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Perception as a Predictor of Intent to Enroll in Master of Science in Radiologic Technology

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A B S T R A C T

This study examined the perception of licensed Radiologic Technologists and their intent to enroll in the Master of Science in Radiologic Technology (MSRT) program. Using a predictive research design, data were collected from 115 purposively selected respondents employed at various hospitals and academic institutions in North Cotabato, Region XII. Participants completed a validated questionnaire through Google Forms and in face-to-face settings. The results showed that Radiologic Technologists generally hold a positive perception of the MSRT program, with a mean score of 4.10, which falls under the "Agree" category, indicating general agreement with its value and benefits. Most participants (59.1%) expressed an intention to enroll, while 40.9% did not, citing concerns such as cost and time constraints. Binary logistic regression analysis revealed that perception is a significant predictor of intent to enroll ($p < 0.001$), with an odds ratio of 72.325, indicating that the likelihood of enrollment increases substantially as perception improves. These findings suggest that improving Radiologic Technologists' perceptions of the MSRT program could enhance enrollment rates. While most respondents see the program as beneficial for career growth and professional development, a notable portion remains hesitant. Efforts to intensify awareness campaigns highlighting the career benefits of the MSRT program may help translate positive perception into actual participation in postgraduate education. Recommendations for higher education institutions offering the MSRT program, institutions employing Radiologic Technologists – both academic and hospital-based, and program developers, such as the Commission on Higher Education (CHED), and for future research, were proposed to address the identified barriers and further promote the advancement of these professionals through postgraduate education.

Keywords: Perception, Intent to Enroll, Master of Science in Radiologic Technology, Predictive, North Cotabato, Philippines

1. Introduction

Earning a master's degree is considered a significant achievement, especially when coupled with the values of continuous learning in light of the challenges and demands of the workforce (Zulieta et al., 2020). The study by Li and Jung (2024) indicates that master's degrees were not universally perceived as ensuring career advancement, a conclusion supported by Van Zyl (2024) and Boneva et al. (2021), who both noted a negative perception of the benefits and life-family-work balance associated with postgraduate studies. These reflect constraints on finances, balancing work and academic responsibilities, and familial commitments that prospective students consider in selecting a graduate school (Shellhouse et al., 2020).

Conversely, there is significant interest in obtaining a master's degree in China, as seen by the 4.74 million candidates who applied for the postgraduate entrance examination in 2023 (Zhou et al., 2024). Research indicated that motivations for pursuing postgraduate studies include enhanced salary, improved employment prospects, career advancement, personal growth, and the attainment of prestige (Amani et al., 2022). However, studies also identified various challenges postgraduate students face, such as time management, transportation, financial issues, concurrent employment, and academic engagement, all of which may result in despair, burnout, and severe anxiety (Yazar, 2020; Rockman et al., 2022).

Damoco et al. (2024) and Diocos (2022) revealed that postgraduate students were overwhelmed and inadequately prepared to address the challenges imposed by the stipulations outlined in the Commission on Higher Education's Memorandum Order (CMO) No. 15, Series of 2019, which includes the publication of postgraduate theses as part of the graduation requirements. In contrast, Akmadul and Agga (2023) reported that additional challenges, such as a hectic clinical work schedule and academic commitments in the nursing master's program at Western Mindanao State University, do not affect their motivation to complete advanced degrees due to their perceived numerous opportunities for advancement, recognition, and financial rewards. This was confirmed by the survey participants of Cordero et al. (2023), alums of graduate programs at the University of the Philippines. They expressed how the programs helped them in their careers by applying the knowledge and skills gained from the programs to their clinical practice, teaching, research consultancy, and policy formulation.

Previous studies (Mohabir, 2020; Bwanga & Sindaza, 2023) investigated the motivating factors influencing Radiologic Technologists' decision-making regarding postgraduate education in radiography. On the other hand, Mohamed et al. (2024) focused on the factors influencing the final year radiography students' decision to pursue postgraduate education in medical imaging. However, no study has been conducted to specifically analyze the perception of

licensed Radiologic Technologists who are not yet enrolled in or degree holders of any postgraduate degree as a predictor of their intention to enroll in postgraduate programs.

Therefore, this study addresses the gap by determining the perception of Radiologic Technologists of the Master of Science in Radiologic Technology (MSRT) and their intent to enroll in the program. This study employed a quantitative approach, which enabled the researcher to gather data from a larger and more diverse group of Radiologic Technologists. The study's findings may enhance the accessibility and enrollment rates of educational institutions offering the MSRT program, which could contribute to advancing healthcare services, the professional growth of Radiologic Technologists, and the field as a whole.

