Original Article

Professional Self-Concept in Nurses and Related Factors: A Sample from Turkey

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Abstract

Background: Professional self-concept is a strong factor affecting nursing shortage. Although there are studies on nurses' professional self in the international literature, there is not enough data on this subject in Turkey.
Objectives: The purpose of this study is to determine professional self-concept among nurses working in hospitals and related factors.
Methods: This descriptive and cross-sectional study was carried out with 2165 nurses. The data were collected with the Socio-demographic Questionnaire, Professional Self-Concept Inventory and Self-Esteem Inventory.
Results: The nurses' professional self-development scores were assessed as high. A significant positive relationship was determined between the nurses' professional self and self-esteem scores. Professional self-concept was significantly higher in the nurses who were older, more experienced, female and master's degree graduates than in the nurses who were younger, less experienced, male and high school graduates.
Conclusions: Nurses working in Turkey have a well-developed professional self-concept and high self-esteem. Nurses' professional self-concept is affected by their personal characteristics and working conditions. In addition, the level of self-esteem plays a role in the development of professional self as well. This study not only provides useful information for nurse educators and nurse managers but also offers a data source for future studies to be conducted on this issue in Turkey.

Key Words; nursing shortage, professional self concept, register nurse, self esteem, Turkey.

Introduction

Nursing shortage has become an issue of international importance, because most of the experienced nurses leave the nursing profession and young people do not choose nursing as a profession (Jonhson et al., 2012). Several international studies have determined that from 9 up to 26% of the nurses express intentions to leave the profession (Heinen et al., 2013; Flinkman et al., 2008; Cortes, 2012; De Milt et al., 2011). A study conducted in Turkey was found 15.4% of the nurses express intentions to leave the profession (Sabancıoğulları & Doğan, 2014). Whereas the number of the nurses per 1000 persons is 8.4 in OECD countries, 10.8 in the United States and 9.7 in the UK, it is only 1.56 in Turkey (Health at a Glance, OECD

Indicators, 2011). The majority of the actively working nurses are younger than 30 years (Ulker et al., 2001). There are a lot of factors affecting their decision to leave the profession. Nurses' professional self concept and commitment to the profession are a strong factor influencing to leave the profession (Sabancıogullari & Doğan, 2014). Vliegher et al. (2011) determined that of the reason why nurses left the profession the most important one was the lack of professional self among nurses. Sharbaugh (2009) found a significant correlation between nurses' professional self and their intent to stay and commitment to the profession. Professional self which has a central meaning like "occupational integration" is the perception of oneself as a member of a profession (Fagermoen, 1997; Gregg & Magilvy, 2001). Professional self is

defined as the professional knowledge, skills, attitudes, values and beliefs shared in a professional team (Adams et al., 2006; Crossley&Vivekananda-Schmidt, 2009).

Development of professional self begins when a student begins nursing education and continues throughout the process of professional socialization. During the theoretical and practical education process, students internalize professional knowledge, skills, attitudes, values and ethical standards, and integrate them with their self-identity and behaviors (Fagermoen, 1997; Gregg & Magilvy, 2001). Self-concept underlies the development of professional self. Strong self-concept contributes to the positive development of professional self (Strasen, 1992). Gregg & Magilvy (2001) determined that professional training and personal-self affected the development of professional self.

Developing a positive professional self-concept is important not only for nurses but also for their patients, colleagues and profession (Johnson et al., 2012). Members of a profession with a strong sense of professional self can achieve changes likely to positively influence them and their patients, colleagues and profession (Strasen, 1992; Johnson et al., 2012). Nurses having a strong sense of professional self can provide high quality nursing care, represent the nursing profession in the community and health care settings well and help nursing profession gain the professional status. In addition, several studies on the issue have determined that members of a profession with a strong sense of professional-self have high job satisfaction but low burnout levels and that their intent to leave the profession is low. (Branch, 2007; Deppoliti, 2008; Sharbaugh, 2009). On the other hand, insufficient professional self can lead to such problems as not having a voice in the professional field, failing to meet professional standards or to successfully fulfill the role of nursing, job dissatisfaction, burnout and resignations (Costello, 2004; Deppoliti, 2008). Therefore, it is of great importance to determine the level of nurses' professional self-development. In many countries, studies on the development of professional self-concept among nurses and factors related to the issue have been performed (Arthur & Thorne, 1998; Arthur et al., 1998; Gregg & Magilvy, 2001; Weller et al., 2006; Siebens et al., 2006; Kelly & Courts, 2007; Deppoliti, 2008; Hendel & Kagan, 2011; Kim-

Godwin et al., 2010; Vliegher et al., 2011). Although Turkey is a country experiencing an intense shortage of nurses, it is unfortunate that such a study has not been conducted in Turkey. Determining the level of nurses' professional self-development can contribute to the development of strategies targeting to solve problems related to employment, intent to stay in the profession and the image and development of the profession. Therefore, this study aimed at investigating professional self-concept among nurses working in hospitals and related factors.

