government agency that created them. Other public HEIs offer post-secondary education, usually technical vocational programmes. The issuance of permit and recognition to offer baccalaureate programmes in all disciplines has been decentralized by the CHED Central Office to the regional offices. However, the issuance of permit and recognition to offer graduate programmes and baccalaureate programmes in nursing, medicine and maritime is still done at the Central Office, through the Office of Programs and Standards. CHED is also mandated to regulate the establishment and operation of review centres and similar entities.

As part of its policy formulation, CHED has designated disciplines that HEIs must prioritize, namely: sciences, medicine and health-related programmes, maritime, engineering and technology, agriculture, agriengineering, forestry and veterinary medicine, teacher education, IT related, mathematics, architecture and town planning. CHED also comes up with higher education indicators for monitoring purposes such as statistics on entrants and graduates of HEIs. No disaggregated data is available on sciences and health-related programmes. Furthermore, the passing performance of licensure examinations in medicine and health-related programmes is a good indicator of educational preparedness and practical knowledge of new graduates to qualify for the practice of their profession. (World Health Organization, 2013)

#### **College Admission Test**

In the competitive world of college admissions, students are constantly seeking ways to stand out from the crowd. One method that students will enter college is to take an admission test and it is given every year. These tests, offered by the Tertiary institution, allowing students to showcase their knowledge and skills in specific subject areas. There are several roles of entrance tests in college admissions. It also discusses here the benefit of prospective students.

One of the main purposes of tests is to demonstrate subject proficiency. These exams are designed to assess a student's knowledge and understanding of specific subjects such as math, science, history, literature, and foreign languages. By taking these tests and earning high scores, students can show colleges that they have a strong foundation in these areas. Additionally, with thousands of applications flooding into colleges each year, it's crucial for students to find ways to differentiate themselves from other applicants. Taking SAT Subject Tests can be one effective strategy for standing out. And also by submitting strong scores on these exams, students demonstrate not only their academic prowess but also their dedication to mastering specific subjects outside of regular coursework. This level of commitment can impress admissions officers who are looking for well-rounded individuals with a genuine passion for learning.

Another advantage of SAT Subject Tests is that they allow students to supplement weak areas or non-traditional courses on their transcripts. Not every high school offers a wide range of advanced courses or electives in specialized subjects such as computer science or psychology. However, by taking the corresponding SAT Subject Test, students can showcase their knowledge and skills in these areas. For instance, if a student's high school does not offer an AP Computer Science course, they can still



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demonstrate their proficiency in the subject by taking the SAT Subject Test in Computer Science. This not only fills any gaps on their transcript but also provides evidence of their ability to excel in areas beyond what their school curriculum offers. Lastly, some colleges have specific requirements or recommendations regarding SAT Subject Tests. While many institutions no longer require these exams as part of the application process, some highly selective schools still consider them an important factor in evaluating applicants. It is crucial for students to research the specific requirements of each college that they are interested in applying to. Some colleges may require or recommend certain subject tests for admission into specific programs or majors. By understanding these requirements early on, students can plan accordingly and ensure that they meet all necessary criteria for admission. In conclusion, SAT Subject Tests play a significant role in college admissions by demonstrating subject proficiency, differentiating oneself from other applicants, supplementing weak areas or non-traditional courses, and meeting college-specific requirements. While not all colleges require these tests, taking them can provide a competitive edge and showcase a student's dedication to academic excellence. Therefore, it is important for prospective students to consider taking SAT Subject Tests as part of their college admissions strategy.

In an article of myFUTURE.com, share that a college entrance exam is a standardized aptitude test that measures the aptitude in various areas such as verbal, math, analytical and writing skills. These tests are not designed to measure what they have learned in school; rather, they measure their potential to perform well in the future. Furthermore, the high school courses will help them prepare for these exams. However, taking practice exams is an additional way to study, as they will help them become familiar with the types of questions asked, the format of the questions and the timing necessary to finish each section. The college they are applying to and where they stand in school will determine which standardized test that need to take. Below is a list of tests colleges most commonly use to assess prospective students:

The PSAT (Preliminary Scholastic Aptitude Test) is a test taken by sophomores or juniors in high school looking to gain test-taking experience in preparation for the ACT and SAT. The PSAT serves as great practice and taking it qualifies and gauge their performance which could eventually help them save on college. Because the PSAT is only a practice test, the score they receive on it does not affect their transcript. In fact, their PSAT score is for their betterment; their score can identify areas where they need to apply more study time, which may help them prepare for the ACT and SAT more efficiently.

The SAT(Scholastic Assessment Test) is a standardized aptitude test that measures a student's readiness for college. It is made up of three sections: reading, writing and language, math and an optional essay. The Essay is only available in states where it's required as part of SAT School Day administrations. Students scheduled to take the SAT on a school day should check with their school about whether the Essay will be included. Questions are generally multiple choice, and the essay involves analyzing a piece of writing. Each section is scored on a scale from 200–800, with a total possible score of 1,600. Optional essay results are reported separately. Be sure to find out if their colleges of choice require SAT essay scores before they take the test. The SAT is offered seven times throughout the year, and they are given three hours to complete it (the optional essay takes an additional 50 minutes).

The best way to get a good score on exams that measure knowledge (GED, SAT Subject Tests and AP Tests) is to study. They should always prepare in taking college-preparatory or AP courses throughout high school, if they are offered. Take practice tests and request detailed score reports so they can focus on areas for improvement. If needed, enlist a tutor for extra help; most high schools offer special tutoring programs for standardized tests.



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If they don't want to use a tutor, check out one of the many test preparation books at school, local library or bookstore. There are dozens available, and they can get one specific to the test they are taking. Some private organizations also offer specific test-prep courses in person and online. Aptitude tests (TOEFL, ACT, SAT, PSAT), sometimes referred to as ability tests, require slightly different preparation. Unlike knowledge tests, aptitude tests measure potential and ask questions that go beyond a specific curriculum. The results help determines their natural strengths and weaknesses, and school counselors often use them as a reference for academic direction.

The best way to prepare for an aptitude test is to become familiar with the types of information covered and the types of questions that are asked. They could start by purchasing a study guide. It will cover every area of the test so they know what to expect, and many include information on time limits and the test's scoring system. Also, take any practice tests available. Aptitude practice tests will allow them to get used to the types of questions asked, how they are worded and working against a time limit.

In the article of appily.com share the idea that some colleges and universities offer a college admissions interview, which allows applicants to visit with admissions officers or alumni interviewers and discuss why they are a good fit for next year's freshman class. The importance of the interview, however, depends on the institution. The top admission factors for freshmen have been consistent for decades, according to a survey collected by the National Association for College Admission Counseling. The survey found that the top factor for college admissions was a student's grades in college-prep courses (79%). That was followed by strength of curriculum and grades in all courses (60%) and admission test scores (53%), the report stated.

In fact, admissions interviews are not included in a set of criteria that's considered by most college admissions officials after grades, curriculum and test scores are taken into account. The second-most important criteria include essays or writing samples, teacher and counselor recommendations, a student's demonstrated interest, class rank and extracurricular activities.

Admissions interviews hold moderate to considerable importance to only a small set of colleges and universities. These institutions, which are typically elite and private, use the admissions interview, along with other factors like subject test scores in Advanced Placement (AP) or International Baccalaureate (IB) classes, portfolios, SAT II scores, state graduation exams and work experience to make admissions decisions. Whether or not to do an admissions interview comes down to the type of institution a student is applying to. Doing one probably will help at private and elite colleges, but have less of an impact at larger public colleges. Regardless, an interview is a good way to get to know a college and ask questions about the curriculum and atmosphere.

Moreover, in the article of fastercapital.com that in understanding the importance of college interviews is a crucial aspect of the college application process. College interviews provide an opportunity for prospective students to showcase their personality, interests, and potential contributions to the campus community. It allows admissions officers to gain a deeper understanding of the applicant beyond their academic achievements and test scores. 1.)Personal Connection: College interviews offer a chance for applicants to establish a personal connection with the admissions committee. By engaging in a face-to-face conversation, students can convey their passion for the institution and demonstrate genuine interest in becoming a part of the campus community. 2.) Demonstration of Communication Skills: Interviews provide a platform for students to showcase their communication skills. Effective verbal and non-verbal communication, such as maintaining eye contact, active listening, and articulating thoughts clearly, can leave a positive impression on the interviewer. 3.) Highlighting Unique Qualities: College



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interviews allow applicants to highlight their unique qualities and experiences that may not be evident in their application materials. By sharing personal anecdotes and stories, students can provide a more comprehensive picture of their character, values, and aspirations. 4.) Assessing Fit: Interviews also serve as an opportunity for both the applicant and the college to assess mutual fit. Through thoughtful questions and discussions, students can gain insights into the college's culture, academic programs, and extracurricular opportunities, helping them determine if the institution aligns with their goals and aspirations. 5.) Addressing Weaknesses: Interviews provide a chance for applicants to address any weaknesses or gaps in their application. Students can use this platform to explain extenuating circumstances, showcase personal growth, or provide additional context to their achievements. It is important to note that while college interviews hold significance, they are just one component of the holistic admissions process. Applicants should also focus on other aspects, such as strong academic performance, compelling essays, and meaningful extracurricular involvement, to present a well-rounded application.

Furthermore, the article also share the topic understanding on College preparedness such as: 1.) Academic Preparedness with content mastery in which the College readiness involves having a solid grasp of core academic subjects. Students should be proficient in mathematics, science, language arts, and social studies. For example, a student who can solve complex algebraic equations or analyze historical texts demonstrates content mastery. 2.) Academic preparedness with critical thinking that is beyond rote memorization, college-ready students engage in critical thinking. They can evaluate evidence, synthesize information, and construct well-reasoned arguments. Consider a student who can analyze a scientific research paper or dissect a philosophical argument. 3.) Non-cognitive factors such as growth a.) Growth Mindset in which College readiness extends beyond cognitive abilities. Students with a growth mindset believe that effort leads to improvement. They embrace challenges and persist through setbacks. For instance, a student who views a low grade as an opportunity to learn rather than a failure exhibits a growth mindset. b.) Self-Regulation in which successful college students manage their time, set goals, and regulate their emotions. They avoid procrastination and prioritize tasks effectively. Imagine a student who balances coursework, part-time work, and extracurricular activities without feeling overwhelmed. 4.) Social and emotional skills such as a.) College readiness includes effective communication skills. Students must express themselves clearly in writing and speech. A student who can articulate their ideas during a class discussion or write a persuasive essay demonstrates communication competence. b.) College life can be challenging. Resilient students bounce back from setbacks, adapt to new environments, and seek support when needed. Consider a student who faces academic difficulties but seeks tutoring or counseling rather than giving up. 5.) Navigating College systems such as: a.) Financial literacy in which understanding college costs, financial aid, and budgeting is essential. College-ready students know how to apply for scholarships, manage loans, and make informed financial decisions. B.) Campus Resources is needed where students need to navigate campus services such as libraries, counseling centers, and career offices. A college-ready student knows where to find academic support, mental health resources, and job placement assistance. 6.) Cultural competence with a.) Diversity awareness in which College campuses are diverse, with students from various backgrounds. Cultural competence involves respecting differences, understanding privilege, and promoting inclusivity. A student who engages in cross-cultural dialogues and appreciates diverse perspectives is culturally competent. B.) Global awareness that In an interconnected world, college readiness includes awareness of global issues. Students should understand geopolitical events, environmental challenges, and cultural interdependencies. For example, a student who studies



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international relations or volunteers abroad develops global awareness. 7.) Transition skills wherein a.) From High School to College in which a bridge programs address the transition from high school to college. Students learn about academic expectations, time management, and study skills. An example might be a bridge program workshop on effective note-taking techniques. b.) From Community College to Four-Year Institutions where transfer students need specific readiness skills. They must understand credit transfer policies, degree requirements, and academic planning. A student who successfully navigates this transition demonstrates college readiness.

In summary, college readiness encompasses not only academic knowledge but also non-cognitive skills, cultural awareness, and practical abilities. Bridge programs play a vital role in preparing students for the challenges and opportunities of higher education. By fostering a holistic understanding of college readiness, educators can better support students on their academic journeys.

The article fastercapital.com of 2024 share that there are College admission consultants which serve as knowledgeable navigators, helping students chart their course through the vast sea of colleges and universities. They consider factors such as academic programs, campus culture, location, and extracurricular opportunities. For instance, a consultant might recommend liberal arts colleges for students seeking a well-rounded education, while suggesting research-focused universities for those passionate about scientific inquiry. With an example like, imagine a high-achieving student torn between a small liberal arts college and a large state university. A consultant would delve into their aspirations, learning style, and long-term goals to provide personalized guidance. It also helps student as crafting a compelling application requires strategic planning. Consultants help students identify their unique strengths and passions, aligning them with the college's values. They advise on standardized tests (SAT, ACT), extracurricular involvement, and teacher recommendations. In such like, a consultant might encourage a budding environmentalist to highlight their sustainability initiatives in their application, emphasizing their commitment to creating positive change. And some essay guidance and storytelling where essays are the soul of an application. Consultants assist students in weaving their narratives, emphasizing growth, resilience, and authenticity. They encourage students to share personal anecdotes that reveal character and values. In such that a consultant, might work with a student who faced adversity say, overcoming a language barrier—to write an essay that showcases their determination and adaptability. They also help interviews can be nerve-wracking. Consultants conduct mock interviews, offering constructive feedback. They teach students to articulate their passions, discuss their experiences, and connect with interviewers. Such as helping them like picture a student preparing for an alumni interview. A consultant would simulate the experience, helping the student refine their responses and build confidence. They also recommend financial aid and scholarships because College is expensive, and consultants guide families through the financial aid process. They demystify PESCA, CSS Profile, and scholarship applications and a consultant might recommend merit-based scholarships based on a student's exceptional achievements in music or sports. While consultants offer valuable support, ethical boundaries are crucial. Transparency about fees, avoiding plagiarism, and maintaining the student's voice are paramount. As an ethical consideration, a consultant would never write an essay for a student but would instead help them express their ideas eloquently. There are success stories and testimonials that kept by the admission consultant like hearing from students who secured admission with consultant assistance provides powerful validation. Success stories underscore the impact of personalized guidance. In which, a student who gained acceptance to their dream school might credit their consultant's mentorship in their acceptance letter.



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In summary, college admission consulting is a dynamic field that combines expertise, empathy, and personalized guidance. Whether it's demystifying financial aid or shaping compelling narratives, consultants play a vital role in students' educational journeys. Remember, the journey matters as much as the destination, and a skilled consultant can make that journey smoother and more rewarding.

