

Innovative Work Behavior as a Mediator Between Mental Health Stress and Performance of Radiologic Technologists

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Abstract

Mental health stress has been linked to lower work performance among health care workers. The purpose of this article was to examine the mediating role of innovative work behavior in the link between mental health stress and work performance. This study used a descriptive-correlational design. This study included 120 radiologic technologists from private hospitals in Davao del Sur. The statistical tools used in the study are mean, spearman rho product moment correlation, regression analysis, and Med graph using Sobel z-test. The data revealed that Radiologic Technologists experienced moderate mental health stress, high levels of innovative work behavior, and high levels of work performance. The study found a substantial correlation between Radiologic Technologists' mental health stress and work performance, specifically in anxiety, job insecurity, and role ambiguity. Additionally, innovative work behavior and work performance with the following indicators Opportunity exploration, Idea generation, Idea promotion, Idea realization, Reflection of Radiologic Technologists also had significant relationships. Meanwhile, mental health stress and work performance, especially anxiety, job insecurity, and role ambiguity, had a negative correlational relationship. Furthermore, the mediation analysis revealed that innovative work behavior did not mediate the association between mental health stress and job performance, resulting in a decrease in beta value. This implies that work behavior is not the cause mental stress which affects job performance. This study uncovered new information that may help researchers and health care institutions build programs to alleviate mental health stress while increasing innovative work behavior and performance among Radiologic Technologists and other healthcare workers.

Keywords: *Mental health stress, Innovative Work Behavior, Work Performance, Radiologic Technologist, Descriptive-Correlation, Davao City, Philippines*

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Introduction

The detrimental effects of mental health stress were found to be exacerbated by inconsistent management, poor communication, conflicting expectations, lengthy workdays, heavy workloads, a lack of breaks, time restraints, and a lack of tools and technology (Sovold et al, 2021). About one-third of the participants said shift work made their depressive and anxious symptoms worse (Sackett et al, 2023) and 57% of radiologic technologists said it was difficult for them to do their duties effectively.

Mental stress has a particularly negative impact on health around the world. In India, mental health stress is linked to different factors such as workload, job insecurity, long hours, low income, role ambiguity, job dissatisfaction, poor performance, poor peer relationships, fewer opportunities for career advancement, and an unhealthy organizational culture and job satisfaction (Vallasamy et al, 2023). There is evidence that an anxious mind and a creative mind are not always compatible. Several research

(Dimoff & Kelloway, 2019) shows that stress severely lowers the ability to innovate.

Mental health stress had a considerable impact on medical professionals' work performance, whereas health status had a strong influence on task performance. Jia et al. (2022) found that mental health status is affected by occupational stress and task performance. Work stress also reduces performance since it harms an employee's mental health (Llosa et al., 2018). Mental health stress in the Philippine setting had a substantial impact on the work performance of all Filipino radiologic technologists. The role of health as a mediator in this process has received little attention, despite significant research on the direct effects of stress on health.

Numerous studies have been conducted on the association between mental health stress and job performance in several occupations. There has been minimal research into the relationship between creative work practices and

job performance (Lu et al, 2022). The goal of this study was to look into how innovative work behavior influences the relationship between radiologic technologists' job performance and mental health stress. Additionally, this study has added to the body of knowledge about how innovative work behavior influences how mental health stress affects radiologic technologists' ability to perform at their jobs in particular private hospitals. This study also provided a baseline for subsequent studies with the same goal of examining the impact of workplace mental health stress on employees' ability to execute their jobs.

The researcher felt that a study on the mental health stress, innovative work behavior, and job performance of radiologic technologists at several hospitals in Davao Del Sur for the academic year 2022–2023 was necessary given the unprecedented issues and research gap mentioned above in the study.

Methods

This research study utilized a descriptive-correlational design. In a correlational study, researchers look for correlations between variables that are independent and dependent to predict future outcomes using current data (Seeram, 2019). In addition, to ascertain the strength and nature of the association between two or more variables, a correlational design was also utilized. It was incorporated with the mediating variable as an intermediary within the causal sequence connecting an independent variable to a dependent variable. The questionnaires were pilot-tested and subjected to reliability test using the Cronbach Alpha with high reliability coefficient.

