



Original research article

Decision-making processes of nurses in clinical practice and their relationship with work motivation and perceived work effectiveness

Helena Svobodová *, Sylva Bártlová

University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, České Budějovice, Czech Republic

Abstract

Goal: This study aims to analyse the level of nurses' involvement in decision-making processes in clinical practice, and to identify the connections between job position, decision-making opportunities, and selected work characteristics, especially work motivation, subjectively perceived work effectiveness, and attitude towards organisational change.

Methods: The study employed a quantitative design and a questionnaire survey. The research instrument was a self-administered questionnaire containing 23 items focused on decision-making competencies, work motivation, and perception of the work environment. The questionnaire was distributed among non-medical healthcare workers in the Czech Republic. 315 fully completed questionnaires were included in the analysis. The data were analysed using the Pearson chi-square test. The effect size was expressed using Cramer's V coefficient.

Results: A statistically significant relationship was found between job position and the possibility of participating in decision-making about the operation of the department or clinic ($\chi^2 = 68.995$; $p < 0.001$; $V = 0.33$). A statistically significant relationship was also identified between the possibility of decision-making and subjectively perceived work efficiency ($\chi^2 = 15.755$; $p = 0.003$; $V = 0.16$), and between the possibility of decision-making and the way of accepting organisational changes.

Conclusion: The results suggest that nurses' involvement in decision-making processes is related to their work perceptions and approach to organisational change. Promoting participative management can improve the work environment in healthcare organisations.

Keywords: Autonomy; Decision-making process; Healthcare management; Nurse; Work motivation

Introduction

Decision-making is an integral part of the daily professional life of healthcare professionals. In healthcare, and especially in nursing practice, decision-making processes are fundamental because they can directly influence the quality of care provided, patient safety, and the effectiveness of healthcare teams. Decision-making in nursing practice can be defined as a process of clinical judgment that involves gathering relevant information, interpreting it, and choosing the most appropriate course of care (Johansen and O'Brien, 2016). This process is influenced by several factors, including professional knowledge, clinical experience, organisational context, and the nature of the specific situation (Hoffman et al., 2009).

Research has long highlighted the importance of nurses' quality decision-making for healthcare outcomes. Tanner (2006) states that the ability to promptly identify changes in a patient's health status and respond appropriately is a key element of clinical judgment in nursing. Effective decision-making

requires not only expert knowledge but also the ability to interpret complex clinical situations and set priorities for care.

The work environment and the organisational structure of healthcare facilities also influence nurses' decision-making processes. The hierarchical structure of healthcare organisations can, in some cases, limit nurses' autonomy in decision-making processes. Although nurses often bear significant responsibility for the implementation of care, their decision-making powers may be limited by organisational rules or the working structure of healthcare teams. According to a WHO report (2020), strengthening nurses' professional autonomy is one of the key factors in improving healthcare quality and patient safety.

Professional experience and the ability to make intuitive judgments also play an important role in clinical decision-making. In their model of professional development for nurses, Benner et al. (2009) describe a gradual transition from analytical to experience-based and clinical-intuition-based decision-making. More experienced nurses often use a combination of analytical and intuitive approaches to solve clinical

* **Corresponding author:** Helena Svobodová, University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, J. Boreckého 1167/27, 370 11 České Budějovice, Czech Republic; e-mail: helena.rojikova@seznam.cz
<http://doi.org/10.32725/kont.2026.026>

Submitted: 2025-12-01 • Accepted: 2026-04-20 • Prepublished online: 2026-04-21

KONTAKT 28/x: xxx-xxx • EISSN 1804-7122 • ISSN 1212-4117

© 2026 The Authors. Published by University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences.

This is an open access article under the CC BY-NC-ND license.

situations. The importance of intuition in decision-making processes is also confirmed by studies by Melin-Johansson et al. (2017) and Pretz and Folse (2011), which highlight its role, especially in situations requiring a quick response.

In addition to nurses' individual competencies, the decision-making process is influenced by the work environment and organisational culture of healthcare facilities. Studies show that working conditions, workload, and the quality of interpersonal relationships in the workplace can significantly affect healthcare workers' job satisfaction and their ability to make effective decisions (Havaei et al., 2022). At the same time, the autonomy of nurses in the work environment is considered an important determinant of the quality of healthcare and the work environment of healthcare teams (Wong et al., 2013).

