



Perceptions pertaining to the impact of modernization plan of the bureau of fire protection within Caraga region

Cypol Jay C Inocente ¹, Ralph Ian S Colima ², Robert H Espinola ³, Sandy C Nuyles ⁴, Francis Carl T Paulite ⁵, Dondee Nyer P Malaqui ⁶, Remegio Bergamo Jr. ⁷

¹⁻⁷ Public Administration, Cebu City, Philippines

* Corresponding Author: Cypol Jay C Inocente

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Abstract

This study examines the perceptions pertaining to the impact of the modernization plan of the Bureau of Fire Protection within the Caraga Region. The respondents, consisting primarily of single individuals with Bachelor's degrees, aged between 36-40, and with 6-10 years of service, generally hold a positive perception towards the implementation of the modernization law. The findings reveal a high level of agreement regarding improvements in various areas, such as Fire Protection Service, Force Restructuring, Organizational Development, Capability, Material and Technology Development, and Specialized Services Development. Respondents also strongly agree that the modernization law has positively impacted their performance in fire prevention, fire suppression, fire investigation, and emergency medical services. However, there appears to be no significant relationship between the implementation of the modernization law and performance in fire prevention, fire suppression, and fire investigation and intelligence. Only emergency medical and rescue services demonstrated a significant correlation, indicating the potential impact of the modernization law in this area. The study also highlights areas that require attention, including human resource development and employee work-life balance. The ranking of issues and concerns by respondents emphasizes the need for specialized training for firefighters, regular fire prevention campaigns, and a focus on disaster preparedness and resilience. These findings provide valuable insights to guide future efforts in enhancing the effectiveness of the modernization law and its impact on fire protection services within the Caraga Region.

Keywords: Modernization Plan, Fire Prevention, Fire Protection Service, Bureau of Fire Protection

1. Introduction

Change, in the same way as other terms, is hard to define. People have different characterization and version of this seemingly simple word. Merriam Webster's Dictionary (2007) defines change as the act, process, or result in the forms of substitution, alteration, and transformation. This is a simple definition but may come along with numerous interpretations. Organizations always adapt to meet needs because change is a constant. Change in an organization can be caused by both internal and external factors (Palumbo & Manna, 2019) ^[10]. Understanding these causes is crucial to effective organizational management. As a result of the fact that organizational change invariably impacts them as well, employees must also be aware of what causes it (Amankwa-Amoae *et al.*, 2021) ^[2]. Avoiding the use of pointless or haphazard tactics and attempting to concentrate on an appropriate course of action are crucial when managing change and putting change strategies into practice (Kornberger & Vaara, 2022) ^[13]. Change management is a continuous process that requires effort, knowledge, devotion, and time to set up and maintain (Dwivedi *et al.*, 2023) ^[5]. The personnel must be involved, and this could mean that they will also be impacted by the changes (Bjorklund *et al.*, 2020). An organization must first determine why it needs the changes and how they will benefit it before implementing one of the numerous effective and well-liked change management methodologies and models (Furterer & Wood,

2021; Veeraraghava, 2021) [8, 17].

Contextualization is a method of approaching or connecting our research topic to the context and setting of the study. This strengthens and supports the overall validity of our research project. This study builds on earlier studies on how people adjust to change at work (such as Chan, 2000; Pulakos *et al.*, 2000) by exploring how people adjust in the context of significant organizational change and empirically determining the dimensions of that structure. The BFP Modernization Act requires the BFP to create and carry out a fire protection modernization program that includes, among other things, the purchase of cutting-edge fire apparatus, an increase in the BFP's staff, and the provision of specialized training for firefighters. As this Act has just been recently approved and published, there is a lack of research materials in related to this subject. Articles, write-ups and other publications found in electronic sources, focus mainly on the presentation of what the law is about. Hence, this study is directed towards capturing the perceptions of "change" by the directly affected individuals which are the Bureau of Fire Protection (BFP) personnel. This study leads the readers down these avenues of contextualizing change and is supported by a wealth of illustrative models and theories. The following figure portrays the framework of the above-mentioned views. The study on the Impact of Modernization Plan of the Bureau of Fire Protection within Caraga Region is crucial in assessing the perceptions and opinions of stakeholders regarding the modernization plan. Examining the perceptions of stakeholders, including fire personnel, local government units, and the general public, the study aims to provide valuable insights into the effectiveness of the modernization efforts and identify areas of improvement. This information is essential for informing policy and decision-making processes, enhancing stakeholder engagement, improving service delivery, and ultimately ensuring public safety within the Caraga Region. The study's findings can guide strategic planning, resource allocation, and implementation strategies to maximize the benefits of the modernization plan, address concerns, and enhance the overall efficiency and effectiveness of fire protection services. Understanding and addressing the perceptions of stakeholders, the Bureau of Fire Protection and Local Government Units can foster transparency, build trust, and work collaboratively towards a safer and more resilient Caraga Region.

