Developing a Professionalism Manual for Nurse Managers to Improve Their Perception Regarding Professionalism and Professional Identity

Marwa H. Ageiz1, Hayam A. Elshrief1, and Huda M. Bakeer2

Abstract
Background: Developing a professional identity is rooted in the dimensions of professionalism and professional development. Moreover, the need for teaching professionalism has a mutual relationship with the formation of a desirable professional identity.

Aim: The current study aimed at developing a professionalism manual for the nurse managers to improve their perception regarding professionalism and professional identity.

Design: Quasi-experimental research design with pre-test, post-test, and follow-up was used.

Setting: The study was conducted at two different hospitals; Menoufia University hospital and Al-helal Insurance hospital, Menoufia Governorate, Egypt.

Subjects: The participants included all nurse managers at different levels from the two different hospitals (n = 100).

Tools: tool 1: Professionalism Questionnaire and tool 2: Professional Identity Assessment Questionnaire were used to collect data.

Results: there was a statistically significant improvement in professionalism perception and professional identity level immediately after administering the professionalism manual and after three months in the follow-up phase than the pre-test phase. Additionally, there was a statistically significant positive correlation between two variables of the study at the post and follow-up phases, but not significant at the pre-test phase.

Conclusion: the professionalism manual was effective in improving nurse managers’ perceptions regarding professionalism and professional identity.

Recommendations: Incorporate the attributes of professionalism that were included in the professionalism manual as a guide for the performance review processes of nurses.

Keywords
professionalism manual, perception, nurse managers, professionalism, professional identity

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Professionalism are considered essential for nursing managers. Moreover, nursing managers are expected to exhibit a high level of professionalism as they are well equipped to serve as role models for their subordinates and colleagues. Professional nurse managers are in a position of trust that can ensure positive first impressions, successful interpersonal relationships, and lasting credibility for the healthcare organization (Tanaka et al., 2015).

Professionalism in nursing is referred to as being committed to executing the assigned professional responsibilities with the obligation to ethical values and compassion to a diverse patient population (Huber, 2015). The criteria of professionalism in nursing were first identified through Miller’s pyramid which includes essential requirements such as being educationally prepared, participating in research and scholarship in professional organizations, being qualified at community service, displaying competence, continuing education, the code of nurses, and autonomy (Tanaka et al., 2014).

With reference to the impact of professionalism in nursing, The Healthcare Leadership Alliance posits professionalism as 1 of the 5 competency domains for all practicing health care managers. Nurse managers with a high degree of professionalism are frequently perceived as being more credible and reliable, therefore, professionalism is a guide for the nursing practice to ensure safety and quality patient care (Hunter & Cusack, 2019). Nurse managers need to communicate their professionalism and contribution in the healthcare system to the public as it is the essence of nursing resulting in the image which then becomes acknowledged by patients, their families, media, public, colleagues, and nurses themselves (Skela-Savic, 2016).

Nurse managers are required to demonstrate professionalism in their daily practice as it determines consumer satisfaction, promotes positive health outcomes, and nurses’ personal and professional growth. Higher levels of professionalism increase recognition, improve autonomy and empowerment, facilitate organizational citizenship behaviors, and improve quality of practice (Huber, 2015). In addition, nurse managers who exhibited high levels of professionalism were reported to have improved levels of education and training, increased levels of scholarship and involvement in research activities, and higher job satisfaction (Shao et al., 2018).

Tanaka et al. (2016) concluded that managers’ professional behaviors influence nursing professionalization and have a strong impact on professional development. In addition, awareness of professional factors is important to continuously maintain nursing professionalism. The implications of their study help nursing managers to develop themselves and realize the potential of their nursing staff by developing professionalism. On the other hand, Ohman (2017) found that lower levels of professionalism have been associated with negative outcomes, including increased turnover and attrition, and lower productivity.

