



ORIGINAL ARTICLE

Motivation for continuing education in nursing

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Abstract

Introduction: The importance of Continuing Professional Education is emphasized internationally due to the widespread changes in different domains. The nursing profession plays an important role in healthcare due to the influence of nurses on patients' and community health status. Thus, it is crucial to understand the motives for participation in Continuing Professional Education programs. This study seeks to recognize the motivational factors that affect nurses to choose Continuing Nursing Education.

Material and methods: Data was collected through a self-completed questionnaire, sent in electronic form to Hellenic Nurses Associations and Institutions. The Kolmogorov–Smirnov test was used for normality analysis of the quantitative variables. Unifactorial analyses were made by using the Mann–Whitney *t*-test, Kruskal–Wallis test, and Spearman's correlation coefficients to analyze the relation between the outcome variables (PRS subscales questionnaires) and the quantitative, qualitative demographic characteristics respectively.

Results: The results of this study have shown that all factors explored within the 4 dimensions by Participation Reason Scale (PRS), have generated a positive response. Factors improving professional skills and patients' services were the most common factors that affect nurses' participation in Continuing Education. Certain demographic variables are associated with specific motivational factors, specifically with higher levels of motivation for both improving professional skills and patient services, as well as professional commitment among nurses.

Conclusion: It is crucial to investigate the incentives for Continuing education in Nursing and recognize their actual training needs. When individuals' continuing education and training needs are acknowledged, it will become possible to develop training plans, promotion, and strategies that are aligned with their specific needs and objectives.

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PALABRAS CLAVE

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Motivaciones en Educación Continua en Enfermería**Resumen**

Introducción: La importancia de la Educación Profesional Continua se enfatiza a nivel internacional debido a los cambios generalizados en diferentes dominios. Dado que la enfermería juega un papel importante en el cuidado de la salud debido a su influencia en el estado de salud de los pacientes y de la comunidad, es crucial saber cuáles son las motivaciones del colectivo o si enfrentan alguna barrera con respecto a su participación en los programas de Educación Continua. Este estudio busca identificar los factores motivacionales que afectan al colectivo de enfermería para optar por la Formación Continua en Enfermería.

Material y Métodos: Se trata de un diseño descriptivo, correlacional. La muestra consta de 154 enfermeras/os del personal del hospital, enfermeras/os prácticas licenciadas/asistentes de enfermería, enfermeras/os escolares, enfermeras/os geriátricas que trabajan en el sector público y privado en Grecia. Los datos se recopilaron a través de un cuestionario autocompletado, enviado en forma electrónica a las Asociaciones e Instituciones de Enfermeras Helénicas. Para el análisis de normalidad de las variables cuantitativas se utilizó la prueba de Kolmogorov-Smirnov. Se realizaron análisis unifactoriales utilizando la prueba t de Mann-Whitney, la prueba de Kruskal-Wallis y los coeficientes de correlación de Spearman para analizar la relación entre las variables de resultado (cuestionarios de subescalas PRS) y las características demográficas cuantitativas y cualitativas, respectivamente.

Resultados: Los resultados de este estudio han demostrado que todos los factores explorados dentro de las cuatro dimensiones por la Escala de Razón de Participación (PRS), han generado una respuesta positiva. Los factores que mejoran las habilidades profesionales y los servicios de los pacientes fueron los factores más comunes que afectan la participación de las enfermeras/os en la Educación Continua. Ciertas variables demográficas se asocian con factores motivacionales específicos, específicamente con mayores niveles de motivación tanto para mejorar las habilidades profesionales y los servicios al paciente, así como el compromiso profesional de las enfermeras.

Conclusión: Es crucial investigar los incentivos que motivan al colectivo de enfermería para la formación continua y reconocer sus necesidades reales de formación. Cuando se reconozcan las necesidades de educación y capacitación continua de las personas, será posible desarrollar planes de capacitación, promoción y estrategias alineadas con sus necesidades y objetivos específicos.

