



Professional Research Thesis

Titled

**Training Strategies and Their Impact on Nursing
Educators' Development of Core Competencies at
The Technical Institutes of Nursing**

Researcher

Sanaa Ragab Ahmed Sheriff

Supervisor signature

Dr/Hagar Refaat

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Acknowledgment

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SUMMARY:

Learning to teach and facilitate knowledge acquisition in nursing education requires preparation and additional formal education to ensure beginning competency in teaching. Nursing educators play a crucial role in developing and delivering educational activities that meet the learning needs of student nurses. Academic nursing educators with more years of experience are more likely to have achieved the expert stage of skill acquisition. The study assesses training strategies and their impact on nursing educators' development of core competencies at technical nursing institutes. It hypothesized that implementing the training strategies affected the development of core competencies among nursing educators.

The results of the present study can be summarized as:

-Three-quarters of nursing educators hadn't satisfactory knowledge of core competencies before training strategies. After the training strategy, nursing educators' total knowledge regarding core competencies had significantly improved reaching 82% in all items.

-Before implementing the training strategy, more than half of nursing educators hadn't perceived all Core competencies dimensions before starting. After implementing the training strategy three-quarters (75%) of nursing educators had perceived in all items regarding Core competencies dimensions.

-A positive correlation and significance between nursing educators' core competency and personal characteristics at p-value <0.001.

Introduction.

Nursing educators' role is multidimensional and complicated; it occurs in both the classroom and clinical settings. Nursing educators are professional clinical nurses who subscribe to professional standards set forth by peers from nursing and nursing education. Nursing educators' skills such as knowledge and skill in teaching, assisting novice learners, supporting students, curriculum development, and implementing effective evaluation methods had deficiencies that need more focus to improve their skills.

Core competence is the efficient integration of an organization's knowledge, technology, resources, techniques, technical skills, and management skills. Core capability is the unique management ability of core competencies to develop novel products, services, and processes. These competencies provide a framework for identifying the essential knowledge, skills, and attitudes relevant to the educator role that can provide direction for development orientations that prepare nursing educators.

Training strategies are “a planned process to modify attitude, knowledge, skill or behavior through learning experience to achieve effective performance in an activity or range of activities.” Its purpose, in the work situation, is to develop the abilities of nurse interns and satisfy the current and future needs of work. The training strategy is outlined because it is a planned program of methods designed to boost performance at an individual, cluster, or structural level. Improved performance successively, implies that their measurable change in data, skills, perspective, and social behaviors. It refers to transient teaching-learning experiences that take place throughout operating at intervals in the work setting.

The study Problem:

Although nursing educators may be experts in practice, many do not have the knowledge, skills, and experience necessary to be effective in the educational environment. More nursing educators are recruited based on the certificate of bachelor's degree without any preparation to perform their job in the nursing education field, which affects their performance as nursing educators.

Furthermore, little research has been addressed in developing a tool for nursing educators' core competencies at technical institutes of nursing without fully integrating the relationship between the nursing educators' total knowledge and personal characteristics, their qualification, their experience, and their training courses before and after the training strategy. Moreover, it is important to develop nursing competency training methods, evaluate their effectiveness, and conduct future research, which contributes to improving nursing quality. By elucidating these relationships, this study seeks to provide insight into optimizing the development of core competencies and their impact on nursing educators.

The importance of studying:

The present study aims to assess training strategies and their impact on nursing educators' development of core competencies at technical nursing institutes.

This thesis attempts to provide valuable insight into the essential competencies that nursing educators need to perform their jobs effectively. Also, it can provide the nursing education profession with a baseline of information regarding the qualifications and competencies that could be used throughout the careers of novice and experienced nursing educators as they develop their expertise in the education field.

Objectives of the study:

-Show nursing educators' core competencies knowledge before training strategies.

-Reveal nursing educators' perception regarding their core competencies before and after training strategies.

-Clarify nursing educators' total knowledge, regarding core competencies and their characteristics before and after training strategies.

Study hypotheses and questions:

There is an improvement in nursing educators' development of core competencies after implementing training strategies at technical institutes of nursing.

1- There is a significant statistical difference between nursing educators' knowledge and their age group, marital status, and qualification before and after the training strategy.

2- There is a significant statistical difference between nursing educators' total knowledge and their experience in teaching before and after the training strategy.

3- There is a significant statistical difference between nursing educators' total knowledge and their training course attendance before and after the training strategy.