Moreover, in understanding the importance of College Admission tests is a crucial aspect of the college application process. These tests serve as a standardized measure of a student's academic abilities and potential for success in higher education. They provide colleges and universities with a common benchmark to evaluate applicants from diverse educational backgrounds. 1.) Assessing Academic Preparedness: College admission tests, such as the SAT or ACT, assess a student's knowledge and skills in areas like math, reading, and writing. By evaluating these core competencies, colleges can gauge a student's readiness for the academic rigor of their programs. 2.) Equalizing Opportunity: Standardized tests help level the playing field for students from different educational backgrounds. They provide an objective measure of academic achievement, allowing colleges to evaluate applicants fairly, regardless of their school's grading system or curriculum. 3.) Predicting College Success: Research has shown a correlation between performance on college admission tests and academic success in college. These tests can help colleges identify students who are likely to thrive in their academic environment and contribute positively to the campus community. 4.) Comparing Applicants: With a large pool of applicants, colleges need a reliable method to compare students. College admission tests provide a standardized metric that allows admissions officers to assess applicants' abilities and potential in a consistent manner. 5.) Scholarship Opportunities: Many scholarships and financial aid programs consider college admission test scores as a factor in awarding funds. Higher scores can increase the chances of receiving merit-based scholarships, reducing the financial burden of college education. To illustrate these points, let's consider an example. Imagine two students with similar high school GPAs but different backgrounds. One student attended a highly competitive school with rigorous academic programs, while the other attended a school with limited resources. College admission tests can help colleges differentiate between these students and understand their academic potential beyond their GPA.

Understandably, the importance of college admission tests is essential for both students and colleges. These tests provide a standardized measure of academic preparedness, equalize opportunities, predict college success, facilitate fair comparisons among applicants, and open doors to scholarship opportunities. By considering these factors, students can approach college admission tests with a comprehensive understanding of their significance in the admissions process.

To understand the College application process, the following statement were advised: 1.) The Importance of Research: Before diving into the college application process, it is crucial to conduct thorough research. This involves exploring various colleges and universities, understanding their admission requirements, and evaluating their academic programs and campus culture. By doing so, students can make informed decisions and identify the institutions that align with their goals and aspirations.2.) Components of a College Application: A college application typically consists of several components that provide a holistic view of the applicant. These components may include personal information, academic transcripts, standardized test scores, letters of recommendation, extracurricular activities, and essays. Each component plays a vital role in showcasing the applicant's strengths, achievements, and potential contributions to the college community.3.) Crafting a Compelling Personal Statement: One of the most critical aspects of the college application process is the personal statement or essay. This is an opportunity for students to express their unique experiences, passions, and aspirations. A well-crafted personal



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statement should be authentic, engaging, and reflective of the applicant's personality and values. It should also demonstrate strong writing skills and the ability to articulate thoughts effectively. 4.) Navigating the Admissions Timeline: Understanding the timeline of the college application process is essential for staying organized and meeting deadlines. This includes researching application deadlines, scheduling standardized tests, requesting letters of recommendation well in advance, and allocating sufficient time for essay writing and revisions. By following a structured timeline, students can ensure that their applications are submitted on time and avoid unnecessary stress. 5.) Financial Considerations: College education often comes with a significant financial commitment. It is crucial for students and their families to understand the financial aid options available, such as scholarships, grants, and student loans. Researching and applying for financial aid early in the process can help alleviate the financial burden and make higher education more accessible.

Just to be mindful about the college application process that it can be complex and overwhelming, but with careful planning, research, and attention to detail, students can navigate it successfully. By understanding the nuances of the process and utilizing the resources available, students can increase their chances of gaining admission to their desired colleges and universities.

As same through with the article written in StudentScholarship.org the largest collection of scholarship on the web shares that the vast majority of colleges across the globe require applicants to successfully complete an admission test before they can be admitted. For college applicants, this is often the most difficult hurdle to overcome in their academic journey. No matter how excellent their application might be, or how good their grades are, they can still be denied acceptance to their school of choice if they don't perform well in their admission test. Generally, college admission tests are administered so that universities can obtain an overall idea about the skills of the students. It can also be gauged from the results whether the said applicant is ready for college. This means that college admission tests play a crucial role when they are applying for college, and encompass the following considerations: 1.) They test the student's academic readiness for college. Even though students may have already graduated from high school, this doesn't necessarily mean that they're academically equipped for college. There are still those students that need an extra push or may have passed their final exams only by a slim margin. This fact is precisely why a college admission test is given. Universities have standards to uphold, and they have to ensure that the students they admit meet the academic readiness criteria that they're looking for. For instance, a student can be tested in the following areas: English, reading and writing skills, and science; Analytical skills and Arts, history, math, and world languages and culture. To improve their chances for admission, students can also get in touch with experienced college consultants that can guide them through the entire admissions process. 2.) They balance out differences in diverse applications. Remember that no two schools are alike. High schools may have different standards for graduation and for the computation of grades. So, it is safe to say that college applicants coming from different high schools across the state, nation, or even from other countries are not on an equal footing. A standardized college admission test is an excellent and effective way to gauge diverse applications. For example, on an applicant's grade records, the GPA may be quite low for science subjects. If this record happens to be the sole criteria for admission, the applicant could be denied acceptance in a university that focuses on the sciences. However, if the college administers an admission test and the applicant aces it, then he or she has a fair chance of being accepted. The example above shows that there's a way to balance out individual differences. This makes it easier for the university to arrive at a sound decision as to whether or not a particular student is, in fact, fit for that course. 3.) They serve as a basis for scholarship applications. For students who wish to apply



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for a scholarship, the entry requirement becomes even more stringent. College admission tests are used to determine which scholarship a particular student qualifies for and deserves. Scholarships given to deserving students are based on certain criteria pertaining to grades and test results. Plus, it's often the case that when your grades and admission test results are higher, it also increases the likelihood of being granted more than one scholarship. 4.) They enable colleges to determine specific classes suitable for students. No matter what the chosen course of an aspiring applicant may be, there are common subjects across different courses that everyone has to take. Examples of such compulsory courses are Geography, History, Literature, English, Psychology, and Math. Since each of these courses has its respective level of difficulty, an applicant's college admission test result can often be the determining factor as to which level of a particular class they should be placed in, such as Advanced Math. If there's a mismatch, a student may end up being placed in a class that's too advanced for the standard they've been used to in their high school. This will lead to an unreasonable increase in the likelihood of the student failing.

As they begin making their way to college, they should be well aware that college admission tests are very important. They have to spend considerable time preparing for them, or they might lose their chance of getting accepted in their university of choice. Universities go through many applications for each opening, so a college test is a good way to filter out the options. Those enumerated advised are only a few of the important roles a college admission test can be used. And, it is up to them to ensure that they are prepare for their college admission test very well.

Consistently, in the article of eklavvya.com that admission tests are an important tool for educational institutions to assess the capabilities and potential of students who are seeking admission into a particular program or course. They help to identify the skill set and aptitude of the applicant and ensure that they are a good fit for the program they are applying to. In today's competitive education landscape, it is not uncommon for the number of applicants to far exceed the number of seats available in a particular program or course. Additionally, admission tests are assessments that are used to evaluate the readiness and qualifications of students applying to a school, college, or university. They are designed to measure the student's knowledge, skills, and abilities in a particular area, such as math, reading, or writing.

In such situations, admission tests become an effective way to filter out the right candidates and ensure that only the most qualified and capable students are accepted into the program. One of the key benefits of admission tests is that they can be conducted online, using AI proctoring. This allows educational institutions to analyze the skills and competencies of a large number of applicants in a cost-effective and efficient manner. With AI proctoring, institutions can accurately assess the aptitude of applicants and make informed decisions about who to admit into their programs. Admission tests are an essential part of the higher education admissions process and can help educational institutions to identify the best candidates for their programs. With the use of online admission tests and AI proctoring, institutions can conduct these tests on a large scale with high accuracy, making the admissions process more efficient and effective.

#### **Professional Licensure Examination**

The Radiologic Technology program requires a full-time, four-year committed study. This course is Bachelor of Science in Radiologic Technology. The first three years consists of a didactic component taught at the classroom and the last year is the clinical education component undertaken in the affiliated training hospital.

The CPT (Current Procedural Terminology) manual divides the Radiology chapter into four subsections. These are: Diagnostic Radiology (Diagnostic Imaging), Diagnostic Ultrasound, Radiation Oncology and



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Nuclear Medicine.

The Republic Act No. 7431 is an Act regulating the Practice of Radiologic Technology in the Philippines, creating the Board of Radiologic Technology, Defining its power and Functions and Other purposes. As describes in section 21 the scope of examination in Radiologic Technology. Unless changed or modified by the Board, the examination in radiologic technology shall cover the following subject with the corresponding weights as follows: (a) Radiation Physics and Equipment Maintenance 10% Radiobiology and Radiation Protection 10% (b) Radiographic Positioning 10% Radiographic Technique 10% Special Procedures 10% (c) Anatomy, Physiology and Medical Terminology 10% (d) Photochemistry and Film Analysis 0% (e) Nursing and Department Procedures in Radiology and Professional Ethics 5% (f) Ultrasound 5% (g) Radiation Therapy 5% (h) Nuclear Medicine 5% (i) Radiologic Pathology 5% (j) Computed Tomography/Magnetic Resonance Imaging 5% Section 22. Report of Ratings. The Board shall, within one hundred twenty (120) days after the date of completion of the examination, report the rating obtained by each candidate to the Commission which shall submit such report to the President of the Philippines for approval.

In order to pass the examination, a candidate must obtain a weighted average of at least 75% with no rating below 60% in any subject. An examinee who obtains an average rating of 75% or higher but gets a rating below 60% in any subject shall be allowed to take a reexamination in only those subjects in which he obtained a rating below 60%. Such examination shall, as far as practicable, be taken in the next scheduled examination. In order to pass the second examination, the examinee must obtain a rating of 75% in each of the subjects repeated. If the candidate still fails the reexamination, he shall as far as practicable, be required to repeat said subjects during the succeeding examination. When an applicant fails to qualify after the third examination, he shall be required to take the entire examination. Section 23. Oathtaking. All successful examinees shall be required to take a professional oath before the Board or before any person authorized by the Board to administer oaths prior to the practice of their profession as radiologic technologists and/or x-ray technologists.

Section 24. Issuance of Certificates of Registration. Every applicant who has satisfactorily passed the required examination shall, upon payment of the registration fee as provided in Section 25, be issued a certificate of registration as radiologic technologist and/or x-ray technologist.

The Board shall, subject to review by the Commission, issue the corresponding certificates to persons who apply for the same who are exempt from the examinations provided under Sections 16 and 17 hereof. All certificates of registration shall contain the full name of the registrant, serial number, signature of the Commissioner, date of issuance, and the official seal of the Board duly affixed thereto. Section 25. Fees. Unless otherwise fixed by the Commission, each examinee or registrant shall pay the following fees: (a) For application for examination P350.00 (b) For registration after passing the board examinations P250.00 (c) For registration without examination P250.00 (d) For replacement of lost or destroyed certificate of registration P100.00 (e) For reissuance of revoked certificate P100.00

In section 26 states that the Penal Provisions of any person who shall practice radiologic technology and/or x-ray technology in the Philippines, within the meaning of this Act, with any of the following attending circumstances shall, upon conviction by final judgment, be punished with a fine of not less than Ten thousand pesos (P10,000) nor more than Forty thousand pesos (P4,000), or by imprisonment of not less than one (1) year nor more than six (6) years, or both, at the discretion of the court: (a) Without a certificate of registration in accordance with the provisions of this Act; (b) Presenting or using as his own the certificate of registration of another person; (c) Using an expired license, or suspended or revoked



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certificate of registration; (d) Giving any false or forged evidence to the Board of Radiologic Technology in order to obtain a certificate of registration; (e) Posing or advertising as a registered radiologic and/or x-ray technologist or using any other means tending to convey the impression that he is a registered radiologic and/or x-ray technologist.

After getting a license and be a certified professional, the task is not yet the end but the beginning of new journey of being a Certified Radiologic Technology. There are several professional groups like RadPeer that offers radiologists a valuable opportunity to engage in peer review activities for professional growth and quality improvement. By participating in RadPeer, radiologists can enhance their skills, stay current with evolving standards, collaborate with peers, and ultimately provide better patient care. Embracing the benefits of RadPeer is a step towards continued professional development in the field of radiology.

The professional Radiologist also can be a member of the Philippine Association of Radiologic Technologist, Incorporated. They give workshop, seminars and trainings to ensure that their member can have a Continuing Professional Development (CPD) units. CPD plays a role in protecting the public by ensuring that registered practitioners are up to date with the skills, knowledge and attributes for safe, contemporary practice in their field of professions.

Gimenez (2022) the birth of Philippine Association of Radiologic Technology were summarized the history of radiology in the Philippines, including the formation of the Philippine Radiological Society in 1948 by seven pioneers. It describes the establishment of the Philippine College of Radiology in 1970 and the first school of radiologic technology in 1969. The formation of several professional associations for radiologic technologists is also outlined, as well as the creation of the Board of Radiologic Technology in 1992 to regulate the profession.

Further, as cited by Hermosisima (2003) in the study of Guinayen (2024), one of the most commonly mentioned indicators of quality of higher education programs in the country is the performance of the graduates in the licensure examinations. The licensing examination is one of the last hurdles that a candidate must face in the licensing process. A board has the ultimate responsibility to ensure that the examination meets technical, professional, and legal standards, and, protects the health, safety and welfare of the public by assessing candidates' abilities to practice competently. Once a candidate has passed a licensing examination, the board must be comfortable granting the license, thus assuring the public that the licensee is minimally qualified to practice at the time of initial licensure. Licensing is required to ensure that the only qualified teachers can be hired. This builds anxiety not only among examinees but more so far schools who turn out prospective teachers with different majors. Obviously, the National examination for teachers stirs competitive against, since it augurs possible employment, salary or appointment upgrading ranking consideration, and acceptance to the halls of DECS. In fact, passing the LET is the main requirement used by the Department of Education (Dep. Ed.) for all teacher education graduates to earn the title professional teacher. In addition, implications permeate school standards and pride for garnering honors from percentage passers (Philippine Journal of Education, 2005). The belief that testing can improve the quality of the teaching force is based on the assumption that the tests are used as good measures of the competencies needed for effective teaching and that their salutary effects on training and selection are not outweighed by negative consequences for supply (including, for example, eliminating competent teachers from the pool and dissuading some from considering teaching).

