

## Demographic Profile on Professional Behavior among Nursing Students in Indonesia

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**Abstract.** Professionalism in nursing is a self-identity for every nurse. The learning of its concept begins in the academic stage through subjects and the hidden curriculum. Learning strategies have been investigated to develop professionalism values among students. Aspects that affect professional behaviour need to be conveyed. This study aims to identify the correlation between the demographic profile and nurse students' professional behaviour in Indonesia. This study used a correlational design with a cross-sectional approach. A sample of 291 student nurses across Indonesia was involved and selected by quota sampling. The questionnaire used the NSPBS adapted for Indonesian students and was given through the online survey platform. The non-parametric test using the Mann-Whitney U and Kruskal Wallis tests was chosen because the data were not normally distributed. The total mean value was 92.37. The variables' test showed there was no correlation between province and sex with professional behavior with  $p = 0.931$  and  $p = 0.945$ , respectively. Meanwhile, there were significant correlations between the age and course toward professional behavior ( $p = 0.007$  and  $p = 0.012$ ). In this study, it was found that the older age and the extension course program showed a higher score on professional behavior. The difference is in healthcare practice and activity practice which may be shaped by work experience. Conclusion: Students' demographic profiles need more investigation as it is an antecedent of the professionalism concept.

### 1. Introduction

Professional behaviour in nursing is something that nurses must possess because they work by involving humans and caring [1,2]. Professional behaviour becomes a description of the nurse's identity, which will positively impact this profession. Hospitals, workplaces and service users will significantly benefit from this behaviour because it means that nurses provide the best service according to professional standards [2]. Nursing is a profession that has a code of ethics that includes the professionalism of nurses.

Nursing professionalism consists of cognitive, attitudinal and psychomotor dimensions [3]. There are several opinions regarding the meaning of professionalism: behave according to ethical principles, have good knowledge, provide integrated services, have sufficient skills, autonomy, collaborate and altruism [4,5]. Several studies on professionalism aspects have almost the same elements, such as

Geckil, who identifies characteristics, namely caring, professionalism, activism, justice and truth [6]. Weis and Schank's well-known work categorised this concept into three dimensions: ethics, professional expertise, and professional mastery [7]. The later work, which is proven to be culturally sensitive, is widely used to measure nursing students' professionalism [8]. The difference in perspective and definition occurs because of nursing professionalism's complex nature [3].

A lecturer can teach professionalism through a hidden curriculum [9] that involves all subjects and role modelling. It is because students cannot master professional skills quickly. Professionalism is learned by students in the clinical stage through observation, understanding and learning from feedback [1]. This material is very culturally sensitive, which can differ in each culture [10,11]. During the academic stage, students receive material and undergo a professional learning process. Students are still confused about this concept and require guidance and role models [12]. Academic educators and clinical instructors are role models for students who will display professionalism in acting both when caring for patients or developing their professional identity [12,13]. A solid strategy on learning professionalism is a key that needs to be investigated [14].

In connection with nursing students' professionalism who have different characteristics in terms of culture from other countries, it is necessary to investigate professionalism in Indonesia. This study aims to identify the correlation between the demographic profile and nurse students' professional behaviour in Indonesia, involving students in all provinces in Indonesia.

## 2. Material and methods

This study's design was correlational with the student population of nurses throughout Indonesia who had gone through clinical experience. At the time of this pandemic, not all student nurses had passed clinical practice. Therefore, the inclusion criteria in this study were nurse students who had passed clinical practice. The exclusion criteria were students at the clinical stage who took leave during the study period. The sampling technique was quota sampling with 291 respondents.

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Ethical approval was obtained from the Ethical Board of the Faculty of Health Sciences, Jenderal Soedirman University Indonesia (Registration Number: 087 / EC / KEPK / IV / 2020). Data collection was conducted with the survey monkey platform distributed to representatives in all provinces in Indonesia. Respondents received an explanation about anonymity, research objectives, how to participate in the study, and reward. Approval to become a respondent is done by clicking the agree button and proceeding to the next page to fill in demographic data. The average time for filling out the questionnaire was 8 minutes.