-Results will be analyzed using appropriate statistical tests of data description according to the aim of the study. The results obtained will be discussed in the light of the available national and international studies and reviews.

-Through research, we will confirm or deny this hypothesis.

Study Approach:

Technical design:

Research design

Quasi-experimental one-group pretest-posttest design will be used in this study.

Research Subjects

All the available nursing educators working in the designated setting will be involved in the study. Their total number is (50).

Data collection tools: data for this study will be collected by the following tools:

- **Part 1:** This part will include data about demographic characteristics of the study subjects (such as age, gender, educational level, years of experience, and attending training related to teaching and education).
- **Part 2:** Needs Assessment questionnaire sheet: This tool will be modified by the researcher based on the National League of Nursing NLN (2005), it contains eight (8) core competencies with 66 task statements based on Benner's skill acquisition theory (1984), it aims to assess core competencies as perceived by nursing educators'

This tool will be developed by the researcher based on a literature review of the competencies to determine the acquisition of the cognitive part of competencies. Core competence is the efficient integration of knowledge, technology, resources, techniques, technical skills, and management skills of an organization. Training strategy is “a planned process to modify attitude, knowledge, skill or behavior through learning experience to achieve effective performance in an activity or range of activities.”

Operational design:

The operational study will include a preparatory phase, a pilot study, and fieldwork.

Preparatory phase

It will include reviewing current and past, local and international related literature using textbooks, scientific articles, periodicals, journals, and the internet to prepare the tool for data collection.

Fieldwork

After securing the official approvals for conducting the study, the researcher will meet the nursing director of Imbaba Technical Institute of Nursing and Dar El Shefaa Hospital to determine a suitable time to collect the data.

Administrative design:

To carry out the study in the selected setting, official letters will be issued to the Director of the Technical Institute of Nursing.

Statistical design:

Data entry and statistical analysis will be done using a statistical software package, and suitable significant tests.

The limits of the study:

Research Settings

The current study will be conducted at two selecting at the Technical Institute of Nursing affiliated to Imbaba Zone at Giza Governorate and Dar El Shefaa Hospitals affiliated with the Ministry of Health.

Time limits: 2014:2024.

Previous studies:

1-Application of Developed Evaluation Tool for Nurse Educator Core Competencies, Doaa Lotfy Ahmed., PhD, 2023.

Abstract:

This study assessed the applicability of developed evaluation tools for nurse educator core competencies. The results showed that the developed evaluation tool can be applied to determine the core competencies of nurse educators as it was applied in different ranges from (51%- 81 %). The author concluded that the developed evaluation tool was applied in the study setting where they are urgently needed. Observation of nurse educator's application of the core competencies revealed a deficiency in some areas of nurse educators' assessment, planning, implementation, evaluation, and documentation.

2- Training Strategies: Its Effect on Developing Core Competencies among Nuse Educators, Rash Negm El Din., PhD,2022.

Abstract:

This study aimed to implement training strategies and measure their effect on developing core competencies among nurse educators. The result showed that before implementing the training strategies, nurse educators' unsatisfactory knowledge then improved regarding core competencies. Meanwhile, total core competencies knowledge and perception of nurse educators were improved markedly, with statistically significant differences after the training strategy. The author concluded that there is improvement in nurse educators' core competencies after the implementation of training strategies.

**3-Competency of Academic Nurse Educators, Miho Satoh.,
PhD,2020.**

Abstract:

This study aimed to investigate the elements that constitute competency in academic nurse educators. The result showed that: An exploratory analysis yielded five competency factors: “facilitating active learning,” “engaging in academic research activities,” “participating in university management,” “undertaking self-directed learning based on professional ethics,” and “practicing education autonomously.” The author concluded that the competencies identified in the present study are essential for academic nurse educators, and the five factors are in accord with the findings of previous studies.

4- Developing core competencies for clinical nurse educators: An e-Delphi-study, panel Jing Ye, Wawen Tao, Lili Yang., PhD,2022

Abstract:

This study aimed to establish the core competencies for clinical nurse educators in China. This study aimed at two rounds of online Delphi expert consultation completed by 25 experts, and the consensus was achieved on four first-level indices, 16 second-level specific competencies, and their 57 connotations. The first-level index included clinical teaching competency, clinical nursing skills, management and leadership competency, and innovation and research competency. The author concluded that the explicit statements of expected competencies for clinical nurse educators can be applied to diverse clinical scenarios and provide a reference for the selection, training, and evaluation of clinical nurse educators.

