Innovation, Competency and Public Satisfaction in Indonesia's Emergency Medical Services: A Study of Semarang's "Ambulan Hebat"

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ABSTRAK

Studi ini mengkaji dampak inovasi layanan publik dan kompetensi kinerja pegawai terhadap kepuasan publik. Ini dilakukan untuk mendukung reformasi administrasi atas meningkatnya permintaan layanan kesehatan yang inklusif dan responsif melalui program Ambulan Hebat di Semarang, Indonesia. Penelitian kuantitatif dilakukan dengan melibatkan 70 responden yang terlibat dalam pelaksanaan Ambulan Hebat di Dinas Kesehatan Semarang. Data dianalisis melalui Partial Least Squares Structural Equation Modeling (PLS-SEM) untuk mengevaluasi model pengukuran dan struktural. Konstruk inovasi layanan publik, kompetensi kinerja dan kepuasan publik menunjukkan reliabilitas dan validitas konvergen. Nilai Variance Inflation Factor (VIF) menunjukkan tidak ada multikolinearitas yang signifikan. Hasil model struktural menunjukkan inovasi pelayanan publik memiliki efek sedang dan signifikan secara statistik terhadap kepuasan publik, sementara kompetensi kinerja memiliki efek yang lebih kecil tetapi tetap signifikan. Kedua konstruk secara kolektif mencakup 58.1% dalam kepuasan publik serta menyimpulkan hasil pengukuran dengan relevansi prediktif yang kuat. Hasil penelitian menunjukkan bahwa masyarakat merespons inovasi pelayanan publik yang nyata dan menganggap kompetensi teknis dan interpersonal program ambulans sebagai contoh yang baik dan rill. Selain itu, perlu dipertahankan dan peningkatkan kinerja pegawai dalam aspek pelayanan kesehatan pada kondisi darurat; sehingga memerlukan strategi pelengkap dan secara bersamaan mendorong inovasi kelembagaan untuk kompetensi profesional pegawai di garda terdepan.

ABSTRACT

This study examines the effects of public service innovation and frontline employee performance competency on public satisfaction with Semarang's "Ambulance Hebat" emergency service in Indonesia. The study situates itself within ongoing administrative reform efforts and the growing public demand for inclusive and responsive healthcare. A quantitative design was employed using survey data from 70 respondents associated with the Ambulance Hebat service at the Semarang Health Office. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to assess both the measurement and structural models. The measurement model demonstrates satisfactory reliability and convergent validity for the constructs of public service innovation, performance competency, and public satisfaction, while variance inflation factor (VIF) values indicate no multicollinearity concerns. Structural results indicate that public service innovation has a moderate, statistically significant effect on public satisfaction, whereas performance competency has a smaller yet significant effect. Together, these predictors explain 58.1% of the variance in public satisfaction, and the model exhibits strong predictive relevance. Substantively, publics respond positively to tangible innovations in service design and delivery and perceive the program's technical and interpersonal competencies as credible markers of service quality. The findings suggest sustaining satisfaction in emergency healthcare requires complementary strategies: continuous refinement of service innovations alongside systematic investments in frontline capability and training, communication enhancement and performance management.

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INTRODUCTION

High-quality health services are central to Sustainable Development Goal 3 on health and well-being, as well as to the pursuit of universal health coverage; this goal emphasizes not only financial protection and service availability but also the quality of care and patient experience (United Nations, 2025). User-satisfaction surveys increasingly monitor quality as an indicator of health-system performance (WHO, 2025); within this framework, emergency and pre-hospital care, including ambulance services, is strategic because delays, miscommunication or inadequate treatment can produce immediate and irreversible consequences (Ellis, 2016).

Empirical studies in numerous low and middle-income countries reveal a tension between the expansion of emergency medical services and ongoing user dissatisfaction, particularly regarding response times, equipment quality, and call-center performance (Asfaw et al., 2024). The results suggest that merely improving access does not guarantee an enhanced user experience or increased trust in public health services (Endeshaw, 2020). In public administration, this issue has been redefined through the lens of public service logic, which views services as processes of value co-creation between providers and users, rather than as one-way delivery of standardized outputs (Grönroos, 2006, 2019). Public satisfaction is a measure of how users feel about the quality, fairness, and responsiveness of a service. Micro-level research utilizing SERVQUAL by AlOmari (2021) demonstrated that dimensions including reliability, responsiveness, assurance, empathy and tangibles collectively affect perceived service quality and satisfaction.

Recent studies associate these insights with innovation in public service and the competence of employees. A study by M. R. Pratama et al (2024) and Rivai (2025) stated that public sector innovation, which encompasses new or significantly improved services, processes, organizational arrangements and digital tools is widely advocated as a strategy to enhance effectiveness and the publi experience. However, there is still fragmented evidence about its impact at the user level.

Research from Pradana et al (2022) and A. B. Pratama (2020) on employee competence indicated that its influence on satisfaction is typically indirect, mediated by perceived service quality. On the other hand, competence enhances service quality, which subsequently predicts satisfaction, whereas the direct relationship between competence and satisfaction is often weak (Kusumasari et al., 2018; Marthalina et al., 2025). The mixed findings suggest a continuing debate about the impact of innovation and performance competence on piblic' satisfaction with public services.

Indonesia offers a compelling environment for examining these inquiries. Over the last decade, the central government has promoted public service innovation and encouraged local governments to document and replicate innovative practices (M. R. Pratama et al., 2024; Rivai, 2025). Research indicates a surge in local innovations across various sectors; however, it reveals that many of these initiatives are merely descriptive "good practices" that lack a comprehensive evaluation of their impact on publics (A. B. Pratama, 2020; Pratiwi et al., 2024). The government has mandated regular measurement of public' satisfaction through the Survei Kepuasan Masyarakat (SKM) to enhance accountability. The Regulation of the Ministry of State Apparatus and Bureaucratic Reform No. 14 of 2017 outlines guidelines for the design, implementation, and reporting of SKM, establishing it as a performance indicator and a learning tool. However, its integration with innovation and human resource management is inconsistent.