1.1 Statement of the Problem

1. What is the perception level of Radiologic Technologists in the Master of Science in Radiologic Technology (MSRT)?
2. Do respondents have the intent to enroll in the Master of Science in Radiologic Technology (MSRT)?
3. Does perception significantly predict the intent to enroll in the Master of Science in Radiologic Technology (MSRT)?

1.2 Hypothesis

Ho_1: The level of Radiologic Technologists' perception does not significantly predict their intent to enroll in the Master of Science in Radiologic Technology (MSRT).

2. Methods

This study employed a predictive research design, which involves a range of techniques for forecasting future outcomes, utilizing historical and current data. Predicting future events is essential for functioning properly in specific applications (Liz-Domínguez et al., 2019). It ensures that one's beliefs about others remain aligned with reality (Bach & Schenke, 2017).

With this, the Radiologic Technologists' perception of the MSRT program was determined as a predictor of their intent to enroll in the program. The study consisted of 115 respondents working in various selected healthcare institutions in North Cotabato, Region XII, who were selected through purposive sampling. According to Memon et al. (2024), purposive sampling is often employed in quantitative studies to focus on specific subgroups critical to addressing the research questions.

In this study, participants were required to be licensed Radiologic Technologists for at least 2 years, as they likely have sufficient exposure to professional practice, enabling them to have matured and meaningful perceptions about the value of pursuing postgraduate education. Additionally, participants must not be currently enrolled in the MSRT program or degree holders of any other postgraduate program to avoid biases in perceptions and intent, as they have already experienced pursuing advanced education. The last criterion was the participants' willingness to engage in the study.

The study employed an adapted instrument from Duque et al. (2023), which was initially developed to measure the perception of public accounting graduates toward postgraduate education. The adapted version retains the original survey's core structure and key questions but has been modified to align them properly with the study's objectives. It consisted of 30-item questions answerable through a 5-point Likert scale. A pilot study was conducted with 30 participants to test the feasibility of the intended questionnaire. The results revealed a Cronbach's alpha coefficient of 0.90, indicating an excellent level of reliability, which means that the questions demonstrated strong internal consistency.

3. Results and Discussions

What is the perception level of Radiologic Technologists in the Master of Science in Radiologic Technology (MSRT)?

Table 1 – Level of Perception of the Respondents

Level of Perception	Mean	Std. Deviation	Interpretation
Overall	4.10	0.37	General agreement on the program's benefits and relevance.

Legend: 4.21 – 5.00: Very Positive; 3.41 – 4.20: Positive; 2.61 – 3.40: Neutral; 1.81 – 2.60: Negative; 1.00 – 1.80: Very Negative

The table shows that the mean perception score falls within the interval range of "Agree," indicating a positive perception of Radiologic Technologists regarding the MSRT program. Their agreement suggests they hold a favourable and supportive view of the program, acknowledging its value and potential benefits.

This further indicates that they are open to pursuing postgraduate education and actively see it as a valuable tool for their professional growth. This result supports the study of Mohabir (2020), which revealed that Radiologic Technologists possess a high level of self-confidence and firmly believe they can complete postgraduate programs should they choose to pursue them.

What is the perception level of Radiologic Technologists in the Master of Science in Radiologic Technology (MSRT)?

Table 2 – Respondents' Intent to Enroll

	Frequency	**Percent**
No	47	40.9
Yes	68	59.1
Total	115	100.0

The table above indicates the respondents' intent to enroll in the Master of Science in Radiologic Technology (MSRT) program. It shows that the majority of radiologic technologists intend to enroll, suggesting that most respondents are considering the MSRT program. This further indicates that the program is increasingly seen as an attainable path for advancement, particularly when aligned with flexible learning options.

These results are consistent with those of Ohemeng et al. (2022), who found that the majority of Ghanaian Radiographers expressed a willingness to pursue postgraduate studies, citing the need for professional growth, specialization, and enhanced clinical competence. Similarly, Bwanga and Sindaza (2023) emphasized that Radiologic Technologists are motivated by the desire for career development, knowledge acquisition, and the perceived credibility offered by postgraduate degrees.

What is the perception level of Radiologic Technologists in the Master of Science in Radiologic Technology (MSRT)?

