# The Related Factors of Moral Sensitivity in Nursing Students

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## Abstract

**Background:** Educating high quality and morally sensitive nurses requires educators to be aware of variables related to students' moral sensitivity. **Objectives:** The study aimed to determine the moral sensitivity levels of nursing students according to sociodemographic and educational variables. **Methods:** This study employed a cross-sectional descriptive design. The number of respondents was 189 of the total 300 undergraduate nursing students. Data were collected using the Moral Sensitivity Questionnaire (MSQ). **Results:** Total moral sensitivity ($F_{2\text{-}186}$,=3.82, p=0.020) and autonomy ($F_{2\text{-}186}$=6.65, p=0.000) scores of students decreased with age and educational level. The students who were living with their friends ($F_{2\text{-}171}$=4.09, p=0.008) and who had taken ethic courses (t=2.34, p=0.020), had a lower level of moral sensitivity. **Conclusion:** Contrary to expectations, moral sensitivity levels of students usually decreased by age and educational level in some sub-dimensions and the total scores, other sub-dimensions did not show any differences. The underlying causes of these results should be explored with further quantitative and qualitative studies.

**Key Words:** Moral, Moral Sensitivity, Nursing Students.

## Öz

### Hemşirelik Öğrencilerinin Ahlaki Duyarlılıkları ile İlişkili Faktörler

**Giriş:** Nitelikli ve ahlaki olarak duyarlı hemşireler yetiştirebilmek için öğrencilerin ahlaki duyarlılıkları ile ilişkili faktörlerin farkında olunması gereklidir. **Amaç:** Bu çalışmada hemşirelik öğrencilerinin ahlaki duyarlılık düzeylerinin sosyodemografik ve eğitimsel değişkenlere göre değerlendirilmesi amaçlanmıştır. **Yöntem:** Bu çalışma kesitsel tanımlayıcı olarak planlanmıştır. Toplamda 300 hemşirelik öğrencisinden 189'u çalışmaya gönüllü olarak katılmıştır. Veriler Ahlaki Duyarlılık Ölçeği ile toplanmıştır. **Bulgular:** Öğrencilerin toplam ahlaki duyarlılık ($F_{2\text{-}186}$,=3.82, p=0.020) ve otonomi ($F_{2\text{-}186}$=6.65, p=0.000) puanları yaş ve eğitim düzeyine göre azalmaktadır. Arkadaşları ile birlikte yaşayan ($F_{2\text{-}171}$=4.09, p=0.008) ve etik dersi alan (t=2.34, p=0.020) öğrencilerin ahlaki duyarlılıkları daha düşük olarak bulunmuştur. **Sonuç:** Beklenenin aksine öğrencilerin ahlaki duyarlılığı bazı alt boyutlarda ve toplam puanlarda yaşa ve eğitim düzeyine göre azalmaktadır, diğer alt boyutlarda herhangi bir farklılık görülmemiştir. Bu sonuçlarda altı çizilen nedenler yapılacak nicel ve nitel çalışmalar ile değerlendirilmelidir.

**Anahtar Kelimeler:** Ahlak, Ahlaki Duyarlılık, Hemşirelik Öğrencileri.
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Ethic is often described as doing the right and good thing and having a certain kind of character with regard to values (Gallagher and Hodge, 2012). It is also known as a moral philosophy (Pattison and Pill, 2004) and includes moral sensitivity. Moral sensitivity is related to ethical decision-making and implies the capability of being aware of ethical issues, and of an individual's own roles and responsibilities in ethically sensitive situations (Lutzen, Dahlqvist, Eriksson and Norberg 2006).

Health care activities involve improving the wellbeing of people who are suffering from a disease or who need help. Thus, it is often described as a moral domain (Lutzen et al., 2006) and includes ethical decision making, awareness and internalization of ethical principles. Health care providers therefore need to have moral sensitivity in order to provide morally effective care and to make proper decisions, which often include life/death situations.

All health care professionals interact with patients, relatives and other professionals in one-to-one relationships (Gallagher and Tschudin, 2010) and can face ethical issues in everyday practice. However, nurses as a group of health care professionals providing 24-hour continuous care and facing ethical dilemmas more often than most, have a greater role in the health care system and in ethical decision-making processes (Ahn and Yeom, 2013; Redman, 1996). In order to understand ethical issues, nurses need to have higher level of moral sensitivity and to respect the values and rights of people (Gastmans, 2002). With the role of nurses expanding in the health care system, it is important to develop a morally competent viewpoint in nurses as early as possible.