Within this national framework, the Semarang City Health Office has a strategic mandate to improve public health including emergency and pre-hospital care. The "Ambulance Hebat" is a

distinguished innovation, providing a complimentary 24-hour emergency ambulance service administered by the Health Office (Dinas Kesehatan, 2025). The program was created in response to the increasing requirement for emergency transportation and has evolved into a complete system that addresses both maternal and non-maternal emergencies, traffic accidents, and disasters. It is connected to an emergency contact center, augmented with digital features such as a hotline and real-time ambulance tracking, and promoted as an accessible, round-the-clock service for the residents of Semarang. Despite extensive assessments and local reports highlighting persistent problems, such as a shortage of medical staff, inadequate equipment, and public complaints regarding response times and communication, the program remains effective.

Research on Semarang's Ambulance Hebat has predominantly concentrated on implementation analysis, indicating that although human-resource competence is typically satisfactory, the quantity of personnel and facilities is inadequate, and standard operating procedures are not consistently institutionalized (Andini et al., 2020). Empirical research on public evaluations of "Ambulance Hebat" through is limited (Novitaria et al., 2020). Also, there is a lack of studies examining the interaction between innovation and employee performance competence in relation to satisfaction with emergency health services or emphasizing policy or organizational processes, rather than user-level outcomes. Additionally, research regarding competence and satisfaction often emphasizes administrative services over critical health services that save lives. The identified gaps highlight the necessity for outcome-oriented research that integrates innovation, competence, and public satisfaction within essential health services.

This study examines the "Ambulance Hebat" program in Semarang, with particular attention to how public service innovation and frontline personnel performance competencies shape publics' satisfaction with emergency healthcare services. This study conceptualizes public service innovation as the design and implementation of new or substantially improved service features, processes, and delivery mechanisms. Public service logic, service-quality theory, and recent empirical insights on the interrelationships among competence, service quality, and user satisfaction inform this conceptualization.

In addition, personnel performance competency refers to the knowledge, technical skills, attentiveness, and professionalism demonstrated by frontline staff during service encounters. Public satisfaction is defined as users' evaluative judgments of response timeliness, the perceived quality of medical care, communication clarity, and the extent to which service experiences meet or exceed expectations. Accordingly, this paper analyzes the innovation dimensions of the "Ambulance Hebat" service, assesses their association with public satisfaction, and evaluates the contribution of employee performance competencies to satisfaction outcomes. Finally, the paper engages with debates on public service innovation and policy development in Indonesia, emphasizing the integration of innovation, human resource development, and SKM-based monitoring to strengthen public trust in emergency healthcare services.

Literature Review

Public service is recognized as a fundamental obligation to ensure the basic rights of publics' are met (Osborne et al., 2015, 2016). Classical literature positions the Weberian model as a normative foundation, highlighting legal rationality, hierarchy, proceduralism, and impersonal administration to guarantee predictability and justice (Peters, 2014; Weber, 2002). This system has faced criticism for its rigidity and lack of responsiveness to

the demands of a modern, complex society, prompting discussions on how bureaucracies can evolve to enhance responsiveness while maintaining legal legitimacy.

The introduction of new public management (NPM) in the 1980s and 1990s marked a paradigm shift, incorporating private sector managerial principles into the public sector. This shift emphasized orientation, efficiency, competition, contractualism and performance measurement (Fohim et al., 2025; Hood, 1991). Advocates of NPM contend that this methodology enhances efficiency and accountability within a service context that necessitates quantifiable performance. Critics argue that NPM diminishes publics to mere consumers, undermining democracy, equality and inclusiveness, and is incompatible with the non-commercial nature of public services (Christensen et al., 2016; Demircioglu & Chen, 2019).

In response, Denhardt & Denhardt (2000) developed the new public service (NPS) paradigm, which emphasizes the government's role is to serve rather than steer. This means that the NPS approach emphasizes the importance of participation, dialogue and collaboration in maximizing public service delivery. The debate between NPM and NPS highlights a fundamental conflict between market-based efficiency and substantive democratic values.

Furthermore, recent developments have expanded the discussion through the framework of public service-dominant logic and value co-creation, which views service quality as the result of interactions between government and publics within a collaborative service ecosystem (Osborne et al., 2015, 2016). However, recent literature from Nasi et al (2024) and Voorberg et al (2015) emphasizes that co-creation and collaboration are heavily influenced by digital capacity, organizational readiness, and information gaps—thus making them less universally effective.

In addition to innovation and participation in public services, the accountability dimension remains a key determinant of the quality of public services. Deininger & Mpuga (2005) demonstrated transparency, competence and public oversight mechanisms significantly contribute to service improvement. However, formal accountability does not always lead to improvements unless supported by staff capacity, appropriate incentives, and an organizational culture that encourages innovation (Bovens, 2007; Dunleavy et al., 2006). Thus, the evolution of public services demonstrates a shift from a procedural approach to a performance-focused model and ultimately to a public-centered collaborative paradigm—providing an important theoretical foundation for empirical studies on service innovation, staff competence, and public satisfaction.

Therefore, public services continue to drive innovation and essential development through fundamental changes in management principles, processes, and practices, continually aiming to improve from traditional concepts to modern management (Grönroos, 2019; A. B. Pratama, 2020). This innovation encompasses two dimensions: conceptual innovation, which involves new paradigms and ideas, and delivery innovation, focusing on innovative methods for providing services to the public.

