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Clinical Decision Making, Problem Solving and Autonomy for Nursing Students Attending an Internship Training Program: A Comparative Study

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Abstract

Internship is a fairly important period of transition from being a student to becoming a nurse. The purpose was to compare and evaluate the self-confidence and anxiety levels of senior students in the process of problem solving, clinical decision making and autonomy who were attending an internship and those of the senior students who did not**.** In the study, a descriptive, cross-sectional and comparative research design was used. The data were collected from senior students meeting the inclusion criteria from two nursing schools in May and June 2018. In both schools, traditional educational methods were used, yet in one of these schools, an internship program was applied. The present study was carried out with a total of 136 students. Of all these students, 73 of them were nursing students who were taking internship training, while 63 of them were those who did not. For the study, the ethics council, the authors who adapted the scales and the institution where the study was conducted were asked for their written consents, and the verbal consents of the students were taken. The results were evaluated considering the significance level of $p<.05$. When the students who took internship training were compared with those who did not, the autonomy mean score (84.23±15.54, p=.022) and the anxiety mean score (95.27±25.89, p=.002) were found to be statistically significantly lower for the former group of students. In addition, the students who took internship training had statistically significantly higher levels of self-confidence (124.01±26.41, p=0.007) when compared to those who did not. Lastly, no statistically significant difference was found between the problem solving skills of the students who took internship training and those of the students who did not (p=.061). In order to increase students' self-confidence in nursing training, to develop problem solving skills and to develop their ability to cope with stress, internship training programs are suggested for senior nursing students. In practice, for the purpose of decreasing the stress levels of nursing students, reflections should be used in nursing training programs. At nursing schools where internship training programs are applied, different educational methods (such as simulation and high fidelity simulators, computer-aided education programs are suggested for the development of students' problem solving skills.

Keywords: Internship, autonomy, stress, self-confidence, problem solving

INTRODUCTION

Experiential learning is a process of putting one's experiences and thoughts about his/her experiences into practice. In other words, it is the process of applying the skills and knowledge they have acquired (Blanzola, Lindeman, and King, 2004). In nursing training, clinical practices are considered to be important for transforming the theoretical knowledge into skills and for developing students' professional identities (Wu, Yang, Liu, and Ye, 2016). The internship practice is a training program which aims to allow students master the cognitive, emotional and behavioral skills that they are expected to have acquired and developed during their three-year education process (Bowen, 2011; Tosun et.al., 2008). Studies demonstrate that internship training increases graduate nurses' knowledge and skills, increases their self-confidence and develop their communication skills (Dinc, 2014; Büyük et.al., 2014; Blanzola, Lindeman, and King, 2004).

Clinical decision making is a complex cognitive process which involves synthesis of the knowledge acquired via interpretation, questioning, explanation, evaluation, communication, experience and observation (Chen et.al., 2016; Jahanpour, Sharif, Salsali, Kaveh and Williams, 2010). It is pointed out that in nursing training, the ability to make effective clinical decisions is developed in clinical settings and that it constitutes an important basis of nursing training (Dicle and Edeer, 2013; Jahanpour et.al., 2010). In one study evaluating nursing students' perceptions regarding clinical decision making, Dicle and Edeer (2012) reported an increase in their clinical decision making perceptions regarding the training process (Dicle and Edeer, 2013). For the purpose of improving patients' health status and minimizing the potential damages, nurses make clinical decisions by using their knowledge and problem solving skills, thinking critically, evaluating the evidence and by doing reflections (Berkow and Virkstis, 2008). In one randomized-controlled study, it was found that the students from the Faculty of Medicine who were given a training on problem solving skills developed their levels of clinical decision making skills after the related training process (Nango and Tanaka, 2010). Problem solving is a cognitive and behavioral process which requires higher-order thinking, determining ways for finding effective solutions, selecting the most appropriate ways of solution and making decisions (D'Zurilla, Nezu, 2001). This process is a debated approach used in educational applications for the training of nurses who are supposed to cope with individual problems and who have to find solutions to others' problems in stressful and acute situations as well as in complicated situations requiring rapid changes (Bayat, Tosun, Erdem, Avcı, and Seviğ, 2015). In a longitudinal study, it was revealed that the nursing students taking education within the scope of an integrated education model for internship training developed their problem solving skills while there was no change in the problem solving skills of the nursing students trained with traditional teaching methods (Bayat, Tosun, Erdem, Avcı, and Seviğ, 2015).