Somotsot, Duran, and Rodriguez (2020) shared that one of the important roles of Higher Education Institutions is to produce competent graduates who become future leaders in their own field. The study aimed to determine which predictors significantly influenced the licensure examination for teachers (LET)



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and licensure examination for fisheries technologist (LEFT) results. A quantitative research design was employed and 337 LET takers and 62 LEFT takers from DNSC from 2015-2019 were investigated. The study used admission test scores, academic performance, and LET and LEFT results. Data were treated using frequency, Spearman's correlation, and binary logistic regression. Results revealed that the majority of LET takers who entered teacher education got an average entrance test score and very good academic performance, while LEFT takers who entered the Bachelor of Science in Fisheries got an average entrance test score and good academic performance. The study revealed that 89.9% of the LET takers passed the exam and 35.5 % of LEFT takers passed the examination. The study confirmed that there was a weak, positive monotonic correlation between entrance test score and LET result and entrance test score and LEFT Results. It is revealed that there is a weak positive monotonic correlation between the academic performance and LET result, and academic performance and LEFT results. It is concluded that of the two variables, statistically, only the admission test score has the likelihood to influence the LET results and LEFT results. The study suggested that schools offering Teacher Education Program and BS Fisheries and Aquatic Sciences consider accepting students with high admission test scores since the study confirmed that for every 1-point increase of the admission test score, the likelihood that the LET and LEFT average score increase by approximately 2. Further investigation may consider and explore using other research designs and variables which is not included on the variables under investigation.

#### **Review of Related Studies**

The review of Related Studies (RRS) is a review of all the studies around a particular research problem. It helps to justify the need for studying the problem in the first place. Studies involve here are more on survey and descriptive which support the research study. Most of the related readings are gotten from the websites pages which is scholarly written and evaluated.

The sequence of discussions of related studies are arranged according to importance of the variables in such gave bearing to the study. The variables discusses on the academic performance of the students, status of learning and passing the subjects. The significant relationship of such variables using different tools and also the setting of the study from local to international.

Based on Oliva (2021), study habits currently have an impact on students' learning and academic achievement, and the results show how students' cognitive and practical skills are developing as well as how they will fare in their future careers. By recognizing the relationship between a learner's study habits and their academic achievement, one can enhance academic performance while also fortifying and adapting their study habits. Studying as a priority has a significant impact on a learner's academic achievement. The degree of readiness and the deliberate application of learning strategies by students have an impact on their academic achievement.

The majority of students in a study by Jaimes, Tweedie, Kreinovich, & Ceberio (2012) as cited by Oliva (2021), it was reported having a decent degree of self-esteem, regardless of their grades, suggesting that self-esteem does not explain for low or high academic achievement. That is not the case, though, with study habits, which are connected to academic achievement. Therefore, if students want to enhance their study habits, they must do better. Academic success is exhibited by learners who are aware of how they use their time.

Additionally, it was suggested that academicians set up group counseling in schools to educate pupils on how to adopt productive study habits that may improve their academic achievement. Student access to the necessity of a working school library should also be easy. There are several reasons, including differences



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in intelligence levels, insufficient amenities, the absence of quality libraries, and so forth. However, a contributing factor to students' failure is their lack of learning effort and their ignorance of the significance of good study habits for their academic success.

Alipio (2020) stated low academic adjustment among college students in the Philippines leads to inadequate performance in the classroom. It was discovered in the Hernandez's (2017) study noted by Alipio (2020) found that first-year students from the chosen higher institutions Calapan City's institutions struggle with social adjustment. They are easily adaptable to academic, emotional, and personal aspects of college life, as well as their attachment to their institution, but it requires time for them to acclimate socially.

Furthermore, Alipio (2020) recommends that the guidance counselors of higher-education institutes build a guidance program specifically targeted at first-year college students. This program may include seminars, workshops, psychological testing, and counseling that goal to help their transition and adjustment to college, as well as the enhancement of self-esteem. It also tackles the psychological, emotional, and psychosocial development of the students.

In light of these issues, research on students' adjustment levels and how they affect their academic achievement is necessary. There aren't many published studies looking at the connection between academic achievement and college adjustment. These were the specified studies collected by Alipio (2020) according to his different sources such as Rai (2009) found a strong correlation between achievement and adjustment. Seetha (2009) discovered that there was no meaningful connection between academic success and social adjustment. Chen et al. (2011) looked at the relationship between academic achievement and children's social adjustment.

Conversely, Mathur (2010) investigated as highlighted by Alipio (2020) how socioeconomic status affected behavior and achievement. The findings showed a strong correlation between achievement and adjustment. The aforementioned studies discussed the connection between academic achievement and students' transition to college. Many researchers have attempted to look into the various antecedents of self-efficacy in an effort to address the issue in recent years. In accordance with a number of research, the best indicators of self-efficacy in both teachers and students were help-seeking, self-esteem, social support, motivation, and self-regulation.

Nevertheless, there is a paucity of empirical data about the combined impact of these variables on self-efficacy. It is crucial to determine and confirm the relationship between these factors in order to expand the social learning theory and offer solutions that will prevent more issues in the academia. Conforming to Alipio (2020), in order to effectively teach radiologic technology (RT), educators and students must work together. Even though the dynamics of collaboration are intricate and difficult, there is still an issue with how to carry out the necessary actions to handle the pressure of the academic requirements. Therefore, it is believed that the self-efficacy of educators and students is a unique aspect in the success of education and educational institutions.

While learners' efficacy refers to students' beliefs in their ability to think and act in ways that are methodically oriented toward or associated with their learning goals, teachers' efficacy is the belief or persuasion of teachers that they can influence the quality of students' learning, even of those who are considered problematic cases or lacking motivation.

Meanwhile, research involving senior high school students are gaining traction in the Philippines. The government's embrace of K–12 education from highly developed and surrounding nations necessitates ongoing efforts to keep up with the global academic environment. In order to identify the educational



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interventions required to avert a catastrophic dropout scenario in the college setting, this endeavor necessitates a preliminary evaluation of the students' academic perseverance.

As specified by Cerbito et. al (2021), radiologic education has evolved significantly over the years, with certain breakthroughs that have left the country catching up. It has moved from analog to digital imaging, leaving underdeveloped countries behind. As such, it is expected that general radiography practices will be different from those of prior years. Using a sequential explanatory research methodology, the study investigated radiologic interns' competences pertaining to particular parameters such as preparation, patient care and management, positioning, and image capture and processing.

Radiology has reached its 126th year and has become increasingly popular among Filipino high school graduates as a chosen course in different colleges. Professors and instructors have been improving their pedagogy as medical imaging has progressed from Roentgen's machine to its first medical use in New Zealand, up to the recent colored X-Ray machines. To keep up with technological advancements, institutions can now improve radiologic technicians' general practices from analog to digital technology. The diversity of medical imaging's use and its fast advancement has led to different studies focusing on its teaching.

As newer technologies emerge in the field of radiology, it has created an opportunity to identify the weaknesses of radiologists. It did not only found differences between the roles of novice and experienced radiologic technologists, but also identified possible differences that radiologists may experience as they are trained and prepared for these new technologies. These findings may help improve the training and preparation of radiologists and ensure that they are better equipped to handle emerging technologies in their field.

Date and Ohkado (2018) conducted a study in Asia to improve the quality of initial diagnostics for pulmonary diseases, with a focus on chest X-rays (CXRs). CXRs are commonly used by physicians to detect respiratory infections and diseases, such as tuberculosis. The study suggests that continuing education and training should be provided to improve the quality of CXR images, especially in developing countries. The authors also noted that Filipino radiologic technologists are facing limited opportunities to enhance image quality. Therefore, it is necessary to improve radiologic education in the Philippines to maintain quality images in a resource-restricted environment.

To provide a comprehensive overview of Radiologic Technology Education in the Philippines, the Commission on Higher Education (CHED) has established policies, standards, and guidelines to govern the program. In their memorandum released in 2018, CHED emphasized that the program must keep up with the fast-paced advancements of the practice to meet the needs of the industry. The core of the program is to ensure that radiologic technicians learn in a way that instills confidence and efficiency in patient care and management. Additionally, section 7 (CHED, 2018) emphasizes performance indicators that focus on specialized skills that students must master.

Contingent to Magulod (2019), to prepare university students to become proficient, versatile, and productive information and industrial technologists in the 21st century, it is crucial to align instructional strategies and activities with their learning style preferences. A study was conducted to examine the study habits, learning style preferences, and academic achievements of students enrolled in applied science courses at a public higher education institution in the Philippines. It is worth noting that a country's development largely depends on the quality of its human resources. The advancement of knowledge and technology in society relies on the quality and preparation of its manpower, who possess technical understanding, as well as personal and interpersonal skills as scientists and technologists. Therefore, it is



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essential to set the highest standards when defining the objectives, components, and processes for information technology and industrial technology programs in higher education institutions.

It is important to be aware of the different learning style preferences of students who are enrolled in applied sciences courses. This knowledge can lead to more effective learning experiences and help students strengthen their self-actualization. Understanding the learning styles can also help teachers to use appropriate teaching strategies and methods to enhance students' academic performance. It can provide positive feedback to both teachers and students on their strengths and weaknesses in the teaching and learning scenario. Moreover, knowledge of learning styles can have implications for curriculum design and allow teachers to implement a learner-centered curriculum model in the classroom.

Pursuant to Magulod (2019), academic performance is a crucial factor in assessing the quality of education, especially in higher education institutions. The academic achievement of students is determined by their scores in various subjects, which can be measured through performance, classroom tests, assignments, outputs, and major examinations. Previous studies have shown that there are both intellectual and non-intellectual factors that affect the academic achievement of students at all levels.

Radiologic Technology plays a crucial role in patient care every day, as highlighted by Hensley (2020). However, radiography has been criticized for being a "hit and run" career due to the short amount of time that technologists spend with their patients. This limited interaction can cause technologists to become disconnected from patients' emotions, resulting in a greater focus on obtaining the image rather than on the patient's well-being. Despite the unique responsibilities of radiologic technologists, it is still essential for them to possess effective communication skills. Unlike nursing and other healthcare professions, there have been few attempts to develop theories or models specifically for radiology. Furthermore, the existing models do not apply to the realities of this field. Therefore, more research specific to radiologic technologists is needed to integrate radiology into the larger healthcare conversation.

However, in relation to De Guzman (2020), countless students have demonstrated that passing a board examination is the result of diligent work, excellent preparation, and an efficient learning style. The Bachelor of Science in Radiologic Technology is a professional course that presents great opportunities for those interested in the field. This degree program teaches students how to perform medical imaging procedures, which is a branch of healthcare delivery that uses X-rays and other forms of energy to aid in the diagnosis and treatment of medical conditions.

Bachelor of Science in Radiologic Technology involves a combination of classroom education and clinical practice through internships. During the program, students learn to operate radiographic equipment, principles of radiation protection, patient positioning and procedures, and the radiation safety of patient care. Therefore, BS Radiologic Technology program is a comprehensive course that includes classroom lectures, discussions, and hands-on training in the clinical internship. In the final year of their education, students are required to undergo an internship training program at different hospitals.

This program enables students to gain practical experience in the medical allied profession, and prepares them for the board examination. Passing the board examination is mandatory for graduates to practice in the field. To prepare for the board examination, students must make all the necessary preparations, which are implemented during their education and review prior to the exam. Physical preparation involves exercise, diet, and sleep, while mental preparation involves developing good study habits and undertaking in-house review. The school or college program is designed to support students through their preparation and help them succeed in the board examination.



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Thanh et al. (2022) specified that radiologic technology training requires a notable amount of practice. The traditional teaching approach involves in-hospital placement, along with theory classes. However, the outbreak of COVID-19 made clinical rotations impossible. Direct contact with patients raised safety concerns for staff and students. The pandemic created unprecedented challenges for medical universities worldwide. To overcome this, we developed in-house simulation software that could be used for radiologic technology training. Our preliminary results have shown that this novel approach is effective in training radiologic technology students.

Simulation-based training (SBT) is a teaching method used to develop and maintain clinical skills for students and medical staff. This method has many benefits, including the ability for students to practice technical skills multiple times without the risk of causing medical errors or increasing radiation exposure for patients or staff. SBT has been successfully applied in various fields, including pilot training, surgery, and nursing. By allowing students to gain confidence before performing operations in medical facilities, SBT ensures that patient safety is prioritized.

Clinical instruction for radiologic technology students has traditionally been carried out mainly in the radiology department, directly on patients. In the early stages of patient contact, most students are taught about radiation safety and medical ethics. Due to the COVID-19 outbreak, many universities remained closed for an unprecedentedly long time. In the context of pandemic prevention, having too many students gather within the x-ray room may raise concerns about viral control. Shortage of teaching staff puts pressure on the management and coordination of clinical instruction.

Universities worldwide have moved rapidly from onsite training to online classes. Additionally, simulation software can be used as an alternative solution and has been implemented by many institutions. However, commercial software can be quite expensive and may require specific infrastructure. Therefore, we developed in-house software that simulates radiography techniques to create a virtual reality environment. This software is used for students to practice preclinically with simulated situations that are similar to clinical reality.

Radiologic Technologists' level of judgment, the complexity of procedures, and the amount of responsibility they assume depend on their experience and education. High-quality health care requires healthcare professionals who can perform radiological procedures competently. Therefore, radiologic technologists who have demonstrated their competence are of prime importance (Alipio, 2020). In the Philippines, a four-year Bachelor of Science in Radiologic Technology degree and certification of passing the National Licensure Examination for Radiologic Technologists granted by the Professional Regulation Commission is the standard requirement for an entry-level position as a Radiologic Technologist.

The primary objective of the licensure examination is to ensure that examinees have the required technical capability for the profession. Technical proficiency involves technical knowledge, the ability to apply such knowledge skillfully and with good judgment, and an understanding of professional responsibility. The recognition of the value attributed to the results of the National Licensure Examination for Radiologic Technologists underscores the importance of predicting the success of program graduates on the exam. This predictive measure constitutes an essential yardstick for evaluating program quality.

Additionally, accurate predictions of success can foster heightened awareness among both faculty and students, reduce anxiety, and promote constructive study habits. As such, this research aims to identify significant predictors of success on the National Licensure Examination for Radiologic Technologists and assess the extent to which predictions can accurately anticipate student success.



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Valdez (2012) accentuated that transition from school to work is a critical issue for fresh graduates, as career decisions are a lifelong process. A career is an ever-evolving activity that is influenced by various factors. The concern about graduate unemployment is increasing every day, and at an accelerated rate in the Philippines. However, the strength of student enrollment and graduate outputs of higher education institutions is growing rapidly.

It's interesting to note that management sectors believe that a graduate's educational background is indicative of their quality as an individual. The type of school graduate attends, as well as the training and instruction they receive, can greatly impact the quality of their education. The school system plays a significant role in preparing students for their future careers by helping them develop necessary skills, providing them with knowledge, and instilling important values and attitudes. As it is important for schools to help students develop employability skills.

Ampaso et. Al. (2022) emphasized the process of molding students through clinical internships requires tremendous effort to help them change personally and professionally. It involves intense physical and intellectual activities that can sometimes be stressful for students. However, clinical internships are crucial for medical students. A literature review has shown a decline in the clinical competency of student interns, particularly in basic radiological science modalities. These modalities are taught in major professional subjects and are also included in the revalidation exam for Bachelor of Science in Radiologic Technology. To succeed in these subjects, effective approaches are necessary to familiarize students with the theory and practical application of these modalities.