Providing morally sensitive care requires insight, and the professional education process is an opportunity for improving the internalization of moral sensitivity. Therefore, educators need to be aware of the moral sensitivity of nursing students and of the variables related to moral sensitivity. Our literature review showed that, although there are some studies analysing moral sensitivity in undergraduate and graduate nurses (Comrie, 2012; Naden and Erikson, 2012; Park, Kjervik, Crandell and Oermann 2012), little attention is being paid to the variables which are related to the moral sensitivity of nursing students. Hence, we aimed to determine the moral sensitivity levels of nursing students according to particular sociodemographic and educational variables. We have tried to answer the following questions: "What are the moral sensitivity levels of nursing students?" and "How are the moral sensitivity scores of nursing students distributed according to particular sociodemographic and educational variables?".

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## Purpose of the Study

This study aimed to determine moral sensitivity levels and the related factors of moral sensitivity in nursing students.

## Background

Professional ethic is related to the values and standards of a particular profession and gives directions to the professionals to act appropriately (Banks and Gallagher, 2009). Ethical principles, which are generally described under the four main headings of respect for: autonomy, non-maleficence, beneficence and justice (Beauchamp and Childress, 2001), provide some general principles to apply to the problems (Pattison and Pill, 2004). These ethical principles are a very valuable guide to the professions, especially the health professions, owing to the complexity of the health care environment. Applying ethical principles to practice requires moral sensitivity and this is related to an individual's capacity to detect and interpret moral questions (Haidt, 2001; Moll, de Oliveira-Souza, Moll, Ignácio, Bramati, Caparelli-Dáquer and Eslinger 2005).

Moral sensitivity requires caregivers to be aware and interpret verbal and nonverbal clues and behaviours in order to identify client needs (Corley, Minick, Elswick, Jacobs, 2005). Individual's self, life satisfaction, insight, awareness of ethical issues, professional approaches etc. can influence the levels of moral sensitivity (Corley et al., 2005; Schluter et al., 2008). On the other hand, moral sensitivity as the individual's capacity to detect and interpret moral questions and includes moral judgement. Moral judgments establish which social behaviors are considered acceptable or not (Calatayud and Aldas, 2016; Haidt, 2001; Moll et al., 2005).

Among the health care professions, nurses, as 24-hour care providers, need to have moral sensitivity as a part of their profession in order to recognise ethical dilemmas and to find appropriate solutions (Ersoy and Gundogmus, 2003). Research supports this viewpoint and shows that, in clinical situations, nurses with higher levels of moral sensitivity can better work out ethical issues (Ersoy and Gundogmus, 2003; Lovett and Jordan, 2010; Rushton and Penticuff, 2007).

Making right decisions and performing according to ethical principles requires not only clinical competence but also ethical competence (Cannaerts, Gastmans and Dierckx de Casterle 2014). Qualified care can be possible as a result of being confident and having an ethically laden practice (Gastmans, 2002). Nurses are continuously challenged to make decisions which provide better care (Cannaerts et al., 2014). In this regards, moral sensitivity and responsibility is therefore of central importance to nurses who provide care according to their own moral values (Corley et al., 2005). However, nursing shortages, work stress and work overload can frequently create problems about ethical decision making for nurses, especially while caring for high-acuity patients or in challenging patient conditions which generally reveal ethical dilemmas (Wolf and Zuzelo, 2006). Nurses often face moral and ethical dissonance and moral distress because of these dilemmas and this can lead to emotional stress and burnout in time (Cameron, Schaffer and Hyeoun-Ae 2001; Fairchild, 2010).