Professionalism in nursing might be learned during early career. However, Tanaka et al. (2015) asserted in their study that nurses in managerial roles need in-depth knowledge of management, leadership, evidence-based practice, risk appraisal, and outcome analysis and are responsible for providing high quality care. Moreover, nursing leaders are expected to create a climate in which professional practice can flourish. Therefore, their study shed light on the additional professionalism requirements for nurse managers such as (1) developing scientific knowledge and participating in continuing education that keeps a nurse manager abreast of new trends that may impact nursing management practice and improve their confidence. (2) Joining professional organizations can contribute to career development, updating professional issues, and expanding professional networking opportunities. (3) Serving one’s community where a nurse leader is willing and committed to share knowledge and assist in healthcare decision making and community services. (4) Adherence to a code of ethics should be an essential component for a nurse leader to create a strong sense of professionalism. (5) Practicing with autonomy; nurse managers should have clear role expectations and correspondingly higher scores on autonomy. (6) Theory development, use, and evaluation enable nurse managers to practice within a theoretical framework by being knowledgeable about management theories and how to apply management principles to their practice.

Some challenges that nursing professionalism faces for nurse managers include rapid changes in nursing practice, membership demands, communication, population diversity, lack of leadership skills and autonomy, health care risks, long working hours, emotional load, lack of recognition by society, shortage of nurses, and limited professional opportunities (Black, 2017). Additionally, educational preparation, nature of work, societal norms and expectations, and organizational structures were reported as dilemmas for professionalism (Dikmen et al., 2016).

In distinguishing between professionalism and professional identity, it is important to recognize that professionalism involves acting acceptably and appropriately while adhering to a professional code of conduct. It also means completing given tasks and responsibilities on time (DeJong, 2014). According to Godfrey and Young (2020), professional identity is influenced by certain values, norms, and characteristics of the nursing discipline that shape the way a nurse acts, thinks, and feels like a nurse manager. Moreover, professional identity can also be reflected as the attitudes, beliefs, experiences, ideals, professional involvement, need for
advancement, and codes of a given career (Tinkler et al., 2018).

According to National League for Nursing (2014), nurses’ professional identity comprises their ability to internalize the core values and perspectives that complement the art and science of nursing. These core values become distinct for nurse managers as they learn, experience, reflect and grow in their profession. Having a strong professional identity requires nurse managers to adopt these core values in every dimension of health care as they practice to improve patient outcomes and promote the standards of the nursing profession. In addition, adherence to these values promotes the nurse managers’ commitment to advocacy for improving health care access and providing services to vulnerable populations, as well as to the growth and sustainability of the nursing profession.

There are indications that professional identity can have a largely positive influence on the practice of health care, as follows: Professional values and beliefs held by nurse managers can guide their thinking, actions, and interactions with patients and their families. By being able to identify what distinguishes their profession (their professional identity), they will be able to value their profession more. Moreover, professional identity acts as a tool that allows professionals to practice with confidence both ethically and practically. A strong professional identity is more likely to improve self-efficacy and resiliency to job pressures and demands. Additionally, the existence of professional identity can lead to potential professional autonomy and is associated with higher levels of perceived integration (Franco & Tavares, 2013). On the other hand, a lack of professional identity has been linked to poor retention in some professions and is considered a reason for turnover (Wald, 2015).

**Significance of the Study**

Being a professional nurse manager is not an easy task, especially with today’s rapid changes in health care value systems and advanced health care technology and protocols of care. These changes have created different ethical and philosophical challenges for nurse managers and have created new nursing environments that require professional nurses. Accordingly, the ideal frame for being professional and having a strong professional identity as a nurse manager must be reconsidered. In addition, there is a need to clarify the perceptions of nurse managers regarding the definition of nursing professionalism and its attributes to provide a comprehensive approach to professionalism that indicates the directions they can go through to be professional nurse managers and, in turn, can enhance their professional identity in nursing. For this purpose, the aim of the current study is to develop a professionalism manual for nurse managers to improve their perception regarding professionalism and professional identity.

**Aim of the Study.** The current study aimed at developing a professionalism manual for nurse managers to improve their perception regarding professionalism and professional identity.

**Research Questions.**

Q1. What is the level of nurse managers’ perception regarding professionalism and professional identity in the pretest phase?