In literature, the personality characteristic of autonomy is claimed to be likely to have a relationship with problem solving skills (Kelleci and Gölbaşı, 2004). Internship students who have high levels of self-confidence and low levels of anxiety are thought to have high levels of autonomy in the problem solving and decision making process. In nursing, autonomy is referred to as the

ability to make nursing decisions for caring and as independence of an individual in his/her own practices (Kaya, Aştı, Acaroğlu, Kaya and Şendir, 2006; MacDonald, 2002; Mrayyan, 2004). According to Beck's cognitive theory, individuals with high levels of autonomy are those satisfied with managing their own activities, achieving their goals, controlling all events around them and being successful (Scher, Segal, Ingram, 2004). In one study conducted by Malak and Üstün, the nurses' levels of success were found to increase as their autonomy scores increased (Malak and Üstün, 2011). In another study carried out with participants who attended an internship training program, it was seen that the participants' levels of autonomy decreased statistically significantly in higher class grades when compared with respect to their class grades (Kaya, Aştı, Acaroğlu, Kaya and Şendir, 2006). Internship is a fairly important period of transition from being a student to becoming a nurse. When related literature is examined, it is seen that there are several studies conducted to examine the influence of educational methods on the autonomy, clinical decision making and problem solving levels of students who were trained within the scope of different curricula (traditional and integrated learning or integrated and self-learning) or on those of students who were trained within the scope of the same curricula (Kaya, Aştı, Acaroğlu, Kaya and Şendir, 2006; Bayat, Tosun, Erdem, Avcı, and Seviğ, 2015 Durmaz, 2012 Dicle and Edeer, 2013; Kelleci and Gölbaşı, 2004). It is important to examine the influence of autonomy on the development of problem solving skills and self-confidence and anxiety levels of nursing students who take internship training and of those who do not in the process of making clinical decisions. In the present study, the purpose was to investigate the self-confidence and anxiety levels of senior nursing students who took internship training and of those who did not in the process of clinical decision making, problem solving and autonomy.

MATERIAL and METHODS

Design

This study was carried out using the descriptive, cross-sectional and comparative research design.

Study sample

The study was conducted with senior students from two nursing schools who met the inclusion criteria, and the research data were collected in May and June 2018. In both schools, the traditional teaching method was used, yet in one of these schools, an internship training program was applied. In the traditional education model, the illness is prominent rather than the individual-centered caring, and the curriculum content is discipline-based (Temel and Dönmez, 2013). At the school where the internship training program was applied, the students were senior students taking education on clinical practice for 24 class hours a week. For senior students, there are two clinical practices that they are supposed to perform in the order of their preference. The clinics that the students were allowed to select were women's health and maternity clinic, internal diseases clinic, surgical diseases clinic, paediatric diseases clinic, psychiatry clinic and public health application. In their clinical practices, the students undertook all the caring responsibilities of the patients under the guidance of the patients' nurse and kept records of their practices in their own files. During shift changes, they informed their next peers about the patients verbally as well as in writing at the beginning and end of the day. The internship students determined the learning goals together with the