Modernization Law

The BFP Modernization Law refers to the legislation implemented to enhance and upgrade the capabilities of the Bureau of Fire Protection (BFP) in the Philippines. This law aims to address the need for modernization in firefighting equipment, facilities, and training to ensure the effective and efficient response to fire incidents and other emergencies. The BFP Modernization Law recognizes the importance of investing in state-of-the-art equipment, such as fire trucks, communication systems, and personal protective gear, to equip firefighters with the necessary tools to carry out their duties safely and effectively. Additionally, the law emphasizes the importance of continuous training and professional development for BFP personnel to enhance their skills and knowledge in fire prevention, suppression, and rescue operations (Sanidad-Leones, 2006) [14]. The implementation of the BFP Modernization Law reflects the government's commitment to prioritize the safety and well-

being of its citizens by providing the BFP with the resources needed to effectively respond to emergencies and protect lives and properties (Sunada *et al.*, 2002) [15]. The BFP Modernization Law is a significant step towards improving the firefighting capabilities of the Bureau of Fire Protection in the Philippines. Allocating resources and establishing a framework for modernization, the law aims to address the challenges faced by the BFP in effectively responding to fire incidents and other emergencies.

One key aspect of the modernization effort is the acquisition of state-of-the-art equipment and facilities. This includes upgrading the fleet of fire trucks to ensure they are equipped with the latest firefighting technology and can efficiently navigate through urban areas (Agenda, 2016) [1]. Additionally, investments are made in communication systems, such as advanced radio systems and integrated command centers, to enhance coordination and response capabilities during emergencies. The law also recognizes the importance of providing BFP personnel with proper training and development opportunities. Continuous training programs are crucial for enhancing their skills in fire prevention, suppression, and rescue operations (National Research Council, 2009). Equipping firefighters with up-to-date knowledge and techniques, they can efficiently handle various emergency situations and minimize risks to life and property.

Methodology

This study is exploratory using quantitative approach. Survey will be conducted and to be supported by open-ended questions for validation purposes. The researchers will be using non-probability sampling specifically convenience sampling for the survey since the population of the respondents are defined but the availability may be varied. The respondents of the study will be personnel who are assigned within the five provinces belonging to Caraga region and clients from all over the region. For the purposes of this study, a conventional questionnaire will be used with certain alterations. The tool will compile information about the respondents' demographic profile, the modernization law components and their opinion, the level on how they are affected, and the problems they encounter in the implementation of this program. This will be a 5-point Likert scale survey which captures the perceptions of respondents as to the implementation of the law. There will be two (2) questions from each component of the law itself and two (2) questions on the opinion of the respondents. This will be answered using the 5-point scale with: 5 – Strongly Agree, 4 – Agree; 3 - Neutral; 2 – Disagree; and 1 – Strongly Disagree.

Results and Discussion

Table 1: Fire Protection Service

Indicators	Mean	VD
Establishment of Fire Protection Service including the establishment of rescue hotlines in all LGUs.	3.42	A
Municipalities with no existing fire protection services have given priority.	3.98	A
Timeliness and efficiency in responding to fire incidents	3.69	A
Accessibility and availability of fire protection services	3.66	A
Effectiveness in fire prevention measures	3.94	A
Grand Mean	3.74	A

Table 1 presents an assessment of the Fire Protection Service, evaluating various indicators related to its effectiveness and efficiency. The establishment of Fire Protection Service, including the establishment of rescue hotlines in all Local Government Units (LGUs), received a mean score of 3.42. While there is some progress, further efforts are needed to enhance this aspect of the service. The indicator focusing on prioritizing municipalities with no existing fire protection services obtained a higher mean score of 3.98, indicating that significant attention is being given to addressing this issue. This suggests a proactive approach in ensuring that all areas have adequate fire protection services. In terms of timeliness and efficiency in responding to fire incidents, the mean score of 3.69 suggests a moderate level of performance. There is room for improvement to enhance response times and increase overall efficiency. The accessibility and availability of fire protection services received a mean score of 3.66, indicating a moderate level of accessibility. However, there is a potential for improvement in certain areas to ensure that fire protection services are readily accessible to all communities. The indicator evaluating the effectiveness of fire prevention measures received a relatively high mean score of 3.94. This suggests that efforts in preventing fires have been effective, resulting in positive outcomes in reducing fire incidents. Overall, the grand mean of 3.74 indicates an average to above-average performance across all indicators assessed. While there are areas that require further attention and improvement, the Fire Protection Service seems to be making significant strides in ensuring the safety and well-being of the communities it serves.