Study plan:

Chapter One: Evolving Competence Requirements in Nursing Education.

-In conclusion: practicing education autonomously is a high-need area for academic nursing educators to develop their abilities to implement education flexibly, corresponding to continuous updating of their knowledge, skills, and technology related to health sciences, changing social situations, working in a wide variety of care setting, or diversifying nursing students. Starting with the study sample consisted of all nursing educators who were available at the time implementing the training strategy with an average age of 40 years old, mostly married, and more than half of the sample had a bachelor's degree.

-This finding agrees with **Lotfy, (2023)** who mentioned that more than half of the nurses were in the 25-35 age group with a mean (37.2) and more than two-thirds were married. About half have a master's degree and more than two-thirds have (1-15) years of experience in education with a mean (13.0), while 86.5% attend training courses and 92% participate in programs, seminars, or workshops.

- The present study results showed a significant relation between nursing educators' knowledge of core competency and their age and qualification. A similar finding was reported by **Lotfy, (2023)**, who stated a significant positive correlation between nursing educators' core competency and their age, qualification, and marital status. However, a disagreement with this finding, in **Mohammed, (2019)** study in Egypt no statically significant correlation could be revealed between age, qualification, and total competency of nurse educators.

Chapter Two: Nurse Educators Development Programs.

-From the researcher's point of view, this result might be attributed to the complex role of academic nursing educators preparing and engaging in scholarship to generate and disseminate new knowledge and the lack of active participation of nursing educators in the institutes' policies and decisions.

-In this regard, **Robinson, (2019)** asserted that clinical teaching is demanding work requiring clinical instructors to be competent educators and clinical nursing experts capable of assuming legal and ethical responsibility for student learning as well as patient care. While most new clinical instructors enter the teaching field with clinical experience, they may not be prepared for, or confident in clinical teaching.

- Concerning knowledge related to Mentoring and evaluation, before the training strategy, almost of nurses had unsatisfactory knowledge of monitoring and evaluation. After the training strategy, their knowledge significantly improved in the method for evaluating a seminar. In agreement with this, **Helminen et al. (2017)** in a recent study in Finland stated that proper assessment of nursing students in clinical practice is crucial in ensuring the quality of their training since the process of assessment influences what they learn.

- In this context, **Lorvic et al. (2014)** reported that nursing students were dissatisfied with their clinical practice experience when instructors did not give them clear precise instructions. Student evaluations of performance should not always be considered negative, as reviewing student evaluations allows for self-evaluation and reflection regarding the educators' teaching methods, which can enhance teaching abilities and competence (**Cooley & DeGagne, 2016**).

Chapter Three: National League for Nursing Core Competencies for Nursing Educators.

-In conclusion, the current study, before implementing the training strategy, the majority of nursing educators hadn't perceived almost all items related to curriculum design and evaluation of program outcomes. This might be attributed to educational institutions role and their vision was not familiar with nursing educators and must be educated in these skills to achieve national certification that requires continuous review and feedback of the curriculum at the class, course, and program levels because this competency is imperative as a fluid guide to nursing programs seeking and maintaining national accreditation status.

On the same line, *Lotfy, (2018)* highlighted that the core competency area with the lowest score among the nurse educators was that of participating in curriculum design and evaluation. As regards, Nurse educators' perception after implementing the training strategy was significant in revising the curriculum based on learner needs and assessment of program outcomes.

-In conclusion, nursing educators' knowledge of core competencies demonstrated significant improvement after the implementation of training strategies. Finally, this finding supports the research hypothesis which was an improvement in nursing educators' development of core competencies after implementing training strategies at technical institutes of nursing.

Conclusion:

Based on the present study findings, it could be concluded that three-quarters of nursing educators had not satisfactory knowledge of core competencies before training strategies. After implementing the training strategy, there was a significant improvement in nursing educators' knowledge and perception of core competencies reaching eighty percent. Furthermore, statistically significant in all dimensions regarding the perception of core competencies. After implementing the training strategy three-quarters of nursing educators had perceived in all items regarding Core competencies dimensions. Also, there was a highly statistically significant and positive correlation between nursing educators' total knowledge and their total perception regarding core competencies before and after the training strategies. In addition, all these lead to accepting the predetermined study hypostasis.

Results:

Part (I): Personal Characteristics of Studied Nursing Educators’.

Table (1): Distribution of the studied nursing educators’ regarding characteristics (N=50).

