

**Motivations and attitudes towards research among postgraduate nursing students at a university in Argentina****Motivaciones y actitudes hacia la investigación en enfermeros de posgrado de una universidad Argentina****Motivações e atitudes em relação à pesquisa em enfermeiros pós-graduados de uma universidade Argentina**

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ABSTRACT

Objective: To explore the motivations and attitudes towards research among postgraduate nursing students at a private university in Argentina. **Methodology:** A descriptive, quantitative, and cross-sectional study was conducted, using the questionnaire by Cepeda et al. to assess motivations toward research in Nursing. This questionnaire consists of 42 items grouped into five domains. **Results:** The study included 63 participants, predominantly female (84.13%), aged between 31 and 40 years (41.27%), married or in a domestic partnership (52.38%), residing in a different borough from the university (50.79%), and with previous undergraduate education (96.83%). The highest-rated domain was Nursing Knowledge and Professional Preparation (mean=80.87, SD=11.50), while Personal Life Organization, Professional Life, and Time Management received the lowest ratings (mean=54.09, SD=13.70). The overall score for motivation and attitudes towards research was 70.01 (SD=7.40).

Conclusion: A moderate level of motivation and positive attitudes towards research was found among the respondents. Gender and marital status were associated with motivation for conducting research activities, with lower motivation observed in male professionals and those who were single. It is necessary to implement strategies to promote research activities among nursing staff during their training and to ensure these activities can be sustained throughout their professional careers.

Keywords: Nursing Research; Nursing; Motivation; Attitude; Education, Nursing, Graduate.

RESUMEN

Objetivo: Explorar las motivaciones y actitudes hacia la investigación en enfermeros de posgrado de una universidad privada de Argentina. **Metodología:** Estudio de tipo descriptivo, cuantitativo y transversal. Se utilizó el cuestionario para evaluar las motivaciones hacia la investigación en Enfermería de Cepeda et al., de 42 ítems agrupados en cinco dominios. **Resultados:** Participaron 63 estudiantes, mayormente de género femenino (84,13%), con edades entre los 31 y 40 años (41,27%), casados o en unión libre (52,38%), residentes en una provincia diferente a la ubicación de la institución (50,79%) y con formación previa de grado (96,83%). El dominio mejor valorado fue Conocimientos y preparación profesional de enfermería (media=80,87, DE=11,50), mientras, Organización de la vida personal, profesional y gestión del tiempo fue el peor valorado (media=54,09, DE=13,70). El puntaje global de la motivación y actitud hacia la investigación fue de 70,01 (DE=7,40). **Conclusión:** Se encontró un nivel moderado de motivación y actitudes positivas hacia la investigación en los encuestados. El género y el estado civil mostraron estar relacionados con la motivación para realizar actividades de investigación, siendo menor en los profesionales masculinos y de estado civil soltero/a. Se requiere de la implementación de estrategias para promover la realización de actividades de investigación por parte del personal de Enfermería durante la formación y que estas puedan mantenerse a lo largo de la vida profesional.

Palabras claves: Investigación en Enfermería; Enfermería; Motivación; Actitud; Educación de Postgrado en Enfermería.

RESUMO

Objetivo: explorar as motivações e atitudes em relação à pesquisa em enfermeiros de pós-graduação em uma universidade privada na Argentina. **Metodologia:** estudo descritivo, quantitativo e transversal. Foi utilizado o questionário para avaliar as motivações em relação à pesquisa em enfermagem de Cepeda et al. com 42 itens agrupados em cinco domínios. **Resultados:** Participaram 63 estudantes, em sua maioria do sexo feminino (84,13%), com idade entre 31 e 40 anos (41,27%), casados ou em união estável (52,38%), residentes em uma província diferente da localização da instituição (50,79%) e com formação universitária anterior (96,83%). O domínio mais bem avaliado foi Conhecimento de enfermagem e preparação profissional (média=80,87, DP=11,50), enquanto Organização da vida pessoal e profissional e gerenciamento do tempo foi o mais mal avaliado (média=54,09, DP=13,70). A pontuação geral para motivação e atitude em relação à pesquisa foi de 70,01 (DP=7,40). **Conclusão:** Os entrevistados apresentaram um moderado nível de motivação e atitudes positivas em relação à pesquisa. O gênero e o estado civil mostraram-se relacionados à motivação para realizar atividades de pesquisa, sendo mais baixos nos profissionais do sexo masculino e no estado civil solteiro. É necessário implementar estratégias para promover a implementação de atividades de pesquisa pela equipe de enfermagem durante o treinamento e para que elas possam ser mantidas ao longo de sua vida profissional.

