

## Influence of Internship Program on Professional Commitment among Nurse Interns

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### Abstract

**Background:** Internship program is a critical phase in nursing career, understanding how this phase can shape nurse interns professional commitment and career outlook is crucial to foster their long – term engagement within nursing profession. **Aim:** This study was aimed to assess the influence of internship program on professional commitment and career maturity among nurse interns. **Research design:** A pre / posttest evaluation design was used. **Setting:** The study was conducted at governmental and private hospitals namely: (El zeitoun specialized hospital, Nasser Institute hospital, Wadi El Nile hospital and El Bank Al Ahaly hospital). **Subjects:** a simple random sample of 125 nurse interns was selected to conduct this study. **Tools of data collection:** professional commitment inventory and career maturity inventory were used to collect data in this study. **Results:** nurse interns' age ranged between 21 to 31 years, with a median of (23.0) years as presented in this study. The majority was males (75.2%), with a general pre-university education (81.6%). this study indicates that the majority of the nurse interns had high professional commitment at the start of the internship program exceeding (90%) in all its three dimensions. also (3.2%) of the nurse interns in the study sample had high total career maturity at the internship program start. This increased reaching (32.0%) at the end of the internship program. **Conclusion:** There was the influence of internship program on professional commitment and career maturity among nurse interns. **Recommendations:** Share the nurse intern in decision-making process to increase interest about occupation and help discovers their own skills and talents alongside with careers, and conduct the on-the-job training, workshops and seminars, and other continuing education activities.

**Keywords:** Career Maturity, Internship Program, Nurse Interns, Professional Commitment

### Introduction

An internship is defined as "an action where nurse interns have practical training, clinical skills and professional experience. Nurse intern's facing a hard phase during internship year due to transition from being a student to a registered nurse. Through this time, there are numerous challenges which affect their practical experience and personal lives. Transition period is the process of Creating familiar environment of a new role for nurse interns. The transition period "reality shock" expresses the feedback of receiving knowledge and skills in nursing field (Saleh, 2020).

Nurse interns students face many practical situations and work pressures that cause stress. Lack of knowledge, experience and practical skills, inability to deal with job responsibilities, negative expectations about work and presence of work load. All of the previous factors lead to negative psychological and physical effects, workplace problems and low job satisfaction. Thus there is an urgent

need to equip nursing intern's students with skills such as change management, motivation, problem solving and decision making skills (Qubati & Tammim, 2022).

Professional commitment is defined as an attitude that provides a physical, mental and emotional connection to one's work. It is also the harmony between individuals' beliefs and their determination to continue working in their profession. It is composed of three factors: a belief in the goals and values of the profession, a willingness to make an effort to understand these values and a determination to stay in one's profession. Higher professional commitment among nurse interns can reduce turnover intention, and improve professional competence, job satisfaction and the quality of patient care.

Nurse interns who possess higher professional commitment levels during their college years are believed to have improved professional commitment levels when they

become registered nurses after graduation (Parnikh et al., 2022).

The clinical environment plays a crucial role, especially in the clinical training of nurse interns, as they come into contact with the realities of their function and form opinions on their professional careers. According to person-environment fit theory, the development of professional commitment occurs as a result of the fit between individuals and their profession. When a match exists between individuals and their environment, favorable outcomes result. Therefore, Researchers argue that nurse interns will have expectations for clinical practice; if they meet their expectations, they will be satisfied with their clinical practice, and they will conclude that they are suitable for the job (Jafaraghaee et al., 2021).

Universities and colleges must prepare their students who want to enter their career directly after graduation by preparing them for entering job market. Educators believe that there is a linkage between nurse interns in an internship program and their transition to the profession. The ever changing employment market causes students to need employment preparation beyond the classroom education. Universities and colleges can provide students with educational preparation through internship program. Internship allows students to engage in career development and gaining employment skills (Lee & Joo, 2023).

### Significance of the study

Through internship year, there are many workplace difficulties that waste the effort and time of the nurse interns as no opportunity to improve clinical experiences in the clinical environment. Also pressure is multifaceted, such as the stress and difficulties one may experience due to a misfit between one's previous college studying experience and a reality framed by increased complexity of interpersonal relationships, lack of adequate clinical skills and high workloads. Tensions with clinical instructors and patients, lack of understanding and trust from patients and their family, and poor rewards can create disappointment among nursing students. They are all related to negative professional perception. Clinical practice is an essential part of nurse training that plays a crucial role in shaping professional attitude, professional emotion and professional identity (Jafaraghaee et al., 2021).