Methods

The study was conducted as a descriptive and cross-sectional one. The study population was determined using the Health Statistics Yearbook released by Turkish Ministry of Health in 2010. According to this yearbook there are 55,000 nurses working in university, state and private hospitals in Turkey. These nurses comprised the population of the study (Ministry of Health of Turkey 2010). The participants of the study were selected using the stratified sampling method (i.e. proportional selection method). Turkey is divided geographically into seven regions. Each of the regions was considered as a stratum and the number of the nurses to be included in the study from each region was calculated in proportion to the number of the nurses in that region. As a result, 2365 nurses working full time and actively involved in patient care in the internal medicine and surgical units of hospitals within these seven regions of Turkey were selected for the study sample.   The data collection continued until the predetermined sample size was attained. When the sample size was achieved, the data collection phase was closed. Two-hundred nurses were excluded from the study because they did not fill out the forms accurately; therefore, the study was completed with 2165 nurses. The sample represents 4 % of the study population. A research coordinator was appointed for each province in the seven regions included in the sample. The coordinators were selected from among college students in nursing education. Before the data collection, an informational meeting about the study was held with the coordinators. The coordinators met with the hospital's head nurse in each hospital to inform them about the study, and upon the approval of the head nurse, they interviewed nurses in the clinics to take nurses' consent. Data collection forms were distributed to the

nurses by the interviewers. The coordinators explained the purpose and importance of the study to the nurses, and the nurses who agreed to participate in the study filled in the forms independently. Nurses were asked not to place their names on the form. The forms were collected on the same day.

The data were collected using a form and the two scales. *Personal Information Form (PIF);* This form consists of 5 questions including information such as age, gender, education, working year, working position of nurses. *Professional Self Concept Inventory (PSCI);* The PSCI was developed by Sabanciogullari et al. (2011) within the sample of hospital nurses. The inventory is a four-point Likert type assessment inventory (1 = "I totally disagree" and 4 = "I totally agree") consisting of 36 items with three subscales: 'professional satisfaction', 'professional competence' and 'professional attitude and skill'. Professional satisfaction (five items) refers to nurses' professional satisfaction and is the person's perception of themselves as the member of the profession. Professional competence (seven items) includes questions of oneself in terms of professional qualifications, such as problem solving skills, decision-making, professional knowledge and skills, and professional competency required to perform the nursing profession. Professional attitude and skill (24 items) includes questions regarding feelings, thoughts and beliefs related to the fulfilment and the qualifications of the profession. The scores obtained for each item are summed to determine the total score. The higher the score, the better and the more advanced the professional self-concept is. Sabanciogullari et al. (2011) have reported the total Cronbach's alpha coefficient of the inventory as 0.87. In the present study, the total Cronbach's alpha coefficient of the inventory was 0.81.

The Coopersmith Self Esteem Inventory (SEI); For the purpose of determining the students' the level of self esteem, The Coopersmith Self Esteem Inventory (SEI), developed by Stanley Smith (1986), and which was adapted to Turkish and whose validity and reliability studies were done by Turan & Tufan (1987) was used. The tool was found to have a test retest reliability of r = 0.76. In this way the Turkish SEI has been determined to be a reliable instrument. Coopersmith SEI consists of 25 questions that can be marked as ''like me'' or ''not like me''.

The substances in scoring are given a score of 4, the others are given a score of 0. The scores can range from 0 to 100. These items contain statements about individuals' outlook on life, family relationships and strength of resistance. Self esteem does not have a certain limit. Therefore, the scores obtained below the mean indicate low self esteem, and those above indicate high self esteem. For the evaluation of the data, the SPSS 16.0 package program was used. For the statistical analysis of the data, One-Way ANOVA, independent-samples t-test and Pearson correlation analysis were used.

