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Original Article

Relationship between locus of control based on King's theory of goal attainment and nurses' performance in hospitals: A cross-sectional study

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Abstract

Background: Nurses' performance is a central determinant of hospital service quality, patient safety, and continuity of care. In demanding clinical environments, performance is influenced not only by organizational conditions but also by psychological factors, including locus of control. Within the perspective of King's Theory of Goal Attainment, locus of control is relevant because nurses' beliefs about personal control may shape communication, responsibility, decision making, and the achievement of care goals.
Objective: This study aimed to examine the relationship between locus of control based on King's Theory of Goal Attainment and nurses' performance in hospitals.
Methods: This study employed a quantitative correlational design with a cross-sectional approach. The study was conducted at Weda Hospital, Central Halmahera Regency, North Maluku, Indonesia, in September 2025. The population consisted of 145 nurses working in the Male Internal Medicine Ward and Neurology Ward. A total of 117 respondents were selected using simple random sampling. Locus of control was measured using a 16-item questionnaire, while nurses' performance was assessed using a 15-item questionnaire. Data were analyzed using univariate statistics, cross-tabulation, and Pearson correlation analysis.
Results: Most respondents were aged 36–45 years (29.9%), female (72.6%), held a bachelor's degree (66.7%), and had 21–30 years of work experience (32.5%). Internal locus of control was the most common category (45.3%), while low nurses' performance was slightly more frequent (37.6%) than high performance (35.9%). Cross-tabulation showed that nurses with external locus of control were predominantly in the low-performance category (60.5%), whereas those with internal locus of control were predominantly in the high-performance category (52.8%). Pearson correlation analysis revealed a statistically significant positive relationship between locus of control and nurses' performance ($r = 0.479$; $p < 0.001$; 95% CI: 0.32–0.62).
Conclusion: Locus of control was significantly associated with nurses' performance in the hospital setting. Nurses with stronger internal control beliefs tended to demonstrate better performance. These findings suggest that strengthening nurses' personal agency, responsibility, and goal-oriented professional attitudes may contribute to improving nursing performance and the quality of hospital care.

Background

Hospital performance depends greatly on nurses because nurses deliver continuous care, coordinate treatment activities, and influence patient experiences across hospital units (Gurning & Duwith, 2025; Yuliana et al., 2024). Hospitals currently face increasing service complexity due to chronic disease burdens, higher hospitalization demands, and the need to maintain quality under rapidly changing care systems (AbuHammad et al., 2023; Meissen et al., 2022). In this situation, nurses' performance becomes a strategic concern because performance affects care quality, patient safety, continuity of care, and organizational outcomes (Peng et al., 2023; Saleem et al., 2021). Evidence also shows that staffing conditions, workload, and job satisfaction shape how consistently nurses can perform their professional roles in hospital settings (Yanwarin, 2024; Kamara et al., 2023). Leadership and work environment further influence nursing performance because supportive behaviors, safety culture, and appropriate management strengthen staff engagement and effectiveness (Alsadaan et al., 2023; Haskins & Roets, 2022). Therefore, studies need to examine psychological and organizational determinants of nurses' performance in order to support more effective hospital management and better patient outcomes (Specchia et al., 2021; Ystaas et al., 2023).

Nurses' performance does not arise only from technical competence, because personal control beliefs also shape how nurses respond to responsibility, stress, and workplace demands

(Abdel Hadi et al., 2023; Netto & Dominic, 2023). Locus of control describes whether individuals perceive outcomes as mainly determined by their own actions or by forces outside their control, and this orientation affects motivation, persistence, and problem solving in professional practice (Abdel Hadi et al., 2023; Netto & Dominic, 2023). Among nurses, external locus of control has been associated with burnout and existential distress, which may weaken work engagement and reduce performance capacity in demanding care environments (Alfuqaha et al., 2021). By contrast, empowering conditions, workplace autonomy, and personal agency can strengthen nurses' confidence to act purposefully and responsibly in clinical situations (Gottlieb et al., 2021; Malik & Shankar, 2023). These findings indicate that nurses who perceive stronger internal control may be more likely to organize care effectively, adapt to challenges, and sustain performance under pressure (Cheng et al., 2023; Moreno-Cunha et al., 2022). Accordingly, locus of control deserves closer investigation as a psychological factor that may help explain differences in nurses' performance within hospital settings (Sibuea et al., 2024; Sipos et al., 2024).