On this, innovative work behavior mediating influence on the relationship between mental health, and work performance was determined. The study comprised a sample of radiologic technologists from selected private and public hospitals in Davao city with one hundred twenty respondents.

Davao City was the largest city on the island of Mindanao. It was a highly urbanized center of Davao Region characterized by its population. Its hospital facilities provide medical and radiologic facilities staffed by highly trained radiologic technologists. The primary research location for this investigation was the selected private and public hospitals in Davao City.

Results And Discussion

Table 1. Summary of Level of Mental Health Stress among Radiologic Technologists

Mental Health Stress	Mean	Std. deviation	Description
1. Anxiety	2.40	.945	Low
2. Heavy Workloads	2.23	1.053	Low

4. Job Insecurity	2.09	.957	Low
5. Roll Ambiguity	3.85	1.259	High
Overall Mean & SD	2.64	1.214	Moderate

Legend: 4.21 – 5.00=Very High; 3.41 – 4.20=High; 2.61 – 3.40=Moderate; 1.81 – 2.60=Low; 1.00 – 1.80=Very Low

The table reflects the level of mental health stress among Radiologic Technologists which is highly manifested in this study. The radiologic technologist in this survey agreed moderately on mental health stress, with an aggregate mean of 2.64. In addition, radiologic technologists agree on role ambiguity, with a mean value of 3.85. This indicates that role ambiguity is assessed at a high degree. Furthermore, Job Insecurity has the lowest mean rating of 2.09, indicating that respondents disagree quantitatively. This means that radiologic technologists are confident in their affiliations. In general, the table above shows that orientation, seminars, training, and institutional guidance are important in defining tasks and goals for radiologic technologists.

The result conforms to the study of Stepanek (2022). When someone has role

ambiguity, it can be stressful and worrying since they are unsure about the duties, expectations, and objectives of their employment. Role ambiguity can be a substantial source of mental health stress for radiologic technologists. It is reinforced by the study of (Alblihed & Alzgahaibi, 2022), who underlined that role ambiguity shows a lack of confidence, predictability, and/or clarity about behavior in a job because of factors such as an unclear or poorly defined job description and/or undefined organizational goals. Role ambiguity is more likely to occur in workers who diligently pursue what they perceive to be an important project only to have it shelved or put on the back burner. It is also more likely to occur in workers who lack clarity regarding the nature and boundaries of their position, the objectives they should be pursuing, and their own priorities.

Table 2. Summary of Level of Innovative Work Behavior among Radiologic Technologists

Innovative Work Behavior	Mean	Std. deviation	Description
<i>As a Radiologic Technologist I:</i>			
Opportunity Exploration	3.74	.809	High
Idea Generation	3.61	.793	High
Idea Promotion	3.74	.733	High
Idea Realization	3.74	.740	High
Reflection	3.56	.860	High
OVERALL Mean & SD	3.68	.787	High

Legend: 4.21 – 5.00=Very High; 3.41 – 4.20=High; 2.61 – 3.40=Moderate; 1.81 – 2.60=Low; 1.00 – 1.80=Very Low

The table reflects the Level of Innovative Work Behavior among Radiologic Technologists which is highly manifested in this study. Data show that respondents to this study agree on the innovative work behavior of radiologic technologist in terms of opportunity discovery, concept pronation, idea realization, idea production, and reflection, with an overall mean rating of 3.68. This indicates that the dimension is rated highly. In addition, radiologic technologists agree on opportunity exploration,

concept promotion, and idea realization, with a mean rating of 3.74. Furthermore, Job Insecurity gets the lowest mean rating (3.56), with a quantitative description of agree. The relevance of innovative work behavior among radiologic technologists allows them to improve their job performance, provide better patient care, and remain competitive in a continually changing healthcare environment. Technologists can help their sector grow and develop by accepting novel

ideas and approaches, as well as improving their own job happiness and mental health.