Q2. What is the effect of the professionalism manual on improving nurse managers’ perception regarding professionalism and professional identity during the posttest and follow-up phase?

Q3. Is there a correlation between nurse managers’ perceptions regarding professionalism and professional identity across the study phases?

**Conceptual Framework.** ADDIE, an acronym for Analysis, Design, Development, Implementation, and Evaluation is used as an instructional model to guide phases of the current study (Reiser & Dempsey, 2012). This model is an approach that helps instructional designers, any content developer, or even teachers to create an efficient, effective teaching design by applying the processes of the ADDIE model to any instructional product.

Source: Reiser and Dempsey (2018).
Methodology

Design
Quasiexperimental research design with pre-test, post-test, and follow-up was used in the current study.

Setting
The study was conducted at two different hospitals. The first setting is Menoufia University hospital that was established in 1993. The second setting is El-Helal Health Insurance Hospital which was founded in 1999 and affiliated with the Health Insurance Sector.

Sample
The participants in the current study included all nurse managers at different levels from the two different hospitals \( n = 100 \) with a response rate 100%.

Tools for Data Collection

Tool 1: Professionalism Questionnaire. Adopted from (The Registered Nurses’ Association of Ontario [RNAO], 2007).

Healthy Work Environments Best Practice Guidelines Project conducted by (RANO) provided a comprehensive approach for developing the professionalism questionnaire that was used to assess nurse managers’ perceptions regarding professionalism competencies. The tool composed of two parts:

Part 1: included sociodemographic data of the study subjects including age, educational qualification, years of experience, marital status, and whether they attended workshops about professionalism.

Part 2: included 8 dimensions with 55 subitems: knowledge (8 items), the spirit of inquiry (5 items), accountability (8 items), autonomy (8 items), advocacy (7 items), innovation, and visionary (6 items), collegiality and collaboration (7 items) and ethics and values (6 items).

Scoring System of the Tool

The subjects’ responses were rated on a three-point Likert scale \( \text{disagree} = 1 \), \( \text{Neutral} = 2 \), and \( \text{agree} = 3 \). The total score of participants’ responses was ranged between (15-45) which indicate the level of nurse managers’ professional identity as follows: score of \( \leq 15 \) indicating weak professional identity, a score of \( 16-30 \) indicating moderate professional identity, and a score of \( 31-45 \) indicating strong professional identity.

Tool 2: Professional Identity Assessment Questionnaire. The tool developed based on the components of novice PHNs’ (Public Health Nurses’) professional identity defined by (Kanefuji & Nakatani, 2017), and modified by the researcher to be suitable to the current study. The tool composed of 15 items to measure nurse managers’ professional identity.

Scoring of the Tool

The subjects’ responses were rated on a three-point Likert scale \( \text{disagree} = 1 \), \( \text{Neutral} = 2 \), and \( \text{agree} = 3 \). The total score of participants’ responses was ranged between (15-45) which indicate the level of nurse managers’ professional identity as follows: score of \( \leq 15 \) indicating weak professional identity, a score of \( 16-30 \) indicating moderate professional identity, and a score of \( 31-45 \) indicating strong professional identity.

Validity of Tools

After the preparation of the tools, they were tested for their content and face validity by a jury of 2 community nursing experts and 3 administrative experts to check if all items in the tool were clear, relevant, and covering the content that tended to be measured. The required modifications were carried out accordingly. Moreover; the researchers translated the original tools into Arabic language, then through back translation, the Arabic tools were translated again into English and compared with original English tools to ensure conformity of items after being translated and identify any confusion and ambiguities of tools.

Reliability of Tools

The internal consistency of the tool was assessed through (Test-re-test reliability). Cronbach’s alpha for the study tools was expressed as follows: Tool I \( \alpha = (0.87) \), tool II \( \alpha = (0.83) \)

Pilot Study

A Pilot study was conducted to assess the feasibility and applicability of the questionnaires and determine the time needed for data collection. It was conducted on 10% of the participants.