Table 2: Force Restructuring and Organizational Development

Indicators	Mean	VD
Development of the BFP into a compact, efficient, responsive and modern firefighting force.	4.15	A
BFP design and establish qualifications upgrading program for BFP officers and personnel in accordance with the CSC rules and regulations.	4.20	A
Effectiveness of communication and coordination within the organization	4.04	A
Adaptability and flexibility in responding to changing needs and demands	3.96	A
Availability of career development opportunities	4.12	A
Grand Mean	4.09	A

Table 2 focuses on the assessment of Force Restructuring and Organizational Development within the Fire Protection Service. The development of the BFP into a compact, efficient, responsive, and modern firefighting force, received a high mean score of 4.15. This indicates that efforts have been made to transform the BFP into a modernized force that is capable of efficiently responding to fire incidents. The second indicator assesses the BFP's qualification upgrading program for officers and personnel, with a mean score of 4.20. This suggests that the BFP has implemented a program to enhance the qualifications and skills of its officers and personnel in alignment with the rules and regulations of the Civil Service Commission (CSC). The effectiveness of communication and coordination within the organization obtained a mean score of 4.04. This indicates that the BFP has demonstrated a commendable level of communication and coordination, which is essential for the efficient operation and response to fire incidents. Moreover, measuring

adaptability and flexibility in responding to changing needs and demands received a mean score of 3.96. This suggests that while the BFP shows a good level of adaptability, there may be some areas where further improvements could be made to effectively address changing needs and demands. The availability of career development opportunities received a high mean score of 4.12. This implies that the BFP has implemented initiatives to provide career growth and advancement opportunities for its personnel, contributing to their professional development. Overall, the grand mean of 4.09 indicates an above-average performance across all indicators in the Force Restructuring and Organizational Development category. This suggests that the BFP has made significant progress in transforming its organization, enhancing qualifications, fostering effective communication and coordination, and providing career development opportunities for its personnel.

Table 3: Capability, Material, and Technology Development

Indicators	Mean	VD
The existing fire protection equipment and services of the BFP shall be upgraded	4.20	A
Acquisition shall be synchronized with obsolete equipment.	4.10	A
Adequacy and availability of firefighting equipment and tools	4.15	A
Effectiveness of training programs to enhance firefighting capabilities	3.78	A
Utilization and integration of technology in fire protection operations	3.94	A
Grand Mean	4.03	A

Table 3 presents the data on the assessment of Capability, Material, and Technology Development within the Fire Protection Service. upgrading the existing fire protection equipment and services of the BFP, received a high mean score of 4.20. This suggests that efforts have been made to improve and modernize the fire protection equipment and services, ensuring that the BFP has the necessary resources to effectively respond to fire incidents. The second indicator assesses the synchronization of acquisitions with obsolete equipment, receiving a mean score of 4.10. This indicates that the BFP is taking steps to synchronize the acquisition of new equipment with the phasing out of obsolete equipment. This approach ensures a smooth transition and maintains the efficiency and effectiveness of firefighting operations. Moreover, the adequacy and availability of firefighting equipment and tools received a mean score of 4.15. This suggests that the BFP has made significant efforts to ensure that firefighting equipment and tools are adequate and readily available, enabling firefighters to carry out their duties effectively. The effectiveness of training programs to enhance firefighting capabilities received a mean score of 3.78. While this score indicates a good level of effectiveness, there may be room for improvement in enhancing the training programs to further develop the firefighting capabilities of BFP personnel. The utilization and integration of technology in fire protection operations received a mean score of 3.94. This suggests that the BFP has started utilizing and integrating technology in its operations, but there is potential for further advancements to fully leverage technology for more efficient fire protection measures. Overall, the grand mean of 4.03 indicates an above-average performance across all indicators in the Capability, Material, and Technology