The researcher noticed that nurse interns before entering the internship year have no commitment to nursing profession, as well as they have high occupational expectation which may affect their interaction with colleagues and health team members in clinical sites.

### Aim of the Study

This study aims to assess the influence of internship program on professional commitment among nurse interns.

**The aim of this study was achieved through the following objective:**

Assess professional commitment among nurse interns' pre/ post nursing internship program.

### Research Question

- What is the influence of internship program on professional commitment among nurse interns?

### Subjects and Methods

#### I. TECHNICAL DESIGN

This design includes the details of the research design, study settings, subjects, and the tool used in data collection.

#### Research design

A pre-posttest evaluation design was used in this study to assess the influence of the internship program on nurse interns' professional commitment.

#### Study settings

The study was conducted at governmental and private hospitals affiliated to the Egyptian Ministry of Health, where nurse interns are having their training. These include the following four hospitals:

- *El-Zeitoun Specialized Hospital*: This 133-bed capacity hospital provides comprehensive care for all community members offering different specialties. It has inpatient and outpatient, emergency. And ICU services, in addition to other departments.

- *Nasser Institute Hospital*: This big hospital has a 533-bed capacity. It provides comprehensive care in different specialties such as inpatient and outpatient, emergency. And ICU services as well as other specialized departments.

- *Wadi Elnil Hospital*: The 504-bed capacity hospital provides inpatient and outpatient. Emergency. And ICU services to all members of the community.

- *El-Bank Alahli Hospital*: This hospital has 90 beds. It offers all inpatient and outpatient,

emergency, and ICU services.

### Subjects

**Sample criteria:** The study's sample consisted of 125 nurse interns enrolled in the internship year 2022-23 and having, their training in the above mentioned settings during the data collection period.

A self-administered questionnaire with one tool was used for data collection.

▪ **Tool: Professional commitment inventory:** This tool was developed by *Jafaraghaee et al. (2021)* and it was adopted by the researcher. It is intended to assess nurse intern's professional commitment. It had two parts as follows:

○ Part 1: This part was for collecting data pertaining to the nurse intern's personal characteristics such as age, Gender, work hospital, etc. as well as the previous attendance of related training courses.

○ Part 2: This consisted of a 26-item scale with a response on a five-point Likert scale ranging from "strongly agree" to "strongly disagree." They are categorized into three dimensions as follows:

▪ Professional attachment (14 items) such as: *"I have stayed in the profession at personal will and interest."*

▪ Professional performance (6 items) such as: *"As a professional, I empathize with the patient."*

▪ Internalization of the profession (6 items) such as: *"I show my abilities in front of colleagues and other healthcare professionals."*

**Scoring:** The responses from "strongly agree" to "strongly disagree" were scored from 5 to 1, with reverse scoring for negative items. The total of each dimension and the total scale were computed and converted into percentage scores. The nurse intern was considered to have high professional commitment if the score was 60% or higher and low if less than 60%.

### Tools validity

Once prepared, the self-administered questionnaire with its tool was presented to a jury group consisting of three experts from faculty members in Nursing Administration departments in various Egyptian universities for validation (one Professor and one Assistant Professor) Faculty of Nursing, Ain-Shams University. Also (one Assistant Professor) Faculty of Nursing MTI University. They assessed The relevance, clarity, and

completeness of the tool.

### Tool reliability

The reliability of the tool was tested by assessing their internal consistency. They demonstrated good reliability with Cronbach Alpha Coefficients of 0.93 for the professional commitment inventory.

## II. OPERATIONAL DESIGN

This design entails a description of the preparatory phase, pilot study, and fieldwork.

### Preparatory phase

This phase lasted from July 2022 to the end of September 2022. It included a review of the current and past, local, and international related literature. It helped the researcher to acquire theoretical knowledge of the various aspects of the study. It was done using textbooks, articles, periodicals, and scientific magazines, in addition to internet search, to modify the tool for data collection.

Moreover, during this phase, the researcher visited the selected places to get acquainted with the personnel and the study settings. The researcher also did the necessary modifications in the data collection tool under the supervisors' guidance and in the light of the experts' opinions.

### Pilot study

A pilot study was conducted at the end of September 2022 on around 10% of the main study sample to examine tool clarity, understandability, and applicability. It also helped to estimate the time needed for filling in the forms; this was found to be around 30-45 minutes. Since no changes were made in the data collection tool, these nurse interns were included in the main study sample.