Correspondingly, Chen et al (2020) and Marthalina et al (2025) emphasized that public service innovation plays a crucial role in supporting good governance and bureaucratic transformation. Using a public administration approach, this study demonstrates that an innovative culture in public services can enhance coordination between the government and the public, as well as reduce policy overlap. Moreover, innovation enables the public

sector to respond to changing public needs more effectively and efficiently (Fohim et al., 2025; Nasi et al., 2024).

Based on these debates and expert opinions, this study aims to elucidate the practical and empirical outcomes of the Semarang city government's efforts to enhance public services and foster service innovation. This is achieved through a strategic and systematic effort to create, develop, and implement new approaches to providing public services, including transforming bureaucratic paradigms, enhancing the quality of governance, and utilizing digital technology to meet the demands of changing times and public needs more effectively, efficiently, and participatively.

This research was uncovered through an evaluation of the Ambulance Hebat initiative in Semarang, which strives to make a tangible contribution to meeting public health needs. Furthermore, this study fills a research gap from an exploratory quantitative standpoint, as previous research has been qualitative and theory-based.

The research related three variables latent and visualized in the table 1. The variables are described as exogenous and one endogenous variable that are interconnected in forming a regression line. In this study, we emphasize the direct and indirect correlations between variables X1 (public service innovation) and X2 (performance competency) with Y (public satisfaction). We argue that public satisfaction is determined by two key factors in public services: the existence of innovation transformation and the continuous improvement of employee competency to meet the complex needs of the public. Therefore, each variable is tested and elaborated based on its interconnected and mutually reinforcing criteria.

Table 1.
Research Variable and Indicator

Variable	Dimension	Indicators	Sources
X1-Public Service Innovation	Service Process	Simplified procedures; faster wait times; clear flow	(Osborne et al., 2015)
	Technological	Easy digital access; online service booking; electronic data	(Nasi et al., 2024)
	User-Centered	Services tailored to needs; responsive to complaints; enhanced experience	(Voorberg et al., 2015)
	Organizational	Healthcare facility collaboration; flexible assignments; leadership support	(Christensen et al., 2016; Dunleavy et al., 2006)
X2-Performance Competency	Knowledge Competence	Understanding SOPs; safety protocols; understanding policies	(Demircioglu & Chen, 2019)
	Skills Competence	Clear communication; making quick decisions; operating medical equipment/health insurance licenses	(Aparna & Bharathi, 2016)
	Work Attitude	Discipline; compliance with regulations; responsibility	(Robbins & Judge, 2009)
	Teamwork Competence	Cross-professional collaboration; assisting colleagues; conducive environment	(Widowati et al., 2023)
Y-Public Satisfaction	Perceived Quality	Tangibles: facilities; Reliability: appropriate service; Responsiveness: prompt; Assurance: a sense of security; Empathy: attention	(Rastogi et al., 2022)
	Expectation–Confirmation	Service meets expectations; total satisfaction; positive service outcomes	(Harinurdin et al., 2024)

Variable	Dimension	Indicators	Sources
	Behavioral Intention	Service meets expectations; total satisfaction; positive service outcomes	(Bobek & Hatfield, 2003)

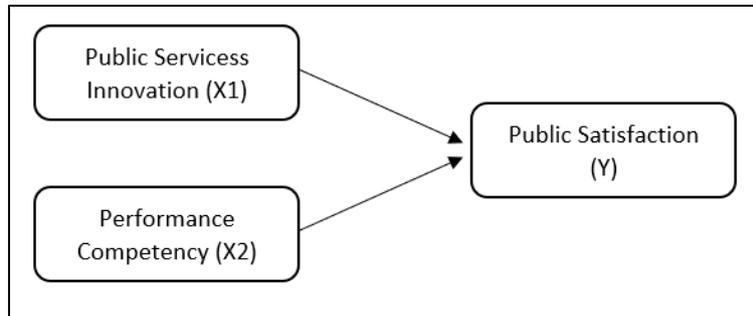Source: Processed by author(s) and previous studies

It present details regarding the involvement of research variables and indicators in Table X. The research hypothesis model is presented, supplemented by the statement's direction, in Figure 1. The research hypotheses are as follows:

H1: Efforts to create public service innovation (X1) are accompanied by increased employee competency (X2) to encourage public satisfaction (Y) at the Semarang City Health Office.

H2: Public service innovation (X1) affects public satisfaction (Y) at the Semarang City Health Office.

H3: Employee performance competency (X2) affects public satisfaction (Y) at the Semarang City Health Office.

Figure 1.
Research Framework

Source: Processed by author(s) and previous studies

RESEARCH METHODS

This study was carried out at the Health Office in Semarang, Indonesia. Regulation No. 14 of 2017, issued by the Minister of Administrative and Bureaucratic Reform, in conjunction with Regional Regulation No. 54 of 2016 regarding Health and Public Services for Ambulan Hebat, promotes bureaucratic reform and enhances public services. The need for sustainable public service quality and the reduction of public grievances motivates this study. Hence, government must formulate relevant recommendations to replace prior restrictions deemed ineffective.

This research examines the links among variables, tests hypotheses, and quantifies existing phenomena or variables through measurable data. The measured phenomena encompass behaviors, perceptions, and specific events within the community that pertain to the capacity for innovation in public services and the competitive performance of personnel. The objective is to assess public satisfaction among service recipients and establish a foundation for developing policies and initiatives that enhance the quality of public health services in Semarang, Indonesia.

Respondents were selected using probability sampling, with specified stratification criteria that included individuals who utilize health facilities (Ambulan Hebat). The criteria for respondents were determined by age and gender; each respondent possessed distinct features that rendered them appropriate for the study analysis. The study population comprised stakeholders, users, and associated individuals who were engaged with the Ambulance Hebat services at the Semarang Health Office during the study period. Seventy respondents were recruited from this

population and constituted the final research sample (n = 70). Consequently, 70 pertains to the sample size, rather than the population size.