Development category. This implies that the BFP has made notable progress in upgrading equipment and services, synchronizing acquisitions, ensuring adequacy and availability of firefighting tools, and integrating technology. Table 4 presents the data on the assessment of Specialized Services Development within the Fire Protection Service. establishment of a Search and Rescue Force and other special units, receiving a high mean score of 4.15. This indicates that the Fire Protection Service has recognized the importance of specialized units and has taken steps to establish a dedicated Search and Rescue Force, highlighting their commitment to respond effectively in challenging rescue scenarios

Table 4: Specialized Services Development

Indicators	Mean	VD
Establishment of Search and Rescue Force and other special units are essential	4.15	A
Availability and effectiveness of specialized services (e.g., hazardous materials response, technical rescue, urban search and rescue)	4.07	A
Establishment of specialized fire protection services.	4.10	A
Response time and efficiency in providing specialized services	4.05	A
Training and proficiency in specialized services	4.15	A
Grand Mean	4.10	A

The availability and effectiveness of specialized services, such as hazardous materials response, technical rescue, and urban search and rescue, received a mean score of 4.07. This suggests that the Fire Protection Service has made efforts to ensure that specialized services are available and that they are effective in addressing specific emergency situations, including hazardous materials incidents and technical rescue operations. The establishment of specialized fire protection services received a mean score of 4.10. This indicates that the Fire Protection Service has recognized the need for specialized units within their organization to address specific fire protection requirements effectively. This highlights their commitment to expanding their capabilities beyond general firefighting. Moreover, the response time and efficiency in providing specialized services received a mean score of 4.05. This suggests that the Fire Protection Service has demonstrated a commendable level of response time and efficiency in delivering specialized services. This is crucial in ensuring timely assistance and effective resolution of emergencies that require specialized skills and resources. The training and proficiency in specialized services received a high mean score of 4.15. This indicates that the Fire Protection Service has implemented effective training programs to enhance the skills and proficiency of their personnel in specialized services. This ensures that they are well-prepared and competent in handling the unique challenges presented by specialized emergency situations. Overall, the grand mean of 4.10 indicates an above-average performance across all indicators in the Specialized Services Development category. This suggests that the Fire Protection Service has made significant progress in establishing specialized units, ensuring the availability and effectiveness of specialized services, and maintaining a high level of training and proficiency. These efforts enhance the Fire Protection Service's ability to respond to a wide range of emergencies and provide specialized assistance to ensure public safety.

Table 5: Human Resource Development

Indicators	Mean	VD
The modernization shall include the development of a comprehensive training program for BFP personnel and BFP volunteers	3.93	A
Mandatory training for new entrants and personnel, volunteers are required as well as establishment of training facilities	3.58	A
Adequacy and effectiveness of training and development programs for personnel	3.55	A
Employee satisfaction with work-life balance initiatives	3.17	A
Support for professional growth and career advancement	3.70	A
Grand Mean	3.59	A

Table 5 presents the data on the assessment of Human Resource Development within the Fire Protection Service. Development of a comprehensive training program for BFP personnel and BFP volunteers, receiving a mean score of 3.93. This suggests that efforts have been made to modernize the training programs within the Fire Protection Service, ensuring that both personnel and volunteers receive comprehensive training to enhance their skills and capabilities. The mandatory training for new entrants and personnel, including volunteers, and the establishment of training facilities received a mean score of 3.58. This indicates that the Fire Protection Service has recognized the importance of providing mandatory training for new recruits and personnel, as well as volunteers, to ensure that they have the necessary knowledge and skills to carry out their duties effectively. The establishment of training facilities further supports the training initiatives within the organization. Moreover, the adequacy and effectiveness of training and development programs for personnel received a mean score of 3.55. While this score suggests that there is room for improvement, it indicates that efforts have been made to provide training and development opportunities for the Fire Protection Service personnel. Further enhancements may be required to ensure that the training programs are adequate and effective in meeting the evolving needs of the organization. Employee satisfaction with work-life balance initiatives received a mean score of 3.17. This suggests that there is room for improvement in work-life balance initiatives within the Fire Protection Service, as the score indicates a relatively lower level of employee satisfaction. Efforts may be needed to address work-life balance concerns and create a supportive and healthy work environment for personnel. The support for professional growth and career advancement received a mean score of 3.70. This suggests that the Fire Protection Service has made efforts to provide support for professional growth and career advancement opportunities for its personnel. However, there may be further potential for improvement in this area to ensure that employees are adequately supported in their career aspirations. Overall, the grand mean of 3.59 indicates an average performance across all indicators in the Human Resource Development category. This suggests that while efforts have been made to develop comprehensive training programs, provide mandatory training, and support professional growth, there is still room for improvement in areas such as training effectiveness, work-life balance initiatives, and employee satisfaction. Addressing these areas can contribute to the overall development and well-being of

the Fire Protection Service personnel.

