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A longitudinal study of perceptions of self-concept and professional self-concept in Turkish nursing students

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Abstract

This study was conducted to determine the relationship between self-concept and professional self-concept amongst nursing students undertaking a four year degree.

A descriptive longitudinal study was applied amongst all nursing students undertaking a four year degree starting in the academic year 2006-2007. The sample consists of total 78 students. The data collection was via two Likert scale type questionnaires about the self description of students and their descriptions of the professional qualities of nurses which were issued a week apart. The first questionnaire consisted of a self-report form of 40 adjectives and students were asked to rate the suitability of each adjective for describing their personality. The second questionnaire employed the same adjectives as the first questionnaire. Students were asked to rate how necessary it was for professional nurses to possess these qualities. SPSS was used to analyse the data via percentages and Cohen's Kappa method.

The data for first year students showed 77.6% were happy to have chosen nursing but significant nearly a quarter were not. 85.9% thought they had similar characteristics to those required by nursing but there was a significant minority of almost one sixth who felt they did not have the required characteristics. The congruence between self-concept and professional self-concept was highest in the fourth year followed by the first year with the second year being the lowest.

Congruence between self-concept and professional self-concept across all four years was evident from our study. Some implications of these findings for nursing education and practice are considered.

A realistic approach to what is involved in both the study and practice of nursing can increase the self and professional self-concept congruence. It is important for nursing educators to effectively manage student expectations as a better alignment of these with actual situations helps students cope with the demands placed upon them.

Keywords: Nursing students; self-concept; professional self-concept.

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Introduction

Self-concept in nursing has been extensively researched by David Arthur since the early 1990s and his work has made use of the notion of self-concept in psychology. Arthur (1995) favours Burns's (1979) view that self-concept is typically characterised as being a relatively enduring organism of affective and evaluative beliefs that predispose one to respond with some degree of probability in predictable directions. This is a useful characterisation which will be taken as a conceptual foundation. Self-concept develops during life (with change being especially important during adolescence and early adulthood) through interaction with others, such as parents and peers, as well as internal dialogue with our feelings and ideas. It affects relationships, academic achievement, and choice of profession. Various approaches have been taken to studying self-concept in nursing including that of grounded theory (Ware, 2008).

Professional self-concept is concerned with how individuals see themselves as professionals and in the case of nursing is about what nurses feel about themselves as nurses. It is constructed through self evaluation about professional knowledge, values, and skills. Role modelling, role repetition, and interaction with the professional reference group is required for professional role clarification (Kelly, 1992). The representation of the idea of professional self-concept in nursing literature embodies the assumption that the attitudes which an individual has may vary significantly depending upon whether they relate to personal identity or professional role although they may be inextricably linked at some level. However, most research in nursing has favoured measurement tools intended to focus on professional self-concept as a distinct identity as the professional self-concept of nurses is unique (Arthur, 1992; Arthur & Thorne, 1998).

Arthur and Randle (2007) claim that since self-concept is the primary determinant of behaviour professional self-concept is essential for investigating current and future nursing practice. They observe that nurses having a healthy self-concept will offer patient care in a positive manner and the converse holds. Professional self-concept arises from professional socialization and involves the assimilation of professional norms. It is established and developed as a result of nurses adopting the general perspectives of other nurses and cannot be isolated from the context in which nursing practice takes place. As such the context in which students begin to identify with and develop their professional self-concept is significant. Strasen (1989) has promoted the idea that nursing leaders can increase professional self-concept by developing useful concepts, appropriate role models for leadership, and helping nurses to internalise these concepts. Kelly and Courts (2007) report that the length of education, the gap between education and professional service, the expectations of the healthcare organisations, and new qualified nurses' professional experience all

have an influence on both the development of self-concept and professional self-concept. In a related way Arthur and Randle (2007) note that how students feel about themselves as emergent professionals is strongly influenced by their treatment by nurses in clinical settings.