In recent years, healthcare professionals' clinical decision-making has also been increasingly discussed in the context of the development of digital technologies and artificial intelligence-based systems. These technologies can support decision-making processes by analysing large datasets and predicting patients' health outcomes (Davenport and Kalakota, 2019). At the same time, they raise questions about the ethical aspects of their use and the preservation of healthcare professionals' autonomy (Doraiswamy et al., 2019). According to a review study by Tun et al. (2025), healthcare professionals' trust in AI systems is significantly influenced by their ability to understand how these systems generate recommendations.

Despite the growing importance of decision-making in healthcare, nurses' involvement in these processes remains limited in some healthcare organisations. Nurses are key actors in healthcare delivery, and their expertise can significantly contribute to the effective organisation of work and to the improvement of care quality (Rabben et al., 2026).

This study aims to analyse the level of nurses' involvement in decision-making processes in clinical practice and to identify the relationships between job position, decision-making opportunities, work motivation, subjectively perceived work effectiveness, and the approach to organisational changes.

Materials and methods

This was a quantitative cross-sectional study aimed at analysing nurses' involvement in decision-making in clinical practice and identifying connections between the possibility of participating in decision-making, work motivation, subjectively perceived work effectiveness, and the approach to organisational changes.

The research sample comprised 314 respondents employed in healthcare facilities in the Czech Republic. The research included general nurses working in direct care and nurses in management positions (e.g., ward and head nurses). Respondents were approached through healthcare facilities, which were asked to distribute the questionnaire among their employees. The selection of respondents was purposive.

A self-administered questionnaire was used to collect data, based on the literature on clinical decision-making and the work environment of nurses. The questionnaire contained 23 items that focused on the following areas:

- sociodemographic characteristics of respondents;
- job position and work experience;
- involvement in decision-making processes;
- work motivation;
- subjectively perceived work efficiency;
- attitudes towards organisational changes.

Most items were constructed as Likert scales, allowing respondents to indicate their level of agreement with each statement.

Data collection took place between September 2024 and April 2025. Questionnaires were distributed through healthcare facilities across the Czech Republic. Respondents' participation in the research was voluntary and anonymous.

The collected data were processed using the statistical programs SASD 1.5.8 (Statistical Analysis of Social Data) and IBM SPSS Statistics. First, a descriptive statistical analysis was performed, in which the absolute and relative frequencies of individual variables were calculated.

Pearson's chi-square test of independence was used to analyse relationships between categorical variables. Effect size was expressed using Cramer's V coefficient. Statistical significance was assessed at levels $\alpha = 0.05; 0.01; 0.001$.

Ethical aspects

The research was conducted in accordance with ethical principles of research in the field of health sciences. Before completing the questionnaire, respondents were informed of the purpose of the research, the anonymity of their responses, and the voluntary nature of their participation. The questionnaire did not contain any data that would allow respondents to be identified.

Results

The research sample comprised 314 respondents. The basic characteristics of the research sample are presented in Table 1.

Job position and opportunity to participate in decision-making

The analysis showed a statistically significant association between respondents' job position and the likelihood of participating in decision-making about the department or clinic's

Table 1. Characteristics of the research sample (N = 314 respondents)

Characteristics and Category	<i>n</i>	%
Sex		
women	295	93.9
men	19	6.1
Age		
to 30	67	21.3
30–39	69	22.0
40–49	88	28.0
51 and older	90	28.7
Experience in healthcare		
to 5 let	41	13.1
6–10 let	52	16.6
11–20 let	75	23.9
older than 20	146	46.4
Job position		
general nurse	202	64.3
station nurse	44	14.0
head nurse	35	11.1
other	33	10.6

Note: Pearson's chi-square test of independence was used to analyse relationships among variables. The statistical significance level was set at $\alpha = 0.05$. The effect size was expressed using Cramer's V, which allows assessing the practical significance of the relationship between the analysed variables.

operations ($\chi^2 = 68.995$; $df = 6$; $p < 0.001$). The effect size was medium (Cramer's $V = 0.33$). General nurses more often stated that their superiors did not allow them to make decisions, while nurses in managerial positions reported greater opportunity to participate in decision-making processes.