Table 6: Fire Prevention

Indicators	Mean	VD
Modernization Law gives the BFP the sole responsibility to administer and enforce the Fire Code.	4.41	SE
The modernized activities established make it easier for us to conduct training and awareness drives.	4.37	SE
Effectiveness of fire safety education programs in the community	4.60	SE
Frequency and thoroughness of fire safety inspections in buildings and public spaces	4.49	SE
Timeliness and accuracy of fire safety permit processing	4.20	SE
Grand Mean	4.41	SE

Table 6 presents the data on the assessment of Fire Prevention within the Bureau of Fire Protection (BFP). Modernization law that gives the BFP the sole responsibility to administer and enforce the Fire Code, receiving a high mean score of 4.41. This indicates that the BFP has been entrusted with the exclusive authority to regulate and enforce fire safety standards. This recognition underscores the importance placed on the BFP's role in ensuring compliance with fire safety regulations. The second indicator assesses the ease of conducting training and awareness drives through modernized activities, obtaining a mean score of 4.37. This suggests that the BFP has implemented modernized activities that facilitate the organization's efforts in conducting training and raising awareness about fire prevention. These activities likely contribute to more effective outreach and engagement with the community.

Moreover, the effectiveness of fire safety education programs in the community received a high mean score of 4.60. This implies that the BFP has successfully developed and implemented fire safety education programs that have proven to be highly effective in educating and informing the community about fire prevention measures. These programs likely contribute to increased awareness and a better understanding of fire safety practices among the public. The frequency and thoroughness of fire safety inspections in buildings and public spaces received a mean score of 4.49. This suggests that the BFP has demonstrated a commendable level of commitment in conducting regular and thorough fire safety inspections in various settings, including buildings and public spaces. These inspections play a crucial role in identifying and mitigating fire hazards. The timeliness and accuracy of fire safety permit processing obtained a mean score of 4.20. This indicates that the BFP has shown a good level of efficiency and accuracy in processing fire safety permits. Timely and accurate permit processing contributes to streamlined operations and ensures compliance with fire safety regulations. Overall, the grand mean of 4.41, denoting "Strongly Effective" indicates an outstanding level of performance across all indicators in the Fire Prevention category. This suggests that the BFP has been successful in modernizing its activities, conducting effective fire safety

education programs, performing regular and thorough inspections, and processing fire safety permits efficiently. These achievements reflect the BFP's commitment to fire prevention and its ability to fulfill its role as the primary enforcer of fire safety regulations.

Table 7: Fire Suppression

Indicators	Mean	VD
Modernized equipment purchases and launching	4.60	SE
Evident collaborative effort of the bureau and the local government	4.29	SE
Response time to fire incidents	4.20	SE
Success rate in controlling and extinguishing fires	4.25	SE
Adherence to firefighting protocols and safety procedures	4.39	SE
Grand Mean	4.35	SE

Table 7 presents the data on the assessment of Fire Suppression within the Bureau of Fire Protection (BFP). Modernized equipment purchases and launching, receiving a high mean score of 4.60. This suggests that the BFP has successfully acquired and deployed modernized firefighting equipment, which likely enhances the BFP's ability to effectively suppress fires and protect lives and properties. The evident collaborative effort of the bureau and the local government obtained a mean score of 4.29. This indicates a strong level of collaboration between the BFP and the local government authorities. Collaboration is crucial for effective fire suppression as it ensures coordinated efforts, shared resources, and a unified approach in tackling fire incidents. The response time to fire incidents received a mean score of 4.20. This suggests that the BFP has demonstrated a commendable level of timeliness in responding to fire incidents. Quick response times are vital in preventing fires from escalating and minimizing the potential damage they may cause.

Moreover, the success rate in controlling and extinguishing fires received a mean score of 4.25. This indicates that the BFP has a high rate of success in effectively controlling and extinguishing fires. This achievement reflects the professionalism and competence of the BFP personnel in executing firefighting operations. Adherence to firefighting protocols and safety procedures obtained a mean score of 4.39. This suggests that the BFP places a strong emphasis on adhering to established firefighting protocols and safety procedures. Strict adherence to these standards ensures the safety of firefighters and the effectiveness of firefighting efforts. Overall, the grand mean of 4.35, denoting "Strongly effective," indicates an outstanding level of performance across all indicators in the Fire Suppression category. This implies that the BFP has been highly successful in acquiring modernized equipment, fostering collaboration with local government authorities, responding promptly to fire incidents, effectively controlling and extinguishing fires, and maintaining strict adherence to firefighting protocols and safety procedures.