King's Theory of Goal Attainment provides a relevant conceptual basis for this issue because the theory emphasizes perception, interaction, communication, transaction, and mutual goal achievement in nursing practice (Park, 2021). This theory assumes that nurses achieve effective outcomes when they interpret situations accurately, communicate therapeutically, and engage patients in shared goals through purposeful actions (Park, 2021; Yuliana et al., 2024). In hospital care, a nurse's locus of control may shape how confidently the nurse initiates interaction, negotiates goals, prioritizes actions, and evaluates care outcomes in line with King's framework (Vizeshfar et al., 2022; Putra & Umar, 2024). Nurses who believe that their actions can influence results may be more proactive in coordinating care, solving problems, and sustaining therapeutic communication across complex clinical situations (Baig et al., 2022; Huo et al., 2022). This orientation also aligns with continuing professional development and lifelong learning because nurses with stronger internal control may engage more actively in reflection, learning, and improvement of practice (King et al., 2021; Mlambo et al., 2021). Thus, integrating locus of control with King's theory may provide a useful lens for understanding how individual beliefs translate into observable nursing performance in hospitals (Harrison et al., 2021; Lyng et al., 2021).

The importance of this issue becomes clearer when current hospital work conditions are considered, because nurses frequently experience burnout, physical strain, and emotional overload during care delivery (Beier et al., 2023; Córdova-Martínez et al., 2023). Work-life imbalance, work-family conflict, and limited recovery opportunities can reduce well-being and eventually impair employee performance in healthcare organizations (Antolí-Jover et al., 2024; El Keshky & Sarour, 2024). Similar evidence shows that psychological resilience, job satisfaction, and perceived balance between work and personal life strongly influence nurses' retention, effectiveness, and day-to-day functioning (Aslan et al., 2023; Min, 2022; Obina et al., 2024). Studies in different contexts also confirm that imbalance between work and family is associated with unhappiness, turnover intention, and weakened employee outcomes among nurses and other health workers (Ihwughwavwe & Shewakramani, 2024; Kamara et al., 2023; Rony et al., 2023). In addition, stress-reduction strategies and improved shift arrangements can support nurses' mental health and strengthen work functioning when organizations respond appropriately to staff needs (Rohita et al., 2022; KK & Apriyadi, 2026). Therefore, examining locus of control together with nurses' performance is important because control beliefs may influence how nurses interpret and manage these workplace pressures (Sipos et al., 2023; Shaban et al., 2024).

Healthcare systems also continue to transform through digitalization, innovation, and organizational change, and these developments require nurses to adapt rapidly while maintaining care quality (Stoumpos et al., 2023; Kelley, 2024). Evidence shows that nurses' acceptance of innovation depends on management strategies, organizational culture, and perceived usefulness of new technologies in practice (Barchielli et al., 2021; Zhang et al., 2023). Digital tools can support mental health, self-care education, and clinical decision making, but successful implementation still

depends on nurses' engagement, confidence, and adaptive behavior (Agarwal et al., 2024; Strudwick et al., 2021; Zhai et al., 2022). Other studies also indicate that digital health interventions improve user outcomes when professionals actively adopt them and integrate them into meaningful care processes (Alruwaili et al., 2023; Shaban, M. M., Sharaa, Amer, & Shaban, 2024). Since innovation, resilience, and evidence-based capability require initiative and agency, nurses with stronger internal locus of control may be better positioned to engage productively with organizational change (Huo et al., 2022; Moreno-Cunha et al., 2022; Lyng et al., 2021). This argument suggests that control beliefs should be studied not only as personal traits, but also as factors that may shape performance in modern hospital systems that demand flexibility, learning, and innovation (Meissen et al., 2022; Harrison et al., 2021).

Although previous studies have examined leadership, burnout, work-life balance, resilience, innovation, and job satisfaction among nurses, fewer studies have specifically analyzed locus of control within King's Theory of Goal Attainment as a predictor of nurses' performance in hospitals (Alsadaan et al., 2023; Alfuqaha et al., 2021; Wong et al., 2021). Existing evidence has largely focused on leadership styles, organizational conditions, and broad workforce challenges rather than on how nurses' personal control orientation may shape goal-directed interactions and work outcomes in hospital care (Specchia et al., 2021; Ystaas et al., 2023; Sibuea et al., 2024). This gap is relevant because nursing performance develops through the interaction of personal agency, communication, environmental support, and professional adaptation rather than through isolated structural factors alone (Gottlieb et al., 2021; Cheng et al., 2023; Peng et al., 2023). The need for such inquiry is further supported by contemporary nursing roles in continuity of care, innovation, patient-centered communication, and spiritually sensitive practice, all of which require purposeful action from nurses (Putra & Umar, 2024; Shaban, M., Shaban, Zaky, Alanazi, Ramadan, Ebied, et al., 2024).