According to the data, users of the Ambulan Hebat were predominantly aged 18–28, with 44 respondents (62.8%), followed by the 29–39 age group, which comprised 20 respondents (28.5%). Simultaneously, individuals aged 40–50 and 51–61 comprised merely 4 (5.8%) and 2 (2.9%) participants, respectively. The Ambulan Hebat service in Semarang was predominantly utilized by those aged 18 to 28 years. This indicates an increased knowledge of emergency health services among younger demographics. In contrast, 40–49 age demographic documented a minimal number of users. A total of seventy respondents participated in the survey.

A quantitative methodology was employed to elucidate the indicator variables pertinent to the examination of the research hypotheses. We conducted analyses using structural equation modeling (SEM) and partial least squares (PLS) methods, as described by Hair et al (2014). The objective was to statistically analyze the phenomenon of public health services in Semarang, assessing public perceptions regarding access to policies and facilities offered by the local government. A questionnaire was administered utilizing a 5-point Likert scale to assessed public opinions and experiences of public health services, particularly the utilization of Ambulan Hebat in Semarang, Indonesia.

In our research investigation, it was adhered to the protocols described by Hair et al (2014). The structural modeling analysis was performed in three phases: hypothesis testing, outer model and inner model evaluation. Variable interrelations were evaluated by regression path analysis. The statistical evaluation included a Cronbach's alpha of 0.70, a composite reliability of 0.70, an average variance extracted or AVE >0.50 and a p-value <0.05 for significance assessment. Internal model evaluation examines multicollinearity via the variance inflation factor (VIF), employing a threshold of <5. This evaluation encompasses coefficients, p-values, effect size (F^2), coefficient of determination (R^2), predictive relevance (Q^2), and goodness-of-fit (GoF) (Hair et al., 2019). A VIF score below 5 indicates the absence of multicollinearity among the constructs, whereas a score above 5 necessitates model adjustment.

RESULTS AND DISCUSSIONS

The "Ambulan Hebat" program in Semarang, Indonesia, enhances public services through innovation and performance competency, resulting in improved quality and increased public satisfaction. This study examines the impact of public service innovation and personnel performance competency on public satisfaction at the Semarang Health Office, a critical measure of public service efficacy.It provides empirical evidence of the influence of innovation and performance competency in enhancing responsive, effective and performance-driven public sector governance at the local government level.

Seventy distributed questionnaires satisfied the criteria for statistical evaluation. This indicates that legitimate results for each measurement item can serve as a primary instrument and be evaluated against the study constructs, fulfilling the criteria for delivering informed and contextually relevant replies. The respondent profiles exhibited diversity in terms of gender, competence, and tenure, thereby improving data representation within the sample population. Table 2 presents the outcomes of the outer model computations.

Table 2.
Outer Model Result

Variable	items	Outer Loading	Cronbach's alpha	Composite reliability	AVE
			0.751	0.712	0.624
X1	X1.1	0.734			
	X1.2	0.760			
	X1.3	0.745			
	X1.4	0.873			
			0.790	0.811	0.722
X2	X2.1	0.790			
	X2.2	0.901			
	X2.3	0.809			
	X2.4	0.754			
			0.871	0.828	0.709
Y	Y1	0.795			
	Y2	0.786			
	Y3	0.817			
	Y4	0.799			

Source: Processed by author(s)

The analysis of the outer model in table 2 surpassed the established thresholds for Cronbach's alpha (0.70), composite reliability (0.70), and average variance extracted (AVE). These values indicate internal consistency among the latent constructs of public service innovation, employee competence, and public satisfaction. The results validate that the measurement items serve as reliable indicators of their respective involvement in the dependent variable.

The distribution pattern presented in table 2 suggests a positive correlation between perceptions of public service innovation and employee performance competency within the Semarang Health Service, Indonesia. A higher level of agreement among respondents regarding the importance of improving public services is associated with more reports of high satisfaction with employee performance, particularly in the "Ambulance Hebat". This finding aligns with existing literature on public service quality, identifying responsiveness and reliability as key determinants of healthcare user satisfaction.

The elements that enhance the government's role and contribution to improving public services influence the attitudes and behaviors of its employees. The government's function extends beyond administration; it also influences behavioral norms via role models, proportional oversight, and the reinforcement of work ethics. This finding confirms that employee behavior reflects the collective behavior and values demonstrated by the government.

The public service innovation construct (X1) demonstrates an outer loading value between 0.734 and 0.873. This range exceeds the 0.70 threshold commonly suggested as a marker of strong item reliability in reflective models, indicating that over 50% of the item variance is accounted for by the assessed latent construct (Hair et al., 2014).

The consistently high outer loading results and AVE greater than 0.50 suggest that indicators X1.1–X1.4 effectively represent the essence of public service innovation. The AVE value of 0.604 demonstrates adequate convergent validity, surpassing the 0.50 threshold, which is deemed sufficient to suggest that the construct accounts for the majority of the variance in its indicators (Cheung et al., 2024).

The cronbach's alpha value of 0.751 indicates acceptable internal consistency, as it exceeds the threshold of 0.70, which is considered adequate for quantitative research. A composite

reliability (CR) value of 0.712 is advised in the PLS-SEM literature. The findings demonstrate that the outer model of public services innovation (X1) exerts a positive and statistically significant influence on public satisfaction (Y) within the Semarang Health Office. The results satisfied the threshold values: Cronbach's alpha (0.751), CR (0.712), and AVE (0.624). The findings suggest that public service innovation within the health sector in Semarang, Indonesia, specifically regarding the "Ambulance Hebat" is characterized by strong, ethically oriented leadership, which reduces the likelihood of counterproductive behavior.