### Fieldwork

After obtaining the official permission to conduct the study from the Dean of the Faculty of Nursing, at Ain-Shams University, the fieldwork was started in October 2022 at the start of the internship program. The researcher met the nurse interns individually, explained the aim of the study, and invited them to participate. Those who provided their verbal informed consent to participate were handed the data collection form and were provided with the necessary instructions to fill it in. They were asked to return the filled form anonymously. The researcher was available for any clarification and to check for completion of the form. This process was repeated at the end of the internship program in September 2023 using

the same tool and data collection procedure.

### III. ADMINISTRATIVE DESIGN

To carry out the study, the necessary approvals were obtained through official letters addressed from the Dean of the Faculty of Nursing at Ain-Shams University to each of the directors of the four hospitals. The letter explained the aim of the study and its procedures, and a copy of the data collection form was enclosed. The researcher then met with the director of each hospital to explain the aim of the work and its expected benefits. This helped in gaining their confidence and cooperation in setting the fieldwork schedule.

#### Ethical considerations

Before embarking on fieldwork, an ethical approval of the study protocol was obtained from the Scientific Research Ethical Committee at the Faculty of Nursing, Ain Shams University. The researcher met with each of the four hospital directors where the nurse interns had their training internship program, clarified the aim of the study, and got their approval. The researcher then met with the nurse interns to explain the purpose of the study and to obtain their informed verbal consent to participate. They were reassured about the anonymity and confidentiality of the data collected, and that it would be used only for scientific research. The subject's right to refuse participation or to withdraw from the study at any time was ensured. The study maneuvers could not entail any harm on participants.

**Ethical code : 24.12.444**

### IV. STATISTICAL DESIGN

Data entry and statistical analysis were done using the SPSS 20.0 statistical software package. Data were presented using descriptive statistics as frequencies and percentages for qualitative variables and means and standard deviations and medians for quantitative ones. Cronbach alpha coefficient was calculated to assess the reliability of the tool through their internal consistency. Qualitative categorical variables were compared using the chi-square test. Spearman rank correlation was used to assess the relationships between quantitative and ranked variables. To identify the independent predictors of the professional commitment scores multiple linear regression analysis was used. Statistical significance was considered at  $p$ -value  $<0.05$ .

## Results

**Table 1** shows that the study sample consisted of 125 nurse interns aged 21 to 31 years, with a median of 23.0 years as presented in Table 1. The majority were males (75.2%), with a general pre-university education (81.6%).

**Figure 1** demonstrates that slightly more than one-third (35.2%) of the nurse interns had their internship in Nasser Institute. On the other hand, the lowest percentage (17.6%) was in Wadi Elnil Hospital.

**Figure 2** illustrated that the majority of the nurse interns reported previous attendance of training courses in professional commitment (84.0%) and professional guidance (83.2%)

**Table 2** indicates that the majority of the nurse interns had high professional commitment at the start of the internship program exceeding 90% in all its three dimensions. No statistically significant changes were noticed in any of the three dimensions at the end of the program.

**Figure 3** In total, demonstrates that 92.8% of the nurse interns in the study sample had a high professional commitment at the start of the internship program. This slightly declined to 90.4% at the end of the program, with no statistically significant difference ( $p=0.49$ ).

**Table 3** demonstrates that the only statistically significant relation between nurse interns' professional commitment at the program start and their characteristics was with their work hospital ( $p=0.001$ ). It is evident that the lowest percentage of nurse interns with high professional commitment was among those working in Wadi Elnil Hospital.

**Table 4** shows statistically significant relations between nurse interns' professional commitment at the end of the program and their pre-university education ( $p=0.003$ ) and their work hospital ( $p<0.001$ ). As the table shows, professional commitment was higher among those having general pre-university education and was lowest among those working in Wadi Elnil Hospital.

**Table 5** shows that the scores of nurse interns' professional commitment dimensions had statistically significant moderate to strong positive inter-correlations. This was noticed at the program's start, end, and overall. The strongest correlation was between nurse interns' scores of performance and attachment at the end of the program ( $r=0.768$ ).