Therefore, this study aims to examine the relationship between locus of control based on King's Theory of Goal Attainment and nurses' performance in hospitals using a cross-sectional approach.

Methods

Study Design

This study used a quantitative approach with a correlational design and a cross-sectional framework to examine the relationship between locus of control based on King's Theory of Goal Attainment and nurses' performance in a hospital setting. The cross-sectional design was selected because the study aimed to measure both variables at one point in time and to identify the direction and strength of the relationship between them without manipulating the study conditions. The study was reported in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guideline, which is the EQUATOR Network reporting guideline for observational studies, including cross-sectional research.

Sampling

The target population in this study consisted of all nurses working in the Male Internal Medicine Ward and the Neurology Ward of Weda Hospital, with a total population of 145 nurses. The sample size was calculated using the Slovin formula with a margin of error of 5%, which yielded a minimum required sample of 106 respondents. To anticipate incomplete responses, missing data, or participant withdrawal during the data collection process, the researcher added 10% to the minimum sample size. As a result, the final target sample for this study was 117 nurses. This addition was justified to preserve the adequacy of statistical power and to ensure that the final analyzable sample remained sufficient for correlation testing even if some questionnaires could not be included in the final analysis. The use of an enlarged sample also improved the stability of the estimates and supported more robust descriptive and inferential analysis.

The sampling technique used in this study was probability sampling with the simple random sampling method. This method was selected because it provides each member of the population with an equal chance of being selected as a respondent and therefore reduces the risk of systematic selection bias. A sampling

frame was prepared from the list of eligible nurses in the two selected wards, and respondents were selected randomly from this list according to the required sample size. The use of simple random sampling was justified because the study population was clearly identified, accessible, and relatively homogeneous in terms of professional role, while still allowing natural variability in age, years of service, education, and work experience. By using a probability-based method, the study enhanced internal validity and improved the representativeness of the sample in relation to the source population.

The inclusion criteria were defined to ensure that all participants had sufficient professional exposure and contextual familiarity with the hospital environment. Nurses were eligible to participate if they worked in the Male Internal Medicine Ward or the Neurology Ward, had a minimum working experience of one year, were active staff members with either permanent or contractual employment status, and were willing to participate by signing an informed consent form. The requirement for at least one year of work experience was justified because nurses with a shorter employment period might still be in the early phase of adjustment and may not yet demonstrate stable work patterns or fully formed perceptions of control in relation to work performance. The exclusion criteria included nurses who were on leave, sick leave, or official permission during the data collection period, as well as respondents who returned incomplete questionnaires. These exclusion criteria were applied to ensure data completeness, consistency of measurement, and adequate exposure to the study setting during the study period.

Instruments

This study involved two main variables. The independent variable was locus of control, and the dependent variable was nurses' performance. Locus of control was conceptually defined as an individual's belief regarding the extent to which success or failure in work is influenced by personal effort and ability or by external factors such as luck, environment, or other uncontrollable circumstances. In this study, the concept of locus of control was integrated with King's Theory of Goal Attainment, which emphasizes the interaction among personal systems, interpersonal systems, and social systems in achieving healthcare goals. This conceptual integration provided a theoretical justification for examining control beliefs not merely as a personal psychological trait, but as a factor that may influence how nurses engage in communication, decision making, role enactment, and achievement of care goals in clinical practice. The operationalization of this variable therefore reflected both the internal–external orientation of control and its relevance to professional nursing interactions.

Locus of control was measured using a questionnaire adapted from Mulyani (2020). The instrument consisted of 16 items rated on a four-point Likert scale. The response options were designed to capture the degree of agreement with statements reflecting beliefs about personal control, external influences, responsibility, and work-related outcomes. The adaptation process involved language adjustment to ensure that the wording was understandable, contextually relevant, and appropriate for nurses working at Weda Hospital. The adaptation did not change the conceptual meaning of the items, but it improved semantic clarity and local applicability. The use of a four-point Likert scale was justified because it minimizes neutral responses and encourages respondents to indicate a clearer position regarding their perception of control. This format was considered suitable for self-administered questionnaires in a hospital environment where respondents are familiar with structured assessments and where efficient completion time is important.