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Introduction

The concept of life-long learning is not new, but it is only in the last years that the nursing profession has taken a strategic approach to the provision and support nurses undertaking Continuing Professional Education. Continuing nursing education, also referred to as "continuing professional development", "continuing professional education", "continuing competence", and "lifelong learning", involves improving the knowledge, abilities, and mindset of nurses.¹

According to American Nurses Credentialing Center's Commission on Accreditation,² Continuing Nursing Education (CNE) includes learning activities aimed exclusively at nursing professionals and intended to improve the educational and experiential bases of the nursing profession. The importance of CNE is emphasized internationally due to the widespread changes in different domains. Globalization, social and political changes, technological advances, consumerism, the industrialization of health, the spread of technology, new scientific knowledge, and climate changes

have challenged the healthcare environment and they are specific reasons explaining CNE is paramount.³ Additionally, in the last years due to the global pandemic of Coronavirus disease 2019 (COVID-19), the face of healthcare has changed dramatically and nursing education must be able to keep up with these changes.⁴

The motivation of nurses for self-learning and participation in continuing nursing courses is affected by external factors, intrinsic motivation, personal experiences, and free will. Motivational orientations can be grouped into 5 categories: (a) Professional improvement and development, (b) professional service, (c) learning and interaction with colleagues, (d) personal benefits and job security, and (e) professional commitment.⁵

As nursing profession plays an important role in healthcare due to the influence on patients' and community health status, it is crucial to know which are the motivational factors regarding the participation in CE programs.⁶ Generally, nurses have a positive attitude about the current CNE programs. However, many studies revealed several barriers and difficulties concerning CNE.⁷

Material and methods

A descriptive, correlational design was adopted for this study and determined to be appropriate to answer the research question, "What are the motivational factors influencing nurses' participation in Continuing Education?" A quantitative approach, through questionnaires was used, because this kind of research can be easily applied and reach a large sample of participants.⁸

A self-completed questionnaire was used for the data collection, which consists of demographic questions, a Participation Reasons Scale (PRS), the Deterrents Participation Scale (DPS), and other questions asking participants about their opinion and experiences regarding the barriers to CNE.

The demographic questions requested information about participants' gender, age, marital status, the number of children, the educational level, specialty, level of English, and computer knowledge, and if they have a master or a PhD degree. These questions also request participants to ask about the duration of working professionally in health sector in general and the duration of work and experience in the current position.

The PRS, which was created by Grotelueschen et al,⁹ is a valid and reliable assessment tool for measuring the reasons of doctors and nurses for participating in CPE.⁹ Extensive evidence supports that the exploration of such factors facilitates the designing and executing well-suited educational programs that benefit all the stakeholders, including the health professionals, the patients, the managers, the policy makers, and society as a whole. The scale was consisted of 5 factors (dimensions) covered by 30 questions: (a) Professional improvement and development, (b) professional service, (c) collegial learning and interaction, (d) personal benefits and job security, and (e) professional commitment.

PRS was used again in a sample of Greek nurses including a 5-point Likert scale (1 = not important, 2 = less important, 3 = important, 4 = quite important, 5 = extremely important). Analysis of the questionnaire's reliability showed a statistically significant level of agreement for each item ($P < .001$). Factor analysis of the 30 possible reasons for participating in CPE revealed 4 main motivational factors: "Improvement of professional competence and patient service", "professional commitment", "collegial learning and interaction", and "personal benefits and job security".¹⁰

Statistical analysis

Data were expressed as mean \pm S.D for quantitative variables and as percentages for qualitative variables. The Kolmogorov–Smirnov test was used for normality analysis of the quantitative variables. Unifactorial analyses were made by using the Mann–Whitney t -test, Kruskal–Wallis test, and Spearman's correlation coefficients to analyze the relation between the outcome variables (PRS subscales questionnaires) and the quantitative, qualitative demographic characteristics, respectively. All tests are two-sided, statistical significance was set at $P < .05$. All analyses were carried out using the statistical package SPSS vr 21.00 (IBM Corporation, Somers, NY, USA).

Results

Our sample consists of 15% men and 85% women with mean age 36 years (19–56 years) and with 1 child per family. 30.5% completed 2- or 3-years nursing school, 38.3% completed University school, and 31.2% completed postgraduate studies. 53% were married, 37% single, 8.4% divorced, and 1.3% widower. 64.5% of participants work in the public sector and 35.7% in the private sector. 40.3% of participants work fixed hours and 59.7% rolling hours. 35.7% of participants work 20–39 h weekly and the remaining 64.3% 40–60 h. 30% of participants work in the clinic unit, 25.3% in geriatric unit, 29.2% in school, and 15.6% in another unit. The median of participants working experience was 10 years (1–35 years) (Table 1).