Congruence between self-concept and professional self-concept determines profession choice along with retention and progression (Betz, 1994). The greater the alignment between self-concept and professional self-concept the more effective professional practice is likely to be. Professional self-concept is linked to concerns about the recruitment and retention in nursing (Cowin & Hengstberger-Sims, 2006). Nursing was largely described by students in terms of nurses being “cheerful, friendly, good listener, happy, good-humoured, empathetic, compassionate, patient, and thorough and safe” (Kelly, 1992; p 123). Kelly and Courts (2007) found that studies of the transition from student to nursing professional indicated that support and guidance along with acceptance by experienced nurses along with preparation, responsibility, knowledge and confidence could influence newly graduated nurses. Such influences affected their professional socialisation and development, their self-concept and in the long term their retention within the profession. Although there are several studies about reasons Turkish student nurses have for choosing it as a profession (Şirin, Öztürk, Bezci, Çakar & Çoban, 2008; Tezel & Arslan, 2002; Tunç, Akansel & Özdemir, 2010; Turgay, Karaca, Çeber & Aydemir, 2005) very little research has been conducted on the congruence between self-concept and professional self-concept in these students.

Methodology

This longitudinal study aimed to determine the relationship between self-concept and professional self-concept amongst all nursing students undertaking a four year degree starting in the academic year 2006-2007. Ethical approval was obtained from Gazi University and students agreed to participate in the study. 80 questionnaires were distributed by members of the academic staff teaching the students and 78 were returned thus making a sample (n=78). The approach followed common methods of investigating professional self-concept which utilise Likert scale type questionnaires taking the form of self-report instruments. Data collection was via two Likert scale type questionnaires about the self description of students and their descriptions of the professional qualities of nurses which were issued a week apart. The first questionnaire consisted of a self-report form of 40 adjectives from Öner (1982) was adapted for nursing by Karadağ, Sezgin, and Arslan (2005). Students were asked to rate the suitability of each adjective for describing their personality using a five point Likert scale ranging from 1 (never suitable), 2 (slightly suitable), 3 (somewhat suitable), 4 (very suitable) to 5 (extremely suitable). The second questionnaire employed the same adjectives as the first questionnaire. Students were asked to rate how necessary it was for

professional nurses to possess these qualities using a five point Likert scale ranging from 1 (never necessary) 2 (slightly necessary), 3 (somewhat necessary), 4 (very necessary) to 5 (extremely necessary). The questionnaires were completed by first years at the start of the first term and the other students completed them at the end of the year. The limitation of the study is that the sample was from a single nursing department and thus cross institutional comparison was not possible.

SPSS was used to analyze the data via percentages and Cohen's Kappa method. The latter measures inter-annotator agreement for qualitative categorical items (Lawal, 2003) which in this case was the extent to which students ascribed the same values to particular adjectives. Values of Kappa can range from -1.0 to 1.0, with -1.0 indicating perfect disagreement below chance, 0.0 indicating agreement equal to chance, and 1.0 indicating perfect agreement above chance. ($0 \leq K < 0.20$ no agreement, $0.20 \leq K < 0.40$ poor agreement, $0.40 \leq K < 0.60$ medium agreement, $0.60 \leq K < 0.80$ good agreement, $0.80 \leq K \leq 1.00$ excellent agreement.) Kappa z-Test was used to compare multiple Kappa accuracies to detect if there any significant difference between them and it has a standard normal distribution. ($|z| < 1.96$ for $p > 0.05$, $|z| \geq 1.96$ for $p \leq 0.05$, $|z| \geq 2.58$ for $p \leq 0.01$, $|z| \geq 3.28$ for $p \leq 0.001$.)

Results

Table 1. Choosing Nursing

Happy to choose nursing (n= 76)	n	%
Happy	59	76.6
Unhappy	17	22.1
Reason for choosing nursing (n= 78)		
Individual choice	33	42.3
Family member choice	4	5.1
Friend and other people's choice	10	12.8
Ease of finding a job	25	32.1
Other	6	7.7
Own and nursing characteristics matching (n= 77)		
Yes	67	85.9
No	10	12.8
Perception of nursing status (n= 78)		
Low	22	28.2
Medium	50	64.1
High	6	7.7
Choose nursing again (n= 78)		
Yes	40	51.3
No	38	48.7

Table one data for first year students showed 77.6% were happy to have chosen nursing but significant nearly a quarter were not.