Nursing Educators’ Characteristics	No.	%
Age group:		
< 30 years	11	22
30- 40 years	22	44
> 40 years	17	34
$\bar{X} \pm SD = 36.20 \pm 7.46$		
Marital status:		
Married	37	74
Single	6	12
Widow	2	4
Divorced	5	10
Qualification in Nursing:		
Doctorate’s degree	3	6
Master’s degree	14	28
Bachelor’s degree	28	56
Diploma	5	10
Years of Experience in the teaching field:		
< 5 years	3	6
5-10 years	23	46
>10 years	24	48
$\bar{X} \pm SD = 11.70 \pm 6.09$		

Table (1): Regarding the characteristics of studied nursing educators this table reveals that less than half (44%) of the study sample had an age range between 30-40 years with mean± SD (36.20± 7.46), and about half (48%) of them had more than 10 years of experience with mean± SD (11.70± 6.09). Meanwhile, approximately three-quarters (74%) of nursing educators were married, while only (4%) of them were widows. Slightly more than half (56%) of nursing educators had a bachelor's degree in nursing, while only (6%) of them had a Doctorate in nursing.

Part II: Nursing Educators’ knowledge Regarding their Core Competencies before and after Training Strategies.

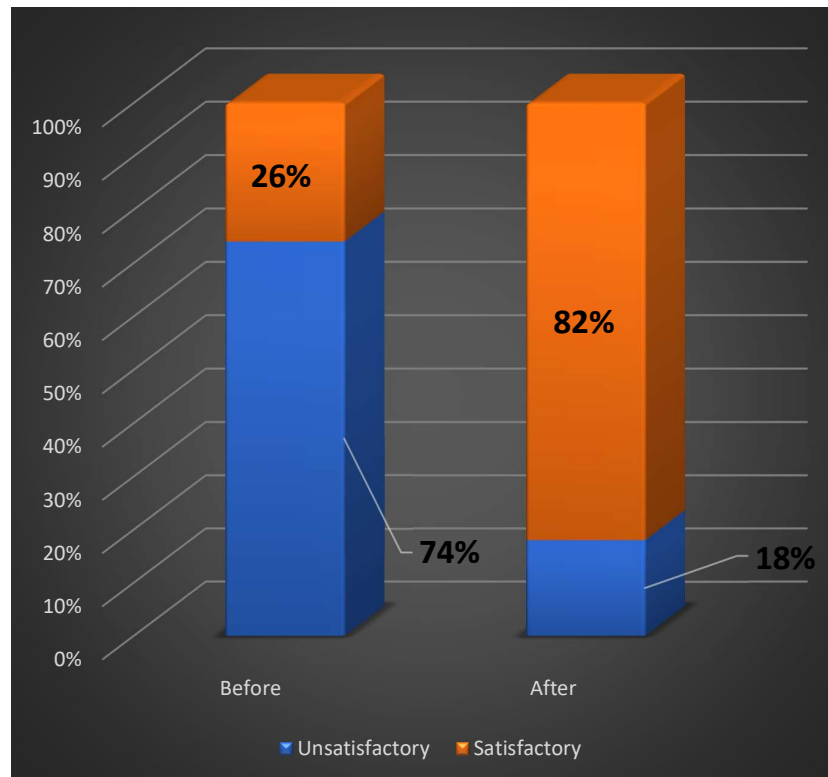
Table (2): Nursing Educators’ total knowledge regarding core competencies before and after training strategies(N=50).

Knowledge regarding Core competencies	Before (N=50)		After (N=50)		Chi-square test	
	Satisfactory		Satisfactory		χ^2	P
	No.	%	No.	%		
Theories and Principles of Adult Learning	17	34	39	78	1.07	.02 *
Communication, Collaboration, and Partnership	16	32	41	82	1.59	.01 *
Monitoring and Evaluation	10	20	39	78	6.02	.00 *
Curriculum and Implementation	5	10	40	80	2.00	.00 *
Management, Leadership, and Advocacy	16	32	44	87	5.28	.01 *
Scholarship and Professionalism	12	24	42	84	1.04	.00 *
Total knowledge of core competencies	13	26	41	82	6.80	.00 *

(*) Statistically significant at $p < 0.05$

Table (2): As evident from the table, only 26% of nursing educators had satisfactory knowledge of core competencies before the training strategy. Meanwhile, after the training strategy (82%) of nurse educators had satisfactorily improved their knowledge of all items.