The result conforms to the study of Alessa and Durugbo, (2021) which states that innovative work behavior (IWB) refers to the efforts that individuals who are key and essential players in fostering innovation undertake to execute their innovative ideas. Innovative work behavior (IWB) is a deliberate activity that is not only advantageous for people but also for medical

care. It is backed by the study of Tajpour et al. (2020) which states that the benefits of innovation include increased healthcare organizational performance and the development of individualized treatment programs for each patient. Active knowledge acquisition encourages the development of innovative solutions by combining new and existing information to generate novel notions.

Table 3. Summary of Level of Work Performance among Radiologic Technologists

Work Performance	Mean	Std. deviation	Description
<i>As a Radiologic Technologist I:</i>			
Innovative Skills	3.95	.831	High
Technical Skills	4.25	.730	High
Patient Engagement Skills	4.26	.765	High
OVERALL Mean & SD	4.15	.775	High

Legend: 4.21 – 5.00=Very High; 3.41 – 4.20=High; 2.61 – 3.40=Moderate; 1.81 – 2.60=Low; 1.00 – 1.80=Very Low

The table reflects the Level of Work Performance among Radiologic Technologists which is highly manifested in this study. Data shows that respondents to this study strongly agree on radiologic technologists' work performance, including inventive skills, technical abilities, and patient involvement skills, with an overall mean rating of 4.14. It simply indicates that the dimension is rated highly. In addition, radiologic technologists agree on patient involvement skills, with a mean rating of 4.26. This indicates that patient involvement skills are evaluated to be at a high level. Furthermore, inventive skills got the lowest mean rating of 2.09, which means it was strongly agreed as quantitative description of. The importance of work performance is essential among radiologic technologists as it directly impacts patient care, diagnostic accuracy, efficiency, collaboration, professional reputation, continuous learning, and ethical and legal responsibilities. Maintaining a high level of work performance is crucial for

delivering safe, accurate, and effective radiologic services.

The findings also conform with the study of (Zhenjing et al, 2022), which emphasized that work performance has benefits outside the organization. It helps people reach their maximum potential while improving overall performance, which can have a positive impact on morale and job quality. It is supported by the study of Secretariat, (2019) which asserts that radiologic technologists are responsible for precisely placing patients and producing diagnostic images of the highest quality. They collaborate closely with radiologists, the doctors who diagnose or rule out sickness or damage based on the interpretation of medical pictures. For the radiologist to accurately interpret the results, the imaging examination must be conducted appropriately by a radiologic technologist. Both radiologic technologists and radiologists focused on providing benefit to patients while always maintaining safety.

Table 4. Summary of Relationship Between Mental Health Stress and Work Performance among Radiologic Technologists

	R	p-value	Remarks
1. Anxiety	.478**	<.001	Significant
2. Heavy Workloads	.047	>.050	Not Significant
3. Job Insecurity	.158**	<.001	Significant
4. Role Ambiguity	.103*	<.050	Significant

The table summarizes the association between mental health stress and work performance using the Spearman rho. It focuses on the correlations between anxiety and work performance, severe workloads and work performance, job insecurity and work performance, and role ambiguity and work performance.

Relationship between Anxiety and Work Performance of Radiologic Technologists. The study found a substantial correlation (.478**) between anxiety and work performance, with a p-value of <.001. Therefore, the null hypothesis is rejected. This means that radiologic technologists perform better at work when their anxiety levels are lower. It implies that they address and manage anxiety that could potentially lead to improved performance in their role. This finding highlights the importance of considering the mental well-being of radiologic technologists and implementing strategies to reduce anxiety in the workplace.

The results conform to the study of Suddell et al, (2023) which states that anxiety can impair cognitive processes such as attention, concentration, and memory. Radiologic technologists who experience low levels of anxiety more focus on their tasks, leading to increased accuracy and efficiency in performing imaging procedures. This is supported by the study of Felizarte (2022) which found that reduced anxiety levels can contribute to improved work efficiency and productivity among radiologic technologists. They are likely to experience fewer distractions, enabling them to complete tasks in a more organized and timely manner.