Behaviour score data were not normally distributed with the Kolmogorov-Smirnov ( $p = 0.000$ ), so that the data analysis used the non-parametric test, Mann-Whitney U and Kruskal Wallis tests. Sex, program, and age data were compared with the professionalism behaviour scores analysed with the Mann-Whitney U test, while the provincial comparison and the behaviour scores were analysed using the Kruskal Wallis test. The level of significance is at 0.005.

## 3. Results and discussions

From table 1, most respondents came from Sumatra (36.8%) and Java (29.9%). Female respondents (68.7%) amounted to 2 times that of male (31.3%). The majority of respondents were under 25 years old (81.8%), ranging from 22 to 50 years. Because the number of respondents aged over 25 and above is small, the statistical calculation is recoding to become 2 categories, namely under and over 25 years old. 81.1% of respondents were students whose previous education was high school. The average score of professional behaviour is 92.37, with a minimum score of 66 and a maximum score of 108.

**Table 1.** Demographic profile of the respondents

<b>Variable</b>	<b>n = 291 (100%)</b>	<b>Mean total = 92.37 ± 9.61</b>	<b>p Value NSPBS Score</b>	<b>Healthcare Practice</b>	<b>Activity Practice</b>	<b>Reporting</b>
<b>Island</b>						
Sumatera	107 (36.8%)	92.59 ± 9.72	0.931	0.970	0.628	0.542
Java	87 (29.9%)	92.59 ± 8.94				
Kalimantan	52 (17.9%)	92.34 ± 10.41				
Bali & Nusa	18 (6.2%)	92.33 ± 8.95				
Sulawesi and East Indonesia	27 (9.3%)	90.85 ± 10.62				
<b>Age (year)</b>						
Under 25	238 (81.8%)	91.62 ± 9.39	0.007	0.004	0.022	0.105
25 year and above	53 (18.2%)	95.75 ± 9.94				
<b>Sex</b>						
Female	200 (68.7%)	91.56 ± 9.39	0.945	0.989	0.936	0.489
Male	91 (31.3%)	97.78 ± 9.42				
<b>Course Program</b>						
Regular	236 (81.1%)	91.66 ± 9.40	0.012	0.008	0.016	0.340
Extension Program	55 (18.9%)	95.43 ± 9.97				

There was no correlation between the province of origin ( $p = 0.931$ ) and sex ( $p = 0.945$ ) and behaviour score. However, age and course program correlate with behaviour, with  $p$  values of 0.000 and 0.012, respectively. The behaviour score has three dimensions that showed the same correlation pattern as the demographic data and the behaviour score. Province of origin and sex did not correlate with the three-dimension behaviours ( $p$  value > 0.005). Age showed a correlation with the three dimensions, and the course program showed the correlation between healthcare practice and activity practice dimensions. Meanwhile, the reporting dimension of the course program showed a  $p$ -value of 0.340.

**Table 2.** Groups mean score and standard deviations of nursing students

<b>Variables</b>	<b>n = 291 (100%)</b>	<b>Healthcare Practice</b>	<b>Activity Practice</b>	<b>Reporting</b>
<b>Island</b>				
Sumatera	107 (36.8%)	63.01 ± 6.14	23.53 ± 3.17	6.04 ± 1.39
Java	87 (29.9%)	63.28 ± 6.11	23.54 ± 2.74	5.77 ± 1.38
Kalimantan	52 (17.9%)	63.26 ± 6.95	23.11 ± 3.24	5.96 ± 1.41
Bali & Nusa	18 (6.2%)	63.00 ± 6.17	23.55 ± 2.66	5.77 ± 1.11
Sulawesi and East Indonesia	27 (9.3%)	62.22 ± 7.10	22.81 ± 3.10	5.81 ± 1.35
<b>Age (year)</b>				
Under 25	238 (81.8%)	62.58 ± 6.24	23.18 ± 2.92	5.84 ± 1.35
25 year and above	53 (18.2%)	65.22 ± 6.38	24.33 ± 3.16	6.18 ± 1.45
<b>Sex</b>				
Female	200 (68.7%)	63.03 ± 6.43	23.36 ± 3.03	5.89 ± 1.28
Male	91 (31.3%)	63.14 ± 6.17	23.46 ± 2.94	5.94 ± 1.55
<b>Course Program</b>				
Regular	236 (81.1%)	62.61 ± 6.25	23.17 ± 2.93	5.87 ± 1.35
Extension Program	55 (18.9%)	65.01 ± 6.39	24.34 ± 3.11	6.07 ± 1.46

In Table 2, the mean scores of healthcare practice, activity practice and reporting on island and sex are not much different. Whereas age 25 year and above, the three aspects' mean score was consistently higher than the younger generation. In the course program, the extension program has a mean score that is higher than the regular program. However, the p-value for the reporting aspect of all variables listed in Table 1 shows no difference.

