Factors Affecting Professional Identity among Nurse Interns'

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Abstract

Background: Improving the professional identity of nursing intern is significant for enhancing the number of new registered nurses and easing the shortage of nursing personnel. The clinical internship is a key period for the formulation of professional identity. **Aim:** the current study aimed to assess factors affecting professional identity among nurse interns'. **Design:** A descriptive cross –sectional design was used to carry out this study. **Setting**: the study was conducted at Ain Shams University Hospital where nurse interns are having their training internship program, **Subjects**: The subjects of this study was include (120) nurse interns selected by simple random sample technique. **Tools of Data collection**: the current study was collected by professional identification scale. **Results**: More than three quarters (78.3%) of nurse intern had a high level of professional identity . While less than one quarter (21.7%)of them had low level of professional identity. As for total nurse interns' views of the factor affecting on professional identity, points to statistically significant relations with their, and. Moreover, a significant association is observed between place of birth, graduation grade, first choice is nursing profession and professional identity **Conclusion**: the current study findings, concluded that the majority of nurse interns' had high level of professional Identity. **Recommendations**: the study recommended that the nursing colleges and clinical nursing departments collaborate to create a tough and broad career planning curriculum for nursing interns, aims to enhancing their professional identity.

Key words: Professional Identity, Nurses Interns,

Introduction:

Professional identity (PI) in nursing is defined as a "sense of oneself, and in relationship with others, which is influenced by characteristics, norms, and values of the nursing discipline, resulting in an individual thinking, acting and feeling like a nurse" **(Godfery and Young 2021).**

Professional identity is defined as "the attitudes, values, knowledge, beliefs and skills shared with others within a professional group" , Numerous factors can influence the formation of PI in students. Factors such as the existence of inconsistencies and differences between the nursing education environment and the clinical environment (i.e., the theory-practice gap) and the lack of a clear picture of the nursing profession in the society affect nurses' PI **(Haghighat ,et al 2020).**

Providing high quality and safe care needs ethical nursing practice, which is increasingly challenging by technological and technical growth in health systems Therefore, new strategies are needed to support the nurses' moral care provision. Acquisition of moral competencies happens in a process called moral development. Moral development is defined as the change in moral behavior over time. **(Davidson , et al 2018).**

The formation of identity is defined as a self-perception about the profession based on attitudes, beliefs, feelings, values, motivations, and experiences. professional identity, is an essential factor in increasing self-confidence, feeling of belonging to the profession and establishing interpersonal communication among nurses **(Harrison,2020).**

Professional identity is an important factor influencing nursing interns' career choices, i.e., a lower professional identity

among nursing interns results in a greater intention to quit, which leads to a loss of nursing talents. For nursing students, professional identity refers to the process of career planning and confirming their professional role in their current status. The nursing students' professional identity formed in practice is closely related to their future career choice **(Goodol and Godfrey,2021)** .

The professional identity of nursing students will affect on their transition from student nursing to professional nursing and their willingness to remain in the nursing profession. As nursing students enter the field of nursing, their professional identity serves as the foundation of their nursing practice and affects their entire career **(Philippa , et al 2021)** . The clinical internship is part of clinical education.. Clinical internship is a key period for nursing students to form professional identity **(Kim , et al 2021).**

The influence factors of professional identity among the nursing students in university are as follows: Firstly, demographic characteristics such as the gender (the female nursing students' professional identity is higher) **(Jing, 2014).** education level (the diploma students' professional identity is higher than baccalaureate nursing students). Secondly, the power of model, such as role modelling and the model of teacher could improve students' professional identity. Lastly, the students with higher self-efficacy and resilience have a higher level of professional identity. **(Mei XX, et al 2022).**

Significance of the study:

Professional identity plays a crucial part of the process of development and expansion of nursing as a profession. This process takes place over time, involves gaining insight into professional performances and fostering professional ideals and values and, is positively associated with, the clinical performance of the nurse intern as well as, patient satisfaction, and care quality **(Wang, et al 2022) .**

The development of professional identity is a continuous process and it is critical to the effective and safe practice of all health professionals, including nurses. The process is influenced by factors such as professional socialization and experiences in practice. A significant amount of the development of professional identity occurs during college years **(Ashby , et al 2019).** Thus, the current study will be conducted to assess factors affecting professional identity among nurse interns'. Aim of the Study.

Aim of the study:

The study was aimed to assessing the factors affecting professional identity among nurse interns'.

Research Question:

What are the factors affecting on professional identity among nurse interns'?