faculty member and examined the related evidence-based studies by reviewing the literature in line with these goals and shared them all with the faculty member in the next meeting. In addition, every week, the students shared and discussed their caring plans and reflections during the 4-hour theoretical group sessions under the guidance of the faculty members in the related department. Moreover, under the supervision of the faculty member/clinical nurse in the second clinic selected, the students completed the skills found inefficient in the previous rotation. At the school were no internship training was provided, the students received applied training on psychiatry nursing for only one and a half day a week in one academic term, and they received applied training on public health in the following academic term. In the other clinics, no applied training was provided. Moreover, they worked together with the clinical nurses in their clinics, and the applied training continued with the faculty member's supervision and with the discussion of the two caring plans prepared in one academic term. In their clinical practices, the students undertook all the caring responsibilities of their patients under the guidance of the patients' nurse. Although the total applied training hours were the same for four academic years for the students who took internship training and for those who did not, the applied training hours were more for the senior students who took internship training. At the nursing school where the internship training program was not applied, the study was conducted and completed with a total of 63 students for several reasons such as refusing to participate in the study, not coming to school on the dates when the study was conducted and failing to provide full response to the questionnaire items. As for the nursing school where the internship training program was applied, 73 students were included in the study in accordance with the following inclusion criteria: volunteering to take part in the study, not working as a nurse anywhere and not being a graduate from a Health Vocational High School. In the study, for the calculation of the sample size, G*powersoftware, version 3_1 was used (Faul et al., 2020). At the end of the study, for the sub-dimension of self-confidence, the effect size was 0.47 (p=0.05), and according to the post hoc independent groups student t-test analysis, the power of the study was calculated as 0.85 considering the 73 nursing students who took internship training and the 63 nursing students who did not.

Participants

Among the students who took internship training, 53.4% of them were female. As for the students who did not take the internship training, 57.1% of them were female nursing students. None of the students taking internship training was married, while 3.2% of the students who did not take internship training were married. Among the students taking internship training, 68.3% of them reported their financial state to be average; 69.9% of them were living in the town for a long time; 83.6% of them had a nuclear family; 42.5% of them were staying in a dormitory; and 3.2% of them had a part-time job. These data have not been presented in any of the tables in the manuscript.

Data collection

Before the distribution of the questionnaires, the participants were informed by the researcher about the purpose and content of the study. The nursing students volunteering to take part in the study were given the questionnaires, and they independently filled out the questionnaires. It took the

students about 10 minutes to complete the questionnaires.

Data Collection Forms

Personal Information Form

This form was prepared by the researchers by reviewing the related literature (Bowen 2011; Bayat et al. 2015; Kaya et al. 2006; Marañón and Pera 2019; Pollard 2003). The form was made up of 17 items in two parts. The first part was related to the socio-demographic backgrounds of the nursing students, and the second part included questions related to the profession of nursing.

Problem solving inventory

This inventory, which was adapted into Turkish by Savaşır and Şahin (1997), included 35 6-point Likert-type items for self-evaluation regarding the problem solving skills of adolescents and adults. There were three sub-dimensions in the scale as follows: “confidence in one’s problem solving skills”, which refers to the person’s belief in his/her ability to solve new problems (Item numbers 5, 10, 11, 12, 19, 23, 24, 27, 33, 34 and 35); “approach-avoidance style” adoption-avoidance”, which refers to revising the initial problem solving efforts for future use and which refers to doing research actively for different alternative solutions (Item numbers 1, 2, 4, 6, 7, 8, 13, 15, 16, 17, 18, 20, 21, 28, 30 and 31); and “personal control”, which refers to a person’s ability to maintain his/her control in problematic situations (Item numbers 13, 14, 25, 26, 27 and 32). The lowest score to be produced by the scale was 32, while the highest was 192. In the study conducted for the adaptation of the inventory, the Cronbach alpha consistency coefficient was calculated as 0.88. Higher scores to be received from the scale meant failing to find effective solutions to problems and having a low level of problem solving. On the other hand, a lower score showed that the person was competent in solving problems with his/her problem solving skills.