Ethical Consideration

To conduct the study, official steps were taken to obtain permission from the institutional review board of the ethical committee at the Faculty of Nursing, Menoufia University (Approval no. 831). Written approval was obtained from the medical and nursing authority at the aforementioned study setting following an explanation of the purpose and procedures of the study. The respondents’ rights were protected by ensuring voluntary participation and informed consent was obtained after explaining the purpose, study procedures, and potential
benefits of the study. The respondents were assured that the data would be treated as strictly confidential.

Methods and Procedures

The procedures followed in the current study extended from June 2020 to December 2020 and based on the staff development ADDIE model that consists of five consecutive phases as follow: (Chand, 2016).

Analysis. In this phase, the researchers justified the need to develop the professionalism educational manual including; the professional competencies gap that needs to be bridged, the target personnel, and the variables that determine the manual are also identified. This phase is carried out through collecting pre-test data regarding nurse managers’ perception of professionalism and professional identity through professionalism questionnaire and professional identity questionnaire.

Design. The educational goals and objectives that will measure behavior in the evaluation phase as follows:

Goal. Improving nurse managers’ perception regarding professionalism and professional identity through the following objectives: a) Explore the concepts that may enable nurse managers to become more cognizant of professional behaviors, b) Assist nurse managers in evaluating their professionalism and may provide them the direction for professional growth, c) Examine the attributes that are fundamental to nursing professionalism, d) Direct nurses on what to do or how to behave in professional situations, e) Recommends that nurses should model professionalism through their practice, and f) Reflect on their values and behaviors then identify areas that they believe needing attention to enhance professionalism.

Development. The researchers reviewed different kinds of literature related to the main variables to translate the goals and objectives into an educational manual.

Implementation. This is the execution phase which includes the necessary adjustments, printing the manual, and distributing the manual for nurse managers. In this phase, the researcher was available at different times to clarify any inconvenience or any vague points ensuring that all concepts are clear, and the content can be gone through smoothly.

Evaluation. This phase involves verifying that the objectives of the educational manual are met. It is developed as a continuous and systematic process to assess the effect of a professionalism manual on improving nurse managers’ perception regarding professionalism and professional identity. This phase was carried out through post-test evaluation within three weeks of manual provision and follow-up test within three months of the post-test.

Statistical Analysis

Data were collected, tabulated, statistically analyzed using an IBM personal computer with Statistical Package of Social Science (SPSS) version 19 (SPSS, Inc, Chicago, Illinois, USA). Descriptive statistics were applied in the form of mean, standard deviation (SD), and range for quantitative data and numbers and percentages for qualitative data. The paired t-test is used for comparison between two related means. Pearson correlation (r) is a test used to measure the strength and direction of the association between two quantitative variables. A p-value of <.05 was considered statistically significant.

Results

The study recruited 100 nurse managers from Shebin El-Kom University hospital and El-helal hospital. Table 1 shows the socio-demographic characteristics of the studied sample (n = 100). As presented in the table, the highest percentage of the nurse managers’ age (54%) ranged from 40 to 50 years old. Regarding qualifications, the highest percentage of the studied nurses (98%) had a bachelor’s degree in nursing. As for years of experience, the majority of studied nurses (62%) had experience ranging from 10–15 years. Concerning marital status, Table 1. Socio-demographic Characteristics of the Studied Sample (n = 100).

| Personal data                        | No. | %  |
|--------------------------------------|-----|----|
| Age                                  |     |    |
| 25–30                                | 17  | 17 |
| 30–40                                | 22  | 22 |
| 40–50                                | 54  | 54 |
| ≥50                                  | 7   | 7  |
| Educational level                    |     |    |
| Technical nursing institute          | 2   | 2  |
| Bachelor’s degree                    | 98  | 98 |
| Experiences                          |     |    |
| <5 years                             | 2   | 2  |
| 5–10 years                           | 30  | 30 |
| 10–15 years                          | 62  | 62 |
| ≤15 year                             | 6   | 6  |
| Marital status                       |     |    |
| Married                              | 68  | 68 |
| Unmarried                            | 32  | 32 |
| Attending training program on professionalism |     |    |
| Yes                                  | 12  | 12 |
| No                                   | 88  | 88 |
the majority of studied nurses (68%) were married. Concerning attendance of training programs on professionalism, (88%) of the studied nurses didn’t attend any training program on professionalism.