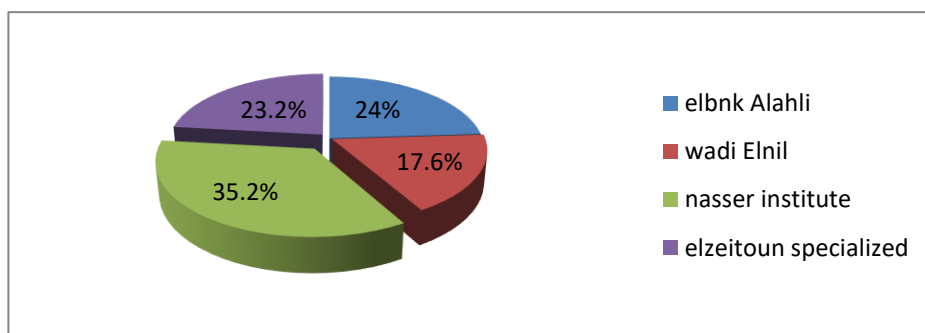
In multivariate analysis, **Table 6** shows that the statistically significant independent

positive predictor of nurse interns' professional commitment score was the internship program. On the other hand, their female gender, work in Wadi-Elnil Hospital, and previous training in

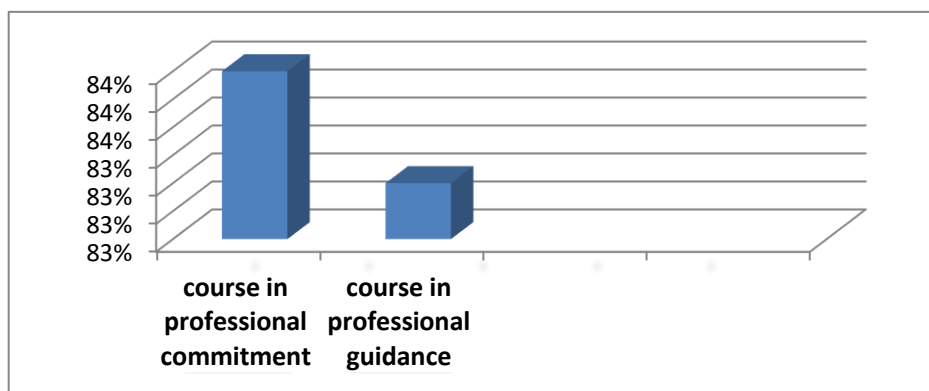
commitment were negative predictors. The model explains 21% of the variation in the professional commitment score.

**Table 1:** Demographic characteristics of nurse interns in the study sample (n=125)

			Frequency	Percent
Age:			80	64.0
<24				
24+			45	36.0
Range			21-31	
Mean $\pm$ SD			23.3 $\pm$ 1.5	
Median			23.0	
Gender:				
Male			94	75.2
Female			31	24.8
Pre-university education:				
General			102	81.6
Technical			23	18.4



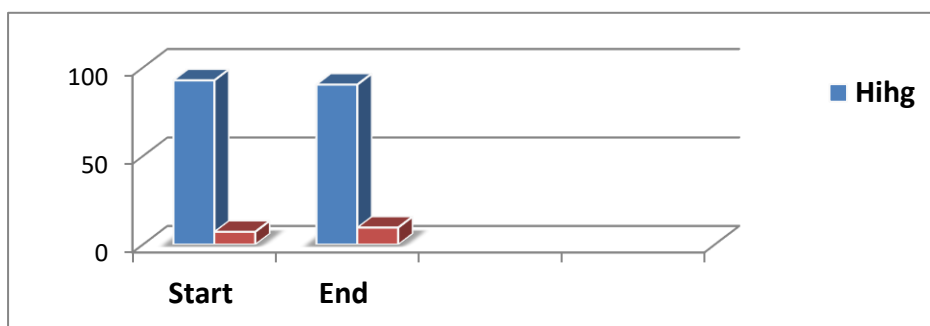
**Figure 1:** Distribution of nurse interns in the study sample by work hospitals (n=125)



**Figure 2:** Attendance of training courses as reported by nurse interns in the study sample (n=125)

**Table 2:** Professional commitment of nurse interns at the start and end of their internship

High (60%+) professional commitment	Internship				$\chi^2$ test	p- value
	Start (n=125)		End (n=125)			
	No.	%	No.	%		
Professional attachment	119	95.2	111	88.8	3.48	0.06
Professional performance	113	90.4	117	93.6	0.87	0.35
Internalization of profession	116	92.8	111	88.8	1.20	0.27