Clinical education is of utmost importance, but identifying students who are at risk of academic failure, particularly during clinical internships, is crucial to minimize failure rates. Previous studies have focused on predictors of academic performance, but predictors of revalidation examination performance in clinical education are not well understood. Therefore, this research aims to examine the relationship between cognitive predictors such as monthly examination scores and case-study analysis scores, as well as non-cognitive grit level predictor, and their influence on students' performance in revalidation examinations. Academic success is crucial for any educational institution, and it requires adequate preparation. A vital component of preparation is assessment, especially for courses that involve clinical internships. In radiology, the revalidation examination is a comprehensive exam that evaluates the interns on all the professional subjects and instructional activities outlined in the training program. This evaluation includes written and oral assessments administered towards the end of the program to test interns' knowledge after several months of clinical duties. The evaluation is necessary because good performance in the assessment indicates readiness for professional practice and reflects the quality of education received in the training program (Ampaso et. Al., 2022).

Clinical education in higher education institutions equips students with learning experiences that allow them to apply theoretical principles to actual practice. Nevertheless, one of the major crises facing the higher education system in many countries is the academic failure of students in medical sciences. Every year, many students experience probation, increased educational semesters, and drop out incidences. It has been concluded that it is not only necessary to focus on the lecturer's knowledge of the subjects and the availability of facilities but also on the methods used in learning, which can greatly influence the students' performance.

Orong, D., Amandoron, RL, Ambat,L. Arcadio, ML, Argayoso (2013) has a study on learning styles and academic performance among radiologic technology students of Liceo De Cagayan University in which each student has a preference in learning. The success of every student is not on how high the grades they



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are getting but on how much they have learned. They determine the learning styles of the student in which it is important in order for the teacher to know if their teaching style matches with how students learn. The study was conducted to determine the learning styles and the level of academic performance among first year, second year, and third year students of Radiologic Technology students of Liceo de Cagayan University, S.Y. 2009-2010. A descriptive correlational method of research was used in this study. The researchers used the stratified random sampling by grouping the students by year level. The data were computed and analyzed using weighted mean, frequency and percentage, and multiple regression analysis as their statistical treatment. The study revealed the following findings: Among the learning styles, students are more on visual/verbal. Among the teaching styles, the faculty members are more on verbal. In the level of academic performance, students fall in the below average level. There is no significant relationship between the learning styles and academic performance of the Radiologic Technology students. It is also concluded that the teaching style does not affect the learning styles and academic performance of the student except for their kinesthetic.

Cruz, DA., Eula S., Campomanes, E., Belleno, E., and Alipio (2024) had a study about academic stress among Radiologic Technology students in Iligan City, Philippines, significantly impacts their well-being and academic success. This research aims to measure and address this stress by developing tailored stress management activities. The study utilizes an exploratory sequential mixed-methods design, combining qualitative and quantitative approaches. Qualitative interviews with Radiologic Technology students identify the key stressors, including academic demands, interpersonal conflicts, and societal expectations. Based on the qualitative findings, a stress management program is developed, that incorporates selfawareness, self-care, and goal setting. Stress levels are measured using questionnaires before and after participating in stress management activities. Participants include second-, third-, and fourth-year Radiologic Technology students who have completed at least one semester in the Radiologic Technology program. Sampling methods include simple random and purposive sampling. Thematic analysis identifies coping mechanisms such as binge eating, exercise, and entertainment. Quantitative analysis shows a significant decrease in stress levels post-intervention, highlighting the effectiveness of stress management activities. Students express positive feedback, acknowledging the benefits of the stress management workshop. This study contributes to understanding academic stress among Radiologic Technology students and highlights the importance of tailored stress management strategies. It emphasizes the significance of self-awareness, self-care, and goal-setting, and emphasizes the need for targeted interventions.

Moreover, the study identified key stressors among Radiologic Technology students, encompassing challenging coursework, exams, clinical training pressure, time management challenges, and future career concerns. These factors collectively contribute to heightened academic stress in this field, as evidenced by significant differences in pre-test and post-test mean scores related to these stressors. Recognizing these challenges is imperative for the development of targeted interventions. Implementing supportive measures focusing on these stressors can foster an environment conducive to student well-being and academic success. The findings emphasize the importance of future research and interventions to explore effective strategies for mitigating academic stress and promoting resilience in Radiologic Technology students, ultimately enhancing their overall learning experience and professional development. The study also revealed diverse stress management methods employed by Radiologic Technology students, ranging from entertainment to occasional binge eating. Some participants found music, videos, and drinking helpful, while others deemed these methods ineffective. Time management challenges, financial concerns, and



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stress within the academic institution itself were highlighted. This underscores the need for comprehensive stress management approaches addressing these specific stressors, creating a supportive academic environment. Upon analyzing stress levels among Radiologic Technology students, post-implementation of stress management activities successfully targeted and reduced stress-inducing factors. This highlights the efficacy of such activities in alleviating stress among students, emphasizing the importance of targeted stress management strategies for their well-being. A multi-pronged approach involving schools, teachers, guidance counselors, students, parents, and the general public is recommended to combat academic stress among Radiologic Technology students. Schools should provide support services, create a positive learning environment, and adjust the curriculum. Teachers should personalize instruction, provide clear expectations, and foster a supportive classroom. Guidance counselors should offer individual support, workshops, and maintain open communication. Students should prioritize well-being, develop coping strategies, and utilize available resources. Parents should offer support, de-emphasize excessive achievement, and collaborate with the school. The general public can raise awareness, encourage help-seeking, and advocate for supportive systems. Future research can assess interventions, compare stress levels across contexts, and investigate long-term effects.

Castor, J. C., Dela Rea, M. L., & Villena, K. (2008) had a study on the factors affecting the academic performance of 1st year and 2nd year students of College of Medical Radiation Technology of De La Salle Health Sciences Institute. The researchers used the descriptive method in the study. Using stratified sampling technique, a total of 126 first year and second year students of the College of Medical Radiation Technology during school year 2007-2008 were included as respondents. The researchers adapted the research questionnaire of Remolona et al. (2005) in their thesis entitled 'Factors Associated with the Academic Performance of Third Year Radiologic Technology Students". Frequency, percentage, mean and t-test were used to statistically treat the data. The following conclusions are drawn: (1) Majority of the respondents are female and first year students; (2) The overall evaluation of factors associated with academic performance of the respondents, namely family, classmates and peers showed homogeneity in results, which was interpreted as very satisfactory. Heterogeneity with regards to extracurricular activities was observed, which was interpreted as satisfactory; (3) The mean academic performance of the respondents was 84.97, which was interpreted as satisfactory; (4) There was no significant difference in the factors affecting the academic performance of the respondents when they are grouped according to year level, thus accepting the null hypothesis of this study; (5) There was no significant difference in the respondents' academic performance when they were grouped according to gender and year level, thus accepting the null hypothesis of this study; (6) There was no significant relationship between the different factors affecting the academic performance of the respondents, thus accepting the null hypothesis of this study.

Said, et.al. (2022) they presents a study that Radiologic Technology students are among those who felt the intensity of drastic changes brought by the pandemic in education, particularly when distance learning was utilized. The main objective of this study is to find out the varied experiences of the selected students and find out the necessary measures that need to be taken to address the emerging issues that surround distance learning. This phenomenological qualitative research was done by interviewing the selected respondents from Iligan Medical Center College, transcribing their answers, and utilizing thematic analysis to find out the recurring themes. The respondents of this research were the eight selected students, who were enrolled in Radiologic Technology program. There were two respondents taken from each year level and interviewed online. The responses taken from the interview



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transcripts were grouped and labelled according to their semantic similarities. The researchers found out that the current distance learning practices of Iligan Medical Center College include online-synchronous and online-asynchronous learning. The students' main problems regarding this type of education include their teachers' lack of knowledge on technology utilization, financial constraints, internet connection problems, lack of focus on their lessons, their vulnerability to cheating, and the health issues and problems. Moreover, the coping strategies of the students to the problems they encounter in distance learning include time-management and getting support from the significant persons around them. In addition, the students assert that the school administration should monitor the teachers even more and improve their digital skills in order for them to relay the lessons more efficiently and effectively. Furthermore, they also emphasized that the teachers' discussion should be livelier in order to encourage active learning and that they should be more considerate and patient, especially when the students try to approach them for something that they did not understand. In addition, the students also believed that the teachers should practice more in using their technological resources. Generally, data from this research imply that the distance learning will be even more successful if there is a proper preparation and training for both the teachers and students. Also, there should be an intervention program that will help the students in dealing with their mental and health issues.

Orong, D., Alcantara, ZM., Asok, G., Baguasan, M., Evangelio, JR., and Galimba, EJ., (2013) had a study on the relationship between teaching strategies and academic performance of radiologic technology students states that the various teaching strategies used by the radiologic technology instructors have a major role in class, particularly in the dissemination of information to students. This study aimed to determine the demographic characteristics of the radiologic technology instructors, the different teaching strategies used by the instructors during classes, the academic performance of radiologic technology students in their professional subjects, and the relationship of the teaching strategies to the academic performance of students. To determine these, the study used a modified questionnaire taken from different studies. The research utilized an analytic cross- sectional method. The study utilized the Universal Sampling Method, covering all the radiologic technology instructors and the second and third year students. The result of the study revealed that most of the radiologic technology instructors are Bachelor of Science degree holders with one to ten years and eleven to twenty years of teaching experience as instructors; and majority of the instructors had attended one to two trainings on seminars about teaching strategies. Moreover, their level of adoption to the effective teaching strategies is described as "always". The academic performance of the second year and third year students falls to "fair" and "satisfactory" levels. The teaching strategies used by the instructors have no significant relationship to the academic performance of the students.

Ingrassia (2020) shows on her study about radiologic technology students' perceptions of an effective clinical learning environment in which the purpose of this qualitative descriptive study was to examine how second-year radiologic technology students in New Jersey and New York perceived their ability to learn based on the ability of clinical instructors and practitioners to provide targeted practice and effective feedback. The theoretical foundations included Vygotsky's zone of proximal development and Sternberg's triarchic theory of intelligence. The sample was second-year students from four programs located in NJ and NY. A qualitative descriptive design was used. Data sources included a questionnaire and face-to-face interviews which were analyzed through thematic analysis using open coding. There were two research questions, one regarding the clinical instructor and the other, the practitioner and both which inquired: How do students perceive their ability to learn based on their perception of the ability of both individuals



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to provide targeted practice and effective feedback. Six themes emerged involving both clinical instructors and practitioners and their impact on assisted practice and feedback, interpersonal skills and the provision of additional opportunities for independent practice with no interference from practitioners yet followed by effective feedback. These themes specifically answer the research questions regarding both the clinical instructor and the practitioner. The most prevailing findings support a need for clinical instructors' willingness to work side by side with students to improve their performance, provide feedback, treat students respectfully and to understand the importance of independent practice.

Factors associated with licensure examination performance of radiologic technology graduates by Talaroc, FR., Ali, A. and Alipio, M. (2021) presented that the purpose of this study is to investigate the factors influencing the licensure examination performance of Radiologic Technology (RT) graduates in a private higher education institution (HEI) in Northern Mindanao, Philippines. A retrospective study was conducted in which the academic records of 181 RT graduates in HEI under study who took the licensure examination during the 2015- 2019 period, were analyzed. Nine academic and non-academic factors were examined, and their impact on the licensure examination performance was tested using simple and multiple linear regression analyses. Results revealed that Student Internship Grade (SIG), College Admission Test (CAT), and Terminal Competency Assessment (TCA) scores were the significant factors affecting the licensure examination performance of the RT graduates.

Meanwhile, RT graduates who were chronically absent during their hospital internship period were associated with lower licensure examination performance. Existing literature shows that being chronically absent places students at risk for low academic examination performance. Therefore, the HEI under study should develop policies to decrease the rate of chronic absenteeism among RT students during their hospital internship period as this factor has a considerable impact on licensure examination performance. Several studies found that allocating a certain percentage of grades for class attendance and imposing sanctions for unexcused absences during hospital internship, may decrease the rate of chronic absenteeism. On the other hand, the investigated nine factors explained 65.4% of the variability in the licensure examination performance, leaving 34.6% unaccounted. Hence, other factors may be explored in the future to determine their impact on the licensure examination performance of the RT graduates. The retrospective nature of this study does not allow inferring causations but only associations. Confounding factors, such as intelligent quotient (IQ), may affect the impact of the key factors to the licensure examination performance. However, due to the design used in the study, the authors were unable to determine the IQ of the RT graduates. Nevertheless, this factor may be investigated in the future.

This study has important implications in the current RT educational practices. Educational management programs that target low-performing RT students and graduates should address factors related to licensure examination performance. The findings of this study can trigger strategic plans to understand the growing concern on the low passing rate in the RT licensure examination both on the national level and the HEI under study, to reduce the number of retakers, and to identify students at risk of succeeding in the RT licensure examination. It is important for undergraduate RT programs with diverse student populations to assess their students thoroughly and to intervene effectively to ensure that these students pass the RT licensure examination and that they are well prepared for entry-level professional RT practice. Academic and non-academic factors explored in this study must be included in the assessment so that students at risk of failure can be identified as early as possible and appropriate tutoring or other interventions started.

Their study concludes the need for the administrators and educators of HEI under study to be aware of the role that SIG, CAT, and TCA play in the licensure examination. These factors should be included in the



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college admission and retention policies, as well as in the formulation of education intervention programs, in order to improve RT graduates' performance in the licensure examination.

Alipio (2020) in his study entitled National radiologic technology licensure examination performance as predicting success using discriminant analysis was designed to identify variables that might be used as predictors for success on the national Radiologic Technology licensure examination. The census sample consisted of 2,036 graduates of a baccalaureate Radiologic Technology program in 2016, 2017, and 2018 from 24 higher education institutions (HEIs) in the Philippines. The investigators examined 12 variables to determine their predictive value for the national Radiologic Technology licensure examination success. Grades in all year levels of Radiologic Technology course were the four best predictors. Results of the discriminant analysis identified seven significant predictor variables leading to successful classification of 99.9 percent of all the passing graduates and 99.8 percent of the failing graduates in the national Radiologic Technology licensure examination. The use of this discriminant function to identify high-risk students has the advantage of early identification of failing. The large number of 92 percent variance in the national RT licensure examination accounted for in this study may substantiate the claim of high accuracy of the discriminant function used. This is the first study to discriminate passing from failing graduates in the national RT licensure examination based on the selected predictor variables and the astounding precision of classifying graduates is a remarkable result for HEIs included in the analysis. Predicting revalidation examination performance of radiologic technology students in a structural equation

modelling approach by Asiz, A., Macasama Ampaso, M., Abedin, SR., Batalo, JM., et.al. (2022) that one of today's major problems in higher education system is the academic failure of medical science students with apparent yearly reports of experiencing probation, insufficient medical knowledge, increase educational semester, and drop out incidences. This study aims to predict the revalidation examination score of the Radiologic Technology interns of a higher education institution in Iligan City. An exploratory research with descriptive correlation design was used to investigate the interrelationship between the predicting variables in this study. The researchers adopted the Grit-S Scale structured questionnaire that was developed by Duckworth and Quinn (2009), which was designed to measure the grit level of respondents. This tool was used to elicit the needed primary data on the currently enrolled 26 radiologic technology interns at a higher institution in Iligan City. The survey was administered online via Google form. The secondary data, which constitutes of monthly examination score, case study scores, and revalidation examination was solicited in the CRT Program Head. Census sampling was employed in this research to obtain a more satisfactory response. The study showed that the indicators in monthly examination obtained a total mean of 31.64 with an SD of 14.35. These low scores were manifested in their performance in revalidation examination, which revealed a total mean score of 52.73 with a  $\pm$  16.02 SD. On the contrary, the respondents obtained high scores in case study with overall mean score of 95.42 and an SD of  $\pm$  2.83. The overall grit level of the respondents demonstrated a moderate description. Furthermore, the findings of this study also revealed that there is a significant relationship between monthly examination and revalidation examination. The strength of correlation is direct and strong as revealed by the coefficient of 0.904. Meanwhile, there is no significant relationship between revalidation examination score and case study score (p=0.537); between revalidation examination score and grit level (p=0.833); between grit level and monthly examination score (p=0.831) and between grit level and case study score (p=0.071). The positive influence of monthly examination implies that respondents who scored high in the monthly examination would be predicted to score high also in the revalidation examination.