Table 2. First Year Self-Concept and Professional Self-Concept Congruence

Professional self-concept	Self-concept					Total
	1	2	3	4	5	
1	13	11	13	7	10	54
2	7	50	58	50	34	199
3	22	67	238	243	169	739
4	7	39	154	530	434	1164
5	3	24	66	259	612	964
Total	52	191	529	1089	1259	3120

$K = 0.23$; $SS_K = 0.013$; $SS_{KO} = 0.012$; $z = 19.42$; $p^z < .001$

Table 3. Second Year Self-Concept and Professional Self-Concept Congruence

Professional self-concept	Self-concept					Total
	1	2	3	4	5	
1	2	2	1	0	0	5
2	1	17	15	10	3	46
3	3	9	71	72	20	175
4	0	13	136	403	90	642
5	8	21	126	423	354	932
Total	14	62	349	908	467	1800

$K = 0.21$; $SS_K = 0.018$; $SS_{KO} = 0.017$; $z = 12.35$; $p^z < .001$

Table 4. Third Year Self-Concept and Professional Self-Concept Congruence

Professional self-concept	Self-concept					Total
	1	2	3	4	5	
1	5	2	3	2	1	13
2	0	12	14	5	6	37
3	3	4	74	81	34	196
4	1	13	120	401	123	658
5	2	4	93	402	475	976
Total	11	35	304	891	639	1880

$K = 0.24$; $SS_K = 0.018$; $SS_{KO} = 0.017$; $z = 14.18$; $p^z < .001$

Table 5. Fourth Year Self-Concept and Professional Self-Concept Congruence

Professional self-concept	Self-concept					Total
	1	2	3	4	5	
1	9	5	6	2	5	27
2	1	15	10	9	3	38
3	1	12	116	70	23	222
4	2	7	93	581	173	856
5	4	7	69	371	926	1377
Total	17	46	294	1033	1130	2520

$K = 0.43$; $SS_K = 0.019$; $SS_{KO} = 0.016$; $z = 26.88$; $p^z < .001$

Despite 42.3% stating that nursing was their sole choice nearly one third selected it because they thought it would be easy to find a job. 85.9% thought they had similar characteristics to those

required by nursing but there was a significant minority of almost one sixth who felt they did not have the required characteristics. Nearly one third of students regarded as a low status profession and 64.1% saw it as medium status. Furthermore 51.3% indicated that they would select nursing again if they had the option which means that almost half would not. For the first three years (Tables 2-4) the congruence between self-concept and professional self-concept is weak but significant with ($p < 0.001$), K (0.23, 0.21, 0.24) and Z (19.42, 12.35 and 14.18) respectively. However, in the fourth year ($p < 0.001$), K (0.43) and Z (26.88) indicates that the congruence between self-concept and professional self-concept is medium but significant (Table 5).

Table 6. Comparing Congruence between Self-Concept and Professional Self-Concept over the Period of Study

1-2 year	2-3 year	3-4 year	1-4 year
Z = .90	Z = -1.18	Z = -7.51	Z = -8.70
p > .05	p > .05	p < .01	p < .01

Table 6 compares how self-concept and professional self-concept changed over the period of the study. There is no significant difference between self-concept and professional self-concept between the first and second, and second and third years ($p > 0.05$). However, there is a marked difference between the third and fourth years ($Z = -7.51$; $p < 0.05$). In the fourth year the similarity between self-concept and professional self-concept had risen substantially since the first year ($Z = -8.70$; $p < 0.01$).