Ethical approval was obtained from the Gaziosmanpasa University Ethics Committee (Decision no.83116987-050). This research was conducted after getting the permission of the Directorate of Head Physician and Nursing Services of the public and the university hospitals. According to the Declaration of Helsinki, the nurses were requested to participate in this study by explaining the purpose of the study orally. The study's objectives and procedures were orally explained to the participating nurses and they were informed that their anonymity would be guaranteed, their participation and withdrawal would be of their own free will, and the refusal to participate or a withdrawal of consent would not result in any negative consequences.

Results

The distribution of the nurses' overall and sub-scale mean scores for Professional Self-Concept Inventory (PSCI) is given in Table 1. The nurses' overall mean PSCI scores (109.17±12.33) and mean scores for professional competence (22.35±3.09), attitudes and skills subscales (73.61±8.34) were determined to be high and positive. However, their mean professional satisfaction subscale scores (13.20±3.41) were determined to be moderate. The nurses' mean scores for the Coopersmith Self-Esteem Inventory are given in Table 2. The nurses' mean self-esteem scores (71.38±15.46) were above average. In table 3, the nurses' overall mean scores for the PSCI are compared with their socio-demographic and work characteristics. While the nurses in the 31-40 (M±SD=110.02±12.21) and 41 and over age groups (M±SD=112.93±12.01) achieved the highest PSCI scores in the study, nurses between the ages of 26 and 30 (M±SD=107.82±11.83)

obtained the lowest scores. Female nurses' overall mean PSCI scores (M±SD=109.27±12.32) were significantly higher than were those of the male nurses (M±SD=106.48±12.35) (p<0.001).

Table 1. Nurses' Overall and Sub-scale Mean Scores for Professional Self-Concept Inventory (PSCI) (N=2165)

PSCI General and Subscales	X	SD	Min[a]	Max[a]
PSCI general	109.17	12.33	38 (36)	144 (144)
Professional satisfaction	13.20	3.41	5 (5)	20 (20)
Professional competence	22.35	3.09	7 (7)	28 (28)
Professional attitude and skill	73.61	8.34	25 (24)	96 (96)

a. Numbers in parentheses are the tools' minimum and maximum obtainable values
PSCI, Professioal Self Concept Inventory

Table 2. Nurses' Mean Scores for Coopersmith Self Esteem Inventory (SEI) (N=2165)

SEI	X	SD	Min[a]	Max[a]
Coopersmith Self Esteem Inventory	71.38	15.46	0 (0)	100 (100)

a. Numbers in parentheses are the tools' minimum and maximum obtainable values
SEI**,** The Coopersmith Self Esteem Inventory

Table 3. Comparison of Nurses' Mean Scores for Professional Self-Concept Inventory (PSCI) With Their Demographic Characteristics (N=2165)

Variables	PSCI general M±SD	*Test*
Age (years)		
18-25 (n=343)	108.02±13.28	
26-30 (n=746)	107.82±11.83	*F =10.72*
31-40 (n=910)	110.02±12.21	***p=0.000***
41 or more(n=166)	112.93±12.01	
Mean of age; X±SD= 31.47±6.07		
Gender		
Women (n = 2084)	109.27±12.32	*t=2.00*
Male (n = 81)	106.48±12.35	***p=0.040***
Educational level		
Health occupation college (n = 443)	108.11±13.00	
Associate degree (n = 925	109.37±11.71	*F =5.40*
Graduate(Baccalaureate) (n = 746)	109.14±12.29	***p =0.010***

Master's degree (n = 51)	115.29±15.77		
Duration of work			
1-5 (n=725)	107.13±12.51		
6-10 (n=526)	108.89±12.45	*F =19.8*	
11 or more (n=914)	110.94±11.85	*p=0.000*	
Position at work			
Service nurses (n = 1799)	108.51±12.23		
Chief nurses (n = 302)	113.14±11.56	*KW=41.3*	
Head Nurse (n = 47)	108.00±16.23	*p=0.000*	
Special Branch Nursing * (n = 17)	112.06±9.97		

*diabetes education nurse, infection control nurse, training coordinator

Table 4. Relationship between Nurses' Overall and Sub-Scale Mean Scores for Professional Self-Concept Inventory (PSCI) and Their Mean Scores for Coopersmith Self Esteem Inventory (N = 2165)

		PSCI general	Professional satisfaction	Professional competence	Professional Attitude and skill
SEI	**r**	.35	.29	.24	.31
	p	*0.000*	*0.000*	*0.000*	*0.000*

PSCI, Professioal Self Concept Inventory; SEI, The Coopersmith Self Esteem Inventory