Palavras-chave: Pesquisa em Enfermagem; Enfermagem; Motivação; Atitude; Educação de Pós-Graduação em Enfermagem.

INTRODUCTION

Research is considered one of the four pillars of professional nursing practice, alongside clinical care, management, and education. Article 2 of the Professional Nursing Practice Law of Argentina¹

emphasizes research as a professional responsibility, highlighting its relevance within the profession's scope.

Nursing has undergone a profound transformation, evolving from a predominantly technical occupation to a profession grounded in a robust body of knowledge, thereby earning its classification as a science. Consequently, scientific research has become a cornerstone in developing its framework, serving as a guide for professional practice and enhancing the quality and safety of care while improving performance across all disciplinary areas.²

Despite the importance of research at both professional and educational levels (including its integration into curricula), studies conducted in Argentina indicate low motivation for engaging in research activities, a lack of understanding of the processes involved in constructing disciplinary knowledge, and inadequate knowledge management. These issues hinder the translation of professional advancements into workplace practices.^{3,4} Such factors contribute to low graduation rates from nursing postgraduate programs, limited scientific output compared to other countries in the region, and reduced interest in pursuing careers in health-related research (including clinical, educational, and community research).⁵

In addition to these challenges, workplace conditions often discourage research activities, particularly for nurses in clinical roles. Barriers include patient overload, extended working hours, multiple job commitments, and insufficient time allocated for research.⁶ Furthermore, the predominantly female nursing workforce⁷ faces additional complexities in dedicating time to research due to domestic responsibilities, family caregiving, and gender-based stereotypes and roles.⁸ In Argentina's current economic instability, the need for multiple jobs to meet personal and family financial needs, and cover transportation, education, and other expenses, further limits the available time and motivation for research work, which is often unpaid.

Recent studies have examined the attitudes of postgraduate students toward scientific research. A study conducted in Argentina by Campos et al.³ analyzed the attitudes of 43 students enrolled in a nursing specialization program in Adult Critical Care at a private university. The findings revealed predominantly positive attitudes toward research; however, the lack of knowledge on methodological and statistical aspects was considered a significant barrier to professional practice in this area. Another Argentine study by Canova-Barrios et al.⁴ included 107 students from a Doctorate in Public Health program at a private institution, of whom more than 40% had undergraduate training in nursing. This study also reported a generally positive perception of the research teaching and learning process. However, it revealed a deficient understanding of both qualitative and quantitative data analysis and the processes of literature search and review. While motivation and attitudes toward research were positive in both studies, they did not translate into scientific output. The students exhibited low publication rates in indexed journals and minimal participation in research activities.

Therefore, it can be anticipated that motivation and attitudes toward scientific research among nursing professionals may be limited or may not lead to actionable outcomes. As noted by Rodríguez García et al.⁶, the main reasons for not engaging in research are a lack of time and insufficient knowledge. For postgraduate students, motivation for research is not necessarily inherent or high. This is particularly true given that postgraduate education may emphasize either academic goals (focused on knowledge development) or professional objectives (centered on skill development). However, both pathways culminate in a mandatory research project, which requires students to apply the knowledge gained throughout the curriculum using the scientific method.

Based on the above, this study aims to explore the motivations and attitudes toward research among postgraduate nursing students at a private university in Argentina. Secondary objectives include analyzing the relationship between sociodemographic variables and motivation for research and

identifying the most influential factors (motivators and barriers) when deciding to engage in this activity.

METHODOLOGY

This was a descriptive, cross-sectional study with a quantitative approach. The population consisted of 63 second-year postgraduate students enrolled in the master's in nursing services management at a private university in Buenos Aires, Argentina. The sample included all postgraduate students, and non-probabilistic sampling was implemented.

Students enrolled in the second year of the curriculum who voluntarily agreed to participate by signing an informed consent form were included. Exclusion criteria comprised inadequate completion of the instrument or providing incomplete responses.