Motivational factors influencing nurses' participation in continuing education

This study examined the motives of 154 nurses for engaging in continuous nursing education. Regarding the 4 dimensions explored by the PRS, all the factors generated a positive response. The results showed that the highest ranked motive was improving professional skills and patient services, with a mean score and standard deviation 4.1 ± 0.9 . This suggests that nurses place a high value on improving their knowledge and skills in order to provide the best possible care to their

Table 1 Demographic characteristics of the sample.

		N	%
Gender	Male	23	14.9
	Female	131	85.1
Education	School Nurse	47	30.5
	2–3 years		
	University	59	38.3
Family status	MSc-PhD	48	31.2
	Single	57	37.0
	Married	82	53.2
	Divorced	13	8.4
	Widower	2	1.3
Level of English language	Good	80	51.9
	Very good–Excellent	74	48.1
Working sector	Public	99	64.3
	Private	55	35.7
Work position	Clinic	46	29.9
	Geriatric	39	25.3
	School	45	29.2
	Other	24	15.6
Type work	Fixed hours	62	40.3
	Rolling hours	92	59.7
Working hours weekly	20–39 h	55	35.7
	40–60 h	99	64.3
Age	Mean \pm SD	36.12 \pm 7.38 (19–56)	
Number of children	(min-max)	1.07 \pm 1.2 (0–4)	
Working experience(yrs)	Median (min-max)	10.0 (1–35)	

patients. Moreover, nurses also recognized personal benefits and job security as a motive for continuous nursing education, with a mean score and standard deviation 4.0 ± 0.9 . This highlights the importance of continuous education in terms of career advancement and job security in the nursing profession. Professional commitment was also identified as an important motivator, with a mean score and standard deviation 3.8 ± 1.0 . This suggests that nurses view continuous education as a way to fulfill their professional responsibilities and maintain their status as respected and valued members of the healthcare team. Additionally, nurses placed a high value on collegial learning and interaction with a mean score and standard deviation 3.8 ± 0.9 , indicating that they see continuous education as an opportunity to learn from and collaborate with their peers (Table 2).

Correlation to demographic variables

The results of the study suggest that certain demographic variables are associated with higher levels of specific motivations. Nurses with higher levels of education, including university studies ($P < .0005$) and MSc or PhD degrees studies ($P < .0005$), demonstrated higher values for both motives improving professional skills and patient services, compared to those who completed only 2–3 years of nursing school. In addition to education, English language proficiency was also found to be associated with higher levels of motivation for both improving professional skills and patient services ($P < .0005$), and personal benefits and job security ($P < .0005$). Nurses with very good or excellent knowledge of the English language showed higher values for both motives compared to those with only good knowledge. Fixed work hours were also associated ($P < .0005$) with higher levels of motivation for both improving professional skills and patient services, as well as personal benefits and job security, compared to nurses with rolling work hours. The study also found that nurses working in clinics or schools showed higher values for both improving professional skills and personal benefits and job security, compared to geriatric nurses. Furthermore, nurses working in the public sector ($P = .036$) presented higher values of personal benefits and job security compared with those in the private sector. Finally, the study found a negative correlation between the number of children and the motive of improving professional skills and patient services ($r = -0.172$, $P = .033$). Age ($r = -0.235$, $P = .003$), number of children ($r = -0.211$, $P = .039$), and working experience ($r = -0.226$, $P = .005$) are low negatively statistically significantly correlated with personal benefits and job security (Tables 3 and 4).

Table 3 Unifactorial analysis of improving professional skills and patient services with demographic variables.¹

		Mean	SD	P-value
Gender	Male	58.00	12.68	.897
	Female	57.57	13.05	
Education	Nursing school	47.06	15.46	< .0005
	2–3 years			
	University	60.71**	8.29	
Family status	MSc-PhD	64.21**	7.73	.836
	Unmarried	57.47	13.76	
	Married	57.78	12.29	
Level of English language	Good	51.93	13.99	< .0005
	Very good–Excellent	63.81	8.10	
Working sector	Public	57.80	13.25	.450
	Private	57.35	12.51	
Work position	Clinic	63.22 ^{SS}	7.64	< .0005
	Geriatric	42.54	13.64	
	School	61.96 ^{SS}	7.40	
Type work	Fixed hours	62.29	7.59	< .0005
	Rolling hours	54.50	14.79	
Working hours weekly	20–39 h	59.49	10.50	.371
	40–60 h	56.61	14.08	
Age	Spearman's correlation	$r = -0.144$.075
Number of children	coefficient	$r = -0.172$.033
Working experience (yrs)		$r = -0.113$.165

¹ A p-value of less than 0.0005 ($p < 0.0005$) indicates statistically significant differences in the mean scores.