**Figure 3:** Professional commitment of nurse interns at the start and end of their internship.**Table 3:** Relations between nurse interns' professional commitment at the start of internship and their characteristics

characteristics

	Professional commitment				test	p-value
	High		Low			
	No.	%	No.	%		
Age:						
<24	73	91.3	7	8.8		
24+	43	95.6	2	4.4	0.80	0.37
Gender:						
Male	89	94.7	5	5.3		
Female	27	87.1	4	12.9	2.01	0.16
Pre-university education:						
General	96	94.1	5	5.9		
Technical	20	87.0	3	13.0	1.44	0.23
Hospital:						
Elzeitoun Specialized	29	100.0	0	0.0		
Wadi Elnil	14	63.6	8	36.4	34.18	<0.001*
Elbank Alahli	30	100.0	0	0.0		
Nasser Institute	43	97.7	1	2.3		
Attended courses in professional commitment:						
No	20	100.0	0	0.0		
Yes	96	91.4	9	8.6	1.85	0.17
Attended courses in professional guidance:			0			
No	21	100.0		0.0		
Yes	95	91.3	9	8.7	1.96	0.16

(\*) Statistically significant at  $p < 0.05$

**Table 4:** Relations between nurse interns' professional commitment of at the end of internship and their characteristics

	Professional Commitment				X <sup>2</sup> test	p-value
	High		Low			
	No.	%	No.	%		
Age: <24  24-1-	73 40	91.3 88.9	7 5	8.8 11.1	0.19	0.67
Gender: Male Female	87 26	92.6 83.9	7 5	7.4 16.1	2.03	0.16
Pre-university education: General Technical	96 17	94.1 73.9	6 6	5.9 26.1	8.83	0.003*
Hospital: Elzeitoun Specialized Wadi Elnil Elbank Alahli Nasser Institute	27 14 30 42	93.1 63.6 100.0 95.5	 2 8 0 2	6.9 364 0.0 4.5	22.88	.<0.001 *
Attended courses in professional commitment: No Yes	17 96	85.0 91.4	 3 9	15.0 8.6	0.80	0.37
Attended courses in professional guidance: No Yes	19 94	90.5 90.4	. 2 10	9.5 9.6	0.00	1.00

**Table 5:** Correlation matrix of nurse interns' professional commitment scores at the start and end of internship and overall.

Professional commitment	Spearman's rank correlation coefficient		
	Attachment	Performance	Internalization
Start (n=125)			
Attachment	1.00		
Performance	.753"	1.00	
Internalization	.676"	.536"	1.00
End (n=125)			
Attachment			
Performance	.768"	1	
Internalization	.663"	.728"	
Overall (n=250)			
Attachment	1.00		
Performance	.750"	1.00	
Internalization	.667"	.653"	1.00

(\*\*) Statistically significant at  $p < 0.01$

**Table 6:** Best fitting multiple linear regression model for the professional commitment score.

	Unstandardized Coefficients		Standardized Coefficients	t-test	P-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Constant	27.64	4.27		6.478	<0.001	19.24	36.05
Internship program	10.63	1.58	0.38	6.740	<0.001	7.52	13.73
Female gender	-3.59	1.83	-0.11	1.962	0.051	-7.19	0.01
Wadi Elnil hospital	-1.56	0.68	-0.13	2.306	0.022	-2.89	-0.23
Course in commitment	-7.75	2.16	-0.20	3.587	0.001	-12.00	-3.49

R-square=0.21

Model ANOVA:  $F = 16.465$ ,  $p < 0.001$

Variables entered and excluded: age, pre-university education, courses in guidance

## Discussion

Nursing internship program is a system of instruction and experience coordinated within an academic setting and leading to the acquisition of the knowledge, skills, and attributes essential to the practice of professional nursing. As nurse intern come into contact with the realities of the function and form opinions on their professional careers. When a match exists between individuals and the environment, favorable outcomes result. Therefore, the nurse interns will have expectations for clinical practice; if nurse interns meet the expectations, will be satisfied with the clinical practice, and conclude that are suitable for the job (Jafaraghaee et al., 2021)

This study aimed to assess the influence of internship program on professional commitment and career maturity among nurse interns through a pre / posttest evaluation

design. The results indicate the internship program was the main statistically significant independent positive predictor to nurse interns' career maturity score, also to their professional commitment score. This confirmed the research question, what is the influence of internship program on professional commitment and career maturity among nurse interns?

The majority of study subjects were young age, meanwhile age range between twenty one to thirty one, this might due to the registration policy of the faculty that accepts graduated of technical institute of nursing regardless graduation year. Additionally high percentage of nurse interns was male, this could be attributed to the high popularity of nursing education among male students. The majority of the nurse interns reported previous attendance of training courses in professional commitment and professional guidance.