Data collection was conducted using the instrument titled *Cuestionario para evaluar la motivación hacia la investigación en enfermería* (Questionnaire to Evaluate Motivation for Nursing Research) developed by Cepeda et al.,⁹ which has a Cronbach's alpha of 0.86. This instrument consists of 42 items distributed across five dimensions or domains: Organization of Personal and Professional Life and Time Management (8 items), Nursing Knowledge and Professional Preparation (8 items), Available Resources and Support (8 items), Professional Development (10 items), and Motivations for Research (8 items). The items are assessed using a 5-point Likert scale: Strongly agree, Agree, Do not Agree or Disagree, Disagree, and Strongly disagree, with scores ranging from one to five points. A score of one reflects the lowest attitude/motivation toward research, while a score of five reflects the highest. Reverse scoring was applied to some items to ensure that higher scores represent better attitudes/motivation toward research. The data collection was supplemented with five questions to characterize the sample, gathering information on age, gender, marital status, place of residence, and educational level.

The instrument was implemented using Google Forms and distributed during class hours via a QR code. The purpose of the study, as well as the voluntary nature of participation, was explained to participants. Those who agreed to participate were asked to sign a written informed consent form. Once the data were collected, the Infostat software was used to perform the analysis. Means and standard deviations (SD) were calculated for quantitative variables, while absolute (n) and relative (%) frequencies were calculated for categorical variables. To facilitate the comparison between domains, scores were converted into indices (0 to 100%) using the maximum domain score and a simple rule of three. Given the normal variable distribution, parametric tests were implemented to identify relationships and correlations between variables. Student's *t*-test was used to compare means between two groups, Analysis of Variance (ANOVA) was used to compare means among three or more groups, and Pearson's *r* was applied to analyze correlations between quantitative variables. A statistical significance level of *p*<0.05 was set.

Regarding ethical considerations, the study was approved by the institution's teaching and research department. Written informed consent was implemented, and no personal or identifying data were collected, ensuring anonymity. Participation was voluntary. According to current legislation in the Republic of Argentina, this study qualifies as "risk-free" due to its observational nature, the voluntary participation of respondents, and the anonymity of data collection.¹⁰

RESULTS

The sample was made up of 63 students of the master's in nursing service management at a private higher education institution in Buenos Aires, Argentina. The participants were mostly women (84.13%), over 41 years (53.97%), married or in a consensual union (52.38%), living in an area

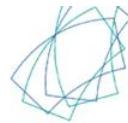
different from where the institution is located (50.79%), and with previous undergraduate training (96.83%) (Table 1).

Table 1. Characteristics of students attending the master's in nursing service management (n=63).

Variable	Categories	n	%
Gender	Female	53	84,13
	Male	10	15,87
Age	Under 30 years	3	4,76
	31 to 40 years	26	41,27
	Over 41 years	34	53,97
Marital status	Single	24	38,10
	Married or in a consensual union	33	52,38
	Divorced or Widowed	6	9,52
Place of Residence	City Buenos Aires	7	11,11
	Province de Buenos Aires	24	38,10
	Another province	32	50,79
Educational Level	Bachelor's Degree	61	96,83
	Specialization	2	3,17
Total		63	100,00

Source: Prepared by the authors (2024).

The item "Research benefits the professional practice of nursing" received the highest score, with a mean of 4.68 (SD=0.64), followed by "Knowledge of new technologies (Internet, online courses, databases, forums...) facilitates research," which scored 4.67 (SD=0.82). Both correspond to the "Strongly Agree" option and belong to the domains "Professional Development" and "Nursing Knowledge and Professional Preparation", respectively. Conversely, the item "Research requires significant time and effort outside working hours," from the domain Organization of Personal Life, Professional Life, and Time Management, obtained the lowest mean score, with a value of 1.46 (SD=0.64), equivalent to the option "Agree." This shows it is a factor that hinders the intention to conduct research. Complete information is presented in Table 2.



Se halló que el reactivo “Investigar aporta beneficios a la práctica profesional enfermera” fue el mejor puntuado, con una media de 4,68 (DE=0,64), seguido de “Poser conocimientos sobre nuevas tecnologías (Internet, cursos on-line, bases de datos, foros...) facilita la investigación” con un puntaje de 4,67 (DE=0,82), equivalentes a la opción de respuesta “Totalmente de acuerdo” y pertenecientes a los dominios Desarrollo profesional y Conocimientos y preparación profesional de enfermería, respectivamente. El reactivo “Para investigar es necesario dedicar mucho tiempo y esfuerzo fuera del horario laboral” del dominio Organización de la vida personal, profesional y gestión del tiempo, obtuvo de la media más baja, con un puntaje de 1,46 (DE=0,64), equivalente a la opción “de acuerdo”, situándolo como un elemento que dificulta e incide sobre la intención de investigar. La información completa se muestra en la Tabla 2