Table 3 – The Test of Prediction of Level of Perception on the Intent to Enroll in the MSRT Program

Independent Variable	**β**	**S.E.**	**Wald**	**OR**	**p-value**	**Decision**
Constant	-17.0	3.839	19.709	.00	0.00	
Perception	4.281	.937	20.881	72.325	0.00	Reject Ho_1

Note: Hosmer and Lemeshow Test p = 0.784; OR = Odds Ratio; Nagelkerke R Square = 0.37

Table 3 presents the results of the binary logistic regression analysis. Based on the findings, the Hosmer and Lemeshow Test p-value (0.784) is greater than 0.05 sig., indicating that the model fits the data well. Moreover, the Cox & Snell R Square and Nagelkerke R Square values indicate that the respondent's perception explains about 27% to 37% of the variance in whether or not the respondents will enroll in the MSRT program. In addition, the respondent's perception is a highly significant predictor of whether the respondent will enroll in the MSRT program, which means that as the respondent's perception increases by 1, the probability of their enrollment in the MSRT program increases by 72%. Since perception was found to be a statistically significant predictor of the participants' intent to enroll, the null hypothesis is rejected based on the p-value of 0.00, which was below the 0.05 alpha level of significance.

These results are consistent with the Theory of Planned Behavior (TPB), which served as the foundation of this study. The study demonstrated that the respondents' perception, reflecting the attitude component of TPB, significantly predicts their behavioral intention to enroll. It also confirms the insights of Bwanga and Sindaza (2023), who emphasized that perceptions of academic and professional relevance strongly motivate Radiologic Technologists to pursue postgraduate studies. Similarly, Mohamed et al. (2024) reported that final-year radiography students are more likely to consider postgraduate education when they perceive it as enhancing their clinical and professional roles.

5. Conclusions

The study revealed that Radiologic Technologists have a positive perception of the MSRT program. The data indicate that they recognize the program's value and benefits, which significantly influence their decision-making process regarding postgraduate education. Furthermore, this favorable view reflects their acknowledgment of the program's potential to enhance their clinical competence and expand their academic qualifications, suggesting an awareness of the program's role in advancing professional practice.

Most Radiologic Technologists expressed their intent to enroll in the MSRT program; however, a significant portion remained hesitant. This division suggests that while many view the MSRT program favorably, there are factors that could be crucial in the decision-making process for radiologic technologists.

The binary logistic regression analysis revealed that the perception of the MSRT program is a significant predictor of the intent to enroll. As the perception of the program increases, the likelihood of enrollment also increases.

6. Recommendations

Based on the conclusions of the study, the following recommendations were made:

Since Radiologic Technologists already view the MSRT program favorably, it is important to maintain and strengthen this positive perception. Higher education institutions should regularly conduct information drives, webinars, and open house sessions that clearly explain the program's benefits for clinical advancement, academic careers, and professional growth. Sharing real-life success stories from MSRT graduates and highlighting the opportunities that come with a postgraduate degree, such as specialization, promotions, and teaching roles, can help build motivation and sustain interest among potential students. Making the program more visible and relatable will sustain the current positive outlook and encourage long-term engagement with the idea of pursuing graduate studies.

Although many Radiologic Technologists expressed intent to enroll, a significant portion remained hesitant despite positive perceptions. It is recommended that higher education institutions offering the MSRT program, institutions employing Radiologic Technologists – both academic and hospital-based and program developers, such as the Commission on Higher Education (CHED), explore scholarship options to support Radiologic Technologists who wish to pursue postgraduate education. Providing incentives for those who complete postgraduate degrees could also be beneficial to them. Moreover, institutional support such as flexible working hours and paid study leaves for enrolled employees would not only enhance their professional development but could also contribute to overcoming potential barriers associated with concurrent engagement in work and study, leading to improved overall quality of their healthcare and academic services.

Enhance public awareness of the practical benefits and career advantages of the MSRT program. Given that perception significantly predicts intent to enroll, higher education institutions offering the MSRT program should develop targeted marketing strategies that demonstrate how the MSRT program contributes to career progression, specialization, and professional recognition. Testimonials from alums and information campaigns about the program's benefits should be utilized to boost positive perceptions and encourage more Radiologic Technologists to consider pursuing the MSRT program.

Conduct continuous program evaluation based on feedback from students and industry professionals. To further improve perception and maintain relevance, regular evaluation of the MSRT program content, delivery, and outcomes is necessary. This ensures the program remains aligned with current clinical, academic, and industry demands, thereby reinforcing its value in the eyes of potential enrollees.

Future studies should consider expanding the research to include a more diverse sample from different regions to assess whether the trends observed in this study are consistent across diverse settings. Additionally, qualitative or mixed-methods research could offer more profound insight into personal motivations, perceived barriers, and lived experiences, which could be employed to capture personal narratives and emotional motivations that may not be fully addressed through quantitative surveys alone. These would enrich the existing literature and offer more comprehensive insights for educational institutions aiming to improve enrollment strategies.

These recommendations aim to enhance the accessibility and enrollment rates of the MSRT program, which could contribute to the professional growth of Radiologic Technologists and the field as a whole and advance healthcare services.

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