In agreement with this present study finding, study on Chinese students Sarkoohi et al., (2024) who studied “the effect of internship programs on nursing students’ critical thinking disposition, caring behaviors, and professional commitment” and found that the mean age of participants was the same range of age. While disagreed with Study on Egyptian students Ahmed et al., (2019) who found that more than half were female and, majority of studied subjects aren’t attending career class.

According to the present study results, the majority of the nurse interns had high professional commitment at the start of the internship program exceeding ninety percent in all its three dimensions, this might be due to professional commitment began from the study years which enhance the level of professional commitment among the nurse interns at the start of the internship program. The finding is in agreement with study on Egyptian students **Bahari et al., (2022)** who studied “The effect of nursing internship program on burnout and professional commitment” and found that total professional commitment was relatively high before internship program. While in congruence with study on Korean students **chang et al., (2019)** who assessed “the level of professional commitment among nurse students before and after internship: and found that low scores for commitment among nurse students post internship.

Overall, nursing professional commitment refers to the recognition of nurses, including willingness to exert effort, willingness for career involvement, positive professional assessment, and recognition of professional value. This current result agreed with study on Chinese students Lu & Lin (2021) & Chen et al., (2022) found that there was no statistically significant relationship between the other two career maturity dimensions (consultation and curiosity) and professional commitment. While, this current result disagreed with study on European students Wang & Li (2022) & Liao (2021) there was statistically significant relation between the career maturity dimension (curiosity) and professional commitment.

Additionally, the scores of nurse interns’ professional commitment dimensions had statistically significant moderate to strong positive inter-correlations. This was noticed at the program’s start, end, and overall. The

strongest correlation was between nurse interns’ scores of performance and attachment at the end of the program, might due to good performance means like the profession which reflect on attachment that increase professional commitment.

This current result agreed with Ahmed et al., (2019) & Sarkoohi et al., (2024) found that the scores of nurse interns’ professional commitment dimensions had statistically significant correlation was between nurse interns’ scores of performance and attachment.

While, this current result disagreed with Parnikh et al (2022) & Qubati & Tammim, (2021) reported that the scores of nurse interns’ professional commitment dimensions hadn’t statistically significant correlation was between nurse interns’ scores of performance and attachment.

The present study finding, demonstrates that the statistically significant independent positive predictor of nurse interns’ professional commitment score was the internship program. This might be due to internship program is new experience which enhance different skills to nurse interns that reflect positive on their professional commitment. This current result agreed with Nurani (2022) & Ismail et al., (2018) found that there were correlations statistically significant between nurse interns’ professional commitment scores and internship program. While, disagreed with Song (2020) & Li (2019) found that there wasn’t correlation statistically significant between nurse interns’ professional commitment scores before and after internship program.

Regarding correlation matrix of nurse interns’ professional commitment scores at the start and end of internship program and overall, this current study result revealed the correlation coefficients between nurse interns’ professional commitment scores at the start of the internship program, at the end of the internship program, and overall. None of the correlations are statistically significant.

From researcher perspective, this might be due to there is no evidence of a relation between a nurse interns’ professional commitment score at one time point and their score at another time point.

This current result agreed with **Nurani (2022) & Ismail et al., (2018)** found that there were no correlations statistically significant between nurses’ internes professional commitment scores. While, disagreed with **Song (2020) & Li**

(2019) found that there were correlations statistically significant between nurses' professional commitment scores before and after internship program.

### Conclusion

This study was undertaken to assess the influence of internship program on professional commitment among nurses' internes. The study findings concluded that the correlation coefficients between nurses' professional commitment scores at the start of the internship, at the end of the internship, and overall. None of the correlations are statistically significant. In addition, revealed that high professional attachment, professional performance, and internalization of the profession slightly decreased by the end of the internship program. However, the overall, total professional commitment remained relatively stable, with a minor decrease. There was the influence of internship program on professional commitment among nurse interns, this confirmed the research question.

### Recommendations

- More emphasis should be given to the feedback on the nurse interns' performance and opinion about their progress should be considered to determine the strengths and weakness of the internship program.
- Conduct the on-the-job training, workshops and seminars, and other continuing education activities to enhance professional commitment and career maturity.
- Maintain that the educational environment encourages career maturity, as nursing instructor, play a key role in the development of nurse intern's career
- Conduct periodical meeting between faculty management and nurse interns for discussing opportunities of career development.

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