Relationship between Heavy Workloads and Work Performance of Radiologic

Technologists. Based on the results of the study, there is a no relationship between heavy workloads and work performance showing a Correlation Coefficient of .047 and a p-value of >.050. Thus, the null hypothesis is accepted. The result means that the level or intensity of workload does not directly impact the performance of radiologic technologists in their job. The result implies that radiologic technologists are ready to accept heavy workloads. It also implies that radiologic technologists may possess the skills, capabilities, and resilience necessary to handle heavy workloads without compromising their performance.

Spagnoli et al., (2020) stressed that heavy workloads may not have a direct impact on work performance, there could still be other consequences, such as increased stress levels, fatigue, or potential long-term effects on well-being. Organizational support and regular monitoring of workload levels remain important to ensure the well-being and sustained high performance of radiologic technologists. Further, (Konermann,2022) also added that workload does not significantly impact their performance.

Relationship between Job Insecurity and Work Performance of Radiologic Technologists. Based on the results of the study, there is a significant relationship between job insecurity and work performance showing a Correlation Coefficient of .158** and a p-value of <.001. Thus, the null hypothesis is rejected. The result means that the lower the level of job insecurity the higher is the level of work performance among radiologic technologists. It implies that they create a secure work environment that could positively impact their performance. When radiologic technologists have a sense of job security, it can contribute to

increased motivation, job satisfaction, and overall well-being, which in turn can enhance their performance in the workplace.

Fultz et al, (2018) said that the lower levels of job insecurity among radiologic technologists have a positive impact on their work performance. Increased focus, reduced stress, enhanced job satisfaction, higher confidence and motivation, improved teamwork, and decreased turnover and absenteeism are some potential benefits. Creating a work environment that promotes job security and provides clear communication about career prospects can contribute to higher levels of work performance and overall well-being among radiologic technologists. In addition, De Angelis et al, (2021) shared that the lower levels of job insecurity create a more stable work environment, allowing radiologic technologists to concentrate and engage more fully in their tasks. They can dedicate their attention and energy to their work, resulting in improved focus, attentiveness to detail, and overall work performance.

Relationship between Role Ambiguity and Work Performance of Radiologic Technologists. Based on the results of the study, there is a correlation between role ambiguity and work performance showing a Correlation Coefficient of .103* and a p-value of <.050. Thus, the null hypothesis is rejected. The result means

that the clarity or ambiguity of job roles and responsibilities directly impact the performance of radiologic technologists in their work. The finding implies that radiologic technologists can perform their job duties effectively regardless of the level of ambiguity surrounding their roles. Further, they possess the necessary skills, competencies, and adaptability to navigate and fulfill their responsibilities even in situations where their roles may be unclear or ill-defined.

Fultz et al, (2018) found that radiologic technologists may be adaptable and flexible in their approach to work, allowing them to handle role ambiguity without it significantly affecting their performance. They can adjust to changing circumstances, take initiative, and make decisions within the scope of their responsibilities, minimizing any negative impact on their work performance. Furthermore, Bliznakova et al, (2023) added that radiologic technologists may receive comprehensive training and ongoing support to ensure they have the necessary knowledge and skills to perform their duties. With proper training, they can confidently handle their responsibilities, leading to higher work performance. Support systems such as mentorship programs or access to resources further contribute to their ability to navigate their roles without being adversely affected by role ambiguity.

Table 5. Summary of Relationship Between Mental Health Stress and Innovative Work Behavior among Radiologic Technologists

	R	p-value	Remarks
1. Anxiety	.281**	<.001	Significant
2. Heavy Workloads	.034	>.050	Not Significant
3. Job Insecurity	.098*	<.050	Significant
4. Role Ambiguity	.184**	<.001	Significant

The table summarizes the association between mental health stress and innovative work behavior using the Spearman rho. It focuses on the link between anxiety and innovative work behavior, excessive workloads and creative work behavior, job instability and innovative work

behavior, and role ambiguity and innovative work behavior.