Moral distress, which is defined as 'knowing the morally right course of action to take but being hindered by institutional structure and conflicts with other co-workers', is associated with problems about professional values, responsibilities and duties (Epstein and Hamric, 2009; Hardingham, 2004; Kalvemark, Hoglund, Hansson, Westerholm and Arnetz 2004). Thus, it has negative impacts on job satisfaction and on the delivery of safe and competent quality of patient care (Pauly, Varcoe and Storch 2012), and it can lead to the moral suffering of nurses (McCarthy and Deady, 2008). Literature has shown that moral distress is an undeniable and wide spread problem for nurses (Hamric, 2010; Pauly, Varcoe, Storch and Newton 2009; Pauly et al., 2012; Ulrich, O'Donnell, Taylor, Farrar, Danis and Grady 2007). Developing moral sensitivity levels can provide better coping styles with ethical issues and can prevent unwanted conclusions that have indicated before.

Although ethic in nursing education has received growing attention (Scott, 1996; Kanne, 1994), nursing students still experience problems in ethical reflection, ethical decision making, and ethical behaviour owing to clinical traditions, the expectations of others, and uncertainty and confusion (Dierckx de Casterle, Izumi, Godfrey and Denhaerynck 2008; Goethals, Gastmans and Dierckx de Casterle 2010; Laabs, 2011). Being novice and having limited knowledge, experience and skills in solving ethical conflicts may cause student nurses to experience these problems more often and may affect their motivation and moral satisfaction negatively (Comrie, 2012; Cameron et al., 2001; Nolan and Markert, 2002). Moral distress and burnout of nurses who are the role models may also have a negative impact on student nurses (Austin, Lemermeyer, Goldberg, Bergum and Johnson 2005; Rice, Rady, Hamrick, Verheijde and Pendergast 2008). These factors, as well as critical thinking and ethical reasoning skills, should be taken into consideration in student education by nurse educators (Ahn and Yeom, 2013).

One of the most important expectations from undergraduate nursing education is the preparation of students for professional practice, in terms of health care ethic as well as other educational issues (Monteverde, 2014). Monteverde (2014) states that students' moral development needs to be improved concerning their knowledge, skills and attitudes towards ethical issues. Moral sensitivity can be improved through education and training. In a research of Baykara et al. (2014), moral sensitivity levels of nursing students was higher in training group (Baykara, Demir, Yaman, 2015). Also, individual's attention to moral issues can lead to greater sensitivity and result in morally responsible behavior at the time of decision making (Borhani, Keshtgar, Abbaszadeh, 2015). Hence, identification of the factors related to moral sensitivity, and the determination and use of appropriate educational strategies are essential characteristics of a learning environment which helps towards the internalization of moral sensitivity (Cannaerts et al., 2014).

## Methods

### *Study Design*

This study employed a cross-sectional descriptive design.

***Place of the Research***

We conducted the study with 189 undergraduate nursing students in a nursing faculty in Turkey.

***Study Population***

The faculty had 300 undergraduate nursing students in total during the 2012-2013 educational year. All the students invited to the study without using any sampling method. Before their courses, students informed about the study and the scale and the data form were distributed. Time, cost constraints and voluntarily participation prevented the inclusion of all of the students. Of those (total 300 students) contacted, several declined to support participation but of those that agreed this allowed access to 189 students (%69 of total).

The faculty in which the study was conducted provides a four-year undergraduate nursing education course. A compulsory ethic course is provided during the second semester of the third year under the name of *"Nursing Deontology and Ethic"* that provides theoretical knowledge including mean of ethic, ethical decision-making, ethical issues and solutions, deontology, malpractice, ethic codes and principles during weekly 3-hours (total 42 hours in a semester) lectures Therefore, this faculty provides eight fundamental nursing courses which are spread over four years:

- Fundamentals of nursing
- Internal medicine nursing
- Surgical nursing
- Obstetric and gynecology nursing
- Child health and diseases nursing
- Psychiatric nursing
- Public health nursing
- Nursing services administration.

Each of these courses also considers the theoretical lectures of ethical issues relevant to their subject area including malpractice, legal issues, ethic behaviours, ethic codes and principles.

***Selection Criteria***

The selection criteria for participants to the study were simply: being an undergraduate nursing student at the current nursing faculty.

***Data Collection***

The aim and scope of our study were explained verbally to the students who were interested in participating and obtained their consent to participate in the study. After receiving the informed consent of the students, the scale and the data form were distributed to the students. Data were collected using the student information form and the Moral Sensitivity Questionnaire (MSQ) by face to face interactions with students to promote data security. The dates of the study were $4^{th}$ – $30^{th}$ March 2013, inclusive.