SUBJECTS AND METHODS

The methodology of this study was presented under four main designs as follow:

I- Technical design.

II-   Operational design.

III-   Administrative design.

IV-   Statistical design.

I. Technical design

The technical design involved a description of the research design, setting, subjects of the study, and tools of data collection.

Research design

A descriptive cross –sectional design was used to carrying out this study.

Setting

The study was conducted at Ain-Shams University Hospitals where nurse interns are having their training internship program. These include Ain-Shams University Hospital, El-Demerdash Hospital, Pediatrics University

Hospital, Cardiovascular Hospital and geriatric hospital.

Subjects of the study

The subjects of this study was include (120) nurse interns out of the total number of (260) nurse interns

Sample size:

The sample size was calculated with the equation developed by **(Thompson (2012).**

n =   N × P (1- p)

n = sample size

N = population size

d = the error rate is 0.05

z = the standard score corresponding to the significance level is 0.95 and is equal to 1.96

p = availability of property and neutral=0.50

Tools of data collection:

The data for this study was collected by professional identification scale. Consists of two parts:

Part 1: Nurse Interns' characteristics data such as age, sex, level of education, graduation grade, first major choice is nursing profession and only child in family.

Part 2: professional identification scale was assessing the influencing factors affecting nursing interns' professional identity during internship year. It was adopted from **(Brown, et al, 2011**) and consisting of 10 items.

Scoring system response of each statement was measured on a five -point Likert Scale that ranged from never (1) to very often (5). The scores of items were summed-up and the total scores were divided by the number of the items, giving the mean score for each items. These scores were converted into percent score. The total score of the scale ranged from 10 to 50. The A higher average score on the scale

indicates a high level of professional identity if the scores (<75%). While, low average score indicates low level of professional identity if the scores (>75%).

II. Operational Design

The operational design for this study included three phases namely: preparatory phase, pilot study and field work.

Preparatory phase:

The researcher reviewed current and past, local and international related literature using textbooks, scientific articles, periodicals, journals and internet. This served to prepare the tools for data collection as well as in writing the literature review.

$$[N-1(d^2/z^2)] \, p(1-p)$$

Tool reliability:

The piloting study was utilized to test the reliability of the scale, which was carried out through measuring the internal consistency and calculating Cronbach alpha coefficients. The reliability of the scale demonstrated high level with coefficients 0.823.

Pilot study:

The pilot study was aimed at examining the clarity of the language and applicability of the tool and their relevance to the study. It was conducted on 12 of the nurse interns representing about 10% of study sample. The pilot study also helped to estimate the time needed for filling the tools. The study subjects who participated in the pilot were excluded from the main study sample.

4-Field work:

The fieldwork of the study took two months started at the beginning of March 2024 after securing all official permissions. It was completed by the end of April 2024. The researcher collected data by herself through meeting each nurse intern individually in the training area, clarifying the aim of the study and the method of filling out the scale about the professional identification, obtaining verbal consent to participate. The researcher met with the nurse interns consecutively in the five

hospitals according to their time schedule and rotation. Each nurse intern took from 15 to 20 minutes to fill out the questionnaire. The data were collected 5 days per week in day shifts, from 9: am to 2: pm.

Ethical consideration:

- Ethical approval for the research was obtained from the ethics committee at the Faculty of Nursing Ain Shams University.

- Official permission was obtained from the director of Ain Shams University Hospitals. Additionally, the research team held a meeting with the director of nursing services to explain the study's objectives, garner support, and encourage active participation from nurse interns.

- Prior to data collection, consent was obtained from all participating nurse interns.

- Measures were taken to ensure privacy and the right for participants to refuse participation or withdraw from the study at any point. All collected data was treated as confidential and used solely for research purposes

IV. Statistical Design:

Data collected from the studied sample was revised, coded and entered using the computer software PC. Data entry and statistical analysis were fulfilled using the statistical package for social sciences (IBM SPSS 26.0). Data were presented using descriptive statistics in the form of frequencies, percentages for non-numerical data and mean, standard deviation (+ SD) for parametric numerical data. Also, using analytical statistics in the form of chi square test to examine the relationship between two qualitative variables. Cronbach alpha coefficient was calculated to assess reliability of scale. Multiple linear regression analysis was performed to identify the independent predictors of professional identity and affecting factors. The statistical significant was considered at P<0.05.

Results:

The study sample consisted of 120 nurse interns whose age ranged between 22 and 24years, median 22.0 years with a majority of them female (56.7%) as presented in table 1. The majority were from urban (50.8%), and had very good graduation degree (57.5%). Their first major choice is nursing profession about (79.2%) and only (88.3%) of them had only child in family.