Relationship between Anxiety and Innovative Work Behavior of Radiologic Technologists. The study revealed a significant

association (.281**) between anxiety and innovative work behavior, with a p-value of $<.001$. Thus, the null hypothesis is rejected. According to the findings, radiologic technologists exhibit more inventive job behavior when they are less anxious. It implies that as anxiety levels decrease, innovative work behavior increases. In other words, when radiologic techs are less worried, they exhibit more inventive job behavior.

According to Lu et al. (2022), anxiety is the most important factor determining innovative work performance among health care workers. When health care personnel, such as radiologic technicians, experience less anxiety, they are more equipped to innovate in their work practices. Furthermore, Seeram (2019) proposed that anxiety can have positive and negative effects on workplace behavior. While a certain level of anxiety may motivate people to perform better and improve their problem-solving skills, excessive anxiety can impede performance and hinder innovation. The relationship between anxiety and innovative work behavior may vary depending on individual qualities and context.

Relationship between Heavy Workloads and Innovative Work Behavior of Radiologic Technologists. According to the findings of the study, there is no association between excessive workloads and innovative work behavior, with a Correlation Coefficient of .034 and a p-value of $>.050$. Therefore, the null hypothesis is accepted. The findings indicate that there is no statistically significant association between hard workload and innovative work behavior among radiologic technologists. It implies that radiologic technologists' ability to engage in innovative work behavior is not significantly impacted by their workload level.

Lee and Trimi (2018) stated that even when radiologic technologists have a heavy workload, it does not necessarily hinder their capacity to exhibit innovative behavior in their work. It implies that inventive work behavior may be impacted by variables other than workload. In addition, Jiménez-Jiménez (2018) discovered that heavy workloads are not

associated with radiologic technologists' innovative work behavior.

Relationship between Job Insecurity and Innovative Work Behavior of Radiologic Technologists. The study found a significant link between job instability and innovative work behavior (Correlation Coefficient = .098*, p-value $<.050$). Therefore, the null hypothesis was rejected. The findings indicate that there is a significant link or correlation between sentiments of job insecurity and an employee's proclivity to engage in innovative work behavior. The findings imply that higher degrees of job insecurity can influence an employee's tendency or incentive to engage in innovative work behavior. This could be because those facing employment uncertainty are more concerned with self-preservation or job stability, which leads them to prefer traditional or conservative tactics over taking risks with innovative ideas.

According to Niesen et al. (2018), the association between job instability and innovative work behavior varies depending on the individual and organization. Some employees may be driven by job insecurity to become more innovative to enhance their employability or secure their position. Additionally, organizational factors such as leadership support, a positive work culture, and opportunities for learning and development can also influence an employee's innovative work behavior. In addition, Sun et al, (2022) also found that job insecurity can have an impact on an employee's willingness or ability to engage in innovative work behavior, but the specific nature and direction of this relationship can be influenced by individual and contextual factors.

Relationship between Role Ambiguity and Innovative Work Behavior of Radiologic Technologists. The study found a strong association between role ambiguity and innovative work behavior (association Coefficient = .184**, p-value $<.001$). Therefore, the null hypothesis was rejected. The findings indicate that there is a significant link or relationship between employees' level of role ambiguity and their proclivity to engage in

innovative work behavior. It suggests that there is evidence that a higher level of position ambiguity can influence an employee's proclivity or willingness to engage in innovative work behavior. When employees are uncertain about their roles and responsibilities, they may feel hesitant or unsure about taking risks or proposing novel ideas. They may focus more on performing their core tasks rather than engaging in innovative activities due to a lack of clarity about how their innovative efforts will be evaluated or recognized.

According to Ordu and Sari (2022), the association between job ambiguity and innovative work behavior varies by individual and organization. Some employees may see role

ambiguity as an opportunity to demonstrate creativity and autonomy, prompting them to engage in innovative work behavior to navigate the uncertainty. In addition, leadership support, organizational culture, and resource availability can all have an impact on the relationship between role ambiguity and innovative work behavior. Mañas et al. (2018) showed a strong link between role ambiguity and innovative work behavior among employees. Role ambiguity, defined as a lack of clarity and uncertainty about work tasks, expectations, and performance criteria, can have a significant impact on individuals' ability to engage in innovative activities.