*Student information form.* This form includes 14 questions about the sociodemographic and educational characteristics of nursing students such as: age, gender, class of enrollment, living place, experiences of taking deontology lesson and/or attending conferences. Therefore, we asked one open-ended question to students about their thoughts of the moral behaviours of nurses.

*Moral sensitivity questionnaire (MSQ).* The MSQ was developed by Lutzen, Everton and Nordin (1997) to measure moral sensitivity. Content validity of the original tool was established and adapted to the Turkish language and culture by Tosun (2005). The questionnaire includes 30 closed-ended questions that are rated using a 7-point Likert scale. Scoring of the questionnaire items varies between 1 and 7, where 1 represents 'completely agree' and 7 represents 'completely disagree'. The questionnaire includes six sub-dimensions which are defined as:

- Autonomy (items 10, 12, 15, 16, 21, 24, 27)
- Holistic approach (items 1, 6, 18, 29, 30)
- Beneficence (items 2, 5, 8, 25)
- Conflict (items 9, 11, 14)
- Implementation (items 4, 17, 20, 28) and
- Orientation (items 7, 13, 19, 22).

The minimum score of the questionnaire is 30 and the maximum is 210; lower scores show higher levels of moral sensitivity. The Cronbach α value of the questionnaire for internal consistency is .84 and for reliability is .98 (Tosun, 2005). The Cronbach α value of the questionnaire for internal consistency is .87 and for reliability is .96 in our results

***Data Analysis***

Data were coded and analysed using the SPSS 21 statistical software (IBM SPSS Statistics v21). Figures and percentages were used in the presentation of the findings depending on the data. A p value of less than .05 was accepted as the significance level for statistical tests. For analysis of the significance, t-test and MANOVA were used. The results of multible comparison analysis were presented by using Scheffe Test according to Post-Hoc analysis of MANOVA.

***Ethical Considerations***

Written permission from the nursing faculty and ethical approval from the university Ethic Committee for Non-Invasive Studies were obtained (GO13/137-20). The aim and scope of our study was explained verbally to the participants who each then received a written summary of the same information. The participants were then asked to give their consent to participate in the study; data was collected only from participants who gave both oral and written consent. No individually identifiable data was requested from the participants and all data was anonymised.

## Results

The majority of the students who participated in the study were female (93.1%); 56.1% of them were 20-22 years old (21.63 ± 3.47) and 37.6% were in their first year. More than half (55.6%) hadn't taken any course about ethical issues. Nearly all the students (98.9%) reported that self-awareness had an important role in the development of moral sensitivity. Although the majority of students (98.9%) indicated that nurses should have moral sensitivity, most of them (72.5%) thought that nurses don't always behave in a morally sensitive manner while caring.

The mean of the moral sensitivity scores of the students was 21.95 ± 2.11 (min 17, max 27). Total moral sensitivity score of students was 91.01 ± 19.23 (min 30, max 165). The scores of the sub-dimensions were 21.62 ± 6.22 (min 7, max 39) for autonomy, 12.48 ± 4.17 (min 4, max 22) for beneficence, 11.32 ± 3.08 (min 3, max 19) for conflict, 12.53 ± 4.40 (min 4, max 28) for implementation, 9.92 ± 3.54 (min 4, max 24) for orientation and 12.94 ± 4.34 (min 5, max 27) for holistic approach (See Table 1).

Our results showed that MSQ scores were statistically significantly different depending on some sociodemographic (age, class, the place where the student lives) and educational variables (taking an ethic course before the study, finding nursing deontology and ethic courses useful, finding participation in conferences related to ethic useful), (See Table 2).

The total moral sensitivity level of the students in 17-19 age group (85.35 ± 20.03) was statistically higher than the students in 20-22 age group (93.48 ± 18.64) and the 23 and over age group (94.60 ± 15.60), ($F_{2\text{-}186}$=3.820, p=0.020). The autonomy level of the students in the 23 and over age group (24.20 ± 6.14) was significantly lower than those in the 17-19 (19.30 ± 6.02) and 20-22 (22.55 ± 6.04) age groups ($F_{2\text{-}186}$=6.650, p=0.000). The implementation sub-dimensions score of the students in the 20-22 age group (13.46 ± 4.28) was statistically significantly lower than in the 17-19 (10.77 ± 4.04) and the 23 and over (11.30 ± 3.19) age groups ($F_{2\text{-}186}$=8.060, p=0.000).