Figure 1 demonstrated that the highest percentage of nurse internes were from general pre university education (90 %).

Concerning the factors affecting on professional identity among nurse interns' in the study sample table 2 indicates the factor I can identify positively with members of this profession (85.8%), and I feel I share characteristics with other members of the profession (85.0%) were the highest, while the I feel like I am a member of this profession was the least viewed (72.5%). The figure 2 demonstrates that a substantial majority of nurse interns exhibit a high level of professional identity, with 78.3% endorsing this attribute, while a smaller proportion indicate a low professional identity, at 21.7%.

As for total nurse interns' views of the factor affecting on professional identity, table 3 points to statistically significant relations with their pre university education, (0.505) and first choice is nursing profession (p=0.034). Moreover, a significant association is observed between place of birth and professional identity levels, where individuals born in rural areas show a higher prevalence of high professional identity compared to those born in urban areas, p-value <0.05. Conversely, no significant association is found between sex and professional identity levels, (p = 0.144), respectively.

Table 4 demonstrated that the nurse interns with a general pre-university education and place of birth were statistically significant independent positive predictors of their score of total factors affecting on professional identity.

Table (1) Personal characteristics of nurse interns in the study sample (n =120).

| Personal characteristic	N	%
Age		
21- <23	25	20.8
23	87	72.5
24 or more	8	6.7
Mean±SD Median	22.86±0.51 23	
Sex		
Male	52	43.3
Female	68	56.7
Pre university education		
General	106	88.3
Institute	14	16.7
Place of birth		
Rural	59	49.2
Urban	61	50.8
Graduation grade		
Good	33	27.5
Very good	69	57.5
Excellent	18	15
Only child in family		
Yes	14	11.7
No	106	88.3
First major choice is nursing profession		
Yes	95	79.2
No	25	20.8
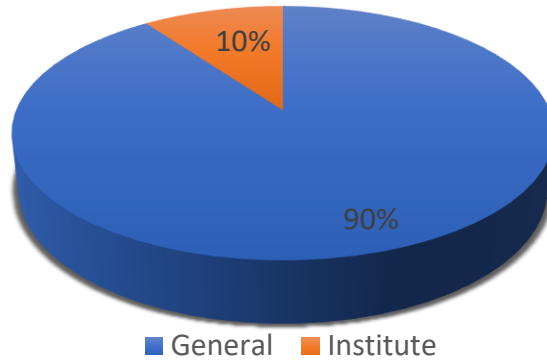
Figure 1: Distribution of the nurse interns in study sample by pre university education

Table (2) : Nurse interns' views of the factors affecting Professional identity (N=120)

Items	High		Low	
	N	%	N	%
I feel like I am a member of this profession.	87	72.5	33	27.5
I feel I have strong ties with members of this profession.	89	74.2	31	25.8
I am often ashamed to admit that I am studying for this profession.	98	81.7	18	15.0
I find myself making excuses for belonging to this profession.	91	75.8	29	24.2
I try to hide that I am studying to be part of this profession.	98	81.7	22	18.3
I am pleased to belong to this profession.	94	78.3	26	21.7
I can identify positively with members of this profession.	103	85.8	17	14.2
Being a member of this profession is important to me.	96	80.0	24	20.0
I feel I share characteristics with other members of the profession.	102	85.0	22	18.3
Being a nurse make me happy	93	77.5	27	22.5

Figure 2 Total professional identity levels among nurse interns'
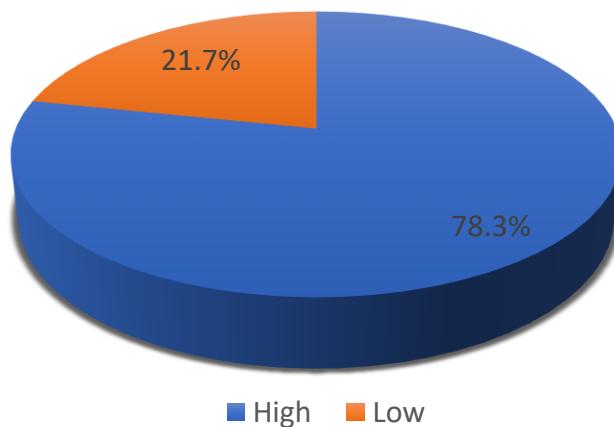
Table (3): Relation between nurse interns' views of the total factor affecting on professional identity and their personal characteristics