Discussion

The findings from this study are consistent with other studies regarding this topic. Specifically, the sample consists mainly of women. This is in accordance with the worldwide opinion that nursing continues to be a female-dominated profession.¹¹

This study includes Greek clinic nurses, school nurses and geriatric nurses ($n = 154$) working on private and public sector and examines their motives for engaging in continuous nursing education.

The results of this study have shown that all factors explored within the 4 dimensions by PRS, have generated a positive response. Specifically, the results have shown that the highest ranked motive was improving professional skills and patient service. This suggests that nurses place a high

Table 2 Descriptive statistics of PRS subscales—motivational factors.

Dimensions of PRS	Mean	Median	SD	Min	Max	Mean \pm SD (1–5)
Improving professional skills and patient services	57.64	61.00	12.95	14.00	70.00	4.1 ± 0.9
Professional commitment	34.49	36.00	9.14	9.00	45.00	3.8 ± 1.0
Collegial learning and interaction	11.44	12.00	2.80	3.00	15.00	3.8 ± 0.9
Personal benefits and job security	16.07	16.50	3.55	5.00	20.00	4.0 ± 0.9

Table 4 Unifactorial analysis of PRS subscale personal benefits and job security with demographic variables.

		Mean	SD	P-value
Gender	Male	16.43	3.16	.675
	Female	16.01	3.62	
Education	School Nurse	13.09	3.59	<.0005
	2–3 years			
	University	17.07**	2.55	
Family status	MSc-PhD	17.77**	2.68	.704
	Unmarried	16.15	3.59	
	Married	16.00	3.53	
Level of English language	Good	14.79	3.65	<.0005
	Very good–Excellent	17.46	2.86	
Working sector	Public	16.40	3.67	.036
	Private	15.47	3.27	
Work position	Clinic	16.89 ^{SS}	2.94	<.0005
	Geriatric	12.64	3.62	
	School	18.02 ^{SS}	1.98	
Type work	Fixed hours	17.68	2.39	<.0005
	Rolling hours	14.99	3.79	
Working hours weekly	20–39 h	17.24	2.80	.004
	40–60 h	15.42	3.76	
Age	Spearman's	$r = -0.235$.003
Number of children	correlation coefficient	$r = -0.211$.009
Working experience (yrs)		$r = -0.226$.005

value on improving their knowledge and skills to provide the best possible care to their patients.

Panagiotopoulou,¹² in her research, examined the participation and motivational orientations of Greek healthcare professionals. The findings showed that the most important reason for nurses to participate in CNE was the need to improve professional competence and patient service received.¹² Other studies have found an important reason for nurses to pursue CNE is to ensure that they retain professional certification, advance in their careers, and improve their knowledge.¹³

According to Brekelmans et al.,¹⁴ nurses believe that the main benefit of continuing nursing education is the improvement of their skills and knowledge. Similarly, according to Tachtsoglou et al.,¹⁵ the main concern of nurses is their updating on developments in healthcare and acquisition of new professional knowledge. In another study (taken place in 2 hospitals in south-east Morocco) by Ali et al.,¹⁶ the results have shown that participants' motivation for continuing education was mainly intrinsic factors, specifically related to professional competence and knowledge seeking.

Personal benefits and job security have been recognized as a motive for continuous nursing education, which highlights the importance of continuous education in terms of career advancement and job security in the nursing profession. Personal benefits and job security refer to the advantages individuals gain, such as higher wages and improved chances for personal advancement within their careers. According to a study conducted in the United

Kingdom involving 620 nurses, it was found that 8 years after completing their nursing education, participants identified that increased job opportunities, intellectual growth, and improvement in clinical judgment were the primary motivations for pursuing postgraduate education.¹⁷

Professional commitment was also identified as an important motivator. This refers to the responsibility of a professional to contribute and guide the overall development and advancement of their field by actively serving and engaging with the professional community. Kamarianaki et al.,¹⁸ surveyed Greek nurses and found that professional improvement and development, professional service, collegial learning and interaction, personal benefits, job security, and professional commitment are the main motivational factors for nurses to participate in CE. Specifically, the higher scores were recorded for "professional commitment" and "personal benefits and job security", indicating that nurses may participate in CNE to provide motivation or drive for the nursing profession and for personal profits. Moreover, related to this professional commitment and professional performance proving, have been identified as motivators in similar studies.¹⁹