Figure (1): Nursing Educators' Total Knowledge Regarding Core Competencies before and after Training Strategy.



(*) statistically significant at $p < 0.05$

As illustrated in **Figure 1**, about three-quarters of nursing educators hadn't satisfactory knowledge of core competencies before training strategies. After the training strategy, nursing educators' total knowledge regarding core competencies had significantly improved reaching 82% in all items.

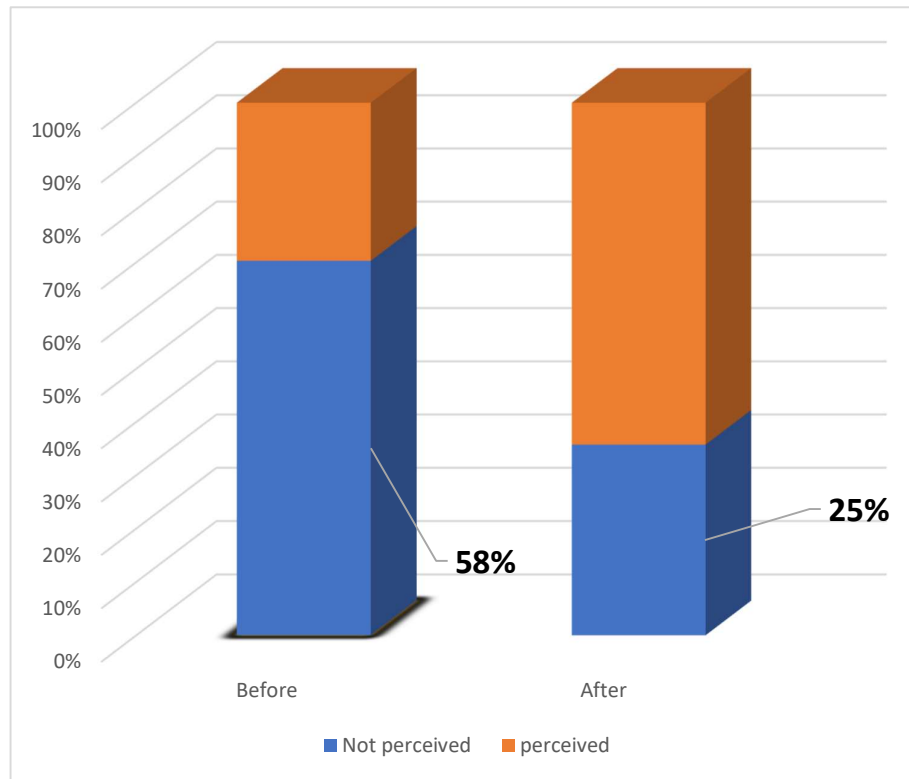
Table (3): Perception of Nursing Educators regarding core competencies dimensions before and after training strategies (N=50).

Core competencies dimensions	Before(n=50)				After(n=50)				Chi-square test	
	Perceived (>60%)		Not-perceived (≤60%)		Perceived (>60%)		Not-perceived (≤60%)			
	No.	%	No.	%	No.	%	No.	%	χ ²	P
Facilitate Learning	28	56	22	44	42	84.4	8	15.6	2.90	.01*
Facilitate Learner Development and Socialization	35	70	15	30	45	91	5	8	1.08	.01*
Use Assessment and Evaluation Strategies:	23	46	27	54	36	73	14	27	6.02	.01*
Participate in Curriculum Design and Evaluation of Program Outcomes	9	18	41	82	34	67	16	33	1.07	.00*
Function as a Change Agent and Leader:	20	40	30	60	35	69	15	31	5.28	.03*
Pursue Continuous Quality Improvement in the Nurse Educator Role:	11	22	39	78	35	69	15	31	1.04	.02*
Engage in Scholarship:	19	38	31	62	39	78	11	22	2.00	.04*
Function within the Educational Environment	20	40	30	60	38	75.5	12	24.5	4.72	.02*
Total perception of core competencies	21	42	29	58	34	75.5	11	24.5	6.80	.03

(*) statistically significant at p<0.05

Table (3) shows that the highest perception was Facilitate Learner Development and Socialization followed by Facilitate Learning dimension while the lowest perception was participating in Curriculum Design and Evaluation of Program Outcomes. The table indicates statistical significance in all dimensions regarding the perception of core competencies. Before implementing the training strategy, more than half of nursing educators had not perceived all Core competencies dimensions before starting. Also, 78% had not perceived to Pursue Continuous Quality Improvement in the Nursing Educator Role. After implementing the training strategy 75.5% of nursing educators had perceived in all items regarding Core competencies dimensions.