Table 6. Summary of Relationship Between Innovative Work Behavior and Work Performance among Radiologic Technologists

	R	p-value	Remarks
1. Opportunity Exploration	.281**	<.001	Significant
2. Idea Generation	.337**	<.001	Significant
3. Idea Promotion	.454**	<.001	Significant
4. Idea Realization	.499**	<.001	Significant
5. Reflection	.281**	<.001	Significant

The table summarizes the association between innovative work behavior and work performance among radiologic technologists using the Spearman rho. It focuses on the relationships between opportunity discovery and work performance, idea generation and work performance, idea promotion and work performance, concept realization and work performance, and reflection and work performance.

Relationship between Opportunity Exploration and Work Performance of Radiologic Technologists. Based on the results of the study, there is a significant relationship between opportunity exploration and work performance showing a Correlation Coefficient of .281** and a p-value of <.001. Thus, the null hypothesis was rejected. The result means that higher the level of opportunity exploration the higher is the level of work performance among

radiologic technologists. It implies that as they embrace and pursue opportunities for growth, learning, and innovation, their performance in the workplace also significantly increases.

Tajpour et al., (2020) said that the higher levels of opportunity exploration encourage radiologic technologists to seek new ideas, methods, and technologies in their work. This mindset promotes innovative thinking and fosters creativity, allowing technologists to discover novel approaches to problem-solving and improving work processes. As a result, their work performance is enhanced through the introduction of innovative techniques and practices. Moreover, Tajpour et al., (2020) said that the higher levels of opportunity exploration encourage radiologic technologists to seek new ideas, methods, and technologies in their work. This mindset promotes innovative thinking and fosters creativity, allowing technologists to

discover novel approaches to problem-solving and improving work processes.

Relationship between Idea Generation and Work Performance of Radiologic Technologists. The study found a substantial correlation (.337**) between idea production and work performance, with a p-value of <.001. Therefore, the null hypothesis is rejected. As a result, radiologic technologists that generate more ideas perform better at work. It means that they are promoting a culture of creative thinking, idea production, and innovation, which can have a good impact on radiologic technologists' workplace performance.

Bekmezci et al, (2022) stated that beyond creativity, innovation is a complicated process including several phases, from the quest for fresh ideas through their ultimate execution. In addition, innovative companies are continuously searching for methods to access the employee potential for innovation, both as a source of new ideas and for their effective implementation. Therefore, it is essential for every firm to investigate what drives individuals to participate in creative work behavior. Nonetheless, inventive behavior might be confused with innovation. Felizarte, (2022) stated that idea creation methods are a fantastic solitary exercise for breaking out of a rut and generating fresh ideas. When used by a group or organization, organized ideation may be a game-changer in terms of how problems are approached and how people work together to find solutions.

Relationship between Idea Promotion and Work Performance of Radiologic Technologists. The study found a significant association between idea promotion and work performance (Correlation Coefficient=.454**, p-value <.001). Therefore, the null hypothesis was rejected. As a result, radiologic technologists perform better at work when their ideas are promoted. The findings suggest that actively promoting and supporting the sharing and execution of ideas can have a favorable impact on their job performance.

According to Alfuraih et al., (2022) idea promotion among radiologic technologists can

have a positive impact on their work performance. It fosters engagement, communication, knowledge sharing, a culture of innovation, problem-solving abilities, adaptability to change, and employee empowerment. Encouraging a supportive environment where idea promotion is valued and recognized can lead to improved work performance and contribute to the overall success of the radiology team. On the other hand,

Patel (2020) said that when radiologic technologists actively promote ideas, it encourages greater engagement and participation among team members. They become more involved in discussions, brainstorming sessions, and problem-solving activities. This increased engagement fosters collaboration, teamwork, and a sense of ownership, ultimately enhancing work performance.