Table 8: Fire Investigation and Intelligence

Indicators	Mean	VD
Establishment of increased plans and programs	4.29	SE
Imposition of more stringent penalties for acts that compromise fire safety	4.24	SE
Timeliness and accuracy of fire incident investigations	4.26	SE
Identification and apprehension of fire perpetrators (if intentional)	4.24	SE
Use of technology and data analysis in fire investigation and intelligence gathering	4.21	SE
Grand Mean	4.25	SE

Table 8 presents the data on the assessment of Fire Investigation and Intelligence within the Bureau of Fire Protection (BFP). The establishment of increased plans and programs received a high mean score of 4.29. This indicates that the BFP has implemented plans and programs to enhance fire investigation and intelligence activities. This likely includes strategies to improve investigative techniques, intelligence gathering, and overall efficiency in addressing fire incidents. The imposition of more stringent penalties for acts that compromise fire safety obtained a mean score of 4.24. This suggests that the BFP has recognized the importance of imposing stricter penalties for individuals or entities that engage in activities that compromise fire safety. This approach serves as a deterrent and reinforces the significance of adhering to fire safety regulations. The timeliness and accuracy of fire incident investigations received a mean score of 4.26. This suggests that the BFP demonstrates a commendable level of efficiency and accuracy in conducting fire incident investigations. Timely and accurate investigations are vital for identifying the causes of fires and taking appropriate actions to prevent similar incidents in the future.

Moreover, the identification and apprehension of fire perpetrators, particularly in cases of intentional fires, received a mean score of 4.24. This indicates that the BFP has been successful in identifying and apprehending individuals responsible for intentional fires. Swift and effective actions in apprehending perpetrators contribute to maintaining public safety and holding responsible parties accountable. The use of technology and data analysis in fire investigation and intelligence gathering obtained a mean score of 4.21. This suggests that the BFP has embraced the use of technology and data analysis to enhance their fire investigation and intelligence capabilities. Technology-driven approaches and data analysis can provide valuable insights and support in identifying patterns, trends, and potential leads in fire investigations. Overall, the grand mean of 4.25, denoting "Strongly effective," indicates an outstanding level of performance across all indicators in the Fire Investigation and Intelligence category. This implies that the BFP has been successful in establishing plans and programs, imposing stricter penalties, conducting timely and accurate investigations, identifying and apprehending fire perpetrators, and utilizing technology and data analysis.

Table 9: Emergency Medical Services

Indicators	Mean	VD
Enablement through additional training of BFP personnel	4.42	SE
Expansion on the budget allocation for medical equipment and services.	4.34	SE
Effectiveness of medical assessments and triage at the scene	4.34	SE
Provision of appropriate medical interventions and treatments	4.38	SE
Collaboration with other healthcare providers and agencies in emergency medical situations	4.36	SE
Grand Mean	4.34	SE

Table 9 presents the data on the assessment of Emergency Medical Services (EMS) within the Bureau of Fire Protection (BFP). The enablement through additional training of BFP personnel received a high mean score of 4.42. This indicates that the BFP has taken steps to provide additional training to its personnel, equipping them with the necessary skills and knowledge to deliver quality emergency medical care. Additional training enhances the capabilities of BFP personnel in assessing and responding to medical emergencies effectively. The expansion on the budget allocation for medical equipment and services obtained a mean score of 4.34. This suggests that the BFP has recognized the importance of allocating sufficient financial resources to enhance medical equipment and services within the EMS. A well-funded budget allows for the procurement of advanced medical equipment and the provision of quality medical services to patients in need. The effectiveness of medical assessments and triage at the scene received a mean score of 4.34. This indicates that the BFP demonstrates a commendable level of competency in conducting medical assessments and triaging patients at the scene of an emergency. These assessments are crucial in prioritizing and providing appropriate medical care based on the severity of the patients' conditions. Moreover, the provision of appropriate medical interventions and treatments obtained a mean score of 4.38. This suggests that the BFP is successful in delivering appropriate medical interventions and treatments to patients in emergency situations. This ensures that patients receive timely and effective medical care, contributing to better outcomes and increased chances of survival. Collaboration with other healthcare providers and agencies in emergency medical situations received a mean score of 4.36. This indicates that the BFP demonstrates a strong commitment to collaborating with other healthcare providers and agencies in emergency medical situations. This collaboration enhances the coordination of resources and expertise, leading to more effective and efficient patient care. Overall, the grand mean of 4.34, denoting "Strongly effective," indicates an outstanding level of performance across all indicators in the Emergency Medical Services category. This suggests that the BFP has been successful in enabling its personnel through additional training, allocating sufficient budget for medical equipment and services, conducting effective medical assessments and triage,