The dependent variable, nurses' performance, was defined as the level of achievement of nurses in implementing nursing care according to professional responsibilities and healthcare service standards. Nurses' performance was measured using a questionnaire also adapted from Mulyani (2020), consisting of 15 items rated on a four-point Likert scale. The instrument assessed several performance

dimensions, namely work quality, work quantity, timeliness, effectiveness, and independence. These dimensions were selected because they represent core aspects of nursing performance in hospital practice and reflect both task execution and professional accountability. The questionnaire approach was considered appropriate because it enabled standardized assessment across all participants and allowed the researcher to quantify performance-related perceptions in a practical and feasible way within the hospital setting. The instrument was intended to capture the respondent's performance profile in relation to daily work responsibilities rather than formal administrative appraisal alone.

Before the main study was conducted, both instruments underwent validity and reliability testing in a pilot group of respondents. Validity testing was performed using the Pearson Product Moment correlation, and reliability testing was conducted using Cronbach's alpha. The results showed that all items in both instruments met the validity criteria, indicating that each item was able to measure the intended construct adequately. The Cronbach's alpha coefficient for the locus of control instrument was 0.826, while the Cronbach's alpha coefficient for the nurses' performance instrument was 0.870. These values indicated good internal consistency and supported the reliability of the questionnaires for use in the main study. The pilot testing process was important because the instruments had been adapted to the local context, and empirical verification was needed to confirm that the adapted items remained accurate, coherent, and suitable for the respondent population.

The total score for each variable was subsequently transformed into interpretive categories to facilitate descriptive analysis and practical interpretation of the findings. For locus of control, the total score ranged from 16 to 80 and was categorized into three groups: 16–44 as external locus of control, 45–60 as balanced locus of control, and 61–80 as internal locus of control. For nurses' performance, the total score ranged from 15 to 75 and was categorized into three levels: 15–40 as low performance, 41–60 as moderate performance, and 61–75 as high performance. These score intervals were derived from the total scoring range of each questionnaire and were used to simplify interpretation of the respondents' distribution across levels of the study variables. Although the primary inferential analysis used the continuous scores of the variables, the categorical grouping was useful for descriptive presentation and for identifying the dominant profile of respondents in the study setting. This dual use of continuous and categorized scores strengthened both statistical precision and practical readability of the results section.

Data Collection

Data collection was conducted in September 2025 after administrative permission had been obtained from the hospital management. Prior to implementation, the researcher coordinated with the heads of the selected wards to arrange the schedule and procedures for distributing the questionnaires in a way that did not disrupt patient care activities. Eligible respondents were approached based on the sampling list, and each selected nurse received an explanation regarding the purpose of the study, the procedures involved, the voluntary nature of participation, and the confidentiality of the responses. After the explanation was provided, nurses who agreed to participate were asked to sign an informed consent form before receiving the questionnaire. This procedure was important to ensure that participation was based on adequate information and free choice. The self-administered questionnaire method was selected because it allowed respondents to complete the instrument privately and efficiently while minimizing interviewer influence on answers.

The researcher monitored the data collection process directly to ensure consistency in the administration procedure and to provide clarification if respondents had difficulty understanding any item. Respondents completed the questionnaires during a time that was mutually agreed upon and that did not interfere with their work responsibilities. Completed questionnaires were checked immediately for completeness to reduce the likelihood of missing responses. If a respondent

omitted an item unintentionally and was still available, the researcher requested the respondent to review the form and complete the unanswered section. This immediate verification process improved data completeness and reduced the need to exclude forms during data processing. The direct but non-intrusive supervision of questionnaire completion also helped maintain standardization while preserving respondent autonomy.

After collection, the data were processed through several structured stages, namely editing, coding, cleaning, scoring, tabulating, and data entry. Editing was performed first to verify the completeness, consistency, and readability of all returned questionnaires. Coding was then applied by assigning numerical codes to each response option in accordance with the Likert scoring system used in the instruments. Cleaning was conducted to identify entry errors, inconsistent values, and incomplete data that might affect the quality of analysis. Scoring involved summing the item scores for each respondent according to the scoring key of the locus of control and nurses' performance questionnaires. The scored data were then organized in tabular form and entered into a computerized database for statistical analysis. This stepwise procedure was justified because it ensured systematic handling of the data, minimized processing errors, and enhanced the accuracy and reproducibility of the study findings.