Fourth year students' total moral sensitivity level (97.45 ± 15.44) was significantly lower than 3rd (95.09 ± 14.41), 2nd (92.65 ± 21.16) and 1st (84.05 ± 20.33) year students ($F_{3\text{-}185}$=5.800, p=0.001). Similarly, the autonomy level of 4th year students (23.84 ± 5.98) was lower than 3rd (23.43 ± 4.42), 2nd (22.75 ± 6.52) and 1st (18.73 ± 5.89) year students ($F_{3\text{-}185}$=9.550, p=0.000). The implementation sub-dimension score of 3rd year students (14.03 ± 3.88) was lower than 1st (10.47 ± 3.94), 2nd (13.85 ± 5.05) and 4th year (13.54 ± 3.67) students ($F_{3\text{-}185}$=9.500, p =0.000).

The total moral sensitivity and the orientation level of students who were "living with friends" was significantly lower than students who were "living with family" and "living in hall of residence" (total moral sensitivity $F_{2\text{-}171}$: 9.500, p=0.000; orientation $F_{2\text{-}171}$=5.070, p=0.002).

Students who had previously taken ethic course had significantly lower scores of total moral sensitivity (94.66 ± 19.77), autonomy (22.84 ± 6.41) and implementation (13.28±4.18) than those who hadn't (88.07 ± 19.37, 20.64 ± 5.91, 11.94 ± 4.50 respectively), (t=2.34, p=0.020; t=2.42, p=0.017; t=2.11, p=0.036 respectively). At the same time, students who found taking ethic courses 'useful' in improving moral sensitivity had lower scores of total moral sensitivity (97.53 ± 14.73), autonomy (23.76 ± 5.48) and implementation (13.94 ± 3.71) than those who found courses 'not useful' (87.41 ± 20.49, 20.45 ± 6.31, 11.77 ± 4.57 respectively), (t=3.910, p=0.001; t=3.750, p=0.001; t=3.530, p=0.001 respectively). These differences were highly statistically significant. On the other hand, students who found participating ethic conferences useful in improving moral sensitivity had significantly higher scores than others in beneficence (8.25 ± 2.50 compared with 12.57 ± 4.16), (t=3.360, p=0.037).

Changes in the scores of moral sensitivity were not statistically significant according to gender, the place where the students' family lived, the type of the high school from which the student graduated, the monthly income or educational level of the students' father and mother, or the perception about the usefulness of self-awareness in improving moral sensitivity (p>0.05).

***Table 1: MSQ Scores of the Students***

| | **Mean** ± SD | **Minimum** | **Maximum** |
|---|---|---|---|
| Total Moral Sensitivity | 91.01 ± 19.23 | 30 | 165 |
| Autonomy | 21.62 ± 6.22 | 7 | 39 |
| Beneficence | 12.48 ± 4.17 | 4 | 22 |
| Conflict | 11.32 ± 3.08 | 3 | 19 |
| Implementation | 12.53 ± 4.40 | 4 | 28 |
| Orientation | 9.92 ± 3.54 | 4 | 24 |
| Holistic approach | 12.94 ± 4.34 | 5 | 27 |

## Discussion

Moral sensitivity as an important concept of ethic can prompt an impersonal emotional response (Calatayud and Aldas, 2016). It can be improved by giving awareness of the moral need to act in order to help eliminate poverty (Haidt, 2001; Moll et al., 2005). Although, the expectation is increased understanding of the role of the individual and professional maturation, both of which enhance self-awareness and the internalization of moral sensitivity and ethical decision making, our results show the opposite of current expectations from senior nursing students. Critical to addressing unethical behaviours among nurses is to raise awareness of its existence and for university's delivering nursing programs and placement providers to work together to develop systems and processes for reporting and investigating the problem. Surprisingly, in the current study student's total