Nursing education and attitude towards the establishment of the Czech Chamber of Nurses

No statistically significant relationship was found between the respondents' educational attainment and their attitude towards the establishment of the Czech Chamber of Nurses ($\chi^2 = 3.550$; $df = 6$; $p = 0.737$; Cramer's $V = 0.06$).

Job position and perceiving decision-making as a motivational factor

A statistically significant association was identified between job position and perceiving decision-making as a motivating factor ($\chi^2 = 17.801$; $df = 6$; $p = 0.007$). The effect size was small (Cramer's $V = 0.17$). Nurses in managerial positions were more likely to report that the opportunity to participate in decision-making was motivating.

Decision-making ability and subjectively perceived work effectiveness

The analysis showed a statistically significant association between the possibility of participating in decision-making and subjectively perceived work effectiveness ($\chi^2 = 15.755$; $df = 4$; $p = 0.003$). The effect size was small (Cramer's $V = 0.16$). Respondents who reported the possibility of participating in decision-making were more likely to report higher subjective work effectiveness.

Ability to make decisions and implement organisational changes

Further analysis showed statistically significant associations between decision-making power and the way changes were accepted in the workplace. A statistically significant association was found between decision-making power and accepting changes presented without explanation ($\chi^2 = 16.958$; $df = 8$; $p = 0.031$; Cramer's $V = 0.13$). Similarly, a statistically significant association was identified between decision-making power and the experience of superiors ordering changes without explanation ($\chi^2 = 34.825$; $df = 6$; $p < 0.001$; Cramer's $V = 0.24$).

A statistically significant association was also found between decision-making ability and the way changes were accepted in the ward or outpatient clinic ($\chi^2 = 13.055$; $df = 4$; $p = 0.011$; Cramer's $V = 0.14$).

Accepting changes and communicating with superiors

The analysis further demonstrated a statistically significant association between accepting changes without explanation and experience with superiors ordering changes without explanation ($\chi^2 = 36.026$; $df = 12$; $p < 0.001$; Cramer's $V = 0.20$). A statistically significant association was also found between respondents' approach to changes and the way they were implemented in the workplace ($\chi^2 = 44.059$; $df = 8$; $p < 0.001$; Cramer's $V = 0.24$).

A summary of the statistical analyses is presented in Table 2.

Table 2. Summary of statistical analyses of relationships among variables (N = 314 respondents)

Analysed relationship	χ^2	df	p	Cramer's V	Effect size
Job position $\times$ decision-making ability	68.995	6	<0.001	0.33	medium
Education $\times$ interest in the establishment of the Czech Chamber of Nurses	3.550	6	0.737	0.06	none
Job position $\times$ decision-making as motivation	17.801	6	0.007	0.17	small
Decision-making ability $\times$ subjectively perceived work efficiency	15.755	4	0.003	0.16	small
Decision-making ability $\times$ accepting changes without explanation	16.958	8	0.031	0.13	small
Decision-making ability $\times$ ordering changes without explanation	34.825	6	<0.001	0.24	small
Decision-making power $\times$ acceptance of changes in the department	13.055	4	0.011	0.14	small
Accepting changes $\times$ ordering changes by superiors	36.026	12	<0.001	0.20	small
Accepting changes $\times$ accepting changes in the department	44.059	8	<0.001	0.24	small

Note: Although several statistically significant relationships were identified, most effects were of small magnitude, indicating that the factors analysed explain only a limited portion of the variability in the observed phenomena.

Discussion

This study aimed to analyse the level of nurses' involvement in decision-making processes in clinical practice, and to identify the connections between job position, decision-making opportunities, and selected job characteristics. The results indicate that, in healthcare organisations, job position is a significant factor in nurses' level of involvement in decision-making processes. Nurses in managerial positions reported higher deci-

sion-making competence than those in direct care. This result aligns with the organisational structure of healthcare facilities, where decision-making powers are typically linked to managerial responsibility.