Figure (2): Perception of Nursing Educators Regarding Core Competencies Dimensions before and after Training Strategies (N=50).



(*) statistically significant at $p < 0.05$

As illustrated in **Figure 2**, Before implementing the training strategy, more than half of nursing educators had not perceived all Core competencies dimensions before starting. After implementing the training strategy three-quarters (75%) of nursing educators had perceived in all items regarding Core competencies dimensions.

Table (4): Nursing Educators’ total knowledge regarding core competencies with their age group before and after training strategy(N=50).

Time	Age group	Mean ± SD	One-way ANOVA	
			F	P Value
Before (n=50)	< 30 years	12.54 ± 1.57	.99	.38
	30- 40 years	13 ± 1.38		
	≥ 40 years	13.94 ± .83		
After (n=50)	< 30 years	14.89 ± 1.76	4.63	.01*
	30- 40 years	13.89 ± 1.45		
	≥ 40 years	14.64 ± 1.50		

(*) Statistically significant, (P) <0.001.

No significance, (P) >0,005.

Table (4) shows an insignificant statistical difference in nursing educators’ knowledge before training strategy according to their age group. In contrast, there was a significant statistical difference in nursing educators’ knowledge after training strategy according to their age group at p-value <0.001.

Table (5): Nursing Educator’s total knowledge regarding core competencies with their marital status before and after training strategy(N=50).

Time	Marital status	Mean ± SD	one way ANOVA	
			F	P
Before (n=50)	Married	13.16 ± 1.44	1.23	.310
	Single	13 ± 1.22		
	Widow	15 ± 0		
	Divorced	13.16 ± .75		
After (n=50)	Married	14.10 ± 1.33	1.67	.198
	Single	15.67 ± 2.52		
	Widow	16 ± 0		
	Divorced	14.60 ± 1.82		

(*) Statistically significant, (P) <0.001.

No significance, (P) >0,005.

Table (5) demonstrates an insignificant statistical difference between nursing educators’ total knowledge and marital status before and after the training strategy.

Table (6): Nursing educators’ total knowledge regarding core competencies with their qualification in nursing before and after training strategy(N=50).

Time	Qualification in Nursing	Mean ± SD	one way ANOVA	
			F	P
Before (n=50)	Diploma	13 ± 1.66	.53	.67
	BSc	13.18 ± 1.25		
	Master degree	13.80 ± 1.31		
	PHD	13.67 ± 1.16		
After (n=50)	Diploma	14.71 ± 1.73	4.68	0.001*
	BSc	14.27 ± 1.44		
	Master degree	14.80 ± 1.31		
	PHD	14.67 ± 1.16		

(*) Statistically significant, (P) <0.001.

No significance, (P) >0,005.

Table (6) shows a significant statistical difference between nursing educators’ knowledge and their qualifications in nursing before and after the training strategy.

Table (7): Nursing educators’ total knowledge regarding core competencies with their experience in teaching before and after training strategy (N=50).

Time	Experience in teaching	Mean ± SD	One-way ANOVA	
			F	P
Before (n=50)	< 5 years	12.33 ± 1.15	.67	.52
	5< 10 years	13.26 ± 1.21		
	≥ 10 years	13.29 ± 1.52		
After (n=50)	< 5 years	16 ± 2.83	32.81	0.001*
	5< 10 years	14.54 ± 1.20		
	≥ 10 years	14.21 ± 1.72		

(*) Statistically significant, (P) <0.001.

No significance, (P) >0,005.

Table (7) shows a significant statistical difference between nursing educators’ knowledge and their experience in teaching before and after training strategy at p-value <0.001.

Table (8): Nursing educators’ total knowledge regarding core competencies with their training courses attendance before and after training strategy (N=50).

Time	Attending training courses and conferences	Mean ± SD	Independent t-test	
			t	P
Before (n=50)	Yes	13.34 ± 1.26	1.85	.18
	No	12.67 ± 1.73		
After (n=50)	Yes	14.63 ± 1.61	22.07	0.001*
	No	13.80 ± 1.30		

(*) *Statistically significant, (P) <0.001.*

No significance, (P) >0,005.

Table (8) shows a significant statistical difference between nursing educators’ knowledge and their training course attendance before and after the training strategy at p-value <0.001.