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These findings can help the faculty and program head in drafting policies and the improvement of academic and clinical performance of students in revalidation exam.

#### **Synthesis of the Study**

There are very rich of information and reading given in this study and they are connected and interrelated with different views. The admission test and examination results descriptions and illustrations given by the different author signifies the research to stress out what is the very relevant to the research variables. In the health, professional responsible for performing radiographic examinations is the *Radiologic Technologist (R.T.)* Radiologic Technologists are essential members of the health-care team, who work closely with physicians, nurses and other members of allied health. Radiologic Technology is not for everyone, it can be physically and emotionally demanding, but for those individuals who are team players, dedicated, compassionate and enjoy helping others, this is a rewarding and satisfying career according to the article of Moonparkcollege.edu.

The Republic Act No. 7431 of the Philippines is an act regulating the practice of radiologic technology in the Philippines, creating the board of radiologic technology defining its powers and functions and for other purposes in which brought an important part of the country.

Those who have been working in the field for several years tend to earn higher wages compared to those just starting their careers. With experience comes increased proficiency, confidence, and the ability to handle complex cases efficiently shared by the article in simpli.com. Additionally, Choa and Andres (2020) shares a study about the radiology research situation in the Philippines in identifying the barriers and limitations for future directions. On the other hand, Cruz (2008) presents the study on problems encountered by the radiologic technology interns during 2nd semester of their internship program. The problems encountered of the respondents in hospitals assignment, x-ray facilities and supplies, relationship with patients, co-interns and chief radiologic technologist and in general have no significant difference in terms of hospital assigned.

Agudo (2019) study on the risk management in radiology is primarily developed and fostered to help safeguard patients, working personnel, and the entire organization. The higher the length of service the less they perform quality healthcare service due to familiarization in their workload.

The Philippines has more than 110 million people spread out over thousands of islands. But that population is served by about 2,500 radiologists, Dr. James Delos Santos, president of the Philippine College of Radiology, told Rappler.com it means that the Philippines only has about 2 radiologists per 100,000 Filipinos.

Consequently, under Republic Act No. 7722, the Commission on Higher Education (CHED) is mandated to promote quality education, broaden access to higher education, protect academic freedom for continuing intellectual growth, and ensure advancement of learning and research.

CHED also comes up with higher education indicators for monitoring purposes such as statistics on entrants and graduates of HEIs. No disaggregated data is available on sciences and health-related program. Furthermore, the passing performance of licensure examinations in medicine and health-related program is a good indicator of educational preparedness and practical knowledge of new graduates to qualify for the practice of their profession.

One method that students will enter college is to take an admission test and it is given every year. These tests, offered by the Tertiary institution, allowing students to showcase their knowledge and skills in specific subject areas. The college that they are applying to and where they stand in school will determine



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which standardized test that need to take. Moreover, in the article of fastercapital.com that in understanding the importance of college interviews is a crucial aspect of the college application process. The college readiness encompasses not only academic knowledge but also non-cognitive skills, cultural awareness, and practical abilities. Bridge programs play a vital role in preparing students for the challenges and opportunities of higher education. The journey in college degree matters as much as the destination, and a skilled consultant can make and help that journey smoother and more rewarding. In such situations, admission tests become an effective way to filter out the right candidates and ensure that only the most qualified and capable students are accepted into the program.

The Radiologic Technology program requires a full-time, four-year committed study. This course is Bachelor of Science in Radiologic Technology. The first three years consists of a didactic component taught at the classroom and the last year is the clinical education component undertaken in the affiliated training hospital. And in order to pass the board examination to have a license, a candidate must obtain a weighted average of at least 75% with no rating below 60% in any subject. An examinee who obtains an average rating of 75% or higher.

Conforming to Alipio (2020), in order to effectively teach radiologic technology (RT), educators and students must work together. Even though the dynamics of collaboration are intricate and difficult, there is still an issue with how to carry out the necessary actions to handle the pressure of the academic requirements.

Additionally, Alipio (2020) in his study entitled National radiologic technology licensure examination performance as predicting success using discriminant analysis was designed to identify variables that might be used as predictors for success on the national Radiologic Technology licensure examination.

#### **Definition of Terms**

This part presents the different variables to make clarifications and explanations. The key concepts, terms and terminology was defined according to the used of this study. It also helps the readers to understand the specific meanings and context of these terms within the research.

**Admission.** This is the act of allowing students to enter in college by means of protocol given by the institution. It is also a grant to students to be part of the institution to take their chosen course with some agreement by following some of the policies.

**Examination.** There is a specific procedures and techniques used to identify, select, process and analyze information about the topic under study in a particular content.

**Licensure.** This is described as a certificate given ensure standard of qualifying an individual. It is also to protect the public by enforcing standards that restrict practice to qualified individuals who have met specific qualifications in education, work experience and examinations.

**Licensure Exam.** This is a designed to assess the knowledge, skills, and competencies required to enter a specific profession and ensure that the candidates are qualified to practice safely and effectively. It is commonly known as Board Exam.

**Results**. This is described as something that occurs as a consequence of some actions taken in some test. Specifically, results of the admission test and rating of professional licensure are used.

**Test.** This is an act and process that exercise by any institution for qualifying students to be admitted in the course chosen. It is also used to measure the ability of the students in preparation for their Board examination.



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#### METHODOLOGY

#### Research Design of the Study

The researchers used a quantitative research design to determine the correlation between admission and licensure examination results. Quantitative research design seeks to discover how many individuals think, act, or feel in a particular manner. These research projects involve large sample sizes, mainly focusing on the number of responses, rather than gaining the more focused or emotional insight that qualitative research provides. The standard format in quantitative research design requires each respondent to answer the same set of questions, ensuring fair analysis of the entire data sample. The data is presented in numerical format and can be analyzed using statistical methods in a quantifiable manner (DJS Research, n.d.).

According to Bhandari (2023), quantitative research is a systematic approach of collecting and analyzing numerical data. This method is useful in identifying patterns and averages, making predictions, testing causal relationships, and drawing generalizations to larger populations. In contrast, qualitative research is concerned with collecting and analyzing non-numerical data such as text, video, or audio.

#### **Locale of the Study**

This study was conducted using the admission and licensure examination results of students enrolled in the Bachelor of Science in Radiologic Technology program at the General Santos Doctors' Medical School Foundation, Incorporated. The research was carried out in Bulaong Subdivision, Barangay Dadiangas West, General Santos City, South Cotabato. This location was chosen because it provided the researchers with a diverse range of relevant information, viewpoints, and ideas from the population of radiologic technology students required for the study. Below is the location of the institution.

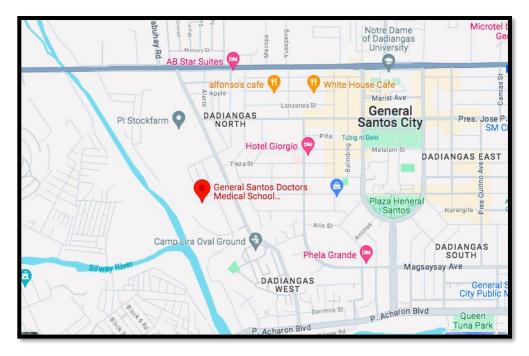


Figure 2. Location Map of the School

General Santos Doctors' Medical School Foundation Inc, is the realization of what used to be an elusive dream of Dr. Genaro B. Valencia Jr. and Dr. Venancio Yap, two of the founders of General Santos Doctors'



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Hospital. A dream that had been nurtured since the beginning of the hospital construction in 1968. They aimed to provide quality health care to the people in General Santos City thus they thought of putting up a nursing school. This idea however was not well accepted by then for fear that a second project would distract them from the first—the hospital.

Sometime in 1995, having had succeeded in making GSDH one of the finest in General Santos City, they thought of reviving their second dream. Frustrating it might have been for them, they had to set it aside once again because of the decreasing demand for nurses locally and internationally.

In 2001, a remarkable resurgence of the demand took place motivating Dr. Genaro B. Valencia Jr. to pursue the said project. He spearheaded the plan in collaboration with Mrs. Resurreccion C. Valencia, Dr. Daniel G. Yap, and some members of the hospital board. GSDMSFI was finally founded and registered with the Security and Exchange Commission on May 30, 2002, and was opened on June 2003 offering Bachelor of Science in Nursing as its pioneering course with 140 enrollees.

The school then started to soar like an eagle with Dr. Genaro B. Valencia Jr. as the wings. Giving the soaring a push are Mrs. Resurreccion C. Valencia, Mrs. Virginia Manalo, Mrs. Tessie T. Osoy, Mrs. Azucena V. Quito, Mrs. Rose Reyes, Mr. Mark Ronulo, and the other pioneering members of the faculty and staff who served as the wind beneath those wings.

In the succeeding years, the Board felt the City's need for other health professionals. Thenceforth, from the Bachelor of Science in Nursing as its pioneering course, GSDMSFI now offers Bachelor of Science in Midwifery, Bachelor of Science in Radiologic Technology, Bachelor of Science in Psychology, Bachelor of Science in Medical Technology, and Bachelor of Science in Pharmacy, Bachelor of Science in Physical Therapy, and Senior High School.

With the continued support of the Board of Trustees, Administrators, our present Dean, Mrs. Grace Joy Gerada-Nietes who joined the force in April 2005, members of the faculty and staff, GSDMSFI will continue to soar high towards the fulfillment of its mission.

#### Population of the Study

The study employed the 178 population of students from the Bachelor of Science in Radiologic Technology program from the Academic Year 2015-2023. These are the following population of the students per year.

NO. OF STUDENTS ACADEMIC YEAR 2015 21 2016 25 29 2017 2019 36 2021 19 2022 16 2023 32 **TOTAL** 178

Table 1. Population of Students per Academic Year

#### **Sources of Data**

The data was retrieved from the help of Registrar staff and Guidance Counselor offices. This study employed the method of retrospective data collection wherein they have to search the name of students'



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admission test results in which paired it with the Professional Licensure Examination results. They gave the coded students name to the head coordinator of BSRT program before it was submitted for analysis. The Otis-Lennon School Ability Test (OLSAT) is a nationally-normed standardized test designed to measure your child's achievement against the achievement of all other children of the same age. Generally administered in the institution, the OLSAT can be one tool used to identify gifted students. While it is technically an achievement test, the OLSAT measures important critical thinking skills, such as higher-order thinking and the ability to analyze, synthesize, and evaluate information. The OLSAT is a multiple choice test. Students will listen to directions and shade the correct answer under each picture. Because there is no reading, pre-literate students can be tested using the OLSAT, and students who struggle with reading but are intellectually very capable may still do well. The maximum OLSAT test length is 75 minutes with 72 items. The areas measure are the following: a.) Verbal Comprehension which consists of understanding of language; similarities and differences among word, b.) Verbal Reasoning that consist of using language to infer, apply, and classify, c.) Pictorial Reasoning consist of inferring from and evaluating pictures, d.) Figural Reasoning consist of reasoning involving geometric shapes.

### **Data Gathering Procedure**

The researchers obtained permission from concerned authorities to conduct their study by submitting a letter of request. They sought permission from various offices, including the guidance office and the registrar's office, to gather the necessary data for their analyses. The letter of approval of the Vice President for Academic Affairs and College Dean was made and attached in appendix.

Moreover, the researchers acquired their data collection of test results of admission, as well as licensure exam results. Also, the data was acquired through statistical analysis. Once the data had been gathered, the researchers tallied and interpreted it.

#### **Statistical Treatment of Data**

The data was encoded in Microsoft Excel. It was calculated, analyzed and interpreted through the use of descriptive statistics. In finding the mean results of admission test results and average rating of Professional Licensure Examination results, frequency distribution were used. The Pearson's R Correlations are used in the significant relationship between the admission test and professional licensure examination results.

Table 2. Size of Correlation Coefficient with Interpretation

Size of Correlation Interpretation

Size of Correlation	Interpretation
.90 to 1.00 (90 to -1.00)	Very high positive (negative) correlation
.70 to .90 (70 to90)	High positive (negative) correlation
.50 to .70 (50 to70)	Moderate positive (negative) correlation
.30 to .50 (30 to50)	Low positive (negative) correlation
.00 to .30 (.00 to30)	negligible correlation

The value of r ranges between -1 and 1. A correlation of -1 shows a perfect negative correlation, while a correlation of 1 shows a perfect positive correlation. A correlation of 0 shows no relationship between the



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movement of the two variables. The table below demonstrates how to interpret the size (strength) of a correlation coefficient.

#### **Ethical Considerations**

The study was conducted in compliance with the ethical principles of the Research Ethics and Review Committee of the institution to avoid academic fraud and research misconduct. Informed consent was obtained from the office of Assistant of Vice-President in Academic Affairs/College Dean of which entails also the letter to the Registrar Office. The researcher guaranteed the privacy of the documents gathered from different offices and by limiting the access of data within the group. Furthermore, the privacy of the data received were treated and coded privately which is based on existing laws and regulations pertaining to data privacy and safety protection law.

#### RESULTS AND DISCUSSIONS

This part presents the results of the study. It shows the tables and figures that brings a better presentation as to understand the very important idea of every variable used. It also gives discussions for the analysis that brought bearing of results.

#### **Admission Test Results**

This section shows the results of the students' admission test. There are tables and figures shown that gives bearing and relevance to the research problem given in Chapter 1.

The Table 3 shows that most of the students who took their Professional Licensure Examination year last 2015, 2017, 2019 and 2022 has same Admission Test results of Stanine 4, in which 6(29%), 8(28%), 10 (28%) and 8(50%), respectively. It has an implication that most of the students are slightly below average.