Psychometric properties of the turkish version of nursing anxiety and self-confidence with clinical decision making scale (NASC-CDM-T)

The NASC-CDM scale was developed by Dr. Krista A. White (White, 2014) and adapted into Turkish by Bektaş, Yardımcı, Bektaş and White (2017). The scale included a total of 27 items prepared to determine the self-confidence and anxiety levels of nursing students in making clinical decisions. The scale allows evaluating the levels of self-confidence and anxiety separately. The self-confidence part of the scale was made up of three sub-dimensions: 'using sources to obtain information and listening to them carefully’; 'use of the information in hand to determine the problem’; and 'knowing and taking action’. A higher score to be received in relation to the sub-dimension of self-confidence shows that the students have a high level of self-confidence. In the anxiety-related part of the scale, there were three sub-dimensions: 'using sources to obtain information and listening to them carefully’; 'use of the information in hand to determine the problem’; and 'knowing and taking action’. A lower anxiety score shows that the students have a low level of anxiety (White, 2014). In the self-confidence part and in its sub-scales, the Cronbach alpha coefficients were found to be .97, .96, .89 and .91, respectively. The related values in the anxiety-related part and in its sub-scales were calculated as .97, .95, .91 and .90, respectively (Bektaş, Yardımcı, Bektaş, White, 2017).

Sociotropy Autonomy Scale (SAS)

This scale measured dependent and autonomy personality characteristics. The scale was developed

by A. T. Beck, N. Epstein, R. P. Horisson and J. Emery (1983) and adapted into Turkish by Nesrin Şahin and colleagues (1993), and its validity and reliability were tested (Şahin et.al., 1993). The test-retest reliability coefficient of the original version of the scale ranged between α.65 and α.88 for sociotropy and between α.66 and α.75 for autonomy. The reliability alpha coefficients of the Turkish version of the scale were found to range between α.70 and α.81 for sociotropy and autonomy, respectively. The scale was made up of 60 Likert-type items (30 items for the sub-scale of sociotropy and 30 items for the sub-scale of autonomy. Each of the items was assigned a score of 0 'I completely disagree', 1 'I partly agree', 2 'I agree', 3 'I mostly agree' or 4 'I completely agree'. The lowest and highest scores to be received from the scale ranged between 0 and 120 for the sub-scale of sociotropy and between 0 and 120 for the sub-scale of autonomy. Since the Sociotropy-Autonomy Scale included two sub-scales, the scale produced two total scores. Higher scores to be received from the scale refer to high levels of sociotropy personality characteristics in the sub-dimension of sociotropy. Similarly, higher scores regarding the sub-dimension of autonomy mean higher levels of autonomy. The sub-dimensions of the scale were evaluated separately, and it was not possible to obtain a total score for the whole scale. In the study, the sub-dimension of autonomy was examined.

Data analysis

The research data were analyzed using the package software of SPSS 15.0 (Statistical Package for the Social Sciences). In the study, for the analysis of the personal information about the senior nursing students, the descriptive statistics of numbers, percentages, mean scores and standard deviations were used. In order to examine the socio-demographic characteristics of the students who took internship training and of those who did not, Chi-square analysis and independent groups student t test were used. Moreover, for the comparison of the students who took internship training and of those who did not with respect to their professional characteristics, Chi-square analysis was applied. Lastly, in order to compare the self-confidence and anxiety levels of the senior nursing students who took internship training and of those who did not in relation to problem solving, autonomy and clinical decision making processes, independent samples student t-test was run. The results were evaluated at the significance level of $p<.05$.

Ethics

For the study, the consent of the clinical research Dicle University Faculty of Medicine Non-Interventional Clinical Research Ethics Committee was taken (Decision Number: 105, Decision Date: 16.03.2018). In addition, the institution where the study was conducted and the authors who adapted the scales were asked for their written concents. Lastly, the students' verbal consents were taken.

RESULTS

Table 1 presents comparison of the socio-demographic backgrounds of the students who took internship training and of those who did not. When the socio-demographic characteristics of the students who took internship training were compared to those of the students who did not, it was seen that they all had similar characteristics with respect to gender, marital status, financial state, employment, the place where they lived longest, family type and age ($p>0.05$) (Table 1).