Percentage scores of professionalism perception among studied sample throughout the study phases (Pre-, Post, and Follow-up test) are shown in Figure 1. As shown in the figure, the highest percentage of the study sample have a moderate perception level of professionalism in the pre-test phase. However, the professionalism level has been improved to a high level in both post and follow-up phases (88% and 84%, respectively).

Percentage scores of nurse managers’ professional identity throughout the study phases (Pre, Post, and Follow-up test) is shown in Figure 2. As presented in the figure, the highest percentage of the study sample (68%) had a high level of professional identity in the pre-test phase. While after administering a manual on professionalism, the professional identity level has been improved in both post and follow-up phases (91% and 86%, respectively).

Table 2 illustrated the mean scores of professionalism and professional identity level among nurse managers throughout the study phases (n = 100). As evidence from the table, there was a statistically significant improvement in professionalism perception and professional identity level immediately after administering the manual on professionalism and after three months in the follow-up phase than the pre-test phase (p = .000).

Table 3 presents mean the scores of nurse managers’ professionalism subscales throughout the study phases. As shown in this table, there were statistically significant differences between all subscales of professionalism. Additionally, there were improvements in the mean score of all subscales of professionalism after administering the manual on professionalism and the follow-up phase than before except in the domain of spirit of inquiry.

Table 4 shows the correlation between nurse managers’ professionalism and their professional identity throughout the study phases (n = 100). As shown in the table, there was a statistically significant positive correlation between two variables of the study at the post and follow-up phases, but not significant at the pretest phase.

Table 5 presents the correlation between nurse managers’ perception of professionalism with their demographic data throughout the study phases (pre-, post-, and follow-up). As presented in this table, there was no statistically significant correlation between nurse managers’ perception of professionalism and their educational qualification. whereas there was a statistically significant positive correlation between nurse managers’ perception of professionalism and their ages and marital status at the post-test phase while there were not in the pre-test phase. On the other hand, there was a statistically significant positive correlation between nurse managers’ perception of professionalism and their attendance of the training program at all study phases.

Table 6 presents the correlation between nurse managers’ professional identity with their demographic data throughout the study phases (pre-, post-, and follow-up). As presented in this table, there was no statistically significant correlation between nurse managers’ professional identity and their marital status, years of experience, educational qualification, and attendance of training programs at all phases of the study. Whereas there was a statistically significant positive correlation between nurse managers’ professional identity and their age at post-test and pre-test phases.

Discussion

Professionalism is important for establishing nursing care standards and providing quality services (Hintistan & Topcuoglu, 2017). Additionally, professional identity is an adaptive developmental process of
### Table 2. Comparison Between Mean Scores of Professionalism and Professional Identity Among Studied Sample Throughout the Study Phases (Pre-, Post, and Follow-up Test) (n = 100).

| Study items            | Study phases | Pre-test X ± SD | Post-test X ± SD | Follow-up X ± SD | ANOVA test | p-value |
|------------------------|--------------|-----------------|------------------|------------------|------------|---------|
| Professionalism        |              | 84.7 ± 23.85    | 144.9 ± 28.4     | 141.4 ± 24.8     | 171.7      | .000*   |
| Professional identity  |              | 29.87 ± 5.8     | 40.56 ± 7.7      | 39.69 ± 8.04     | 66.8       | .000*   |

*Indicate P value is statistically significant at 0.05.