Table 3. Percentage Distribution On The Admission Test Results Of BSRT Students Who Took
The Professional Licensure Examination From 2015-2023

ADMISSION	201	15(21)	201	6(25)	2017	(29)	2019	0(36)	2021	l(19)	2022	2(16)	202	3(32)
RESULTS	n	%	n	%	n	%	n	%	n	%	n	%	n	%
S1	1	5	1	4	0	0	1	3	1	5	1	6	0	0
S2	5	24	9	36	5	17	6	17	7	37	1	6	0	0
S3	4	19	10	40	4	14	8	22	4	21	4	25	9	28
S4	6	29	5	20	8	28	10	28	5	26	8	50	10	31
S5	5	24	0	0	6	21	10	28	2	11	1	6	8	25
S6	0	0	0	0	5	17	1	3	0	0	1	6	4	13
S7	0	0	0	0	0	0	0	0	0	0	0	0	1	3
S8	0	0	0	0	1	3	0	0	0	0	0	0	0	0
TOTAL	21	100	25	100	29	100	36	100	19	100	16	100	32	100

In the year 2021, the Admission Test results of most students' population which is 7(31%) got a result of Stanine 2. This results implies that most of the students has a poor ability test results.



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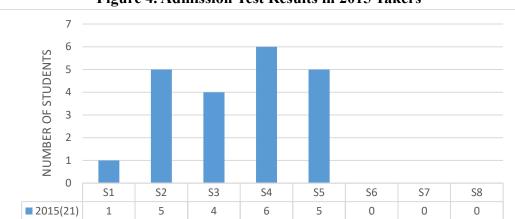


Figure 4. Admission Test Results in 2015 Takers

The Figure 4 shows that most of the students in year 2015 takers got Stanine 4, which is 6 out of 21. No one got Stanine 6 to Stanine 8. This implies that most of the students are slightly below average.

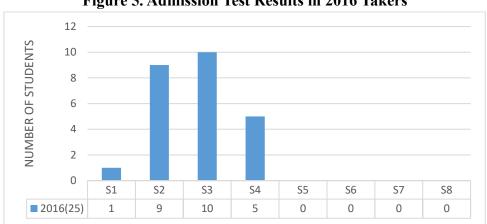


Figure 5. Admission Test Results in 2016 Takers

The Figure 5 shows that most of the students in year 2016 takers got Stanine 3 which is 10 out of 25. No one got the Stanine 5 to Stanine 8. This implies as considerably below average.

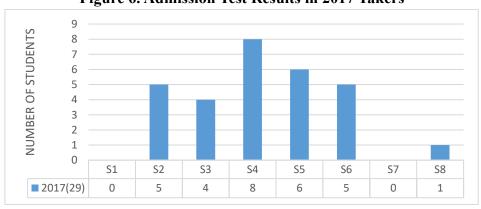


Figure 6. Admission Test Results in 2017 Takers

The Figure 6 shows that most of the students in year 2017 takers got Stanine 4 which is 8 out of 29. And only 1 got Stanine. This is an implication that most of the students are considerably below average. The Figure 7 shows that most of the students in year 2019 takers got Stanine 4 and Stanine 5 which are both 10 out of 36 students.



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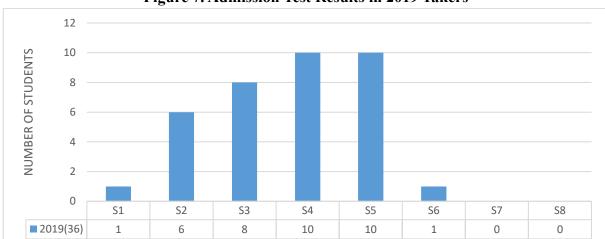


Figure 7. Admission Test Results in 2019 Takers

The results are interpreted as slightly below and average, respectively.

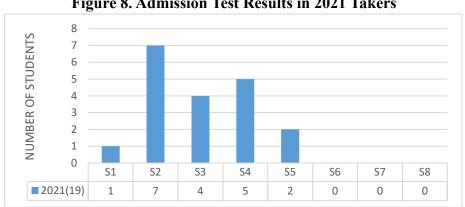


Figure 8. Admission Test Results in 2021 Takers

The Figure 8 shows that most of the students in year 2021 takers got Stanine 2 which is 7 out of 19. Most of the students are in the category of poor ability.

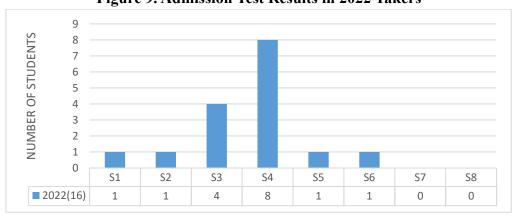


Figure 9. Admission Test Results in 2022 Takers

The Figure 9 shows that most of the students in year 2022 takers got Stanine 4 which is 8 out of 16. This is implied that most of the students are slightly below average. It shows also that there are 1 students in Stanine 5 and Stanine 6 in which describes as average and slightly above average, respectively.



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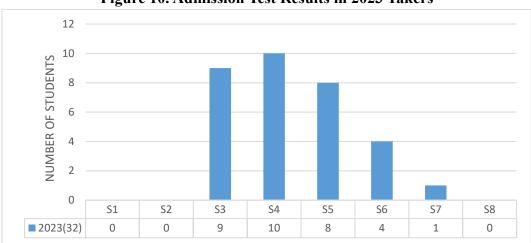


Figure 10. Admission Test Results in 2023 Takers

The Figure 10 shows that most of the students in year 2023 takers got Stanine 4 which is 10 out of 32. This is implied that most of the students are slightly below average.

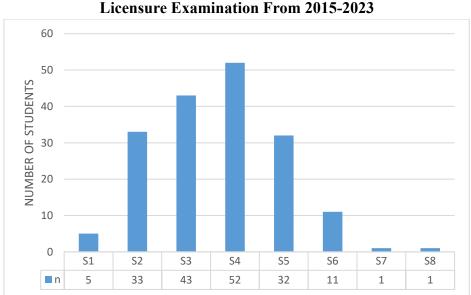


Figure 11. Total Population on the Admission Results of Students Who Took Professional Licensure Examination From 2015-2023

In Figure 11, it shows that most of the students from 2015-2023 are Stanine 4 in which 52 students got it out of 178 students. There are 1 student who got Stanine 7 and Stanine 8.

It implies that most students admitted in the program are slightly below average. And a least of considerably above average and Superior which are the Stanine 7 and 8, respectively.

In the study of Cahapay (2021) entitled system admission test and licensure examination for teachers as the case of passed and conditional groups states that a vast body of studies has a propensity towards considering system admission test (SAT) scores as one collective variable that influences the licensure examination performance. The current article revisits this research area and further takes a step forward in analysing the influence of SAT score grouped into two categories as passed and conditional. This study is a comparative analysis of the Licensure Examination for Teachers (LET) performance according to SAT groups of a cohort of 86 elementary education graduates from the Bachelor of Elementary Education (BEEd) Department at the College of Education (CoEd), Mindanao State University, General Santos City



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(MSU GSC), Philippines. The Mann-Whitney U Test was mainly used as a statistical tool. The results showed that the majority of the students with passed SAT scores obtained a good level of LET performance and those with conditional SAT scores attained a fair level of LET performance. It was further revealed that there is a statistically significant difference in the LET performance of the students with passed and conditional SAT scores. Based on these pieces of evidence, this current research presents three essential instructional accommodations that may be considered to improve the future LET trajectory of the students.

#### **Professional Licensure Examination Results**

This section discusses the Professional Licensure Examination results taken from year 2015-2023. The results are showed and follow by a discussions. Some analysis were given for thorough understanding of the results.

The Table 4 gives the examination results with the percentage in every year. It shows also the results ranges with a class size of 6. Since the lowest score is 47.00 and the highest is 87.80. Moreover, the lowest score was got in 2015 and the highest score have gotten in the year 2017.

Table 4. Percentage Distribution of Professional Licensure Examination Results From 2015-2023

		20	15(2	201	16(2	20	17(2	201	19(36			202	22(1				
R	Range		1)		5)		9)		)		2021(19)		6)	2023(32)		Total	
		n	%	n	%	n	%	n	<b>%</b>	n	%	n	%	n g	%	n	<b>%</b>
	45-50	2	10	0	0	0	0	0	0	0	0	0	0	0	0	2	1
(D	51-56	1	5	2	8	2	7	1	3	1	5	2	13	1	3	10	6
FAILED	57-62	0	0	4	16	1	3	5	14	4	21	1	6	3	9	18	10
FA	63-68	4	19	6	24	2	7	3	8	4	21	4	25	3	9	26	15
	69-74	7	33	7	28	3	10	3	8	3	16	1	6	5	16	29	16
ED								1									
PASSED	75-80	5	24	6	24	9	31	6	44	7	37	5	31	11	34	59	33
PA						1											
	81-86	2	10	0	0	0	34	8	22	0	0	3	19	9	28	32	18
	87-92	0	0	0	0	2	7	0	0	0	0	0	0	0	0	2	1
	TOT	2	10	2	10	2	10	3						3	10	17	10
	AL	1	0	5	0	9	0	6	100	19	100	16	100	2	0	8	0

Additionally, the Table 3 shows that the results ranging from 75-80 was got in 2019, 2021, 2022 and 2023 in which these are 31(16%), 16(44%), 7(37%) and 11(34%) takers, respectively.

Consequently, the year 2015 and 2016 has the most number of takers got the range of 69-74 in which 7(33%) and 7(28%), respectively. These results marks the highest number of failed takers. While in 2017, it has a results ranging from 81-86 with 10(34%) takers, in which identify as the highest range of test results.

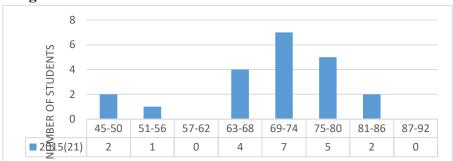
The following presentation and discussions are arranged according to the year of examination. The results were shown in the same class size of 6.

In the Figure 12, it shows the Professional Licensure Examination results taken in the year 2015.



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Figure 12. Professional Licensure Examination Results in 2015

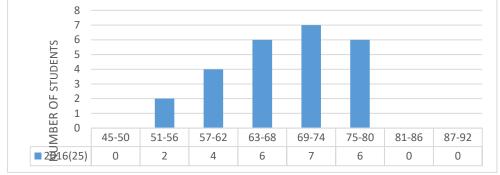


Wherein, the most number of takers are in the ranges of 69-74 were there are 7 out of 21 takers. Consequently, the passers are 7 takers who ranges from 75-80(5) and 81-86(2).

The Figure 13 shows the Professional Licensure Examination results taken in the year 2016. Wherein, the most number of takers are in the ranges of 69-74 were there are 7 out of 25 takers. Consequently, the passers are 6 takers who ranges from 75-80.

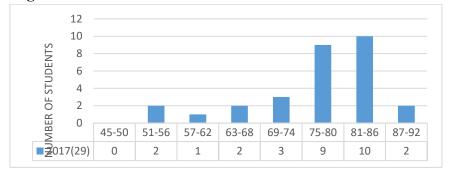
Moreover, during this year of 2016 the lowest result is 54.30 and with the highest results of 77.80.

Figure 13. Professional Licensure Examination Results in 2016



The Figure 14 shows the Professional Licensure Examination results taken in the year 2017. Wherein, the most number of takers are in the ranges of 81-86 were there are 10 out of 29 takers. This is a remarkable year of the examination results because of identified number of passers.

Figure 14. Professional Licensure Examination Results in 2017



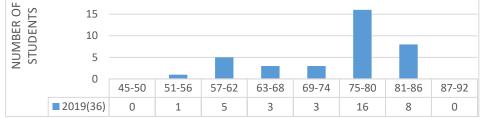
The Figure 15 shows the Professional Licensure Examination results taken in the year 2019. Wherein, the most number of takers are in the ranges of 75-80 were there are 16 out of 36 takers.



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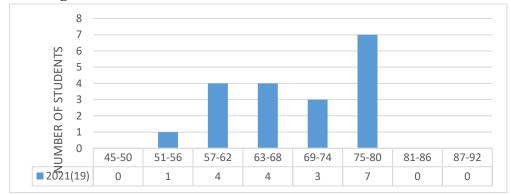
The lowest results of the year 2019 is 53.60 while the highest result is 84.80.

Figure 15. Professional Licensure Examination Results in 2019



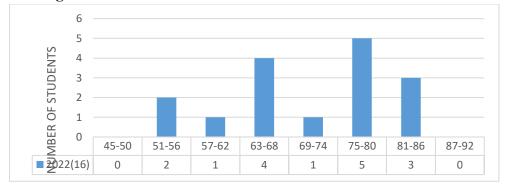
The Figure 16 shows the Professional Licensure Examination results taken in the year 2021. Wherein, the most number of takers are in the ranges of 75-80 were there are 7 out of 19 takers. The lowest results in 2021 is 52.90 and the highest result is 78.00.

Figure 16. Professional Licensure Examination Results in 2021



The Figure 17 shows the Professional Licensure Examination results taken in the year 2022. Wherein, the most number of takers are in the ranges of 75-80 were there are 5 out of 16 takers. The lowest results in 2022 is 54.00 and the highest result is 81.60.

Figure 17. Professional Licensure Examination Results in 2022

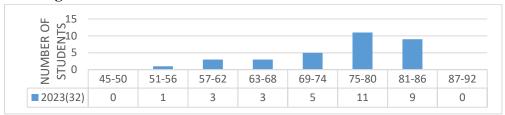


The Figure 18 shows the Professional Licensure Examination results taken in the year 2023. Wherein, the most number of takers are in the ranges of 75-80 were there are 11 out of 32 takers. The lowest results in 2023 is 56.40 and the highest result is 86.20.



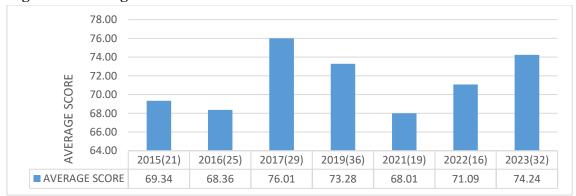
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Figure 18. Professional Licensure Examination Results in 2023



The Figure 19 shows the average results Professional Licensure Examination from 2015-2023. It presents that 2017 has a highest average result which is 76.01. In the year 2019 has a lowest average of results.

Figure 19. Average Results of Professional Licensure Examination From 2015-2023

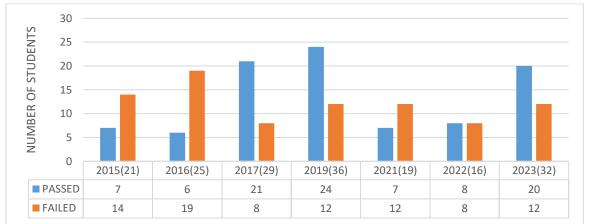


The Figure 20 shows the passed and failed number of takers. In the year of 2019, it shows the highest number of passers which is 24 out of 36. It was followed by year 2017 which is 21 out of 29.