Nurses placed a high value on collegial learning and interaction as well, indicating that nurses see continuing education as an opportunity to learn from, collaborate with their peers and maintain contact with other professionals as a means of challenging their intellectual abilities.²⁰

Collegial learning refers to the professional's inclination or aspiration to stay connected with other professionals in the same field. This connection serves to stimulate and challenge their intellectual capabilities. Peer relationships in nursing play a vital role due to various reasons. These relationships are crucial for coordinating patient care across different shifts or locations, ensuring high-quality and safe care, and establishing and upholding professional standards. Collegial learning and interaction seemed to be an important factor in Kamarianaki et al. research.¹⁸

Regarding the demographic characteristics, results show that demographic variables are associated with higher levels of motivation for both improving professional skills and patient services, as well as personal benefits and job security among nurses. Nurses with higher levels of education demonstrated higher values for both motives compared to those who completed only 2–3 years of nursing school. Educational level affects participation in CNE.^{18,21}

In addition to education, English language proficiency was also found to be associated with higher levels of motivation for both improving professional skills and patient services ($P < .0005$), and personal benefits and job security ($P < .0005$). In the literature, it is mentioned that learning engagement might be affected by individuals' English fluency, which might impact his/her academic performance.²²

As far as personal characteristics concerned, fixed work hours were also associated ($P < .0005$) with higher levels of motivation for both improving professional skills and patient services, as well as personal benefits and job security compared to nurses with rolling work hours. Additionally, the study also found that nurses working in clinics or schools showed higher values for both improving professional skills and professional commitment, compared to geriatric nurses. Similar studies have found that certain personal

characteristics such as age, income level, academic rank, and the nature of working hours have a significant impact on an individual's participation in Continuing Education (CE) programs.²³

In DeSilets study,²⁴ results have shown that factors such as their initial nursing training, area of work, age, and years of experience influence their involvement in educational programs. Moreover, nurses who work in larger hospitals and those who work in specialized units or have supervisory roles are also more likely to participate in continuing education.²⁵

Finally, the study found a negative correlation between the number of children and the motive of improving professional skills and patient services ($r = -0.172$, $P = .033$). This suggests that nurses with more children may have less time and resources to devote to continuous education and professional development. Similar with other studies nurses who are more likely to participate in continuing educational programs are those who do not have any children and those who have children older than 5 years old.²⁶

It is crucial to investigate the incentives that motivate nurses for continuing professional education and recognize their actual training needs. When individuals' continuing education and training needs are acknowledged, it will become possible to develop training plans, promotion, and strategies that are aligned with their specific needs and objectives.²⁷

By prioritizing the professional development for nurses, we can ensure that they have the necessary skills and knowledge to provide excellent care to patients, especially in the face of difficult circumstances.²⁸

Moreover, it is recommended that they have to collaborate with other training and educational institutions such as universities to create and implement continuing educational programs. This partnership will aid in the advancement and implementation of contemporary training methods and enhance the quality of education offered. Furthermore, it will increase the number of educational materials produced.²⁹

It is important for organizations to provide sufficient funding and easy access to ongoing professional development opportunities. This will enable nurses to consistently improve their skills and knowledge, which is essential for maintaining high standards of nursing care through competent practice. On the other hand, nurses should take an active role in pursuing these opportunities to ensure they are providing the best possible care to their patients.³⁰

Declaration of Competing Interest

I declare that this research was conducted without any external funding. This study was solely initiated and carried out by me, and I did not receive financial support or grants from any organization, institution, or individual.

Furthermore, this study follows the ethical practices code of the University of Cordoba (Spain) and the principles of the Declaration of Helsinki, including the anonymity and consent of participants. Ethical approval of the Committee for this study was not required since participants were made aware of the purpose of the study, the anonymous nature of the purpose, the anonymous nature of the dataset generated, and the option to not respond if they so wished. All participants involved in the research provided informed

consent before their inclusion in the study. Prior to their involvement, they were informed about the research's purpose, procedures, and their rights as participants. Their consent was obtained voluntarily, and they were assured of their right to withdraw from the study at any point without facing any consequences.

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