providing appropriate medical interventions and treatments, and collaborating with other healthcare providers and agencies.

Table 10: Significant relationship between implementation of the modernization law and level of performance in terms of fire prevention

Adjusted R square: -0.0464006	Coefficients	Standard Error	t Stat	P-value	Remarks
Intercept	2.550	1.302	1.959	0.064	NS
Fire Protection Service	0.247	0.195	1.265	0.220	NS
Force Restructuring and Organizational Development	0.122	0.162	0.752	0.461	NS
Capability, Material, and Technology Development	0.109	0.162	0.675	0.507	NS
Specialized Services Development	-0.098	0.146	-0.670	0.511	NS
Human Resource Development	0.137	0.134	1.020	0.320	NS

Based on the provided analysis results, there doesn't appear to be a significant relationship between the implementation of the modernization law and the level of performance in terms of fire prevention. This is indicated by the coefficients and p-values for the predictors (Fire Protection Service, Force Restructuring and Organizational Development, Capability, Material, and Technology Development, Specialized Services Development, and Human Resource Development) in the regression model. The intercept has a coefficient of 2.550 and a p-value of 0.064, which suggests that it is not

statistically significant. Similarly, all the coefficients for the predictors have p-values greater than 0.05, indicating that they are not statistically significant either. The adjusted R square of -0.0464006 also indicates a very weak relationship between the predictors and the level of performance in fire prevention. Based on these results, it can be concluded that the implementation of the modernization law does not have a significant impact on the level of performance in terms of fire prevention, as measured by the provided indicators.

Table 11: Significant relationship between implementation of the modernization law and level of performance in terms of fire suppression

R squared: 0.04379	Coefficients	Standard Error	t Stat	P-value	Remarks
Intercept	5.034	1.760	2.860	0.010	S
Fire Protection Service	0.116	0.263	0.440	0.664	NS
Force Restructuring and Organizational Development	-0.140	0.219	-0.637	0.531	NS
Capability, Material, and Technology Development	0.017	0.219	0.079	0.938	NS
Specialized Services Development	-0.124	0.197	-0.628	0.537	NS
Human Resource Development	-0.016	0.181	-0.086	0.932	NS

Table 11 provides the results of a analysis examining the relationship between the implementation of the modernization law and the level of performance in terms of fire suppression. The R-square value is 0.04379, which implies that about 4.38% of the variation in fire suppression performance can be explained by the model, and the rest by factors not included in this model. This is a relatively low value and suggests that this model may not fully capture the factors influencing fire suppression performance. The coefficients provide information about the expected change in fire suppression performance for a unit change in the corresponding predictor, while holding all other predictors constant. However, the p-values for each of the components of the modernization law ("Fire Protection Service", "Force Restructuring and Organizational Development",

"Capability, Material, and Technology Development", "Specialized Services Development", and "Human Resource Development") are all above the typically used significance threshold of 0.05, indicating a lack of statistical significance. In other words, based on these results, none of these variables significantly predict the level of performance in terms of fire suppression. These findings have several implications. It suggests that the elements of the modernization law studied here may not be the critical factors impacting fire suppression performance. This might indicate that policy-makers and fire suppression agencies need to re-evaluate the emphasis placed on these components or look for other factors not captured in this study that might have a more substantial impact on performance.