Relationship between Idea Realization and Work Performance of Radiologic Technologists. The study found a substantial correlation (.499**) between idea realization and work performance, with a p-value of <.001. Therefore, the null hypothesis was rejected. As a result, radiologic technologists perform better at work when their ideas are realized. The finding implies that aggressively implementing and executing ideas can improve their performance at work.

Radiologic technologists can manage some challenges by utilizing the technical reasoning, knowledge, and established procedures they learned throughout the training (Harris, 2018). Other unforeseen challenges that arise during routine practice demand reflection and action. Human connection issues necessitate careful decision-making, which involves reaching justifiable conclusions in the face of uncertainty. Technology professionals frequently encounter both well- and poorly structured technical and non-technical challenges.

Further, Seeram (2019) also said that idea realization encourages a culture of innovation and creativity among radiologic technologists. It demonstrates their ability to turn ideas into practical solutions and drives them to continually seek new and innovative approaches. This focus

on innovation stimulates continuous improvement and keeps the team motivated, leading to enhanced work performance.

Relationship between Reflection and Work Performance of Radiologic Technologists. Based on the results of the study, there is a significant relationship between reflection and work performance showing a Correlation Coefficient of .281** and a p-value of <.001. Therefore, the null hypothesis was rejected. The results indicate that the higher the amount of reflection, the higher the level of work performance among radiologic technologists. The findings suggest that they can stimulate and support radiologic technologists' reflective behaviors. This can be facilitated through regular self-assessment, feedback mechanisms, mentorship programs, or opportunities for peer collaboration and discussion. Recognizing the value of reflection and providing the necessary time and resources for it can contribute to improved work performance.

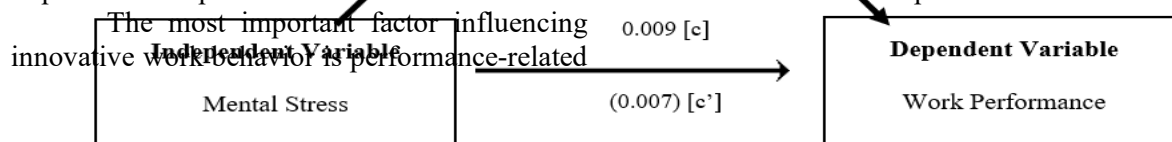


Figure 3: Mediation Model of Innovative work behavior in the Relationship of Mental health stress & Work Performance

Figure 3 indicates that there is no significant mediation occurring in the model ($z=.713075$, $p>0.05$). Because there is no

reflection. Furthermore, reflecting on job duties and the social environment had an indirect impact on instructors' innovative work behavior by improving performance-related reflection. As a result, reflection must be viewed as a source of creativity and professional development, as well as an essential component of daily routines, corporate cultures, and job training (Ali et al., 2022).

Encouraging a culture of reflection within the radiology department can contribute to the professional development and overall effectiveness of the radiologic technologists. Moreover, the reflection of Nadkarni et al., (2018) allows radiologic technologists to review and analyze their experiences, decisions, and actions. It provides an opportunity for self-assessment and self-awareness, leading to personal and professional growth. Radiologic technologists who engage in reflection are more likely to identify areas for improvement, learn from their experiences, and apply that learning to enhance their work performance.

mediation, it is possible to argue that innovative work behavior is not the cause of how mental stress affects job performance. This suggests that

innovative work behavior does not contribute to mental stress, which impairs radiologic technologists' job performance.

The effect size ($\beta = 0.005$) indicates that the path (IV to MV to DV) cannot fully explain the impact of mental stress (IV) on work performance. The overall effect ($\beta = 0.009$) is the sum of direct and indirect effects. The direct

effect ($\beta = .007$) measures the link between mental stress (IV) and job performance (DV), with creative work behavior (MV) included in the regression. The indirect-to-total ratio index yields an R-square of .420. This suggests that the MV accounts for about 42.0 percent of the IV's overall effect on the DV, while the remaining 58.0 percent is either direct or mediated by factors not included in the model.