This result is consistent with findings in the professional literature, which highlight the importance of organisational hierarchy and professional autonomy in nursing practice. Johansen and O'Brien (2016) define decision-making in nursing practice as a process of clinical judgment based on the interpretation of available information and the selection of the

most appropriate course of care. An integrative literature review by Nibbelink and Brewer (2018) further states that nurses' decision-making processes are significantly influenced by their professional role, experience, and range of competencies. A higher level of autonomy is associated not only with higher job satisfaction but also with better patient care outcomes.

The results of the study also suggest a link between the possibility of participating in decision-making and subjectively perceived work effectiveness. Respondents who reported having the opportunity to participate in decision-making processes were more likely to report higher work performance. This result can be interpreted in the context of research that emphasises the importance of the work environment and organisational support for job satisfaction and the effectiveness of healthcare workers. For example, the study by Havaei et al. (2022) shows that working conditions, particularly workload and organisational support, significantly affect nurses' job satisfaction and the quality of care they provide.

Similarly, the results suggest a link between decision-making and job perceptions of motivation. Nurses in leadership positions were more likely to report that the opportunity to participate in decision-making was motivating. This result is consistent with research highlighting professional autonomy as a key determinant of work motivation and job satisfaction among healthcare workers (Wong et al., 2013). For example, Aiken et al. (2017) reported that work environments that support nurses' autonomy are associated with lower burnout and higher quality of care.

Another important area analysed was the relationship between decision-making and the approach to organisational change. The results show that nurses who reported a higher level of involvement in decision-making processes also reported a more positive approach to implementing workplace changes. This result can be interpreted in the context of studies focused on organisational communication in healthcare. According to Manojlovich (2010), transparent communication between healthcare professionals is one of the key factors influencing the work environment and care outcomes. Similarly, White et al. (2016) emphasise the importance of participatory management in implementing changes in healthcare organisations.

In a broader context, the study's results can also be interpreted in relation to the clinical decision-making process, which, in nursing practice, is influenced not only by formal competencies but also by professional experience and clinical judgment. In his model of clinical judgment, Tanner (2006) emphasises that decision-making in nursing practice is a complex process that includes interpreting clinical situations, reflecting on experiences, and making subsequent decisions about the appropriate course of care. Similarly, Hoffman et al. (2009) highlight differences between experienced and novice nurses in the processes of information collection and the interpretation of clinical situations.

An important aspect of clinical decision-making is the role of experience and intuition. In her model of professional development for nurses, Benner (2001) describes a gradual transition from analytical decision-making to more complex forms of clinical judgment grounded in experience. The importance of intuition in nursing practice is also confirmed in studies by Melin-Johansson et al. (2017) and Pretz and Folse (2011), which show that experienced nurses often combine analytical and intuitive decision-making strategies.

In recent years, healthcare professionals' clinical decision-making has been increasingly discussed in the context of the development of digital technologies and artificial intelligence. These technologies can support clinical decision-making by analysing big data and using predictive models (Davenport and Kalakota, 2019). At the same time, they raise questions about the professional autonomy of healthcare professionals and the ethical aspects of algorithmic decision-making systems (Doraiswamy et al., 2019). According to a review by Tun et al. (2025), healthcare professionals' trust in AI-based systems remains primarily dependent on their ability to understand how these systems generate recommendations.

In summary, the results of this study highlight the importance of nurses' involvement in decision-making in clinical practice. Although the magnitude of most statistical effects was relatively small, the results suggest that a participatory approach to managing healthcare teams may be associated with more positive work perceptions and attitudes towards organisational change. Further research should focus on a deeper analysis of the factors influencing decision-making processes in nursing practice; particularly the influence of organisational culture, workload, and the type of healthcare department. At the same time, it would be appropriate to complement the quantitative approach with qualitative methods to better understand how nurses perceive their role in decision-making processes and the barriers they identify in this area.

Study limitations

This study has several limitations that need to be considered when interpreting the results. The research was conducted using the author's non-standardised questionnaire and purposive sampling, which may limit the generalisability of the results. The data were obtained through respondents' subjective self-assessments. Due to the study's cross-sectional design, only statistical associations between variables can be identified, not causal relationships.

Conclusion

The study results show that nurses' job positions are associated with their ability to participate in decision-making in clinical practice. Nurses in leadership positions reported greater involvement in decision-making than nurses in direct care. At the same time, a statistically significant relationship was found between decision-making opportunities and subjectively perceived work effectiveness and attitude to organisational change.