Table 1. Comparison of the Socio-Demographic Backgrounds of the Students Who Took Internship Training and of Those Who did not (n=136)

Variable	Students who took internship training (n=73) Number/Percent	Students who did not take internship training (n=63) Number/Percent	Total	Test, p value
Gender				
Female	39 (52.0)	36 (48.0)	75 (100)	X^2=.189 , p=.664
Male	34 (55.7)	27 (44.3)	61 (100)	
Marital Status				
Married	0 (0)	2 (100)	2 (100.0)	X^2=- , p=.213
Single	73 (54.5)	61 (45.5)	134 (100.0)	
Financial State				
Very poor or poor	4 (28.6)	10 (71.4)	14 (100.0)	X^2= 5.202, p=.074
Average	61 (58.7)	43 (41.3)	104 (100.0)	
Good or very good	10 (55.6)	8 (44.4)	18 (100.0)	
Employment				
Employed	6 (75.0)	2 (25.0)	8 (100.0)	X^2=.777, p=.378
Unemployed	67 (52.3)	61 (47.7)	128 (100.0)	
Place where they lived longest				X^2= .388, p=.824
City	51 (52.0)	47 (48.0)	98 (100.0)	
Town	10 (58.8)	7 (41.2)	17 (100.0)	
Village	12 (57.1)	9 (42.9)	21 (100.0)	
Family Type				X^2= .030, p=.863
Nuclear family	61 (54.5)	51 (45.5)	112 (100.0)	
Extended family	12 (50.0)	12 (50.0)	24 (100.0)	
Variable	**Mean±SD**	**Mean±SD**		**test**
Age	23.06±1.04	22.93±1.24		t=-.673, p=.502

Table 2 presents comparison of the professional characteristics of the students who took internship training and of those who did not. Of all the students taking internship training, 64.8% reported that they preferred this job intentionally, and the difference between the two groups was found statistically significant (p=0.007). Among the students taking internship training, 69.9% loved their job, and the difference between both groups was found statistically significant (p<0.001). In addition, 53.2% of the students taking internship training experienced problems in practice, and the difference between the two groups was not found statistically significant (p>.05). Among the students taking internship training, 66% of them were able to transfer the theoretical information they got at school into practice, and the related difference between both groups was found statistically significant (p<0.001) (Table 2).

Table 2. Comparison of the Professional Characteristics of The Students Who Took Internship Training and of Those Who did not (n=136)

Variable	Students who took internship training (n=73) Number/Percent	Students who did not take internship training (n=63) Number/Percent	Total	Test, p value
Choosing the job intentionally				
Yes	**46 (64.8)**	25 (35.2)	71 (100)	X^2=7.377 , p=.007
No	27 (41.5)	38 (58.5)	65 (100)	
Liking the job				
Yes	**65 (69.9)**	28 (30.1)	93 (100)	X^2=31.107 , p<.001
No	8 (18.6)	35 (81.4)	43 (100)	
Experiencing problems in practice				X^2= .009, p=.923
Yes	33 (53.2)	29 (46.8)	62 (100)	
No	40 (54.1)	34 (45.9)	74 (100)	
Using theoretical information				X^2=21.126, p<.001
Yes	**66 (66.0)**	34 (34.0)	100 (100)	
No	7 (19.4)	29 (80.6)	36 (100)	

Table 3 presents comparison of the autonomy, problem solving, self-confidence and anxiety levels of the students who took internship training and of those who did not. When the students who took internship training were compared to those who did not, the autonomy mean score (84.23±15.54, p=0.022) and anxiety mean score of the former group (95.27±25.89, p=0.002) were found statistically significantly lower. In addition, the students who took internship training had statistically significantly higher self-confidence mean score (124.01±26.41, p=0.007) when compared to the students who did not take internship training. Lastly, no statistically significant difference was found between the problem solving skills of the students who took internship training and of those who did not (p=0.061) (Table 3).