Conclusion and Recommendations

Results show that Radiologic Technologists had moderate mental stress. Role ambiguity has got the highest mean rating which connotes that role ambiguity is a situation where individuals are uncertain about their roles, responsibilities, and expectations within their job or organization. In the context of radiologic technologists, role ambiguity may arise when there is a lack of clarity or conflicting information regarding their specific duties, tasks, and scope of practice. Findings also suggest how role ambiguity among radiologic technologists has been recognized as an important factor that can affect job satisfaction, performance, and overall job-related well-being. Innovative work behavior is agreed by the radiologic technologists. The impact of innovative work behavior in radiologic technology is substantial, ranging from improved patient care and workflow efficiency to enhanced accuracy, cost reduction, professional growth, and research advancements. By embracing innovation and actively pursuing advancements in the field, radiologic technologists can positively influence healthcare outcomes and contribute to the evolution of radiologic technology. Work performance among radiologic technologists has a broad impact on diagnostic accuracy, patient safety, workflow efficiency, collaboration, continuous learning, patient experience, and overall healthcare outcomes. By consistently delivering high-quality work, radiologic technologists contribute to improved patient care, enhanced departmental efficiency, and the advancement of radiologic technology. Results also show that there is a significant relationship between mental stress and work performance, particularly on anxiety and work

performance, job insecurity and work performance. Radiologic technologists believe in the value of managing their anxiety and job insecurity in relation to their profession.

Given the results of the study, it is deemed necessary that they should have a positive work environment which can have a significant impact on their effectiveness and productivity. A highly significant relationship was shown on innovative work behavior and work performance among radiologic technologists. Opportunity and work performance, idea generation and work performance, idea promotion and work performance, idea realization and work performance, and reflection and work performance. Based on the results, fostering a culture of innovation and supporting technologists in their pursuit of new ideas and approaches can significantly enhance their effectiveness and productivity. Encouraging continuous learning, providing resources for experimentation, and promoting collaboration can contribute to the development of innovative work behaviors and ultimately lead to improved work performance and patient care. Results show that there is a negative relationship between mental health stress and work performance in terms of anxiety & job insecurity. RT believes in the value of managing anxiety & job insecurity in relation to their profession. It is deemed necessary that they do have a positive work environment which can have a significant impact on their effectiveness & productivity. Innovative work behavior does not mediate the mental stress and work performance of radiologic technologists. It means that the presence or

absence of innovative work behavior does not play a significant role in how mental stress impacts their work performance among radiologic technologists. In multiple regression, if the beta of IV effect on DV is significant on M and M on IV is significant meaning there is a mediation. If the effect of IV on DV while controlled by M becomes zero or insignificant, there will be full mediation. If the p-value is still significant you have partial mediation. Moreover, if the direct relation is not significant while the indirect is significant, there is partial mediation. Otherwise, there will be no mediation effect.

This study suggests that Radiologic Technologists should manage their stress effectively. Effective management of mental health stress among radiologic technologists is essential for improving work performance, patient care, job satisfaction, and overall well-being. It contributes to a healthier and more successful professional life while

reducing the risk of physical and mental health problems. The hospital administrators should recognize the significance of radiologic technologists managing their mental health stress effectively as it positively impacts patient care, workforce retention, productivity, collaboration, organizational culture, and employee well-being. By prioritizing mental health, hospitals create an environment conducive to success for both radiologic technologists and the overall healthcare system. The top management should recognize the significance of radiologic technologists managing their mental health stress effectively as it positively impacts patient safety, productivity, workforce retention, cost savings, employee well-being, and professional development. Prioritizing mental health stress management contributes to a high-performing healthcare system and the delivery of quality care. Future researchers. Since the present study is conducted in Davao del Sur, with only a small population. A similar study should be conducted. Alfuraih, A. M., Alsaadi, M. J., & Aldhebaib, A. M. (2022). Job satisfaction of radiographers in Saudi Arabia. *Radiologic Technology*, 93(3), 268-277.

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