	Total professional identity					
	High		Low		Chi-square	
	N	%	N	%	X2	P-value
Age						
22	11	11.7	14	53.8		
23	75	79.8	12	46.2	22.754	0.097
24	8	8.5	0	0.0		
Sex						
Male	44	46.8	8	30.8	2.134	0.144
Female	50	53.2	18	69.2		
Pre university education						
General	84	89.4	22	84.6	0.445	0.505*
Institute	10	10.6	4	15.4		
Place of birth						
Rural	37	39.4	22	84.6	16.688	0.048*
Urban	57	60.6	4	15.4		
Graduation grade						
Good	23	69.7	10	30.3		
Very good	45	65.2	24	34.8	7.01	0.008*
Excellent	12	66.7	6	33.3		
Only child in family						
Yes	8	57.2	6	42.8	4.80	0.003
No	78	73.6	28	26.4		
First major choice is nursing profession						
Yes	54	56.8	41	43.2	4.505	0.034*
No	18	72	7	28		

Table (4) best fitting multiple linear regression for total factors affecting professional identity score

	Unstandardized Coefficients		Standardized Coefficients	t. test	P-value	95% CI	
	B	SE	Beta			Lower	Upper
(Constant)	8.041	1.815		4.429	<0.001*	4.445	11.637
Pre university education	0.295	0.078	0.361	3.770	<0.001*	0.450	0.140
Place of birth	0.257	0.070	0.312	3.667	<0.001*	0.396	0.118
Dependent Variable: Total professional identity							

r-square = 0.529   f= 11.189   P-value <0.001*

DISCUSSION

Professional identity is a major issue in the transition from students to nurse interns and likely affects retention rates. Students report that they expect to feel comfortable in their jobs and confident in themselves after graduation, but these expectations are often not met. A disconnect between workplace expectations and reality has been blamed for high attrition rates among newly graduated nurses. A high proportion of newly qualified nurses report negative feelings such as frustration and stress often stemming from inflexibility in the system they have entered.

The study was aimed at assessing the factors affecting on professional identity

among nurse interns. The results of the study indicate that about three quarter of nurse interns having high level of professional identity. This means the transitions between academic and clinical settings, and aligning these transitions may enable nurse intern to develop realistic expectations of nursing profession and positively affect on their professional identities, and a statistically significant relation with their pre university education, and first choice is nursing profession. Moreover, a significant association is observed between place of birth and professional identity, which means nurse interns' professional identities develop throughout their lifetimes, from before entering nursing education, throughout their years of study and clinical experience, and continue to evolve during their careers. Education is, however, a key period as it is during these time students gain the knowledge and skills that separate nurse interns as professional healthcare workers from lay people.

This finding is agreement with the results reported by **Alharbi, Kuhn & Morphet, (2022)**. The results of this study show that first-year H&SC students already have relatively strong professional identities upon entry to their respective programmed of study. also **Fitzgerald,(2020).,** who investigated students at an early level of training reported similar high levels of professional identity to those reported in the current investigation. In congruence with this, a study in china Professional identity of Chinese nursing students during the COVID-19 pandemic outbreak: A nation-wide cross-sectional study **Zhang et al. (2021)**.

Regarding factors affecting professional identity among nurse interns the present study could find a statistical significant with pre university education, graduation grade and first choose is nursing profession which refers to an individual's ability to structure knowledge in response to changing situational demands, making it pertinent when considering how a student develops from a novice into an expert, through knowledge construction. Similar results were also reported by **Zeng et al (2022)** The nursing interns' professional identity is related to some demographic characteristics (i.e., residential status, first major choice, education).

According the present study bivariate analysis revealed that the pre university education and place of birth had higher statistical significance as a positive predictor. Which means that the reason may be the rural areas have an economic level, lower capabilities, and unsuitable working conditions.in this respect, a study of research on professional identity of nursing students during their internship and construction of promotion strategies **Jing, (2014).**

CONCLUSION

The study concluded that the majority of nurse interns' had high level of professional Identity and a statistically significant relation with some personal characteristics such as pre university education, and first choice is nursing profession.

RECOMMENDATIONS

In the light of the results of this study, the following recommendations are suggested:

- The nursing college should pay attention to the nursing interns who lived in the urban and not first choice is nursing profession due to difficult adapt with the new profession.
- Improving nursing interns' intention of choosing nursing as a career after graduation is important for alleviating the shortage of nursing personnel.
- Furthermore, nursing colleges and clinical nursing departments collaborate to create a tough and broad career planning curriculum for nursing interns, aims to enhancing their professional identity.

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