From a substantive viewpoint, public service innovation is regarded as a multidimensional concept, given its significant role, which encompasses process innovation, technological innovation, and institutional innovation. Consequently, in certain studies, it is assessed formatively rather than reflectively (Voorberg et al., 2015). Methodological debates arise when a multifaceted construct, such as innovation, is constrained to a singular, reflective dimension. Proponents of the reflective approach contend that a latent core of innovation is evident in organizational behavior. In contrast, the formative perspective posits that the dimensions of innovation constitute a construct that may not exhibit strong correlations with one another (Nasi et al., 2024; Osborne et al., 2015; Sarstedt et al., 2021).

The measurement quality for the performance competency construct (X2) is significantly stronger. Outer loading values ranged from 0.754 to 0.901, indicating that each indicator makes a significant contribution to the latent construct. Cronbach's alpha (0.790) and composite reliability (0.811) surpassed the 0.70 threshold typically employed to evaluate good to excellent reliability. The AVE of 0.752 demonstrates that over 75% of the variance in the indicators is accounted for by the performance competency construct, exceeding the 0.50 threshold necessary for adequate convergent validity (Cheung et al., 2024).

Performance competency is defined as a combination of knowledge, skills, abilities, and behavioral characteristics linked to superior workplace performance. Classical competency models, exemplified by Ashforth et al (2008) assert competency consists of multiple interrelated dimensions, including results orientation, initiative, teamwork, and problem-solving.

The reliability value of 0.811 indicates that the performance competency indicators in this study represent a single highly homogeneous latent dimension, thereby supporting the reflective construct approach, in which changes in the construct are mirrored across all indicators. A study by Habibie et al (2024) on organizational performance posits that competency should be regarded as a complex construct that includes multiple performance dimensions, including task performance and contextual performance. Excessively high correlations among indicators suggest that various dimensions of performance are inadequately captured.

The results suggest that the performance competency instruments utilized in this study demonstrate high reliability and convergent validity. Researchers should exercise caution in theoretically constraining the concept of competency to overly narrow definitions.

The public satisfaction (Y) construct demonstrates robust measurement characteristics. The outer loading values for indicators Y1–Y4 range from 0.786 to 0.817, indicating a strong correlation with the public satisfaction construct for each item. Cronbach's alpha (0.871) and composite reliability (0.828) show that the internal reliability is high. The AVE (0.709) shows that the latent construct of public satisfaction accounts for more than 70% of the variance in the indicators. This observation demonstrates robust convergent validity.

Public satisfaction with government services is generally defined as a public's comprehensive evaluation of the service experience, encompassing elements of process (the method by which

officers provide services), outcome (the results of the service), and perceptions of distributive justice. The literature on public administration presents a debate regarding the measurement of public satisfaction. It questions whether satisfaction should be viewed as a unidimensional construct, focusing on a singular global factor that reflects publics' overall evaluations of services, or as a multidimensional construct that differentiates satisfaction across various aspects, such as procedures, outcomes, accessibility, transparency, and fairness.

The high AVE and reliability values in this study support a unidimensional view, indicating that the individuals who answered the questions perceive satisfaction as a single, coherent and global experience. Tavakol & Dennick (2011) caution that excessively high reliability values indicate item redundancy, thereby reducing the additional information contributed by each item.

For structural modeling purposes, as demonstrated in this study's design regarding the influence of public service innovation and performance competence on satisfaction, a robust and homogeneous public satisfaction construct is beneficial. This process reduces measurement error and facilitates the estimation of more stable structural relationships. This conceptual debate is pertinent for advancing the development of scales and delineating satisfaction dimensions in subsequent studies, such as differentiating satisfaction related to speed, cost, and officer treatment.

Moreover, findings invited further scholarly debates. Bloch & Bugge (2013) contend the inherent complexity of public-sector innovation prevents it from being reduced to a single, uniform concept. They distinguish multiple forms of innovation in the public sector—service and delivery innovation, administrative and organizational innovation, and conceptual, policy, and systemic innovation—each of which may pursue different objectives. Consequently, they contend that relying on a single output indicator often fails to capture the broader, more substantive effects of innovation on public sector performance, and that overly simplistic measurement approaches risk overlooking critical dimensions of innovative change.

This perspective stands in tension with empirical studies that operationalize performance competency as a unidimensional construct with very high reliability. Such results warrant both methodological and theoretical scrutiny. Methodologically, extremely high reliability may signal item redundancy and raise concerns about whether the instrument adequately represents the conceptual breadth of competency. Theoretically, it prompts debate over the appropriateness of collapsing performance competency into a single latent dimension across diverse settings, roles, and service contexts. As the field continues to mature, contemporary research increasingly calls for more nuanced construct specification and measurement strategies that better reflect the multidimensional nature of performance in varied institutional and organizational environments.

The assessment of the inner model was conducted through a multicollinearity test, confirming that the VIF values for all constructs remained below 5 (Hair et al., 2014). The objective was to confirm the absence of collinearity issues among the variables. The study indicated that the VIF range (1.021 to 3.260) fell within the acceptable category, suggesting no ambiguity or bias in the measurement model.

Table 3.
Inner Model Result

	Original sample (O)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	p-values	F²	Result
X1 > Y	0.359	0.061	4.557	0.001	0.205	Significant
X2 > Y	0.153	0.046	3.035	0.004	0.051	Significant

Source: Processed by author(s)

The results of the inner model presented in table 3 indicate that both examined structural paths are statistically significant. The relationship between public service innovation and public satisfaction (X1 to Y) exhibits an original sample coefficient of 0.359, a t-statistic of 4.557, a p-value of 0.001, and an F^2 value of 0.205, indicating a medium effect size. The findings suggest that innovation within the Ambulance Hebat service, evaluated through its binding indicators, significantly enhances public satisfaction.

The performance competency-public satisfaction path (X2 to Y) consistently demonstrates a coefficient of 0.153, a t-statistic of 3.035, a p-value of 0.004, and an F^2 value of 0.051, indicating a small yet significant effect. Performance competence significantly influences public satisfaction, although its direct impact is comparatively less than that of service innovation.