Discussion

Table one indicates some interesting first year student attitudes with notable instances of negativity despite a positive picture overall. Nearly a quarter were unhappy to have chosen nursing and nearly a third selected it on the grounds of ease of finding a job. One sixth of students did not think they had the required characteristics for professional nursing and nearly half would not choose nursing again. These findings raise questions about whether all students are entering the nursing profession for the right reasons. This failure to enter for the right reasons is not always apparent from recruitment evidence because recruitment is at a high constant level due to the opportunities nursing gives for finding a decent job. However, this problem about entering for the right reasons does become evident when retention is considered. Nurses in Turkey often retire as early as possible and have nothing further to do with the profession which suggests a possible lack of long term professional commitment.

Arthur and Thorne (1998) show that students develop a stronger professional self-concept during the transition from student to nurse subculture. They report significant differences as

students progress on their degree with fourth year students having a higher professional self-concept than second years. Data on how the congruence between self-concept and professional self-concept alters over the years shows variation. Several studies indicate that it increases (Turgay et al., 2005; Pallone & Hosinsky, 1997) but Uz (1984) found that congruence between self-concept and professional self-concept decreased as students realised some of the difficulties of being a professional nurse. Congruence between self-concept and professional self-concept across all four years was evident from our study and research conducted by Karadag et al. (2005) with nursing students (60 first and 54 fourth years) had similar findings. Our work demonstrated that congruence was highest in the fourth year followed by the first year with the lowest level being the second year. The results for the fourth year may be the result of students identifying themselves with nursing more, being aware that they are due to graduate soon, and gaining professional socialization due to the nursing education they have received. A crucial difference between the fourth and other years is that students undertake a two day a week placement which involves both management and teaching activities. They work with ward managers and attend meetings with senior staff. This placement is concurrent with a module on nursing management and education in which there is a correlation between university and practice based learning. Findings from Kelly and Courts (2007) that newly qualified nurses had a weak sense of leadership which stemmed from not expecting to be in charge or leading others provides evidence for the value of this management and education module in combination with the placement. This combination also addresses a need perceived by Arthur (1995) that nursing degree curricula should encompass the development of a strong professional identity as nurses are increasingly exercising their independence.

In the second year the nursing curriculum involves medical and surgical nursing with most students finding the modules quite hard to cope with. They also undertake a hospital placement and as Yilmaz (2000) observes such placement is a stressful process. Randle (2003) has similar findings about the distressing experiences students reported about their placements and suggests that constructive ways of dealing with these situations that build student self-esteem should be incorporated into the curriculum. These difficulties with the modules and placement could explain the decline in congruence between self-concept and professional self-concept amongst second years. Although the congruence is weak in the first year there is still a significant match between self-concept and what are regarded as qualities of professional nurses. Factors which affect this congruence include the fact that most students are happy to be studying nursing, have decided on the profession for themselves, would be willing to choose nursing again, and regard their personal

characteristics as being aligned with those required for nurses (Table 1). At this stage more than half the students have a positive image of nursing and are well motivated.

Conclusion

The most significant finding of this study is that congruence between self-concept and professional self-concept is at the lowest level in the second year. It is clear that a realistic approach to what is involved in both the study and practice of nursing can increase this congruence. It is important for nursing educators to effectively manage student expectations as a better alignment of these with actual situations helps students cope with the demands placed upon them. Part of managing expectations is ensuring that students receive detailed information both about their course of study and the placements they will undertake. The effectiveness of combining a module on nursing management and education with a placement which reinforces the learning is evident and could occur earlier in the course. It might be good to have it at the end of the second year when many students are suffering from lower motivation. It is clear that there are some problems connected to recruitment to nursing for the right reasons and retention within the profession. Dealing with these difficulties is complex and involves a variety of factors including an improved public image of nursing. Professional self-concept has a role to play in this as the more positive nurses are about it the more likely the profession is to recruit and retain good people. Although these findings about self-concept and professional self-concept, including their significance for recruitment and retention, are particular to Turkey it is clear they have wider international implications.

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APPENDIX: Data Collection Forms

This is the form which students used for self description:

Forty adjectives are listed in the table. Please identify the suitability of each adjective for describing your personality using the five point Likert scale ranging from 1 (never suitable) to 5 (extremely suitable).