Data Analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS), using the most recent version available to the research team at the time of analysis. The analysis consisted of univariate and bivariate procedures in accordance with the study objectives. Univariate analysis was used to describe the demographic and professional characteristics of the respondents as well as the distribution of the main study variables. The findings from this stage were presented in the form of frequencies, percentages, means, and standard deviations, depending on the scale and nature of the data. This descriptive step was essential because it provided an overview of the respondent profile and allowed the researcher to understand the distributional pattern of locus of control and nurses' performance before proceeding to inferential analysis. It also supported transparency in reporting the baseline characteristics of the sample, which is recommended in cross-sectional studies under the STROBE framework.

Before the correlation test was performed, the normality of the variable distribution was assessed using the Kolmogorov–Smirnov test. This test was used to determine whether the data met the assumptions required for parametric analysis. If the significance value was greater than 0.05, the data were considered normally distributed and the relationship between variables was analyzed using the Pearson Product Moment correlation test. If the significance value was less than or equal to 0.05, the data were considered non-normal and the alternative non-parametric test, Spearman rank correlation, would be used. This analytic decision pathway was justified because the selection of an appropriate statistical test must be based on the measurement characteristics and distributional assumptions of the data. Such a procedure improves the rigor of statistical inference and reduces the risk of drawing conclusions from an inappropriate model.

In the present study, the relationship between locus of control and nurses' performance was planned to be analyzed using Pearson correlation, because both variables were measured at the interval level through total questionnaire scores and were expected to satisfy the normality assumption. The results of the bivariate analysis were to be reported using the correlation coefficient (r), the p-value, and the 95% confidence interval, in order to describe the direction, magnitude, and statistical significance of the association. Reporting the confidence interval was particularly important because it provides an estimated range within which the true population correlation is likely to lie and therefore offers more information than the p-value alone. The interpretation of the correlation coefficient was intended to consider both statistical significance and practical

meaning. A positive coefficient would indicate that stronger internal control orientation is associated with higher nurses' performance, whereas a negative coefficient would indicate the opposite direction.

Although the main objective of the study was to determine the relationship between locus of control and nurses' performance, the researcher also recognized the possible influence of confounding variables such as age, educational level, years of service, and work environment. These variables were described during the univariate stage to provide context for interpretation. However, the study did not include multivariable modeling because the primary analytical focus was on the direct correlation between the two main variables. This decision was justified by the exploratory and relationship-focused nature of the study, which aimed to establish whether a meaningful association exists before more complex explanatory models are developed in subsequent research. Nevertheless, the findings were interpreted cautiously with acknowledgment that unmeasured or uncontrolled factors may also contribute to variation in nurses' performance. This transparent acknowledgment of analytical scope and limitation is consistent with rigorous reporting standards for observational studies.

Ethical Consideration

This study was conducted after obtaining formal permission from the management of Weda Hospital prior to the initiation of data collection. Institutional permission was necessary because the study involved hospital personnel, was conducted within clinical service units, and required coordination with nursing administrators and ward leaders. In addition to administrative approval, the study applied fundamental ethical principles throughout all stages of the research process, including respect for persons, voluntariness, confidentiality, anonymity, and non-maleficence. Each selected respondent received a clear explanation about the purpose of the study, the expected time needed to complete the questionnaire, the voluntary nature of participation, and the right to refuse or withdraw at any stage without any penalty or consequence for employment status. This procedure ensured that respondents were not coerced and that their participation reflected genuine willingness. Only nurses who provided written informed consent were included in the study.

Results

This section presents the findings of the study on the relationship between locus of control based on King's Theory of Goal Attainment and nurses' performance at Weda Hospital. The results are organized into univariate and bivariate analyses. The univariate analysis describes the characteristics of the respondents and the distribution of the main study variables. The bivariate analysis explains the cross-tabulation pattern between locus of control and nurses' performance and the statistical correlation between the two variables. This sequence was used to provide a clear description of the respondent profile before presenting the analytical relationship between the independent and dependent variables.