### Table 3. Mean Score of Professionalism Subscales Among Studied Sample Throughout the Study Phases (n = 100).

| Professionalism subscales | Study phases | Pre-test X ± SD | Post-test X ± SD | Follow-up X ± SD | ANOVA test | p-value |
|---------------------------|--------------|-----------------|------------------|------------------|------------|---------|
| Knowledge                 |              | 10.34 ± 3.04    | 19.84 ± 4.77     | 19.24 ± 4.83     | 153.057    | .000*   |
| Spirit of inquiry         |              | 7.37 ± 2.26     | 13.6 ± 2.22      | 13.23 ± 2.41     | .871       | .420    |
| Accountability            |              | 12.38 ± 5.28    | 20.55 ± 5.16     | 20.22 ± 4.72     | 83.365     | .000*   |
| Autonomy                  |              | 10.88 ± 4.18    | 20.68 ± 4.95     | 20.14 ± 4.51     | 145.690    | .000*   |
| Advocacy                  |              | 9.01 ± 3.33     | 18.21 ± 3.76     | 17.29 ± 3.97     | 187.621    | .000*   |
| Innovation and visionary  |              | 8.12 ± 2.64     | 16.16 ± 3.06     | 15.52 ± 3.45     | 211.585    | .000*   |
| Collegiality and collaboration |        | 14.35 ± 5.55    | 19 ± 4.11        | 18.94 ± 2.92     | 37.912     | .000*   |
| Ethics and values         |              | 12.27 ± 4.69    | 16.92 ± 2.8      | 16.85 ± 1.82     | 64.026     | .000*   |
| Total professionalism     |              | 84.7 ± 23.85    | 144.9 ± 28.4     | 141.4 ± 24.8     | 171.7      | .000*   |

*Indicate P value is statistically significant at 0.05.

### Table 4. Correlation Between Nurse Managers’ Professionalism and Their Professional Identity Throughout the Study Phases (n = 100).

| Professional identity | Pre-test R | p-value | Post-test R | p-value | Follow-up R | p-value |
|-----------------------|------------|---------|-------------|---------|-------------|---------|
| Professionalism       | .028       | .784    | .281        | .005*   | .247        | .013*   |

*Indicate P value is statistically significant at 0.05.

### Table 5. Correlation Between Nurse Managers’ Professionalism and Their Socio-Demographic Data Throughout the Study Phases (n = 100).

| Personal data         | Pre-test r | p-value | Post-test R | p-value | Follow-up R | p-value |
|-----------------------|------------|---------|-------------|---------|-------------|---------|
| Age                   | -.014      | .888    | .260**      | .009    | .239*       | .017    |
| Marital status        | -.184*     | .067    | -.227*      | .023    | .171        | .090    |
| Years of experience   | -.061      | .546    | .016        | .877    | .056        | .578    |
| Educational qualification | .019      | .854    | .058        | .564    | .213*       | .033    |
| Attending training program | -.310** | .002    | -.200*      | .046    | -.271**     | .006    |

*Correlation is significant at the .05 level (2-tailed).

**Correlation is significant at the .01 level (2-tailed).
adopting or being formed into the values, habits, and behaviors of a community of practice. Therefore, helping individuals develop a desirable professional identity through an effective in-service educational module requires improving their perceptions of professionalism, then tracking and evaluating each individual’s progress in acquiring the knowledge base and understanding of the axial principles of professionalism (Cruess et al., 2016). Therefore, the aim of the current study was to develop a professionalism manual for nurse managers to improve their perceptions regarding professionalism and professional identity.

First, a look at the personal characteristics data of the study participants. For the study, 100 nurse managers were recruited, most of them have a bachelor’s degree in nursing, are between 40 and 50 years old, have between 10 and 15 years of experience, are married, and didn’t attend any workshop on professionalism.

The results of the current study can be interpreted as follows in light of the study questions: According to the first question, which stated what is the level of nurse managers’ perception regarding professionalism and professional identity in the pretest phase? As per the results of the current study, a moderate level of professionalism was perceived by a high percentage of the study sample at the pretest phase. This can be justified by the fact that more than half of the study participants were between 40 and 50 years of age and had 10 to 15 years of experience, which enabled them to be more professional and gain experience in various work situations, but did not reach the required level of professionalism that would qualify them for the various challenges and circumstances in the health care environment, as the majority of the study participants did not have the essential scientific background related to professional behavior.