Table 3. Comparison of the Autonomy, Problem Solving, Self-Confidence and Anxiety Levels of the Students Who Took Internship Training and of Those Who did not (n=136)

Variable	Students who took internship training (n=73) Mean±SD	Students who did not take internship training (n=63) Mean±SD	Test,	p value
Autonomy	**84.23±15.54**	90.20±14.26	T=2.321-,	p=.022
Self-confidence	**124.01±26.41**	109.92±32.51	T=-2.746,	p=.007
Anxiety	**62.13±24.24**	77.84±33.76	T=3.145,	p=.002
Problem solving	95.27±25.89	102.89±20.18	T=1.890,	p=.061

DISCUSSION

Internship education is a practical training which allows students to put their theoretical knowledge into practice in clinics, to adapt themselves to their job and to develop their professional identities (Dinc, 2014). In this study, the purpose was to compare and evaluate the autonomy, problem solving skills and self-confidence and anxiety levels of senior nursing students in the clinical decision making process who took

internship training and of those who did not. At the end of the study, when the senior nursing students taking internship training were compared to those who did not, it was seen that the former group had higher levels of self-confidence and lower levels of anxiety in the clinical decision making process. In addition, the students who took internship training were found to have poorer autonomy when compared to those who did not.

The findings obtained in the study revealed that the senior nursing students who took internship training had higher levels of self-confidence in the process of making clinical decisions than those who did not. In literature, there is no research in which the self-confidence levels of students attending schools where traditional educational methods are applied are compared to those of the students attending schools where internship training is given. In one study, Suliman and Halabi (2007) compared freshman nursing students with senior nursing students and reported that the senior students had statistically higher levels of self-confidence in terms of critical thinking than the freshman students (Suliman & Halabi 2007). In another study Mailloux (2006) found that the undergraduate nursing students had higher levels of self-confidence as their educational and knowledge levels increased (Mailloux 2006.). In one other study, similarly, it was revealed that the clinical nurses had better decision making skills as their educational levels and clinical experiences increased (Wu et al. 2016). In another study conducted by Dinc (2014), the researcher reported that the internship training increased the nursing students' levels of self-confidence (Dinc 2014). Turan, Tan and Dayapoğlu (2017) examined the students' views about internship and found that their practical nursing skills, knowledge, self-confidence and love of their job increased following the internship training process and that their feelings of responsibility developed (Turan et al., 2017). When the related literature was examined, it was seen that the nursing students in higher class grades had higher levels of self-confidence when compared to those in lower class grades. Similarly, in the present study, it was revealed that the nursing students who took internship training had higher levels of self-confidence than those who did not. In this respect, it could be stated that the self-confidence levels of the senior students taking internship training increased because they constantly worked in clinics in their last school year and because they had more experience and developed their skills more by being on duty not only in daytime but also at nights. At the end of the study, it was found that the nursing students who took internship training experienced less anxiety when compared to those who did not. In literature, there is no research conducted to compare nursing students taking education with traditional methods who were provided with internship training and those taking education with traditional methods who were not provided with internship training. In related studies, it was reported that almost all the nursing students who took internship training developed their communication and psychomotor skills and increased their theoretical knowledge after they took internship training (Turan et al. 2017; Büyük et al., 2014). In one study carried out by Öztürk, Çilingir and Şenel (2013), the researchers found that more than half of the nursing students experienced problems in establishing communication with doctors and patients (Öztürk et al., 2013). In another study, it was revealed that among the nursing students who visited a clinic for the first time, those