The findings suggest that nurses' involvement in decision-making processes may be related to their job perceptions and attitudes towards job changes. Promoting participative management may improve the work environment in healthcare organisations.

Acknowledgements

The authors would like to thank the respondents for their willingness to participate and their cooperation in the research.

Conflict of interest

The authors have no conflict of interest to declare.

References

1. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Sermeus W; RN4CAST Consortium (2017). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *Int J Nurs Stud* 50(2): 143–153. DOI: 10.1016/j.ijnurstu.2012.11.009.
2. Benner P, Tanner C, Chesla C (2009). *Expertise in nursing practice: caring, clinical judgment and ethics*. 2nd ed. New York: Springer Pub., 528 p.
3. Davenport T, Kalakota, R (2019). The potential for artificial intelligence in healthcare. *Future Health J* 6(2): 94–98. DOI: 10.7861/futurehosp.6-2-94.
4. Doraiswamy PM, Blease C, Bodner K (2019). Artificial intelligence and the future of psychiatry: Insights from a global physician survey. *Artif Intell Med* 102: 101753. DOI: 10.1016/j.artmed.2019.101753.
5. Havaei F, Ji XR, Boamah SA (2022). Workplace predictors of quality and safe patient care delivery among nurses using machine learning techniques. *J Nurs Care Qual* 37(3): 232–241. DOI: 10.1097/NCQ.0000000000000600.
6. Hoffman KA, Aitken LM, Duffield C (2009). A comparison of novice and expert nurses' cue collection during clinical decision-making: Verbal protocol analysis. *Int J Nurs Stud* 46(10): 1335–1344. DOI: 10.1016/j.ijnurstu.2009.04.001.
7. Johansen ML, O'Brien JL (2016). Decision making in nursing practice: A concept analysis. *Nurs Forum* 51(1): 40–48. DOI: 10.1111/nuf.12119.
8. Manojlovich M (2010). Nurse/physician communication through a sensemaking lens: shifting the paradigm to improve patient safety. *Med Care* 48(11): 941–946. DOI: 10.1097/MLR.0b013e3181eb31bd.
9. Melin Johansson C, Palmqvist R, Rönnerberg L (2017). Clinical intuition in the nursing process and decision making – A mixed studies review. *J Clin Nurs* 26(23–24): 3936–3949. DOI: 10.1111/jocn.13814.
10. Nibbelink CW, Brewer BB (2018). Decision making in nursing practice: An integrative literature review. *J Clin Nurs* 27(5–6): 917–928. DOI: 10.1111/jocn.14151.
11. Pretz JE, Folse VN (2011). Nursing experience and preference for intuition in decision making. *J Clin Nurs* 20(19–20): 2878–2889. DOI: 10.1111/j.1365 2702.2011.03705.x.
12. Rabben J, Fossum M, Vivat B, Rohde GE (2026). Nurses' perceptions of their involvement in shared decision making for advanced cancer treatment and palliative care: A qualitative interview study. *J Adv Nurs* 82(1): 719–731. DOI: 10.1111/jan.16994.
13. Tanner CA (2006). Thinking like a nurse: A research based model of clinical judgment in nursing. *J Nurs Educ* 45(6): 204–211. DOI: 10.3928/01484834 20060601 04.
14. Tun HM, Rahman HA, Naing L, Malik OA (2025). Trust in artificial intelligence-based clinical decision support systems among health care workers: A systematic review. *J Med Internet Res* 27: e69678. DOI: 10.2196/69678.
15. White KM, Dudley Brown S, Terhaar MF (Eds) (2016). *Translation of Evidence into Nursing and Health Care*. New York: Springer, 472 p.
16. WHO (2020). *State of the World's Nursing 2020: Investing in Education, Jobs and Leadership*. Geneva, 116 p. [online] [cit. 2026-01-22]. Available from: <https://www.who.int/publications/i/item/9789240003279>
17. Wong CA, Cummings GG, Ducharme L (2013). The relationship between nursing leadership practices and patient outcomes: a systematic review update. *J Nurs Manag* 21(5): 709–724. DOI: 10.1111/jonm.12116.