Table (9): Correlation between Nursing Educators' Core Competency and Personal Characteristics (N=50).

		Nursing Educators' Core Competency
Personal Characteristics	r-test	0.571
	p-value	<0.001**

****p-value <0.001 HS**

Table (9): Indicates a positive correlation and significance between nursing educators' core competency and personal characteristics at p-value <0.001.

Recommendations:

Because of the main study findings, the following recommendations are proposed.

Nursing educators should be allowed to participate in curriculum design, revision, and development actively. They also need leadership training and to be change agents. Practical training programs are recommended for nursing educators to be proficient in the use of different teaching methods, strategies, and evidence-based teaching practices.

Enhance academic nursing educators to pursue both a clinical and research-focused doctoral and master's degree. Examining the skill acquisition level preparation in nursing (advanced practice, leadership, or education) and specific coursework related to the academic nursing educator role would provide additional variables to consider related to NLN Core Competency skill acquisition.

Currently, there are no universal guidelines or standards for the preparation of academic nursing educators which confuses the profession, academia, and most importantly potential of doctoral students.

Further research is needed to:

Implications for nursing education and the proposed algorithm for academic nursing educators should be considered in future research studies, program design, and accrediting guidelines.

Developing innovative approaches that meet the needs of nursing education and evaluate the success of teaching can assist with the scholarship of teaching.

ABSTRACT

Background: Nursing educators' role is multidimensional and complicated; it occurs in both the classroom and clinical settings. Nursing educators are professional clinical nurses who subscribe to professional standards. **Aim:** To assess training strategies and their impact on nursing educators' development of core competencies at technical nursing institutes. **Research design:** Quasi-experimental one-group pretest-posttest design **Settings:** The study was conducted at two selecting at the Technical Institute of Nursing affiliated to Imbaba Zone at Giza Governorate and Dar El Shefaa Hospitals affiliated with the Ministry of Health. **Subjects:** All the available nursing educators working in the previously mentioned settings. Their total number is (50). **Tools:** structured interviewing questionnaire sheet to assess characteristics of the studied nursing educator and knowledge regarding core competencies. **Results:** Before implementing the training strategy, more than half of nursing educators had not perceived all Core competencies dimensions before starting. After implementing the training strategy three-quarters (75%) of nursing educators had perceived in all items regarding Core competencies dimensions. **Conclusion:** The study revealed a positive correlation and significance between nursing educators' core competency and personal characteristics **Recommendations:** Emphasis on educational programs for nursing educator to improve their knowledge and practice. Nursing educators must actively participate in curriculum design, revision, and development.

Key Words: Training strategies, Nursing educators, Core competencies, Technical Institute of Nursing.

References

- Álvarez-Nieto, et al. (2018):** C. Álvarez-Nieto, J. Richardson, G. Parra-Anguita, M. Linares-Abad, N. Huss, L. Grande-Gascón, J. Grose, M. Hymen, I.M. López-Medina Developing digital educational materials for nursing and sustainability: the results of an observational study *Nurse Educ. Today*, 60; pp. 139-146.
- American Association of Colleges of Nursing (2018):** Defining scholarship for academic nursing. Retrieved from <https://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Defining-Scholarship-Nursing>
- Barr S., Ferro A., and Prion S. (2019):** An innovative academic-practice partnership to enhance the development and training of military nurses. *J Prof Nurs.*; 35(5): 369-378. Doi: 10.1016/j.profnurs. 2019.04.008. Epub 2019 May 2.
- Benner, P. (1984). From novice to expert:** Excellence and power in clinical nursing practice. Menlo Park, CA: Addison- Welsey publishing company, pp.,95-97
- Halstead, J.A. (2019):** NLN core competencies for nurse educators: A decade of influence. *Philadelphia, PA:* Wolters Kluwer.
- Helminen, K., Johnson, M., Isoaho, H., Turunen, H. and Tossavainen, K. (2017):** Final assessment of nursing students in clinical practice: Perspectives of nursing teachers, students, and mentors. *J Clin Nurs.* doi: 10.1111/jocn.13835.
- Impellizzeri, F.M., Marcora, S.M. and Coutts, A.J. (2019):** Internal and external coaching load: 15 years on. *International Journal of Sports Physiology and Performance*; (00): PP.,1-4.