In the same line; Abdel Aziz et al. (2020) found that the overall professionalism behavior was low among the highest percentage of nurse managers (82.9%) and justified their findings with the inadequate awareness of nurse managers on the importance of professionalism behavior and its domains and lack of hospital support in developing professional behavior, therefore they need to improve their level of professionalism behavior.

A similar result was also found by Dikmen et al. (2016) who concluded low professional levels of nurse executives and declared that professionalism in nursing is delayed due to many negative factors such as the differences between nursing education levels, the perception in the community about nursing as a profession, the hierarchical structures of hospitals, the workload, the focus of nursing on tasks, the lack of personnel and equipment, insufficient job security, low salaries, and weakness in organized labor; so that it is paramount to help nurse managers to continue their self-development and realize the potential of their nursing staff by developing professionalism.

Furthermore, the current findings concur with those of Yang et al. (2016) who investigated and analyzed the professionalism of 500 nurses working at different levels in a public hospital and showed a low level of professionalism among nurses. The findings of Shohani and Zamanzadeh (2017) showed that nursing staff attitude towards professionalism is at an average level.

In terms of professional identity, the study result shows that more than half of the study subjects have a high level of professional identity in the pretest phase. This can be explained by the fact that all the subjects have a bachelor’s degree in nursing. Along the same line, (Li et al., 2020) concluded that Chinese general practitioners (GPs) have a higher level of professional identity. Mohtashami et al. (2015) also reported that more than half of the nursing staff had a good professional identity. This current finding is contrary to Elhanafy and Saleh (2018) who showed that the majority of their study participants had a low identity.

Regarding the second study question about the effect of the professionalism manual on improving nurse

### Table 6. Correlation Between Nurse Managers’ Professional Identity and Their Socio-Demographic Data Throughout the Study (n = 100).

| Personal data            | Pre-test | Post-test | Follow-up |
|--------------------------|----------|-----------|-----------|
|                          | r        | p-value   | R         | p-value   | R         | p-value   |
| Age                      | .212*    | .034      | .192      | .056      | .295***   | .003      |
| Marital status           | -.266    | .024      | .062      | .541      | .017      | .480      |
| Years of experience      | .079     | .434      | .005      | .960      | .135      | .180      |
| Educational qualification| .114     | .257      | -.011     | .917      | .035      | .728      |
| Attending training program| .022    | .828      | .168      | .095      | .105      | .297      |

*Correlation is statistically significant at the .05 level (2-tailed).
**Correlation is highly statistically significant at the .01 level (2-tailed).
managers’ perceptions of professionalism and professional identity during the posttest and follow-up phases, the present study showed a statistically significant improvement in nurse managers' perceptions of professionalism after the administration of the professionalism manual (posttest and follow-up). Additionally, there were statistically significant differences between all subscales of professionalism except the spirit of inquiry. At the same time, there was a statistically significant improvement in professional identity in the posttest and follow-up phases compared to the pre-test phase.

In the same way, Sabanciogullari and Dogan (2015) concluded that the professional identity of the different categories of nurses significantly improved after the implementation of an educational program at Professional Identity Development, where the mean scores of professionalism among the different categories of nurses significantly increased after the program compared to the pre-program but significantly decreased in the follow-up phase. Furthermore, AbuEElala et al. (2019) showed that nursing staff knowledge across all domains of nursing professional values changed significantly after the training than before the training.

The third research question asked whether there was a correlation between nurse managers' perceptions of professionalism and professional identity across the study phases? In the present findings, there was a statistically significant positive correlation between nurse managers' perceptions of professionalism and their professional identity across all study phases except the pre-test phase. This can be supported with Forouzadeh et al. (2018) who stated that framing professional identity is a process with the following areas: professionalism, and development of a personal (psychosocial). In addition, a social identity, which is inferred from that unification about professional, personal, ethical improvement. Moreover, they concluded that the need to teach professionalism has a reciprocal relationship with the formation of a desirable professional identity. Additionally, Levinson et al. (2014) guaranteed that the basic elements of professional identity development are rooted in the dimensions of professionalism and professional development (excellence in service provision, growing self-knowledge, and vigorous monitoring).

