

A Text Away from Excellence: Effectiveness of an SMS Feedback System in Enhancing Nurses' Job Performance in a Selected Secondary Hospital in CAMANAVA

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ABSTRACT

Feedback is essential for the professional growth of every nurses. Patient's response to the quality of care rendered by the healthcare provider, in form of comments, commendation and criticism, greatly influences nurses' job performance viewpoint. Hence, this quantitative descriptive- correlational study aims to determine the effectiveness of Short Message Service (SMS) system in enhancing nurses' job performance in a selected secondary hospital in CAMANAVA. Data were purposively collected to 92 nurses using researcher adapted structured questionnaire. The results revealed that the SMS-based feedback system was generally perceived as effective across the dimensions of frequency (M=2.54), quality (M=2.69), constructiveness (M=2.71), supportiveness (M=2.39) and usefulness (M=2.49). Likewise, results revealed that nurses generally demonstrate a high level of job performance in terms of availability, responsiveness, competence and productivity. A low to moderately low association was demonstrated in Spearman's Rank Correlation. Overall, the SMS-based feedback system contributes positively to technological advancement and feedback management, as reflected by the overall mean of 3.03 (SD = 0.93). The findings may provide evidence for administrators and nursing leaders in the usage of SMS based feedback system as performance enhancement tool, bridging the gap between traditional and technology driven communication system. By evaluating the significance of SMS feedback system, this research will contribute in strengthening the role of mobile communication technologies in promoting efficient and effective nursing care. Furthermore, the study supports the attainment of UN Sustainable Development Goals (SDGs), particularly SDG 3: Good Health and Well being and SDG 8: Decent Work and Economic Growth.

Keywords: - Feedback, SMS system, nursing care, digital communication, job performance, comments, criticism

INTRODUCTION

Feedback mechanisms are important tools used to improve nursing performance, patient safety, and quality of care. According to Rapin et al. (2022), feedback systems provide nurses and healthcare teams with structured information regarding their performance, allowing them to identify strengths, improve clinical practice, and enhance service delivery. In the Philippines, most hospitals use pen-and-paper suggestion boxes to ask for patients' overall experience. However, the use of traditional feedback systems often leads to a broken feedback loop with zero transparency. With the advancement of digital technology, Short Message Service (SMS)-based feedback systems have emerged as a more accessible and efficient alternative. In the selected secondary hospital in CAMANAVA, the Text JRT SMS-based feedback system is used

to collect real-time complaints, commendations, and suggestions from patients. Despite the implementation, there is limited evidence on how this system influences nurses' job performance. Therefore, this study aims to determine the effectiveness of the SMS-based feedback system in enhancing nurses' job performance.

Statement of the Problem

This study aimed to determine the effect of the SMS-based feedback system on nurses' job performance in a selected secondary hospital in CAMANAVA. Specifically, it seeks to answer the following questions:

1. What is the demographic profile of the respondents in terms of age, gender, years of service, and area of assignment?
2. What is the level of effectiveness of the SMS-based feedback system in terms of frequency, quality of feedback, constructiveness, supportiveness of the feedback environment, and usefulness?
3. What is the level of nurses' job performance in terms of availability, responsiveness, competence, and productivity?
4. Is there a significant relationship between the effectiveness of the SMS-based feedback system and nurses' job performance?
5. Based on the findings, what is/are the contribution of the SMS Feedback System in terms of technological advancement in feedback management and nursing practice?

Scope and Delimitations

This study determined the effectiveness of an SMS-based feedback system in enhancing nurses' job performance in a selected secondary hospital in CAMANAVA in terms of availability, responsiveness, competence, and productivity. As a study limitation, the participants were selected using inclusion and exclusion criteria. All participants were employed in a selected secondary hospital in CAMANAVA. Only the responses from the data collection period starting July 8 to July 16, 2026 were included in the statistical analysis. Findings were limited to the perceptions and responses of the participating nurses.

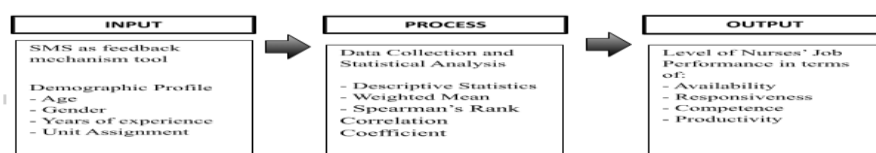
Review of Related Literature

The reviewed literature emphasizes that feedback mechanisms, particularly SMS-based systems, enhance communication, accountability, and continuous quality improvement by providing timely and constructive feedback that supports nurses' professional development and improves patient care outcomes.

Theoretical Framework

This study is anchored primarily on Rozzano C. Locsin's Theory of Technological Competency as Caring in Nursing, supported by Imogene King's Goal Attainment Theory, Dorothea Orem's Self-Care Deficit Nursing Theory, and Florence Nightingale's Environmental Theory. Collectively, these theories explain how an SMS-based feedback system can serve as a technological communication tool that enhances nurses' job performance.

Conceptual Framework



METHODOLOGY

This study employed the use of quantitative approach to measure and analyze the effectiveness of the SMS feedback system using numerical data and statistical analysis. The quantitative approach enabled the researcher to measure responses and objectively examine the relationship between the effectiveness of the SMS based feedback system and nurses' job performance.

Research Design

The design utilized in the study was descriptive-correlational. The study sought to describe and determine the relationship between the SMS-based feedback system and the nurses' job performance. The descriptive method was used to identify and explain the demographics of the respondents, while the correlational method was applied to examine the relationship between the SMS-based feedback system and nurses' job performance.