The total mean value of assessing the nurse students' professional behaviour was 92.37, with a standard deviation of 9.61. With a minimum value of 27 and a maximum of 108, this number is considered high. Several other studies, including those using different assessment instruments in Spain, Macau, Egypt, Turkey, Iran and Nigeria, showed a high professionalism score [8,13,15,16,17] The difference is the value on the dimensions that shape professionalism and the variables that cause

the value difference. In this study, the student nurse profile was investigated, including the province of origin, sex, age, and course program.

Respondent provinces showed no correlation with behaviour scores ( $p = 0.989$ ). Residential areas of respondents throughout Indonesia are divided into five parts, which are a combination of islands. Although the respondents reside in all provinces, the number of respondents per province is not balanced, merging into five sections. Nursing higher education spreads throughout the province and has higher education associations that also regulate the learning curriculum. In the curriculum, aspects of professionalism are included in the subjects. The same core curriculum that contains professionalism results in no difference in professionalism behaviour based on the province of origin. To date, studies on professionalism involving student representatives in all provinces or states in other countries were only a few [18], so that this study can be a reference for research on a national scale.

The results of this study indicated that sex and behaviour do not correlate ( $0.989$ ). In this study, female ( $n = 200$ , 68.7%) doubled the number of male ( $n = 91$ , 11.3%). The mean score of female behaviour was 91.56, and the mean score of male's behaviour was 6 points higher. Three aspects also showed no difference with  $p > 0.005$ . In a study on the ethical aspect as part of professionalism, it was found that there was no significant relationship between ethical aspects with age, sex, GPA, academic semester and being a nurse or student. However, in the student group, females had a higher mean ethical score than males [19]. This result is also in line with research in Spain and Nigeria, which showed no correlation between sex and professionalism scores [8,16]. In other studies, it was also found that the mean female professional score was higher in female, and there was a correlation between sex and professional scores [2,20,21]. While in this current study, the authors found the mean of the female professional score was lower. This difference may be because these studies have different characteristics and sample sizes. These different results require further investigation by involving a larger sample and have the same characteristics as students in clinical practice.

Significant results were seen on the course program and age compared with behaviour scores with  $p$ -values of 0.012 and 0.007, respectively. Age can describe a person's course program. The regular course program has the characteristics of students who are under 25 years old. While the extension program, which is usually a nurse with a diploma graduate continuing the bachelor's degree, is more than 25 years old. The mean value on the course program, extension program is higher than regular. Likewise, with age, respondents aged 25 years and above have a higher mean value than younger respondents. A more mature age has a higher value because professionalism develops according to age and work experience [15,18]. In the current study, students from the extension program mostly already have work experience. Nurses who are professional organisations or nursing area memberships have a full professional value [21]. Work experience makes nurses more confident in healthcare practice and activity practice because these dimensions include clinical skills, ethics, ability to communicate, and self-development. Meanwhile, in the reporting dimension where nurses were involved in a conflict, there was no difference between regular and extension programs ( $p = 0.340$ ).

This result does not follow Mohamed's research which stated that younger nursing students have a higher mean value of professionalism than nurses [17]. However, maturity, age and work experience are significantly related to aspects of professional identity. Likewise, research in Turkey found that professional scores at the age of 24 years and above were lower than those aged 23 and under [21]. The difference in results at this age has not been able to conclude that increasing age enhances professionalism values. The antecedent of professionalism that is a demographic factor [3] requires more exploration so that the internalisation of this concept is applied appropriately.

#### **4. Conclusion**

The current findings indicated that professional behaviour has a significant correlation with age and course program. Dimensions of healthcare practice and activity practice on age and course program variables also showed a significant correlation, except for the dimension reporting on the course program variable, which is not related. This study revealed that professional behaviour enhanced with increasing age and work experience needs further investigation with many samples and similar

numbers between groups. This study enriches the concept of nursing professionalism in which academic educators can consider to design its learning during school.

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