who did not feel themselves attached to their profession and who did not acquire sufficient professional knowledge or skills had higher levels of clinical stress.[31] According to Hutchinson and Janiszewski Goodin (2013), it is necessary to discuss the reasons why nursing students experience moderate or high levels of anxiety and to use certain strategies to decrease their stress levels. For this purpose, reflective journals and guided reflection could be used (Hutchinson & Janiszewski Goodin 2013). In another study, it is reported that reflection supports learning via experiences and allows criticizing these experiences and changing behaviors accordingly in a positive way when individuals face the same situation in future (Bulman et al. 2012). In the present study, the students who took internship training chose to become a nurse with a higher ratio and had a higher tendency to like the profession of nursing (Table 2) when compared to the students who did not take any internship training. In addition, in relation to solving the problems experienced, the students who took internship training established better communication with the health staff and with the patients thanks to reflection within the scope of the internship training program, and they developed their knowledge levels, which eventually helped them experience lower levels of stress. In the study, it was found that the students who took internship training had lower levels of autonomy when compared to those who did not. In related studies, it was reported that the senior nursing students attending a school where they took internship training and those attending a school where they did not take any internship training had lower levels of autonomy, while the freshman students at these schools had higher levels of autonomy (Karagözoğlu 2009; Kaya et al. 2006). On other hand, in another study conducted to compare senior students who took problem-based education, those who took integrated education and those who were taught with traditional methods, no difference was found between the nursing students' levels of autonomy (Karagözoğlu et al. 2015). Based on the findings obtained in all these studies, it could be stated that freshman nursing students have highest levels of autonomy while senior nursing students have lowest levels of autonomy. In the present study, it was a striking finding that the senior nursing students who took internship training had lower levels of autonomy when compared to those who did not. In one qualitative study, Maranon and Pera (2019) pointed out that the senior students had confusion regarding professional autonomy and reported that a student thought "a nurse does not have any knowledge about his/her own working areas of nursing, and s/he only deals with technical issues (Marañón & Pera 2019). In the present study, the reason why the autonomy scores of the students who took internship training were low could be the fact that such students have begun to spend longer time in practical fields in recent years. In addition, they now realize that a nurse does not just deal with technical issues or is just in a position dependent on the doctor and that they have independent roles and many responsibilities in terms of caring and thus need to make clinical decisions since they work as if they were employed as a nurse. In this study, the students who took internship training had better problem solving skills when compared to those who did not, yet the difference was not found statistically significant. In one longitudinal study, it was found that the nursing students taking education within the scope of an integrated education model involving internship training

developed their problem solving skills; however, no change was reported in the problem solving skills of the nursing students who took education with traditional methods (Bayat et al. 2015). In another study, the nursing students were reported to experience problems in practical areas and to fail to transfer their theoretical knowledge into practice because there were not enough faculty members who would act as role models for them (Karadağ et al. 2013). In one other study, it was found that use of simulation and high fidelity simulators before internship training developed third-grade nursing students' problem solving skills and prepared them better for the internship training program (Nevin et al. 2014). In the present study, it was revealed that thanks to the internship training, the students had better problem skills. However, the reason why the difference was not found statistically significant could be attributed to two factors. First of all, the two schools were institutions where traditional education methods were applied, and no simulation and high fidelity simulators were used to support the problem solving skills of the students. Secondly, there were not enough faculty members employed in the practical area.

CONCLUSION

At the end of the study, the nursing students who took internship training had higher levels of self-confidence and lower levels of anxiety in the process of making clinical decisions when compared to those who did not. In addition, the students who took internship training had lower levels of autonomy than those who did not. Though not found statistically significant, the problem solving skills of the students who took internship training were better. In order to increase the autonomy levels of internship students, the curriculum applied could be revised, and strategies to improve autonomy could be put into practice. In nursing education, internship training could be given to senior nursing students to increase their self-confidence, to develop their problem solving skills and to help them cope with stress. For the purpose of decreasing the stress levels of nursing students in practical areas, use of reflection could be included in nursing training programs. At nursing schools where internship training programs are applied, different educational methods (simulation and high fidelity simulators, computer-aided curricula and so on) could be used to develop students' problem solving skills. Lastly, longitudinal studies could be conducted to see the changes in students over time.

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