Research Steps

This research started with the idea of enhancing the traditional pen-and-paper feedback system to a more technology-driven platform, like an SMS-based system. A rigorous literature review was done to identify existing knowledge and research gaps. Following the development of research questions, ethical approval and institutional permission were secured. Afterward, the researcher adapted the questionnaire and underwent pilot testing with a total of 9 respondents to establish reliability before transcribing the questions through Google Forms. A total of 92 nurses agreed to participate and signed the informed consent prior to completing the survey. The collected data were analyzed using appropriate statistical methods with the assistance of a third-party statistician.

Data Collection and Sample Selection

Data collection commenced after obtaining the total number of registered nurses employed in the selected hospital through the assistance of the Human Resource Department. From a population of 119 nurses, a sample of 92 respondents was determined using Slovin's formula with a 5% margin of error. Purposive sampling was utilized to select nurses who had received at least one SMS feedback message (text comment, commendation, complaints, recommendation or suggestion) and met the following inclusion criteria: (1) with 1 year experience in bedside, (2) aged 18-60 years old (3) male or female, and (4) nurses deployed in the field of Medical-Surgical ward, Emergency Room, Outpatient Department, Operating Department, Delivery Room and other units.

Data Analysis Methods

Data analysis began after the collected data were encoded, tabulated, and analyzed using appropriate statistical software. Frequency, percentage, weighted mean, ranking, and standard deviation are among the descriptive statistics utilized to summarize the respondents' demographic profile and determine the level of effectiveness of the SMS-based feedback system and nurses' job performance. Along with this, in identifying the relationship between the effectiveness of SMS based feedback system and nurses' job performance, Spearman's Rank Correlation Coefficient (Spearman's ρ) was employed. Statistical significance was

determined at the 0.05 level.

Research Hypotheses and Validation

The hypothesis was tested using Spearman's Rank Correlation Coefficient at the 0.05 level of significance to determine the relationship between the effectiveness of SMS based feedback system and nurses' job performance.

H₀: There is no significant relationship between the effectiveness of the SMS-based feedback system and nurses' job performance in a selected secondary hospital in CAMANAVA.

H₁: There is a significant relationship between the effectiveness of the SMS-based feedback system and nurses' job performance in a selected secondary hospital in CAMANAVA.

For instrument validation, the research-adapted questionnaire underwent content validation by three experts in the field of nursing and management. Revision was done based on the validators' recommendations. Pilot testing was completed with nine respondents, yielding an excellent reliability analysis using Cronbach's alpha. Coefficient results ranging from 0.820 to 0.979 for the SMS-based feedback system questionnaire, 0.918 to 0.993 for the nurses' job performance questionnaire, and 0.966 for the technological advancement and feedback management scale confirmed a threshold more than 0.70, testifying that the instrument was reliable and suitable for the data collection.

Study Limitations and Ethical Considerations

The study adhered to ethical considerations by obtaining ethical clearance from the Institutional Ethics Review Board of St. Bernadette of Lourdes College. Approval was given on July 8, 2026. All respondents were invited with no coercion and with their full willingness to be part of the study. Confidentiality and anonymity were observed before, during, and after data collection. The data were placed on a secured computer with a passcode that only the sole researcher had access to. No other person was given access to the information presented. The study adhered to the ethical principles of autonomy, respect for persons, beneficence, non-maleficence, and justice.

RESULTS AND DISCUSSION

SOP1: The demographic distribution indicates that the majority of respondents are young adults aged 21–30 years (54.30%), are largely female (76.10%), have 1–5 years of experience (81.50%), and have the largest proportion of “Others” (34.80%) as their area of assignment.

SOP2: The overall findings indicate that the SMS-based feedback system is generally perceived as effective, although variations exist across specific dimensions. For Frequency of Feedback, the overall mean is 2.54; Quality of Feedback at 2.69; Constructiveness of Feedback at 2.71; Supportiveness of Feedback Environment at 2.39; and Usefulness of Feedback at 2.49.

SOP 3: The results indicate that nurses generally demonstrate a high level of job performance across all dimensions. For Availability, the overall mean was 3.35; for Responsiveness, 3.31; for Competence, 3.32; and for Productivity, 2.97.

SOP4: The results reveal generally low to moderately low associations between dimensions of the SMS-based feedback system and nurses' job performance, with several

statistically significant relationships.

SUMMARY

The results suggest that while some aspects of the SMS-based feedback system (particularly quality and constructiveness) are significantly associated with job performance, the strength of these relationships is generally low to moderately low, indicating that other factors may also play substantial roles in influencing nurses' performance.

CONCLUSIONS

- Overall, the findings demonstrate that the SMS-based feedback system contributes meaningfully to technological advancement by digitizing and streamlining feedback processes, enhancing feedback management through real-time, structured, and accessible data collection, and supporting nursing practice by enabling timely performance evaluation, informed clinical decision-making, and continuous quality improvement. The results imply that the integration of SMS technology not only modernizes feedback systems but also strengthens the linkage between patient input and professional nursing performance.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

- The hospital administrator and nursing managers should strengthen the implementation of the SMS based feedback system. Ensure that monitoring and evaluation are done regularly.
- The nurses are encouraged to actively use patients' feedback to improve their service quality. Use SMS based feedback as a basis for self-reflection and professional growth.
- Future researchers may further investigate additional variables to gain deeper insight into the effectiveness of SMS-based feedback systems.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

REFERENCES

- CEDTyClea. (2023, October 12). *The problem with suggestion boxes*. BusinessWorld Online. <https://bworldonline.com/labor-and-management/2023/10/13/551324/the-problem-with-suggestion-boxes/>
- Rapin, J., Pellet, J., Mabire, C., Gendron, S., & Dubois, C.-A. (2022). How does nursing-sensitive indicator feedback with nursing or interprofessional teams work and