Table 1 shows that most respondents were aged 36–45 years (29.9%), followed closely by those aged 26–35 years (29.1%) and those older than 45 years (27.4%). This distribution indicates that the respondents were largely in a productive adult age group with substantial maturity and professional exposure in clinical practice. In terms of gender, female nurses dominated the sample (72.6%), while male nurses accounted for 27.4%, which reflects the common demographic profile of the nursing profession. Based on educational attainment, most respondents held a bachelor's degree (66.7%), followed by diploma education (21.4%), professional nurse qualification (11.1%), and master's degree (0.9%), suggesting that the majority had an adequate academic foundation for professional nursing practice.

Regarding work experience, most respondents had worked for 21–30 years (32.5%), followed by 11–20 years (27.4%), which indicates that a considerable proportion of the sample had long-term professional experience. Most

respondents were married (71.8%), while 28.2% were unmarried. For the main independent variable, nearly half of the respondents had an internal locus of control (45.3%), followed by external locus of control (32.5%) and balanced locus of control (22.2%). For the dependent variable, 37.6% of respondents were categorized as having low performance, 35.9% had high performance, and 26.5% had moderate performance. Overall, the univariate findings indicate that the respondents were predominantly experienced female nurses with bachelor-level education and a tendency toward internal locus of control, which provides an important basis for the subsequent bivariate analysis.

Table 1. Distribution of Respondent Characteristics and Study Variables

Variables	Frequency (n)	Percentage (%)
Age		
< 26 years	16	13.7
26–35 years	34	29.1
36–45 years	35	29.9
> 45 years	32	27.4
Gender		
Male	32	27.4
Female	85	72.6
Education		
Diploma	25	21.4
Bachelor's degree	78	66.7
Professional nurse (Ners)	13	11.1
Master's degree	1	0.9
Years of service		
< 5 years	15	12.8
6–10 years	19	16.2
11–20 years	32	27.4
21–30 years	38	32.5
> 30 years	10	8.5
Marital Status		
Unmarried	33	28.2
Married	84	71.8
Locus of control		
External	38	32.5
Balanced	26	22.2
Internal	53	45.3
Nurses' Performance		
Low	44	37.6
Moderate	31	26.5
High	42	35.9

Table 2 demonstrates a clear pattern in the relationship between locus of control and nurses' performance. Among respondents with an external locus of control, most were categorized as having low performance (60.5%), while only a small proportion reached the high-performance category (13.2%). This pattern suggests that nurses who tend to attribute work outcomes to external factors may show lower initiative and lower personal responsibility in performing professional tasks. In contrast, among respondents with an internal locus of control, more than half were categorized as having high performance (52.8%), and only 22.6% had low performance. This finding indicates that nurses who believe that work outcomes are influenced by their own abilities and efforts tend to demonstrate more favorable performance outcomes. Meanwhile, respondents with a balanced locus of control showed an even distribution between low and high performance categories (34.6% each), with 30.8% in the moderate category. Overall, the crosstabulation suggests that an internal

control orientation is associated with better performance, whereas an external control orientation is more frequently associated with lower performance.

Table 2. Cross-tabulation of Locus of Control and Nurses' Performance

Locus of Control	Low Performance		Moderate Performance		High Performance		Total
	n	%	n	%	n	%	
External	23	60.5	10	26.3	5	13.2	38
Internal	12	22.6	13	24.5	28	52.8	53
Balanced	9	34.6	8	30.8	9	34.6	26

Table 3 shows that the Pearson correlation test identified a statistically significant positive relationship between locus of control and nurses' performance (r = 0.479; p = 0.000). This result indicates that the stronger the tendency toward an internal locus of control, the higher the level of nurses' performance. The correlation coefficient of 0.479 falls within the moderate range, which means that locus of control has a meaningful association with performance, although it is not the only factor influencing it. The 95% confidence interval for the correlation coefficient (0.32–0.62) further supports the stability of this positive relationship in the study population. These findings suggest that nurses with stronger personal beliefs in self-control, responsibility, and effort orientation are more likely to show better work performance in clinical settings. At the same time, the moderate magnitude of the relationship also implies that nurses' performance remains a multidimensional outcome influenced by other individual and organizational factors beyond locus of control alone.