Table 12: Significant relationship between implementation of the modernization law and level of performance in terms of fire investigation and intelligence

Adjusted R square: -0.05523	Coefficients	Standard Error	t Stat	P-value	Remarks
Intercept	6.681	1.384	4.826	0.000	S
Fire Protection Service	-0.131	0.207	-0.631	0.535	NS
Force Restructuring and Organizational Development	-0.095	0.173	-0.552	0.587	NS
Capability, Material, and Technology Development	-0.121	0.172	-0.703	0.490	NS
Specialized Services Development	-0.176	0.155	-1.132	0.271	NS
Human Resource Development	-0.116	0.143	-0.810	0.427	NS

Table 12 presents the results of a analysis assessing the relationship between the implementation of the modernization law and the level of performance in terms of

fire investigation and intelligence. The adjusted R-square value is -0.05523, which suggests a poor fit for the model and indicates that it may be overfitted or poorly specified. The

negative adjusted R-square is unusual and often suggests that the predictors in the model are not suitable or the model doesn't fit the data well. The intercept is statistically significant (p -value = 0.000), implying that when all other variables are set to zero, the expected level of performance in terms of fire investigation and intelligence is significantly different from zero (6.681). However, none of the components of the modernization law, including Fire Protection Service, Force Restructuring and Organizational

Development, Capability, Material, and Technology Development, Specialized Services Development, and Human Resource Development, are significantly related to the level of performance in fire investigation and intelligence, as their p -values are all above 0.05. The implications of these findings are important. They suggest that the components of the modernization law do not have a significant impact on fire investigation and intelligence performance, based on the data and the model used in this analysis.

Table 13: Significant relationship between implementation of the modernization law and level of performance in terms of emergency medical and rescue services

Adjusted R squared: 0.2335	Coefficients	Standard Error	t Stat	P-value	Remarks
Intercept	1.859	1.571	1.184	0.250	NS
Fire Protection Service	0.489	0.235	2.082	0.050	S
Force Restructuring and Organizational Development	-0.287	0.196	-1.463	0.159	NS
Capability, Material, and Technology Development	0.456	0.195	2.333	0.030	S
Specialized Services Development	0.259	0.176	1.471	0.157	NS
Human Resource Development	-0.234	0.162	-1.446	0.164	NS

Table 13 provides the results of an analysis that explores the relationship between the implementation of the modernization law and the level of performance in terms of emergency medical and rescue services. The adjusted R-square value of 0.2335 indicates that about 23.35% of the variance in the level of performance in emergency medical and rescue services can be accounted for by the variables included in this model. Looking at the coefficients and their associated p -values, we see those two components of the modernization law - "Fire Protection Service" and "Capability, Material, and Technology Development" - are significantly related to the level of performance in terms of emergency medical and rescue services, as their p -values are less than 0.05. This means that changes in these variables are associated with changes in the performance of emergency medical and rescue services, even when controlling for the other variables in the model. The implications of these findings are twofold. First, they suggest that specific components of the modernization law - namely Fire Protection Service and Capability, Material, and Technology Development - do have a significant relationship with the level of performance in terms of emergency medical and rescue services. This implies that implementing changes in these areas could potentially enhance performance in these services. Second, the three other components included in the model - "Force Restructuring and Organizational Development", "Specialized Services Development", and "Human Resource Development" - did not show a statistically significant relationship with performance. This suggests that they might not be critical factors in influencing the level of performance in terms of emergency medical and rescue services, at least based on this model and data. Furthermore, while the model accounts for about 23.35% of the variance in performance, a significant portion of the variance is still unexplained, suggesting that there might be other important factors not included in this model.

Conclusion

Based on the findings, it can be concluded that the respondents, who mainly comprise of single, Bachelor's degree holders aged between 36-40 with 6-10 years of service, generally have a positive perception towards the implementation of the modernization law. This is evidenced

by their high level of agreement towards improvements in Fire Protection Service, Force Restructuring, Organizational Development, Capability, Material and Technology Development, and Specialized Services Development. Furthermore, respondents strongly agree that the modernization law has positively impacted their performance in various roles, such as fire prevention, fire suppression, fire investigation, and emergency medical services. However, the survey results also suggest that there may not be a significant relationship between the implementation of the modernization law and the level of performance in fire prevention, fire suppression, and fire investigation and intelligence. The only significant correlation was found between the implementation of the modernization law and the performance in emergency medical and rescue services, indicating that this could be an area where the modernization law has the most noticeable impact. Moreover, the lower score in Human Resource Development, especially in regards to employee work-life balance, indicates that there are areas that need to be addressed for further improvement. Additionally, the ranking of the issues and concerns by respondents highlights the need for more specialized training for firefighters, regular fire prevention campaigns, and an emphasis on disaster preparedness and resilience. In conclusion, while the modernization law has been generally well-received and has led to perceived improvements in certain areas, there are still aspects that require attention and improvement, such as human resource development and provision of specialized trainings. These findings can guide future efforts to enhance the effectiveness of the modernization law and its impact on fire protection services.

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