Table 2. Performance of items from the Questionnaire to Evaluate Motivation Toward Nursing Research (n=63)

Domains	Items	Mean	SD
Organization of Personal and Professional Life and Time Management	1) Research requires significant time and effort outside of working hours.*	1.46	0.64
	2) My personal life will be negatively affected if I conduct research.*	3.30	1.07
	3) Personal commitments outside of work are an obstacle to carrying out research.*	2.84	1.03
	4) I do not have time during working hours to dedicate to research projects.*	2.30	1.14
	5) Conducting research during my work hours would get in the way of me performing my functions.*	2.57	1.20
	6) Shift work makes it difficult to dedicate time to research.*	2.62	1.13
	7) In my job, the workload allocated to clinical practice hinders dedicating time to research.*	2.59	1.10
	8) Part of the working day should be allocated to research projects.	3.95	1.01
Nursing Knowledge and Preparation	9) I have enough knowledge to carry out a research project.	3.06	1.00
	10) Nurses should read scientific journals frequently (at least once a month).	4.43	0.80
	11) There is enough information available to conduct research in nursing.	2.97	1.18
	12) There should be postgraduate research courses for nursing.	4.38	0.87
	13) Nursing curricula should include research training.	4.62	0.85
	14) Knowledge of new technologies (Internet, online courses, databases, forums) facilitates research.	4.67	0.82
	15) Knowing other languages facilitates conducting research.	4.30	0.99
	16) Nurses are just as qualified as other healthcare professionals to carry out research.	3.92	1.13
Available Resources and Support	17) I receive support and motivation from management to do research.	2.71	1.28
	18) Nursing research receives the same external support (grants, awards, publications, etc.) as research conducted by other healthcare professionals.	2.46	1.18
	19) I have access to information sources for research in my workplace.	3.08	1.27
	20) Research requires financial resources that are difficult to obtain.*	2.95	1.02
	21) In my work, the rest of the multidisciplinary team would collaborate on a nursing research project.	3.63	0.97
	22) In my workplace, I have access to material resources (paper, computer, software programs, etc.) for research.	3.56	1.29
	23) In my workplace, I have access to nursing scientific literature.	2.67	1.30
	24) Nursing has the same financial support as other professionals for research.	2.33	1.09
Professional Development	25) Research is a part of my professional functions.	4.02	1.11
	26) As a nurse, I have the authority to decide on the patient's care.	4.22	0.94
	27) The functions of nurses are primarily practical and care-oriented.*	2.65	1.27
	28) I would be willing to collaborate with other professionals in their research projects.	4.44	0.74
	29) Research benefits the professional practice of nursing.	4.68	0.64

Motivations for Research	30) I don't need to conduct research to improve my work.*	3.49	0.95
	31) Research is a function delegated by other professionals.*	3.60	0.81
	32) It is difficult to find interesting areas to do research in Nursing.*	3.63	0.75
	33) Research improves the recognition of the nursing profession.	4.60	0.73
	34) Nursing as a profession is not oriented toward research.*	3.35	1.02
	35) I would like to participate in a research project.	4.24	0.78
	36) Feeling motivated at work encourages me to conduct research.	4.38	0.71
	37) I feel capable of leading a research project.	3.71	0.97
	38) Achieving a higher level in my professional career is an incentive to conduct research.	4.22	0.94
	39) A financial reward would increase my interest in research.	4.05	1.01
	40) Publishing a research paper is not professionally recognized.*	2.86	1.12
	41) It is not worth researching to improve my resume and become more competitive.*	3.68	0.78
	42) I am interested in the research projects being developed at my workplace.	3.79	0.90

*The item scores are interpreted inversely.

Table 3. Performance on the domains of Motivation Toward Research (n=63)

Dimension	Raw values		Indices	
	mean	SD	mean	SD
Organization of Personal and Professional Life and Time Management	21,63	5,48	54,09	13,70
Nursing Knowledge and Preparation	32,35	4,60	80,87	11,50
Available Resources and Support	23,40	5,73	58,49	14,32
Professional Development	38,70	4,60	77,40	9,20
Motivations for Research	30,94	3,94	77,34	9,86
General motivation towards research	147,02	15,54	70,01	7,40

Source: Prepared by the authors (2024).