Furthermore, in line with previous findings, Irby and Hamstra (2016) claimed that professionalism is considered as the method of becoming a member of a profession that incorporates processes of socialization and identity formation, which means adopting the features of a profession that are associated with a particular community. Additionally, Barnhoorn et al. (2019) concluded that professionalism is composed of different perspectives, with the perspective of professional identity formation complementing the behavior-based and attitude-based perspectives on professionalism.

In general, the results of the present study showed a statistically significant correlation between nurse managers’ professionalism and their age. This can be justified by the fact that with increasing age and experience, nurse managers gain more information about the profession and experience in dealing with nurses and patients, different situations and crises, and in dealing with different problems they face at work, which makes them more professional.

The current results also disclosed no significant correlation between the professionalism of nurse managers and their educational qualification and years of experience except at the follow-up phase. In the same line, Shohani and Zamanzadeh (2017) and Sabanciogullari and Dogan (2017) reported that educational level is an important factor in nursing staff professionalization. It was found that as the educational level of nurses increases, their professional self-development also increases. Moreover, there was a statistically significant relationship between nurses’ attitude towards professionalism and work experience. According to Dikmen et al. (2016), there was a significant difference between the total scores of professionalism and the educational level and work experience of nurse executives. Furthermore, Yang et al. (2016) found a significant difference between the level of professionalism and the level of education of different levels of nursing staff.

Moreover, Hoeve et al. (2014) revealed strong influences of nurses’ educational background and experiences on emphasizing ethics, values, and professionalism. Likewise, Balang and Burton (2014) studied contributing factors to nursing professionalism in a descriptive, comparative design on 774 nurse managers and concluded that overall professionalism may be related to long experience, higher education, membership in organizations, position, and specialty certification. In addition, Tanaka et al. (2016) found that higher nursing professionalism was significantly related to longer experience in nursing, higher level of education, and current position as a nurse administrator. Therefore, it can be said that maturity in professional experience has a great influence on professional attitude. In general, although several internal and external factors are associated with the level of professionalism in nursing, work experience and educational background are very effective factors in becoming a true professional.

In the current study, there was no statistically significant correlation between nurse managers’ professional identity and their marital status, years of work experience, educational qualification, and attendance of training programs at all phases of the study. On the other hand, there was a statistically significant positive correlation between the professional identity of the nurse
managers and their age in the posttest and pretest phases. This result contrasts with Hassan and Elhosany (2017) who found that there were statistically significant correlations between nurses’ professional identity and years of nurses’ experience.

Additionally, there was no statistically significant correlation between nurse managers’ professional identity and their age at the pretest and follow-up phases. This is consistent with Li et al. (2020) who found a statistically significant relationship between professional identity and age. The older the age during the career, the more experience nurses acquire in terms of relationships and communication with others, patient outcomes, and environmental circumstances which leads to the acquisition of more professional and technical skills, thereby helping them to improve their professional identity compared to younger nurses.

Limitations

- There are few studies on the level of professionalism of nurse managers.
- Due to the Covid 19 pandemic, it was not possible to gather nurse managers through educational sessions, so the authors decided to design an educational manual instead of an educational program.

Conclusion and Implications

The professionalism manual was effective in improving nursing managers’ perceptions of professionalism and professional identity. Therefore, improving nurse managers’ perceptions of professionalism through an educational manual requires not only reading and applying it all at once, but rather reviewing and reflecting on it over time. Therefore, the professionalism manual can serve as a comprehensive framework for adhering to professional standards of practice, handling unprofessional behavior, and encouraging reflection on practices that influence professionalism.

Recommendation

- Incorporate the attributes of professionalism that were included in the professionalism manual as a guide for performance review processes of nurses.
- Organizational support is necessary to reinforce personal responsibility for lifelong learning as part of professionalism.
- Incorporate professionalism as a central concept within all training and education programs, including undergraduate curricula and in-service training programs.
- Further research is required to assess the effect of improved perception of professionalism and professional identity of nurses on health care outcomes.

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ORCID iD

Marwa H. Ageiz  https://orcid.org/0000-0002-2921-880X

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