- Jing, Ye., Wen Tao., (2022):** Developing Core Competencies for Clinical Nurse Educators, *Nurse education today* volume 109, science direct.com\science 1 article\abs\pii\S0260691721004.
- Judge, D., Opsahl, A. & Hensel, D. (2018):** Q methodology: teaching strategy to promote student engagement. *Nurse Educ.*; 43 (6): 285–286.
- Kainer, K.A., Binnqüist, C.L. and Dain, J.L. (2018):** Leading by listening, learning by doing: modeling democratic approaches to conservation leadership in graduate education. *Journal of Environmental Studies and Sciences*; PP., 1-12.
- Kuivila, H. M., Mikkonen, K., Sjögren, T., Koivula, M., Koskimäki, M., Männistö, M., Lukkarila, P., & Kääriäinen, M. (2020):** Health science student teachers' perceptions of teacher competence: A qualitative study. *Nurse Education Today*, 84, 104210. <https://doi.org/10.1016/j.nedt.2019.10421>
- Lake, (2020):** M.A. Lake What we know so far: COVID-19 current clinical knowledge and research *Clinical Medicine (Lond)*, 20 (2) (2020), pp. 124-127
- Lee, A.O. (2017):** Best practices for onboarding new nurse faculty: The role of the nurse educator (Doctoral dissertation). Retrieved from <https://eric.ed.gov/?id=ED580595>.
- Logan, P.A., Gallimore, D. & Jordan, S. (2016):** Transition from clinician to academic: An interview study of the experiences of UK and Australian registered nurses. *Journal of Advanced Nursing*, 72, 593–604.

- Lotfy, D. (2023):** Application of Development Evaluation Tool for Nurse Educator Core Competencies, PHD Degree Thesis, Faculty of Nursing, Egyptian Journal of Health Care, vol, 14No, 13 PP., 704: 716
- Maruo, S., Matsuoka, S (2017):** Evaluation of faculty development seminar 2015 on interprofessional education practice: A focus on competency of university faculty members. Konan Women's College researches, 11, PP.,19–24 (in Japanese).
- McAllister, M. & Flynn, T. (2016):** The Capabilities of Nurse Educators (CONE) questionnaire: Development and evaluation. *Nurse Education Today* PP., 122–127.
- Mohamed, H. (2015):** Motivation factors affecting students' success at technical institutes of Nursing, *Master Thesis*, Faculty of Nursing, Ain Shams University.
- Mohamed, K. (2019):** competency of the clinical instructor as perceived by students and clinical instructors themselves at Faculty of Nursing Mansoura University, Unpublished Master Theses, Faculty of Nursing, Zagazeg University.
- Mostafa, M., (2018):** Core Competencies of Nurse Educators at Technical Institute of Nursing, Master Thesis, Faculty of Nursing, Ain Shams University. Egyptian Journal of Health Care, vol,9 No.4
- National Advisory Council on Nurse Education and Practice (2024):** The impact of the nursing faculty shortage on nurse education and practice [9th annual report] Washington, DC: U.S. Government Printing Office.
- National League for Nursing (2018a):** Certification for nurse educators. Retrieved from <http://www.nln.org/professional-development-programs/Certification-for-Nurse-Educators>.

National League for Nursing (NLN). (2005): Position statement: Transforming nursing education. New York, NY: National League for Nursing.

Negm, R., El Din., (2022): Training Strategies and Its Effect on Developing Core Competencies among Nurse Educators, unpublished PHD Degree thesis, Faculty of Nursing, Ain Shams University, Egyptian Journal of Health Care, vol,9 No.4

Petitte, D. and Farris, C. (2020): Using gaming as an active teaching strategy in nursing education. *Teaching and Learning in Nursing Journal*; 15(1): pp., 61-65.

Robinson, C. (2019): Teaching and Clinical Educator Competency: *Bringing Two Worlds Together*. *International Journal of Nursing Education Scholarship*; 6(1): pp., 2-13

Satoh, M., (2020): Competency of Academic Nurse Educators, SAGE Open, Nursing volume 6: Article reuse guidelines, Sage PubMed .com\journals home\son, pp., 1-11.

Takase, M., Niitani, M., Imai, T. (2020): What educators could do to facilitate students' use of a deep approach to learning: *A multisite cross-sectional design*. *Nurse Education Today*, 89, 10422. <https://doi.org/10.1016/j.nedt.2020.10422>

Turner, P.E., Johnston, E., Kebritchi, M., Evans, S. & Heflich, D.A. (2018): Influence of online computer games on the academic achievement of nontraditional undergraduate students. *Cogent Educ.*; 5 (1): 1437671.