Adjectives	Never suitable 1	Slightly suitable 2	Somewhat suitable 3	Very suitable 4	Extremely suitable 5
1. Intelligent	()	()	()	()	()
2. Capable	()	()	()	()	()
3. Knowledgeable	()	()	()	()	()
4. Pleasant	()	()	()	()	()
5. Hard working	()	()	()	()	()
6. Serious	()	()	()	()	()
7. Contemporary	()	()	()	()	()
8. Punctual	()	()	()	()	()
9. Democratic	()	()	()	()	()
10. Careful	()	()	()	()	()
11. Sensitive	()	()	()	()	()
12. Systematic	()	()	()	()	()
13. Able to educate others	()	()	()	()	()
14. Flexible	()	()	()	()	()
15. Easy to get along with	()	()	()	()	()
16. Traditional	()	()	()	()	()
17. Realist	()	()	()	()	()
18. Enterprising	()	()	()	()	()
19. Reliable	()	()	()	()	()
20. Humanistic	()	()	()	()	()
21. Cooperative	()	()	()	()	()
22. Obedient	()	()	()	()	()
23. Determined	()	()	()	()	()
24. Self Confident	()	()	()	()	()
25. Talkative	()	()	()	()	()
26. Inflexible/Strict	()	()	()	()	()
27. Cultured	()	()	()	()	()
28. Polite/Refined	()	()	()	()	()
29. Altruistic	()	()	()	()	()
30. Patient	()	()	()	()	()
31. Intuitive	()	()	()	()	()
32. Systematic	()	()	()	()	()
33. Imperturbable	()	()	()	()	()
34. Social	()	()	()	()	()
35. Self-controlled	()	()	()	()	()
36. Fastidious	()	()	()	()	()
37. Successful	()	()	()	()	()
38. Harmonious	()	()	()	()	()
39. Helpful	()	()	()	()	()
40. Philanthropic	()	()	()	()	()

This is the form which students used to describe the qualities of professional nurses:

Forty adjectives are listed in the table below. Please identify the necessity for professional nurses to possess each of the qualities listed using the five point Likert scale ranging from 1 (never necessary) to 5 (extremely necessary).

Adjectives	Never necessary 1	Slightly necessary 2	Somewhat necessary 3	Very necessary 4	Extremely necessary 5
41. Intelligent	()	()	()	()	()
42. Capable	()	()	()	()	()
43. Knowledgeable	()	()	()	()	()
44. Pleasant	()	()	()	()	()
45. Hard working	()	()	()	()	()
46. Serious	()	()	()	()	()
47. Contemporary	()	()	()	()	()
48. Punctual	()	()	()	()	()
49. Democratic	()	()	()	()	()
50. Careful	()	()	()	()	()
51. Sensitive	()	()	()	()	()
52. Systematic	()	()	()	()	()
53. Able to educate others	()	()	()	()	()
54. Flexible	()	()	()	()	()
55. Easy to get along with	()	()	()	()	()
56. Traditional	()	()	()	()	()
57. Realist	()	()	()	()	()
58. Enterprising	()	()	()	()	()
59. Reliable	()	()	()	()	()
60. Humanistic	()	()	()	()	()
61. Cooperative	()	()	()	()	()
62. Obedient	()	()	()	()	()
63. Determined	()	()	()	()	()
64. Self Confident	()	()	()	()	()
65. Talkative	()	()	()	()	()
66. Inflexible/Strict	()	()	()	()	()
67. Cultured	()	()	()	()	()
68. Polite/Refined	()	()	()	()	()
69. Altruistic	()	()	()	()	()
70. Patient	()	()	()	()	()
71. Intuitive	()	()	()	()	()
72. Systematic	()	()	()	()	()
73. Imperturbable	()	()	()	()	()
74. Social	()	()	()	()	()
75. Self-controlled	()	()	()	()	()
76. Fastidious	()	()	()	()	()
77. Successful	()	()	()	()	()
78. Harmonious	()	()	()	()	()
79. Helpful	()	()	()	()	()
80. Philanthropic	()	()	()	()	()