The model's explanatory indicated by an R^2 value of 0.581, suggesting that approximately 58.1% of the variation in public satisfaction (Y) is jointly explained by public service innovation (X1) and performance competency (X2). This value indicates significant explanatory power and establishes the model as a strong framework for analyzing public satisfaction with Ambulan Hebat services. The Q^2 value of 0.245 indicates that the model exhibits strong predictive relevance for the dependent variable, demonstrating its effectiveness in predicting public satisfaction within the realm of pre-hospital emergency services. The inner model suggests that enhancing service innovation and improving employee performance competency are crucial factors in enhancing the quality of public services in Semarang.

The path coefficient X1 to Y (0.359; p=0.001; F²=0.205) demonstrates a moderate effect, whereas X2 to Y (0.153; p=0.004; F²=0.051) reflects a small yet significant effect. The model demonstrates an R^2 of 0.581, which is categorized as "substantial" within the social sciences. Additionally, Q^2 value of 0.245 signifies good predictive relevance concerning public satisfaction. The findings support the assertion that service innovations, such as accelerated response times, ease of access, and reduced transportation costs, significantly enhance public satisfaction with emergency services. Additionally, officer performance competence contributes meaningfully, albeit to a lesser extent. The findings indicate that public service innovation enhances public satisfaction and trust. Evidence from population administration services and government innovations demonstrates that improvements in speed, inclusivity, and efficiency lead to greater public satisfaction and trust.

Public administration literature similarly positions employee competency as a composite of knowledge, skills, and attitudes, which serves as a prerequisite for service quality and, consequently, public satisfaction. Nonetheless, findings are not universally consistent: certain studies indicate that employee competency does not consistently exert a direct, positive and significant influence on public satisfaction or that its impact is only evident when mediated by service quality or other factors (Astuti et al., 2024; Cho & Song, 2021).

On the other hand, research on emergency medical services (EMS) across different countries suggests that factors such as wait times, response speed, and service organization often outweigh the significance of innovation (Aringhieri et al., 2017). Wait times and interactions with healthcare professionals particularly affect patients (McLay & Mayorga, 2010). This context raises the question of whether publics are purchasing innovation as a concept or its manifestations, such as responsiveness, reliability, and cost reductions that they experience directly.

The findings is significant contribution to the public service innovation theory and supporting the existing literature. They indicate that service innovation, including simplified procedures, accelerated service delivery and reduced costs, is positively correlated with public satisfaction and trust in local government. Thereby enhancing the discourse on individual staff competency, especially in innovative service design, which manifests in terms of speed, accessibility, and cost reduction. This investigation improves upon earlier models that were broader and less tailored to the context of emergency medical services.

Competency findings typically exert an indirect influence mediated by service quality. Numerous studies indicate that service quality serves as the central intermediary between employee competency and public satisfaction, resulting in a direct effect of competency on satisfaction that is frequently insignificant or weak. In contrast, within the framework of Ambulance Hebat, the competencies and technical skills of staff in emergency response, along with their communication abilities are evident and recognized by the public, leading to a substantial direct impact. A notable theoretical contribution is the higher R^2 value (0.581) compared with other public sector studies, which typically range from 0.60 to 0.65. This supports the assertion that integrating service innovation with the performance competency construct constitutes a robust framework for elucidating public satisfaction in the emergency health sector.

The finding that public service innovation significantly affects public satisfaction underscores the need for Semarang Health Office to regard Ambulan Hebat as a platform for ongoing innovation rather than merely a routine service program. Local governments should prioritize enhancing innovative features that residents' value, including reduced waiting times, improved access to services, transparency and assurances against unreasonable costs. This finding is consistent with those from multiple studies, which indicates services speed, procedural clarity and management have a significant influence on patient satisfaction in emergency services. Policymaking can focus on service redesign and process innovation that directly affect the patient experience.

Despite the relatively minor effect of performance competency, its significant influence suggests that continued investment in human resource capacity development is necessary. This finding indicates that having skilled employees enhances service quality and patient satisfaction, both directly and indirectly. The practical implications involve the necessity for ongoing training programs, simulations for emergency case management, enhanced therapeutic communication with patients and their families, and the establishment of systematic performance feedback mechanisms. Service design innovation and staff competency improvement should complement one another rather than replace each other.

Notwithstanding the statistically significant correlations identified, this study possesses limitations. The sample size (n=70) is small and comprises participants from a single program, thereby constraining the study's external validity. Additionally, the poll relies on self-reported perceptions, which may lead to common procedural and perceptual biases. Consequently, the results should be considered context-specific evidence for Semarang's Ambulance Hebat service, rather than as assertions that apply universally to other emergency medical services in Indonesia. Future research should employ larger, multi-site samples and combine perception-

based metrics with objective operational indicators (response time logs, referral outcomes, complaint records, and SKM-based monitoring) to improve causal inference and generalizability.

CONCLUSIONS

This study finds that public service innovation and frontline employee performance competency significantly improve the perceived quality of Semarang's Ambulance Hebat services, thereby increasing public satisfaction. Public service innovation shows a stronger, moderate effect, whereas performance competency contributes a smaller but still statistically significant effect. The high coefficient of determination further indicates that innovation is translated into concrete operational practice—rather than remaining limited to branding or formal documentation—and that its benefits are closely linked to the technical and interpersonal capabilities of frontline personnel.

These results contribute to public administration and health service management in three ways. First, they reinforce the argument that publics respond less to the mere existence of a government program and more to the service design they directly experience. Second, they confirm that performance competency remains a key factor in determining satisfaction, adding to the ongoing discussion of how innovation, bureaucratic capacity, and public satisfaction interact in emergency medical services. Third, the findings underscore that effective public services require the joint strengthening of institutional innovation and professional expertise, rather than reliance on either dimension alone.