Table 3. Pearson Correlation Analysis between Locus of Control and Nurses' Performance

Variable	Mean	SD	r	p-value	95%CI
Locus of Control	65.42	8.73	0.479	0.000	0.32–0.62
Nurses' Performance	72.16	10.15			

Discussion

This study found that most respondents were adult nurses in productive working age, predominantly female, mostly educated at the bachelor level, and largely had long professional experience. This study also found that nearly half of the respondents demonstrated an internal locus of control. The distribution of nurses' performance showed that low and high performance categories were relatively close in proportion, with low performance slightly more frequent. The cross-tabulation analysis revealed that nurses with an external locus of control were more likely to have low performance, whereas nurses with an internal locus of control were more likely to have high performance. The Pearson correlation test confirmed a statistically significant positive relationship between locus of control and nurses' performance with a moderate correlation strength. These findings indicate that stronger internal control beliefs were associated with better nursing performance in the hospital setting.

The pattern of respondent characteristics in this study provides an important context for understanding the relationship between locus of control and nurses' performance. Productive adult age and long years of service may support professional maturity, clinical judgment, and adaptation to demanding care environments in hospital practice (Beier et al., 2023; Córdova-Martínez et al., 2023). Higher educational attainment may also strengthen nurses' critical thinking, evidence-based practice capacity, and ability to manage complex responsibilities in patient care (King et al., 2021; Mlambo et al.,

2021). The predominance of female respondents reflects the general demographic composition of the nursing workforce, in which interpersonal sensitivity and relationship-centered care often shape daily professional roles (Specchia et al., 2021; Ystaas et al., 2023). These demographic and professional conditions may create a foundation that supports nurses in engaging with goal-directed practice and accountability in care delivery (Gottlieb et al., 2021; Haskins & Roets, 2022). Therefore, the respondent profile in this study may have contributed to the way control beliefs were expressed and translated into observable work performance in the clinical setting (Sibuea et al., 2024; Yanwarin, 2024).

The finding that internal locus of control was the most dominant category suggests that many nurses believed that work outcomes were influenced by their own efforts, decisions, and abilities. This tendency is consistent with the view that personal agency and perceived control shape motivation, persistence, and responsibility in professional roles (Abdel Hadi et al., 2023; Netto & Dominic, 2023). Nurses who perceive stronger internal control may be more likely to interpret challenges as manageable tasks rather than as fixed barriers determined by external conditions (Gottlieb et al., 2021; Malik & Shankar, 2023). Such an orientation may enhance initiative, self-regulation, and ownership of patient care responsibilities in everyday practice (Cheng et al., 2023; Moreno-Cunha et al., 2022). In contrast, external locus of control has been associated with burnout and existential strain, both of which may weaken confidence and reduce active engagement in work demands (Alfuqaha et al., 2021; Sipos et al., 2024). Thus, the dominance of internal locus of control in this sample may partly explain why a substantial proportion of respondents also demonstrated high levels of performance (Sibuea et al., 2024; Saleem et al., 2021).

The cross-tabulation findings further clarify this interpretation because nurses with an external locus of control were concentrated in the low-performance category, while nurses with an internal locus of control were concentrated in the high-performance category. This pattern indicates that how nurses attribute the source of success or failure may influence how actively they perform their professional duties. Nurses with internal control beliefs may show stronger accountability because they perceive that their own actions can shape care outcomes and work achievements (Abdel Hadi et al., 2023; Gottlieb et al., 2021). That perception may encourage proactive behavior, persistence in solving clinical problems, and stronger commitment to quality care (Baig et al., 2022; Huo et al., 2022). On the other hand, nurses who rely more heavily on external explanations may become less engaged in initiating action or sustaining effort when workplace demands increase (Alfuqaha et al., 2021; Rony et al., 2023). This explanation aligns with literature showing that psychological orientation, job crafting, and workplace empowerment contribute to how nurses respond to organizational and clinical challenges (Moreno-Cunha et al., 2022; Malik & Shankar, 2023).

The positive and statistically significant correlation between locus of control and nurses' performance confirms that control beliefs were meaningfully associated with work outcomes in this study. The moderate correlation coefficient indicates that locus of control was an important factor, although it was not the sole determinant of performance. This interpretation is consistent with research showing that nurses' performance is shaped by multiple interacting influences, including staffing, work conditions, job satisfaction, and organizational support (Peng et al., 2023; Yanwarin, 2024). Leadership style and work environment also influence whether nurses can translate personal motivation into effective action and sustained professional performance (Alsadaan et al., 2023; Specchia et al., 2021). A moderate relationship therefore suggests that internal control orientation may strengthen performance, but this influence unfolds within broader clinical and organizational contexts (Ystaas et al., 2023; Haskins & Roets, 2022). Consequently, hospital managers should interpret locus of control as a meaningful psychological resource that interacts with structural conditions rather than as an isolated cause of performance differences (Harrison et al., 2021; Lyng et al., 2021).