Whereas the nurses with the graduate degree obtained the highest PSCI scores (M±SD=115.29±15.77), the nurses graduated from the health vocational high schools (M±SD=108.11±13.00) obtained the lowest scores. The difference between the groups is statistically significant (p<0.001). The nurses having worked 1 to 5 years (M±SD=107.13±12.51) achieved the highest PSCI score, while the nurses having worked 11 or more years (M±SD=110.94±11.85) obtained the lowest PSCI score. The difference between the groups is statistically significant (p<0.001). PSCI scores of the charge nurses (M±SD=113.14±11.56) in the study were significantly higher than were those of the clinical nurses (M±SD=108.51±12.23) (p<0.001). A significantly positive correlation was determined between the nurses' mean self-esteem scores and their overall and sub-scale mean scores for professional self-concept (p<0.001) (Table 4).

Discussion

Professional self in the nursing profession is an essential part of the professional development (Depoliti, 2008) and an important factor affecting nurses' decision to leave the nursing profession (Vliegher et al., 2011). The findings of this study are similar to those of previous studies in the international literature (Siebens et al., 2006; Arthur et al., 1998; Pilehvarzadeh et al., 2003; Kelly & Courts, 2007; Park et al., 2007) and revealed that Turkish nurses had a well-developed professional self-concept. In a limited number of studies previously conducted in Turkey (Ozcan & Ozgur, 1990; Kaya et al., 2004), it was determined that nurses had negative views about the profession and suffered problems in their commitment to the profession. According to the findings of our study, it can be

said that Turkish nurses' perspectives regarding the nursing profession and their professional-self have improved in time.

The nurses achieved high scores in professional competence, attitudes and skills subscales of the PSCI. Professional competence includes self-evaluation in terms of professional qualifications necessary to fulfill the nursing profession. The nurses reflected their self-confidence on their confidence in professional knowledge and skills. The results of the study conducted by Siebens et al. (2006) in Belgium supports this finding. The majority of the nurses (82.5%) in Siebens et al.'s study (2006) considered themselves as competent healthcare professionals who bore significant responsibilities in terms of professional competence.

In our study the nurses' scores for the professional satisfaction subscale were lower than their scores for the other subscales. Similarly, in Ozcan and Ozgur's study (1990) in Turkey, the majority of nurses' professional satisfaction levels were found to be very low. On the other hand, more than half of the nurses in Siebens et al.'s study (2006) in Belgium and the majority of the nurses in Sharbaugh's study (2009) in the USA were determined to have higher professional satisfaction levels. In this study, professional satisfaction refers to nurses' satisfaction of nursing profession. According to these findings, it can be said that Turkish nurses' professional satisfaction levels now have increased compared to their levels in previous years, but that they are still lower than those of the nurses in other countries. This may be due to the fact that in Turkey, nurses' working conditions (excessive workload, long working hours, etc.) are difficult and they have very limited opportunities to improve their professional autonomy and skills.

Nurses' having strong self-concepts is important for the workforce both in nursing profession and in the health care sector. In several studies (Cowin & Hengstberger-Sims, 2006; Johnson et al., 2012), a strong relationship has been established between low self-esteem levels and high rates of intent to leave. In this study, Turkish nurses' self-esteem scores were found to be high. Compared with the findings of other studies (Pınar & Arikan, 1998; Ugurlu et al., 2003; Erbil & Bostan, 2004) conducted in Turkey in previous years, this finding is quite positive. Within the last 10 years, significant

changes have been made in the curriculum of nursing education. Different educational models which are student-centered, support students' self-esteem and adopt humanistic approaches are now being developed and applied in nursing schools. In addition, in the nursing law revised in 2007 in Turkey, basic nursing education is required to be given at bachelor's level. This positive result observed in nurses' self-esteem levels in Turkey may be the reflection of the increases in the education level of the nursing profession and positive changes in the curriculum content.

Professional-self is the complementary part of the nurses' self-concept (Jonhson et al., 2012). The positive development of the self-concept is a prerequisite for the development of professional self (Jonhson et al., 2012). In other words, the positive development of nurses' self-concepts positively affects their professional self-development (Strasen, 1992). As in Arthur et al.'s study (1998), in this study too, a significant and positive correlation was determined between the nurses' self-esteem levels and their levels of professional self. This finding suggests that if nurses' professional self is to be strong, it is important to design the process of nursing education in such a way that it can contribute to the positive development of students' self-concept and professional self. This finding also indicates the importance of planning activities in the workplace in order to promote nurses' self-esteem and professional self. Strengthening of nurses' self-esteem and professional self may reduce nurses' turnover (Cowin & Hengstberger-Sims, 2006; Johnson et al., 2012).