The Semarang Health Office can use Ambulance Hebat as a test bed for long-term innovation by focusing on faster response times, better referral pathways, more open procedures, and keeping costs low. Simultaneously, to ensure consistent implementation, the Semarang Health Office should secure structured emergency-care training, strengthen communication with patients and families, and establish a more systematic performance evaluation framework. Future research should extend the model by incorporating variables such as public trust, perceived fairness, and negative service experiences, and conduct cross-regional comparative studies to assess replicability across Indonesia.

REFERENCES

Almari, F. (2021). Measuring gaps in healthcare quality using SERVQUAL model: challenges and opportunities in developing countries. *Measuring Business Excellence*, *25*(4), 407–420. https://doi.org/10.1108/MBE-11-2019-0104

Andini, M. R., Arso, S. P., & Kusumastuti, W. (2020). Analisis Pelaksanaan Program Ambulan Siaga Kota Semarang Tahun 2019. *Jurnal Kesehatan Masyarakat*, *8*(2).

Aparna, S. G., & Bharathi, S. J. (2016). A Study on the Competence of Employees in Information Technology Companies of Coimbatore. *Asian Journal of Research in Social Sciences and Humanities*, *6*(11), 970. https://doi.org/10.5958/2249-7315.2016.01244.2

Aringhieri, R., Bruni, M. E., Khodaparasti, S., & van Essen, J. T. (2017). Emergency medical services and beyond: Addressing new challenges through a wide literature review. *Computers & Operations Research*, *78*, 349–368. https://doi.org/10.1016/j.cor.2016.09.016

Asfaw, F. Z., Yalew, A. Z., Godie, M., Fikadu, A., & Workina, A. (2024). Ambulance service satisfaction level and associated factors among service users in Addis Ababa, Ethiopia. *BMC Emergency Medicine*, *24*(1), 92. https://doi.org/10.1186/s12873-024-01007-9

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in Organizations: An Examination of Four Fundamental Questions. *Journal of Management*, *34*(3), 325–374.

https://doi.org/10.1177/0149206308316059

Astuti, S. D., Perdana, T. A., & Sijabat, R. (2024). Role Stressor, Work Stress and Cyberloafing Behavior: Will They Decrease The Employee Performace? *Jurnal Organisasi Dan Manajemen*, *20*(1), 129–145. https://doi.org/10.33830/jom.v20i1.5988.2024

Bloch, C., & Bugge, M. M. (2013). Public sector innovation—From theory to measurement. *Structural Change and Economic Dynamics*, *27*, 133–145. https://doi.org/10.1016/j.strueco.2013.06.008

Bobek, D. D., & Hatfield, R. C. (2003). An Investigation of the Theory of Planned Behavior and the Role of Moral Obligation in Tax Compliance. *Behavioral Research in Accounting*, *15*(1), 13–38. https://doi.org/10.2308/bria.2003.15.1.13

Bovens, M. (2007). Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal*, *13*(4), 447–468. https://doi.org/10.1111/j.1468-0386.2007.00378.x

Chen, J., Walker, R. M., & Sawhney, M. (2020). Public service innovation: a typology. *Public Management Review*, *22*(11), 1674–1695. https://doi.org/10.1080/14719037.2019.1645874

Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, *41*(2), 745–783. https://doi.org/10.1007/s10490-023-09871-y

Cho, Y. J., & Song, H. J. (2021). How to Facilitate Innovative Behavior and Organizational Citizenship Behavior: Evidence From Public Employees in Korea. *Public Personnel Management*, *50*(4), 509–537. https://doi.org/10.1177/0091026020977571

Christensen, T., Lægreid, P., & Rykkja, L. H. (2016). Organizing for Crisis Management: Building Governance Capacity and Legitimacy. *Public Administration Review*, *76*(6), 887–897. https://doi.org/10.1111/puar.12558

Deininger, K., & Mpuga, P. (2005). Does Greater Accountability Improve the Quality of Public Service Delivery? Evidence from Uganda. *World Development*, *33*(1), 171–191. https://doi.org/10.1016/j.worlddev.2004.09.002

Demircioglu, M. A., & Chen, C.-A. (2019). Public employees' use of social media: Its impact on need satisfaction and intrinsic work motivation. *Government Information Quarterly*, *36*(1), 51–60. https://doi.org/10.1016/j.giq.2018.11.008

Denhardt, R. B., & Denhardt, J. V. (2000). The New Public Service: Serving Rather than Steering. *Public Administration Review*, *60*(6), 549–559. https://doi.org/10.1111/0033-3352.00117

Dinas Kesehatan, D. (2025). *Layanan Ambulance Hebat Andalan Masyarakat Kota Semarang*. Dinas Kesehatan Kota Semarang. https://ambulancehebat.dinkes.semarangkota.go.id/

Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). *Digital Era Governance:* Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199296194.001.0001

Ellis, D. (2016). *Emergency Care & The Sustainable Development Goals*. Global Emergency Care. https://globalemergencycare.org/blog/emergency-care-the-sdgs/?utm_source=chatgpt.com

Endeshaw, B. (2020). Healthcare service quality-measurement models: a review. *Journal of Health Research*, *35*(2), 106–117. https://doi.org/10.1108/JHR-07-2019-0152

Fohim, E., Jacobs, C. D., & Sieger, P. (2025). Expanding towards a Public Value Governance paradigm: the role of mindset expansion in a Swiss government agency. *Public Management Review*, 1–38. https://doi.org/10.1080/14719037.2025.2566903

Grönroos, C. (2006). Adopting a service logic for marketing. *Marketing Theory*, *6*(3), 317–333. https://doi.org/10.1177/1470593106066794

Grönroos, C. (2019). Reforming public services: does service logic have anything to offer? *Public Management Review*, *21*(5), 775–788. https://doi.org/10.1080/14719037.2018.1529879