The highest-rated domain was "Nursing Knowledge and Professional Preparation," with an average score (index) of 80.87 (SD = 11.50), while "Organization of Personal Life, Professional Life, and Time Management" received the lowest rating, with an average score of 54.09 (SD = 13.70). The overall score for motivation and attitude towards research was 70.01 (SD = 7.40), indicating a moderate and positive evaluation (Table 3).

Inferential analysis revealed a relationship between the domain "Organization of Personal Life, Professional Life, and Time Management" and the variables of gender and marital status. Women scored higher on average compared to their male counterparts (Women: 55.61 and Men: 46.00, $p = 0.039$), while single respondents had lower scores in this domain (Singles: 48.65, Cohabiting or Married: 56.52, Divorced or Widowed: 62.50, $p = 0.039$). Age, place of residence, and educational level did not show any influence on attitudes and motivation toward research.

Finally, a positive and moderate correlation was found between the domains of the instrument and overall motivation towards research, with "Organization of Personal Life, Professional Life, and Time Management" being the most influential factor on the intention and motivation to engage in research activities ($r = 0.69$, $p < 0.001$).

DISCUSSION

Undoubtedly, research represents a particularly important area in Nursing for improving health outcomes (quality and safety of care) and promoting the development and visibility of the profession.^{5,11} As such, it is essential to identify the factors that may influence the intention to engage in research activities, recognize opportunities for its promotion, and overcome identified barriers.¹² Postgraduate education provides a conducive environment for the development of research competencies, but it requires that students are motivated to learn and perceive the usefulness of what they have learned for their professional practice, thus making the role of postgraduate educators crucial.

This study found a positive level of motivation and attitudes towards research. Similar findings have been reported in studies involving postgraduate nursing students;^{3,4} however, it is important to highlight that positive motivations and attitudes towards research do not necessarily correlate with showing commitment to its practice. This discrepancy is evident when reviewing the scientific output in the field of nursing in Argentina, which lags behind countries with similar conditions in the region.⁵

A noteworthy finding of this study is that participants report having sufficient knowledge and preparation to engage in research activities; however, work, family, and academic demands, which affect their availability, are barriers to carrying out such activities. Two systematic reviews conducted by Rizany et al.¹³ and Almarwani & Alzahrani¹⁴ on what impacts the development of nursing competencies describe six factors: work experience, professional environment, educational level, adherence to professionalism, critical thinking, and personal factors. In the context of research, personal, educational, and work environment factors such as age, gender, marital status, confidence, educational level, research promotion, and workplace research facilities, have been identified. In our study, marital status and gender showed a statistically significant relationship with motivation towards research.

Studies have revealed that it is often academic staff that carries out research, without necessarily considering the actual needs of workplace settings. This affects the perception of research activities, hence influencing the motivation to design or engage in them.¹⁵ A study conducted by Amicucci et al.¹⁶, which included 921 healthcare professionals, found a moderate level of participation in research activities and very low experience in publishing scientific articles. The study highlights the need to identify and promote research among nursing professionals, including protected time to dedicate to

research, providing specific training, strengthening collaboration with academic settings, and offering financial support. In the present work, these elements are described under the domain "Organization of Personal Life, Professional Life, and Time Management." Here, participants responded that research requires significant time and effort outside of working hours, that they do not have time during work hours to conduct research, that engaging in research activities would hinder their duties, the lack of financial incentives to engage in research, and that the high workload prevents them from dedicating time to research.

This study serves as a basis for decision-making aimed at increasing nursing staff participation in research, considering that most of the respondents manage different services in healthcare institutions and their motivation and level of knowledge could influence how they transmit their intention to engage in research to their subordinates.¹⁷

One limitation of this research is that it was conducted only in one private educational institution. Additionally, the sample was heterogeneous in terms of work and residential areas, which could affect the representativeness of the findings.

CONCLUSIONS

A moderate level of motivation and positive attitudes towards research was found among the surveyed students. The highest and lowest rated dimensions were "Nursing Knowledge and Professional Preparation" and "Organization of Personal Life, Professional Life, and Time Management," respectively.

Gender and marital status were found to be related to motivation for research, with lower motivation observed among male professionals and those who were single. "Organization of Personal Life, Professional Life, and Time Management" was the element most strongly associated with motivation towards research.

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CCB: Conceptualization, Data Curation, Formal Analysis, Funding Acquisition, Investigation, Methodology, Validation, Writing – Original Draft Preparation, Writing – Review & Editing.

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