As in previous studies (Arthur et al.,1998; Pilehvarzadeh et al.,2003; Adams et al., 2006; Hisar & Karadag, 2010) in the international literature, in this study too, it was determined that as nurses' ages increase so does their professional self-development. This finding is consistent with the findings in the literature indicating that the development of professional-self continues throughout working life (Costello, 2004; Deppoliti, 2008). This finding also indicates the importance of the employment of well-trained, experienced and self-confident nurses as role models for new graduate nurses and organization of supportive programs targeting to develop professional-self of new graduate nurses by nurse managers. El-Jardali et al. (2009) determined that younger nurses had a

higher intent to leave than did the others. Professional self is an important factor affecting nursing shortage. Age and experience play an important role in the positive development of nurses' professional self. If professional self can be improved during the nursing education and in the first years of working life, nurse retention rates can be increased too.

In this study, female nurses' professional self-development was higher than that of male nurses was. A few other studies (Adams et al., 2006; Worthington et al., 2013) support this finding. In Turkey, nursing is a predominantly female profession and is perceived as a profession for women. In Turkey, males' entering nursing profession is a recent phenomenon and the number of male nurses is still very few. There is lack of male role models in nursing applications and educational environments. These reasons may pose a barrier to males' commitment to the nursing profession and to the development of their professional self. El-Jardali et al. (2009) determined that male nurses' intention to leave nursing was greater than that of female nurses. Nurse managers should especially pay attention to male nurses' professional self-development.

The level of education is an important factor in the development of professional self. It was determined that as nurses' education levels increase so does their professional self-development. This finding is consistent with the findings of previous studies (Arthur et al., 1998; Arthur & Thorne, 1998; Hwang et al., 2009; Hisar & Karadag, 2010). This finding shows the importance of the professional training process in professional self-development. The main reason for this difference may also be due to increased professional capacities of highly educated nurses since they conduct research, implement professional theories, and keep up with professional publications more. This result reveals that it is a necessity to increase the level of nursing education for the professionalization of nursing.

Charge nurses' professional-self levels were higher than were those of clinical nurses. While nurses working as charge nurses in hospitals in Turkey work only during daytime, clinical nurses work overtime and in shifts and are directly responsible for patient care. This may be due to the fact that charge nurses take on different tasks such as autonomy, team communication and interaction and managerial responsibilities

besides providing patient care. In addition, clinical nurses' working conditions and working hours may have hindered their professional development and reduced professional satisfaction. Pilehvarzadeh et al. (2003) identified a significant relationship between nurses' working methods and professional self.

Strengths and Limitations of the study

That the study was conducted with the participation of nurses across Turkey and had a large sample size is the strength of this study. Of the limitations of the study, the first is that the study sample included only the nurses working in hospitals and the other one is that the data collected was based on the nurses' own statements.

Implication and Conclusions

The study yielded significant results for nurse trainers and nurse managers. The study emphasized the factors that can be solved through nursing education programs and nurse managers' contributions to the self-development and evaluation of the staff. Based on the study results, it can be said that self-esteem and professional-self levels of the nurses in Turkey are high and positive. There is a significant and positive relationship between the self-esteem and professional-self levels of the nurses. Professional self-development takes form mainly during school education and the student's personal-self lays the basis for the development of his/her professional self. Therefore, nurse educators are recommended to develop and implement constructive and student-centered educational curriculum during the educational training of nursing students which will strengthen their self-esteem.

Of the nurses, those who were older and more experienced, had higher education and worked as charge nurses achieved positive professional self-development more. Male nurses' professional self-development levels were lower than were those of the female nurses. When professional-self is considered as a factor affecting nursing shortage, it can be said that nurses whose professional self-development is higher do not leave the nursing profession. Therefore, the nurse managers can organize training programs especially for new graduate, young and male nurses in order to help them develop professional self. Nurse managers can benefit from nurses with higher education and experience as a role

model and mentor for new graduate nurses and student nurses. This study is the first study evaluating the nurses' professional self-development in Turkey. Therefore, it is recommended that similar studies should be conducted in the future to monitor the differences over the years. This study evaluates the professional self-development levels of nurses who only work in hospitals. It is recommended to conduct studies in the future in order to determine the professional self-development levels of nurses working in all areas of nursing in Turkey and the factors affecting these development levels. It is also recommended that further studies should be performed in Turkey in order to investigate the relationship between nurses' professional self and reasons why they leave their jobs.

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