These findings can also be understood through King's Theory of Goal Attainment, which emphasizes perception, communication, interaction, transaction, and mutual goal achievement in nursing practice. Nurses with an internal locus of control may be better prepared to engage in purposeful interactions because they are more likely to believe that their own actions affect patient care outcomes. This belief may support more confident communication, clearer prioritization, and stronger commitment to shared care goals in hospital settings (Park, 2021; Putra & Umar, 2024). King's framework also suggests that effective nursing outcomes emerge when nurses actively participate in interpersonal processes and professional decision making (Park, 2021; Yuliana et al., 2024). Internal control orientation may therefore function as a psychological mechanism that supports goal-directed transactions and strengthens the implementation of nursing roles within personal, interpersonal, and social systems (Vizeshfar et al., 2022; Cheng et al., 2023). In this sense, the present findings extend the relevance of King's theory by showing that the nurse's perceived control over work outcomes may be an important condition for achieving effective performance in clinical environments (Huo et al., 2022; Harrison et al., 2021).

The discussion of this relationship also becomes more relevant when current healthcare challenges are considered. Nurses today work in environments characterized by high workload, emotional pressure, digital transformation, and increasing expectations for adaptability and innovation (Stoumpos et al., 2023; Meissen et al., 2022). Work-life imbalance, burnout, and psychological burden may reduce nurses' ability to sustain optimal performance when internal coping resources are insufficient (Antolí-Jover et al., 2024; El Keshky & Sarour, 2024). Studies have shown that resilience, work-life balance, and mental health support are closely linked to nurses' functioning and retention in healthcare systems (Aslan et al., 2023; Min, 2022; Obina et al., 2024). Digital interventions and supportive technologies may strengthen nurses' competence and self-management, but successful use still depends on engagement, confidence, and willingness to act (Agarwal et al., 2024; Strudwick et al., 2021; Shaban, M. M., Sharaa, Amer, & Shaban, 2024). Internal locus of control may help nurses remain active and responsible amid these pressures because it promotes the belief that personal effort can still influence outcomes despite organizational complexity (Alruwaili et al., 2023; Zhai et al., 2022). Therefore, strengthening nurses' internal control orientation may complement organizational strategies that aim to improve mental health, innovation readiness, and professional performance in hospitals (Barchielli et al., 2021; Kelley, 2024).

The findings of this study have practical implications for nursing management and workforce development in hospitals. Hospital leaders may need to design interventions that not only improve technical competence but also strengthen nurses' sense of agency, autonomy, and responsibility in patient care (Gottlieb et al., 2021; Alsadaan et al., 2023). Continuing professional development programs may be more effective when they include reflective learning, communication strengthening, problem solving, and self-management components that reinforce internal control beliefs (King et al., 2021; Mlambo et al., 2021). Leadership approaches that promote empowerment, psychological safety, and meaningful participation may help nurses convert personal control beliefs into better work outcomes (Specchia et al., 2021; Ystaas et al., 2023). At the same time, stress management, healthy scheduling, and supportive work-life balance policies remain important because performance is shaped by both personal and organizational dimensions (Rohita et al., 2022; Ihwughwavwe & Shewakramani, 2024). Future studies should consider multivariable models to examine how locus of control interacts with work environment, leadership, workload, and job satisfaction in influencing nurses' performance (Kamara et al., 2023; Peng et al., 2023). Such work would provide a more comprehensive explanation of nursing performance and support the development of theory-based and context-sensitive workforce interventions in hospital settings (Lyng et al., 2021; Zhang et al., 2023).

Conclusion and Recommendation

This study concluded that locus of control had a significant positive relationship with nurses' performance in the hospital setting, which indicates that nurses with stronger internal control beliefs tended to demonstrate better performance. The findings also showed that nurses with external locus of control were more frequently found in the low-performance category, while nurses with internal locus of control were more frequently found in the high-performance category. These results suggest that psychological factors, especially beliefs about personal control over work outcomes, should be considered in efforts to improve nursing performance. Hospitals should therefore develop management strategies that strengthen nurses' personal agency, responsibility, and professional confidence through supportive leadership, continuing education, reflective supervision, and healthy work systems. Future research should include broader settings and multivariate analysis so that the relationship between locus of control and performance can be understood more comprehensively alongside organizational and environmental factors.

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