Consequently, the number of failures is in the year of 2016 in which 19 out of 25 takers failed. Moreover, in the year of 2015 is 14 out of 21. The Figure 20 also shows the most promising of passers are in the year of 2019, 2017 and 2023. The challenging year of failures are in the year of 2016, 2015 and 2021.

The licensure examination is a significant measure to ensure the quality of teacher education. It presents a quality measure to determine the graduates who have the required minimum degree of competence to practice the teaching profession in the field.

Figure 20. Professional Licensure Examination Results in Who Passed and Failed From 2015-2023





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Most professions conduct licensure examinations to screen qualified graduates into their respective fields. The licensure examination, in the case of teacher education, is an initial gauge of competence in teaching (Knowles, Plake, Robinson, & Mitchell, 2001; Acosta & Acosta, 2016).

### Significant Relationship of Admission Test and Professional Licensure Examination Results

In this section, the variables are used for statistical treatment of data. These are the admission and licensure examination results.

The Table 5 shows the average rate of Professional Licensure Examination results has a weak relationship with the admission test results of the takers. This implies that there is a little relationship between their results.

Table 5. Correlation Results Between Admission and Professional Licensure Examination Results

Sources of Variation	Pearson correlation	P-value	Remarks
Licensure Examination			Weak Relationship
Admission Results	0.461	0.000	Significant

### \*0.05 level of significance

It entails that the results on admission test has a little correlation to the licensure examination results. It is not constantly relative on the ability of the takers to passed the Professional Licensure exam.

Cahapay (2021) stated that the SAT score is considered by many educators and researchers as indicative of passing the licensure examination. It is suggested that achievement in the SAT presents an early glimpse of future success in the licensure examination. This interesting point has been the center of many educational narratives and empirical studies. Additionally, his study was guided by its purpose to analyze the SAT scores grouped as passed and conditional and the LET performance. This study provides general evidence that students who achieved passed SAT scores performed better in LET than those who obtained conditional SAT scores. This conclusion does not find a stricter admission approach as a solution to the problem because it is given that a special mandate of the university is to integrate disadvantaged students from indigenous communities. This work rather suggests that in assisting students with conditional SAT scores to a higher achievement trajectory in LET, instructional accommodations from program entry until exit should be done.

First, there is an existing bridging intervention that enhances students with conditional SAT scores in tool subjects in language, science, and mathematics upon entry to the program. The intervention approach may be reviewed to ensure that the students obtain a rigorous bridging program. Second, while the students are in their coursework in professional education, continuous assessment of their performance should be made. The areas in which they have weaknesses should be constantly monitored as a basis for instructional remediation. Third, upon completion of coursework, an internal LET review for students with conditional SAT scores should be conducted by the department. The focus of preparation this time should not only include mastery of test competencies but also strategies in taking the examination.

Furthermore, in the study of Balinario (2024) states that there is a significant indirect relationship between the profile of the respondents such as age, course, Entrance Exam, and Grade point average. Lastly, the respondent's mother's educational attainment, course, GPA, and entrance examination are significant predictors of LET performance. It is recommended the college will concentrate on the area of specialization in the conduct of review classes and strengthen the college-wide admission and retention



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policy. Non-education graduates who wish to take education units should be given priority to be admitted to the college's post-undergraduate program and given enough seminars and review classes.

Out of the presentation of results and discussions shown, there is a proposed development as improvement on the admission policy for Bachelor of Science in Radiologic Technology students. This is to create for the better policy that helps both instructors and students in learning the course effectively. More over this serves as a standardized admission policy in the course of BSRT in the institution.

### Propose an Improvement On the Admission Policy For BSRT Students

There is already existing admission policy used by the institutions for BSRT students. This proposal is not to bring contradict but to add some improvement to the BSRT program admission policy. The presentation are arrange according to the sequence of importance of admission and it goes with an explanation and descriptions on the opposite side.

Sequence of Admission to BSRT Program	Descriptions/Explanation
<b>Application Process</b>	
The applicants of the program will look and fill up	At this time, applications are only being
the Application forms and do the Application Online.	accepted via email. Paper applications will
They have to follow instructions that is found under	not be accepted.
the Forms section of the school website.	
35.230.55.252/gsdmsf/applicants/	
It is recommended that they make an appointment with	If they have questions about the application
a counselor to take the entrance examination.	process, the guidance counselor can entertain
The applicants need to get an appointment to the	them.
guidance counselor on when to take the OLSAT	The applicant have to get an examination
examination.	results of Stanine 3 or above which is
The applicants will process the payment for the said	considerably below average as a cut-off score.
examination at the Business Office and set the day of	The results of examinations was the general
examination given by the Guidance Office.	admission of the institution.
Applications to the Radiologic Technology	
Program are accepted once a year.	
-Applicants must be at least 18 years old at the time	The applicants must be in the legal age in
of application.	which they have finished the Senior High
	School Program.
-Finished the Science and Technology, Engineering	If the applicants are not part of STEM Strands
and Mathematics (STEM) Strand in Senior High	in SHS. They need to take a bridge program
School Program with an average grade of 80.	such as Mathematics, Physics and in the Field of Sciences.
-The applicant has No criminal record or pending	The applicant has no derogatory record at the
cases the time of admission.	time working with the BSRT Program



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B. Admission Requirements	
Take the OLSAT Examination	There are several requirements that will be
Completers of SHS	submitted to different offices like the
Have an average grade of 80 in Math, Science and	Registrar, Guidance Counselor, School
English.	Library, School Clinic and School Finances.
Physically Healthy	Library, School Clinic and School Finances.
With Good Morale	
PSA Birth Certificate	
ID picture	
C. Selection Process	Bringing the requirements from the different
Passed the OLSAT Examination	offices and submitting it. Interview will be
Have a good average rating	schedule as for the appointment of the
Passed the Interview from the College Dean and	College Dean and Program Head or Program
Program Head or Program Coordinator	Coordinator
D. Once Accepted	
Loading of Subjects	Upon the submission and interview schedule
2. Take the Bridging Program for Non STEM strands.	from the Dean's office and Program Head.
	The applicants will be given a line-up of
	subject load by the registrar's office.
	This is to signifies that the applicants are
	accepted for the BSRT program.
E. BSRT Program Orientation	
1. The accepted Radtech Students have to attend the	The accepted students will undergo different
orientation program.	orientation that discuss the rules and
	regulations of the schools and the BSRT
	program.
F. Retention Policy	
The accepted RadTech student will follow the policy	The accepted RadTech Students will totally
of BSRT program.	complete the BSRT program for graduation.
k 2	

#### RADIOLOGIC TECHNOLOGY DEPARTMENT POLICY

The student must have had a minimum residency of one (1) year with an academic load of not less than thirty (30) units prior to clinical education training.

The candidate must passed and complete all requirements in the curriculum which include the 800 general radiographic examinations, and 200 specialized radiographic examinations.

The candidate must have completed 2,112 RLE hours and all the required procedures for graduation as shown in the RADTECH RLE Record Book.

The student must have filed an application for graduation.

The student must have been cleared with all his/her financial and property accountabilities.



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# **SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS Summary of The Findings**

These are the following summary of the results:

- 1. Most of the students from 2015-2023 are Stanine 4 in which 52 students got it out of 178 students. There are 1 student who got Stanine 7 and Stanine 8.
- 2. The average results Professional Licensure Examination from 2015-2023 presents that 2017 has a highest average result which is 76.01. In the year 2019 has a lowest average of results.
- 3. The average rate of Professional Licensure Examination results has a weak relationship with the admission test results of the takers.

### **Conclusions of the Study**

Out of the results, the following statements are concluded:

- 1. It implies that most students admitted in the program are slightly below average. And a least of considerably above average and Superior which are the Stanine 7 and 8, respectively.
- 2. The results shows the most promising of passers are in the year of 2019, 2017 and 2023. The challenging year of failures are in the year of 2016, 2015 and 2021.
- 3. It entails that the results on admission test has a little correlation to the licensure examination results.

#### **Recommendations of the Study**

The following statements are the recommendations of the study:

- 1. To the future researchers that they may give an analysis of the academic performance of BSRT students in Academic Year 2018-2023.
- 2. To the Guidance Counselor that they will maintain and make some intervention plan for the students who have a low academic admission score.
- 3. To the academic Administrator, adapt and evaluate the proposed plan for admission and recruitment of incoming BSRT students.
- 4. To the School Administrator that they will have a survey on satisfaction on admission and recruitment process of the BSRT students.
- 5. To the instructors that teaches major subjects that will have a standard assessment for the improvement of the academic performance of their students in preparation of the Professional Licensure Examination.
- 6. To the BSRT students that they should be always prepare in entering the course of BSRT and take the consequences in any task given to them as to prepare them for the job.

#### REFERENCES

- Acuff, N., Bradley, Y., Barlow, P., Osborne, D.(2021). Making Radiology Work The impact of X-Ray technologists. Journal of Nuclear Medicine Technology Sep 2014, 42 (3) 211-217; DOI: 10.2967/jnmt.114.139915
- 2. Agudo, MA., Estolano, AJ., Masajo, E., and Pambid, D. (2019). Factors Contributing to Errors in Radiographic Imaging LPU- St. Cabrini School of Health Sciences Inc. <a href="https://lpulaguna.edu.ph/wp-content/uploads/2019/10/4.-Factors-Contributing-to-Errors-in-Radiographic-Imaging.3-references.pdf">https://lpulaguna.edu.ph/wp-content/uploads/2019/10/4.-Factors-Contributing-to-Errors-in-Radiographic-Imaging.3-references.pdf</a>



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

- 3. Alipio, M. (2020). Adjustment to college and academic performance: Insights from Filipino college freshmen in an Allied Health Science course. *Adjustment to College and Academic Performance: Insights From Filipino College Freshmen in an Allied Health Science Course.* https://doi.org/10.35542/osf.io/74ysf
- 4. Alipio, M. (2020). National Radiologic Technology Licensure Examination Performance: Predicting Success using Discriminant Analysis <a href="https://www.researchgate.net/publication/340625251\_National\_Radiologic\_Technology\_Licensure\_Examination\_Performance\_Predicting\_Success\_using\_Discriminant\_Analysis">https://www.researchgate.net/publication/340625251\_National\_Radiologic\_Technology\_Licensure\_Examination\_Performance\_Predicting\_Success\_using\_Discriminant\_Analysis</a>
- 5. Alipio, M., Talaroc, FR., Ali, A. (2021) Factors Associated with Licensure Examination Performance of Radiologic Technology Graduates IMCC Journal of Science 2021, 1, 46-55 https://myjournal.imcc.edu.ph/
- 6. Alipio, M. (2022). Predicting Revalidation Examination Performance of Radiologic Technolog Students: A Structural Equation Modelling Approach <a href="https://www.researchgate.net/publication/359605820">https://www.researchgate.net/publication/359605820</a> Predicting Revalidation Examination\_Perfor mance\_of\_Radiologic\_Technology\_Students\_A\_Structural\_Equati on\_Modelling\_Approach
- 7. Ampaso, A., Abedin, S., Batalo, J., Ampaso, R., Abdullah, H., & Amer, N. (2022). Predicting Revalidation Examination Performance of Radiologic Technology Students: A Structural Equation Modelling approach. *International Journal of Multidisciplinary*, *3*(3), 404–418. https://doi.org/10.11594/ijmaber.03.03.11
- 8. Bhandari, P. (2023, June 22). *What is quantitative research? | Definition, uses & methods*. Scribbr. https://www.scribbr.com/methodology/quantitative-research/
- 9. Balinario, J., Ofqueria, MG., Arca, L. (2024).Predictors of licensure examination for teachers' performance College of Education, Northern Negros State College of Science and Technology, Philippines https://www.researchgate.net/publication/379669671\_Predictors\_of\_licensure\_examination\_for\_teachers' performance
- 10. Bout, MS., Daligdig, MD., Daulo, K., Delica, D., Fegi, VM., Filomeno, E. Cruzet, R. et.al(2007). A survey of the problems encountered by Radiologic Technologists handling pediatric patients subjected to X-ray examinations among selected tertiary-level hospitals in Cebu City from June to December 2006. https://www.herdin.ph/index.php?view=research&cid=53240
- 11. Castor, J. C., Dela Rea, M. L., & Villena, K. H. (2008). Factors affecting the academic performance of 1st year and 2nd year students of College of Medical Radiation Technology of De La Salle Health Sciences Institute. [Bachelor's thesis, De La Salle Medical and Health Sciences Institute]. GreenPrints. https://greenprints.dlshsi.edu.ph/bsrt/618
- 12. Cahapay, M.(2020). System Admission Test and Licensure Examination for Teachers: The Case of Passed and Conditional Groups College of Education, Mindanao State University, Fatima, General Santos City, 9500 South Cotabato, Philippines https://files.eric.ed.gov/fulltext/EJ1328015.pdf
- 13. Cannavale, A., Santoni, M., Mancarella, P., Passariello, R., & Arbarello, P. (2013a). Malpractice in Radiology: What Should You Worry About?, 2013. Cannavale, A., Santoni, M., Mancarella, P., Passariello, R., & Arbarello, P. (2013b). Malpractice in Radiology: What Should You Worry About? Radiology Research and Practice, 2013, 1–10. https://doi.org/10.1155/2013/219259