Habibie, M. A. El, Indrayani, I., Satriawan, B., & Dewi, N. P. (2024). The Influence of

Transformational Leadership, Competence, Work Motivation and Organizational Culture on the Performance of RSCM Employees through Job Satisfaction as a Mediating Variable and Organizational Support as a Moderating Variable. *Jurnal Manajemen Pelayanan Publik*, *8*(2), 665–682. https://doi.org/10.24198/jmpp.v8i2.55072

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, *26*(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Harinurdin, E., Safitri, K. A., & Kountur, R. (2024). Applying the Theory of Planned Behavior in Examining the Intention to Improve Corporate Tax Compliance Through Compensation and Counterproductive Work Behavior. *Sage Open*, *14*(4). https://doi.org/10.1177/21582440241305624

Hood, C. (1991). A Public Management for All Season? *Public Administration*, *69*(1), 3–19. https://doi.org/10.1111/j.1467-9299.1991.tb00779.x

Kusumasari, B., Setianto, W. A., & Pang, L. L. (2018). A Study on Digital Democracy Practice: Opportunities and Challenges of e-Health Implementation in Indonesia. *Jurnal Ilmu Sosial Dan Ilmu Politik*, *22*(1), 1. https://doi.org/10.22146/jsp.28863

Marthalina, M., Dione, F., & Saribulan, N. (2025). Determining Factors of Digital Public Service Management Implementation Policy at Subdistrict Level in South Jakarta City. *Jurnal Manajemen Pelayanan Publik*, *9*(2), 251–275. https://doi.org/10.24198/jmpp.v9i2.59855

McLay, L. A., & Mayorga, M. E. (2010). Evaluating emergency medical service performance measures. *Health Care Management Science*, *13*(2), 124–136. https://doi.org/10.1007/s10729-009-9115-x

Nasi, G., Osborne, S., Cucciniello, M., & Cui, T. (2024). *Public Service Explained*. Cambridge University Press. https://doi.org/10.1017/9781009373586

Novitaria, W., Wigati, P. A., & Sriatmi, A. (2020). Analisis Kesiapan Pelaksanaan Program Ambulance Hebat Dalam Rangka Dukungan Terhadap Sistem Penanggulangan Gawat Darurat Terpadu di Kota Semarang. *Jurnal Kesehatan Masyarakat*, *5*(4). https://doi.org/https://doi.org/10.14710/jkm.v5i4.18334

Osborne, S. P., Radnor, Z., Kinder, T., & Vidal, I. (2015). The SERVICE Framework: A Public-service-dominant Approach to Sustainable Public Services. *British Journal of Management*, *26*(3), 424–438. https://doi.org/10.1111/1467-8551.12094

Osborne, S. P., Radnor, Z., & Strokosch, K. (2016). Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, *18*(5), 639–653. https://doi.org/10.1080/14719037.2015.1111927

Peters, B. G. (2014). *The Politics of Bureaucracy*. Routledge. https://doi.org/10.4324/9780203879146

Pradana, I. P. Y. B., Susanto, E., & Kumorotomo, W. (2022). Analyzing the critical factors for innovation sustainability in the public sector: evidence from Indonesia. *International Journal of Public Sector Management*, *35*(7), 733–748. https://doi.org/10.1108/IJPSM-02-2022-0044

Pratama, A. B. (2020). The landscape of public service innovation in Indonesia. *Innovation & Management Review*, *17*(1), 25–40. https://doi.org/10.1108/INMR-11-2018-0080

Pratama, M. R., Tualeka, S. H., & Prasetya, A. (2024). Symphony of Digital Public Service Innovation in Indonesia: Evidence from Indonesia Public Service Innovation Competition 2014-2022. *Jurnal Studi Pemerintahan*, 21–42. https://doi.org/10.18196/jsp.v15i1.342

Pratiwi, C., Noor, I., & Rozikin, M. (2024). Significance Performance Analysis On The Quality Of University Administrative Services. *Jurnal Manajemen Pelayanan Publik*, *8*(2), 433–446.

https://doi.org/10.24198/jmpp.v8i2.54062

Rastogi, T., Awasthi, S., Khare, R., Prasad, M., Sami, G., & Verma, V. K. (2022). Perceptions and practices of COVID-19 protective measures among the general public of North India. *Clinical Epidemiology and Global Health*, *13*, 100927. https://doi.org/https://doi.org/10.1016/j.cegh.2021.100927

Rivai, N. I. (2025). Evaluation of Public Services on Community Satisfaction at the Regional Secretariat of Kepulauan Riau Province. *Jurnal Manajemen Pelayanan Publik*, *9*(2), 444–467. https://doi.org/10.24198/jmpp.v9i2.55351

Robbins, S. P., & Judge, T. (2009). *Organizational Behavior*. Prentice Hall.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. *Handbook of Market Research*, *July*, 587–632. https://doi.org/10.1007/978-3-319-57413-4_15

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

United Nations, U. (2025). *Sustainable Development Goal 3: Good health and well-being*. United Nations. https://www.un.org/sustainabledevelopment/health/?utm_source=chatgpt.com

Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, *17*(9), 1333–1357. https://doi.org/10.1080/14719037.2014.930505

Weber, M. (2002). Economy and Society: An Outline of Interpretive Sociology. In *Readings in Economic Sociology* (pp. 24–37). Wiley. https://doi.org/10.1002/9780470755679.ch3

Widowati, E., Koesyanto, H., Istiono, W., Sutomo, A. H., & Sugiharto. (2023). Disaster Preparedness and Safety School as a Conceptual Framework of Comprehensive School Safety. *Sage Open*, *13*(4). https://doi.org/10.1177/21582440231211209

World Health Organization, W. (2025). *Universal health coverage (UHC)*. WHO. https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)