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- 14. Cerbito, A. F., Gonzales, K. P. J., & Lapastora, E. (2021). Learning Preferences And Competencies Of Radiologic Technology Interns On General Radiography. *Zenodo (CERN European Organization for Nuclear Research)*. https://doi.org/10.5281/zenodo.4437857
- 15. Choa JMD, Andres MM (2020) The Radiology Research Situation in the Philippines: Identifying the Barriers and Limitations for Future Directions. Int J Radiol Imaging Technol 6:061. doi.org/10.23937/2572-3235.1510061
- 16. Chen. X., Rubin, Kenneth H. Li, Dan, (2011). Relation between Academic Achievement and Social Adjustment: Evidencefrom Chinese Children. Journal of Developmental Psychology. Canada: May Vol.33(3), 518-525.
- 17. Commision on Higher Education. (2018). Policies, Standards, and Guidelines for the Bachelorof Science in Radiologic Technology (BSRT) Program. CHED The Official Websiteof Commission on Higher Education. https://ched.gov.ph/wp-content/uploads/2018/07/CMO-No-07-s.-2018-PSG-for-BS-Radiologic- Technology.pdf
- 18. Codomiz, L. M., Garcia, J., Lachica, H., Lepardo, T. M., Lumagui, T. J., & Vidal, B.(2017). Problems encountered in hiring and retention of radiologic technologists in selected hospitals in the National Capital Region. [Bachelor's thesis, De La Salle Medical and Health Sciences Institute]. Green Prints. https://greenprints.dlshsi.edu.ph/bsrt/268/
- 19. Cruz, R. Bernard. (2008). Problems encountered by the radiologic technology interns during 2nd semester of their internship program S.Y. 2007–2008. [Bachelor's thesis, De La Salle Medical and Health Sciences Institute]. GreenPrints. https://greenprints.dlshsi.edu.ph/bsrt/175/
- 20. Cruz, Denise Audrey B., Eula Sara A. Campomanes, Erlryn Ella L. Belleno, and Mark M. Alipio. 2024. "Academic Stress Measurement and Management of Radiologic Technology Students". *Asian Journal of Education and Social Studies* 50 (4):38-53. https://doi.org/10.9734/ajess/2024/v50i41309.
- 21. Date, T., & Ohkado, A. (2018). The role of continuing education in improving the quality of chest radiography images based on experiences in three Asian countries. *Health and Technology*, 8(5), 411–418. https://doi.org/10.1007/s12553-018-0242-6
- 22. De Guzman, J. (2020). Level Of Effectiveness Of Radiologic Technology Graduate In Preparation To The Local Board Examination. Scribd. https://www.scribd.com/document/292995660/LEVEL-OF-EFFECTIVENESS-OF-RADIOLOGIC-TECHNOLOGY-GRADUATE-IN-PREPARATION-TO-THE-LOCAL-BOARDEXAMINATION?fbclid=IwAR0wJVlO7MgFyhZckox1XD3Yf6edvd2Z3X4jazeYQFeRe2 FXowyZ\_bQry
- 23. DJS Research. (n.d.). *Quantitative Research Design*. <a href="https://www.djsresearch.co.uk/glossary/item/Quantitative-Research-">https://www.djsresearch.co.uk/glossary/item/Quantitative-Research-</a>
  Design#:~:text=Quantitative%20research%20design%20is%20aimed,the%20aim%20of%20qualitative%20research
- 24. Florentino, C. B., Gustilo, R. L., Jailani, H. U., Maceren, M. R., Periabras, N. O., & Alipio, M. M. (2019) The Clinical Competencies of Radiologic Technology Interns of Batch 2018-2019 on Radiological Science Modalities: Basis for Proposed Enhancement Program.
  <a href="https://www.academia.edu/40139502/The\_Clinical\_Competencies\_of\_Radiologic\_Technology\_Interns\_of\_Batch\_2018\_2019\_on\_Radiological\_Science\_Modalities\_Basis\_for\_Proposed\_Enhancement\_Program</p>



E-ISSN: 2582-2160 • Website: <a href="www.ijfmr.com">www.ijfmr.com</a> • Email: editor@ijfmr.com

- 25. Ganseña, MC., Alexis Keith C. Fidel, AK., Luciano, D., Medrano KC, Ortiz, MA., Remo, G. et. al. (2022). Psychological Distress and Burnout of Radiologic Technologists in Batangas Province Amidst the COVID-19 Pandemic . Asia Pacific Journal of Allied Health Sciences in Asia Pacific Journal of Allied Health Sciences Vol. 5. No 2, pp 57-67 September 2022 ISSN 2704-3568 https://research.lpubatangas.edu.ph/wp-content/uploads/2022/09/8-APJAHS-2022-09.pdf
- 26. Gimenez, K. (2022). The Birthd of Philippine Association of Radiologic Technology https://www.scribd.com/document/609692198/The-Birth-of-Philippine-Association-of-Radiologic-Technology?irclickid=TR2whSSR0xyPUba31Q3Ov3MyUkC03Ez3Hz5SW40&irpid=357605&utm\_source=impact&utm\_medium=cpc&utm\_campaign=Scribd\_affiliate\_pdm\_acquisition\_YieldKit%20GmbH&sharedid=4e52405092d94c458711b4fff5efbfbd&irgwc=1
- 27. Guinayen, VK. (2024) Relationship Of The Academic Performance To The Licensure Examination For Teachers Performance Of MPSPC BSED Graduates https://www.mpspc.edu.ph/index.php/15-abstracts/153-relationship-of-the-academic-performance-to-the-licensure-examination-for-teachers-performance-of-mpspc-bsed-graduates
- 28. Hensley, C. (2020). Radiology Students' Attitude Toward Learning Communication Skills: Impact of Clinical Education. *UNLV Theses, Dissertations, Professional Papers, and Capstones*. https://doi.org/10.34917/19412082
- 29. Ingrassia, Jennett M. (2020). Radiologic Technology Students' Perceptions of an Effective Clinical Learning Environment <a href="https://www.asrt.org/docs/librariesprovider3/pdfs/dissertations/radiologic-technology-students-perceptions-of-an-effective-clinical-learning-environment.pdf">https://www.asrt.org/docs/librariesprovider3/pdfs/dissertations/radiologic-technology-students-perceptions-of-an-effective-clinical-learning-environment.pdf</a>
- 30. Jaymalin, M. (2015). Shortage Of Radiologists Threatens Delivery Of Health Care Services
- 31. <a href="https://www.philstar.com/headlines/2015/02/23/1426670/shortage-radiologists-delivery-health-care-services">https://www.philstar.com/headlines/2015/02/23/1426670/shortage-radiologists-delivery-health-care-services</a>
- 32. Knowles, K.T., Plake, B.S., Robinson, D.Z., & Mitchell, K.J. (Eds.). (2001). Testing teacher candidates: The role of licensure tests in improving teacher quality. Atlanta, Georgia: National Academies Press.https://eric.ed.gov/?id=ED467800
- 33. Magulod, G. C. (2019). Learning styles, study habits and academic performance of Filipino University students in applied science courses: Implications for instruction. *Journal of Technology and Science Education*, 9(2), 184. https://doi.org/10.3926/jotse.504
- 34. Mathur. K. 2010. Effects of Socio-Economic Status on the Achievement and Behaviour of Secondary School Students. Unpublished Ph.D. Thesis.
- 35. Monserate, C. A., PhD. (2018). Impact of Technology on the Academic Performance of Students and Teaching Effectiveness. *International Journal of Interdisciplinary Research and Innovations*, *Vol.* 6(Issue 1), 47–87. https://www.researchpublish.com/upload/book/Impact%20of%20Technology-5340.pdf?fbclid=IwAR1DKuTNXdSYI0PFEDRhAQnOmwihnbpPHG\_8D\_ZE1\_EeOqdGa1rdfJZIF Vs
- 36. Oliva, Ameena. B. (2021). Study Habits and Their Effects with the Academic Performance of Bachelor of Science in Radiologic Technology Students. *International Journal of Scientific Research and Management*, 9(07). https://doi.org/10.18535/ijsrm/v9i07.el01
- 37. Orong, D., Alcantara, ZM., Asok, G. Baguasan, M., Evangelio, JR., Galimba, EJ. (2013). The Relationship between Teaching Strategies and Academic Performance of Radiologic Technology Students
- 38. https://ejournals.ph/article.php?id=5549 (2013)



E-ISSN: 2582-2160 • Website: <a href="www.ijfmr.com">www.ijfmr.com</a> • Email: editor@ijfmr.com

- 39. Orong, D., Amandoron RL., Ambat, C., Arcadio, L., Argayoso, JA. (2013)Learning Styles and Academic Performance among Radiologic Technology Students of Liceo de Cagayan University <a href="https://ejournals.ph/article.php?id=5547">https://ejournals.ph/article.php?id=5547</a>
- 40. Pambid, D. & Agawin, M. (2020). A Tracer Study of Radiologic Technology Graduates of LPU-ST. Cabrini College of Allied Medicine from 2016-2018 College of Allied Medicine, College of Arts and Sciences LPU-Laguna Journal of Multidisciplinary Research Vol. 4 No. 1 October 2020 <a href="https://lpulaguna.edu.ph/wp-content/uploads/2021/09/7.-Pambid-Agawin GTS-">https://lpulaguna.edu.ph/wp-content/uploads/2021/09/7.-Pambid-Agawin GTS-</a> Radtech.pdf
- 41. Pangngay, J. J., Merza, C. a. R., & Almojuela, M. L. R. (2023). Academic Predictors of Performance in the Board Licensure Examination for Psychometricians. *Philippine Social Science Journal*, *6*(1), 74–84. https://doi.org/10.52006/main.v6i1.633
- 42. Rai, P. N. (2009). A Comparative Study of a Few Differential Personality Correlates of Low and High Achievers. Unpublished Ph.D. Thesis, Agra Univ.
- 43. Said, M. H., Dalug, N., Galawan, N., Hibaya, H. J., & Jenan, J. (2022). Towards a better Distance learning: Experience of radiologic technology students in a higher education institution. *International Journal of Multidisciplinary*, *3*(4), 627–639. https://doi.org/10.11594/ijmaber.03.04.14
- 44. Seetha, B.C. (2009). An Inquiry into the Psychological and Social Factors Affecting Academic Achievement. Unpublished Ph.D. Thesis. Ban. Univ.
- 45. Smith-Bindman R, Miglioretti DL, Johnson E, et al.(20120). Use of diagnostic imaging studies and associated radiation exposure for patients enrolled in large integrated health care systems, 1996-2010. JAMA. 2012;307(22):2400-2409.
- 46. Somosot, I., Duran, Jr.,& Bernandita Rodriguez, B.,(2021). Success Under Pressure: A Probabilistic Analysis Of The Predictors Of The Licensure Examination Results https://www.coursehero.com/file/152871327/Abstract-Somosot-Success-Under-Pressuredocx/?subId1=667cc9a75b6db103444df920&subId2=102381&irclickid=z5T075UG3xyPU5 NUAR2N32gjUkC0TnWuHz5SW40&utm\_medium=affiliate&utm\_content=1453307&irgwc=1
- 47. Thanh, T. N., Hoang, N. T., Van Nguyen, T., & Ha, H. T. (2022). How Can We Sustain the Training Quality of Radiologic Technology Students During COVID-19 Outbreaks: A Lesson from Vietnam. *Advances in Medical Education and Practice*, *Volume 13*, 1439–1442. https://doi.org/10.2147/amep.s386043
- 48. Valdez, A. P. (2012). Graduates' Transition from Study to Employment of Radiologic Technology Graduates of the Lyceum University of the Philippines--Batangas. *IAMURE: International Journal of Multidisciplinary Research*, *3*(1), 269–291. http://files.eric.ed.gov/fulltext/ED557054.pdf
- 49. WHO (2009) However, public hospitals are generally larger than private hospitals; hence, the majority of Human resources for health country profiles: Philippines; World Health Organization Regional Office for the Western Pacific. ISBN 978 92 9061 624 5 (NLM Classification: W 76) © World Health Organization 2013 Whoiris.who.int/rest/bitstreams/920779/retrieve
- 50. Vavasseur, A., Muscari, F., Meyrignac, O., Nodot, M., Dedouit, F., Dercle, L., Rozenblum, L., Wang, L., Maulat, C., Rousseau, H., Otal, P., Dercle, L., & Mokrane, F. (2020). Blended learning of radiology improves medical students' performance, satisfaction, and engagement. *Insights Into Imaging*, 11(1), 1-12. https://doi.org/10.1186/s13244-020-00865-8
- 51. Yu, LS. (2024). Can AI-assisted X-rays help with the Philippines' radiologist shortage? <a href="https://www.rappler.com/business/artificial-intelligence-x-ray-philippines-radiologist-shortage/">https://www.rappler.com/business/artificial-intelligence-x-ray-philippines-radiologist-shortage/</a>



E-ISSN: 2582-2160 • Website: <a href="www.ijfmr.com">www.ijfmr.com</a> • Email: editor@ijfmr.com

#### Other Webpage References:

- 52. eklavvya.com . The Significance Of Admission Test In Higher Education Admissions
- 53. https://www.eklavvya.com/Content/doc/admission-test/
- 54. faqtoids.com(2024).https://www.faqtoids.com/knowledge/role-sat-subject-tests-college admissions?utm\_content=params%3Aad%3DdirN%26qo%3DserpIndex%26o%3D740006%26ag% 3Dfw130&ueid=F4FCED60-15C2-46EE-B068-619BDBEA3789&origq=College+Admission+Test+means Last Updated February 12, 2024© 2024
  - 619BDBEA3/89&origq=College+Admission+Test+means Last Updated February 12, 2024© 2024 Ask Media Group, LLC
- 55. fastercapital.com (2024). College Interview Preparation Mastering the Art of College Interview Preparation: Tips and Strategies https://fastercapital.com/topics/understanding-the-importance-of-college-interviews.html updated June 17, 2024
- 56. gehealthcare.com <a href="https://www.gehealthcare.com/en-ph/insights/article/making-radiology-work--the-impact-of-xray-technologistsMoorParkCollege.Ed">https://www.gehealthcare.com/en-ph/insights/article/making-radiology-work--the-impact-of-xray-technologistsMoorParkCollege.Ed</a>
  - https://www.moorparkcollege.edu/departments/academic/radiologic-technology/what-is-rad-tech
- 57. 2019 Global Imaging Outlook Report, IMV, https://imvinfo.com/
- 58. Rappler.com/ttps://www.rappler.com/business/artificial-intelligence-x-ray-philippines-radiologist-shortage/
- 59. REPUBLIC ACT NO. 7431. An Act Regulating The Practice Of Radiologic Technology In The Philippines, Creating The Board Of Radiologic Technology Defining Its Powers And FunctionsAndForOtherPurposes.
  - $https://prc.gov.ph/sites/default/files/Radiologic\%20 Technologic\%20\%20 Board\%20 Law\_0.PDF$
- 60. myfuture.com/ttps://myfuture.com/college/taking-college-entrance-exams

  https://www.appily.com/guidance/articles/applying-to-college/importance-of-college-admissions-interview
- 61. simpli.com(2024). Exploring Factors that Impact the Average Salary for Radiology Techhttps://www.simpli.com/lifestyle/exploring-factors-impact-average-salary-radiology-techs?utm\_content=params%3Aad%3DdirN%26qo%3DserpIndex%26o%3D740008%26ag%3Dfw1 30&ueid=5A7623BE-504E-48D4-BD4D-8EA13CAC1130&origq=Issues+and+concerns+of+Radiologic+Technologist+in+the+Phili\_ppines Last Updated May 13, 2024
- 62. studentsscholarships.org <a href="https://studentscholarships.org/articles/133/whats-the-role-ofcollege-admission-testsconsumersearch.com">https://studentscholarships.org/articles/133/whats-the-role-ofcollege-admission-testsconsumersearch.com</a>
- 63. https://www.consumersearch.com/technology/radpeer-login-explained-understanding-benefits-radiologists?utm\_content=params%3Aad%3DdirN%26qo%3DserpIndex%26o%3D740007%26ag%3Dfw130&ueid=E5F4AB08-812C-4EEC-B7D8-
  - 944D52425C54&origg=Certified+Radiologist+in+the+Philippines