***Table 2: MSQ Scores of the Students According to Sociodemographic and Educational Variables***

| Variables | | SQ | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total Moral Sensitivity | | Autonomy | | Implementation | | Orientation | | Holistic | | Beneficience | | Conflict | |
| | | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* | $\bar{X}$±SD | Test Results* |
| **Age** | **17-19** | 85.35±20.03 | | 19.30±6.02 | | 10.77±4.04 | | 9.50±3.72 | | 12.37±4.24 | | 12.74±4.60 | | 11.37±3.24 | |
| | **20-22** | 93.48±18.64 | **$F_{2-186}$=3.82, p=0.020** | 22.55±6.04 | **$F_{2-186}$=6.65, p=0.000** | **13.46±4.28** | **$F_{2-186}$=8.06, p=0.000** | 10.10±3.49 | $F_{2-186}$=.57, p=0.560 | 13.20±4.39 | $F_{2-186}$=.73, p=0.480 | 12.36±3.98 | $F_{2-186}$=.16, p=0.840 | 11.30±3.02 | $F_{2-186}$=.01, p=0.980 |
| | **>23** | **94.60±15.60** | | **24.20±6.14** | | 11.30±3.19 | | 10.10±3.31 | | 13.20±4.54 | | 12.48±4.17 | | 11.32±3.08 | |
| **Educational Level** | **1st** | 84.05±20.33 | | 18.73±5.89 | | 10.47±3.94 | | 9.69±3.70 | | 12.07±4.11 | | 13.01±4.35 | | 10.97±3.16 | |
| | **2nd** | 92.65±21.16 | **$F_{3-185}$=5.80, p=0.001** | 22.75±6.52 | **$F_{3-185}$=9.55, p=0.000** | 13.85±5.05 | **$F_{3-185}$=9.50, p=0.000** | 9.82±3.97 | $F_{3-185}$=.84, p=0.847 | 13.10±4.11 | $F_{3-185}$=1.72, p=0.163 | 11.45±4.50 | $F_{3-185}$=1.44, p=0.231 | 11.60±3.22 | $F_{3-185}$=.51, p=0.675 |
| | **3rd** | 95.09±14.41 | | 23.43±4.42 | | **14.03±3.88** | | 10.31±3.03 | | 13.43±4.50 | | 12.06±3.30 | | 11.40±2.92 | |
| | **4th** | **97.45±15.44** | | **23.84±5.98** | | 13.54±3.67 | | 10.08±3.31 | | 13.80±4.67 | | 12.86±4.08 | | 11.56±3.00 | |
| **The place where the student lives** | **Living with family at home** | 87.62±16.84 | | 21.07±5.34 | | 11.66±4.60 | | 9.6±3.36 | | 12.11±4.24 | | 12.04±3.98 | | 11.33±2.45 | |
| | **Living with friends at home** | **99.25±22.57** | **$F_{2-171}$=4.09, p=0.008** | 23.02±7.07 | $F_{2-171}$=1.79, p=0.150 | 13.47±4.59 | $F_{2-171}$=5.07, p=0.124 | **11.72±4.15** | **$F_{2-171}$=5.07, p=0.002** | 14.12±4.91 | $F_{2-171}$=1.65, p=0.179 | 13.95±3.95 | $F_{2-171}$=2.18, p=0.091 | 11.77±3.56 | $F_{2-171}$=1.02, p=0.381 |
| | **Living in hall of residence** | 90.35±18.20 | | 21.71±6.13 | | 12.79±4.31 | | 9.47±3.15 | | 12.92±4,22 | | 12.18±4.31 | | 11.31±3.17 | |
| **Taking a course about ethic** | **Had taken** | **94.66±19.77** | **t=2.34, p=0.020** | **22.84±6.41** | **t=2.42, p=0.017** | **13.28±4.18** | **t=2.11, p=0.036** | 10.09±3.57 | t=1.20, p=0.547 | 13.45±4.57 | t=1.43, p=0.154 | 12.32±3.82 | t=.49, p=0.622 | 11.73±3.17 | t=1.65, p=0.101 |
| | **Hadn't taken** | 88.07±19.37 | | 20.64±5.91 | | 11.94±4.50 | | 9.78±3.53 | | 12.53±4.13 | | 12.61±4.45 | | 10.99±2.99 | |
| **Perception about usefulness of taking an ethic course in improving moral sensitivity** | **Useful** | **97.53±14.73** | **t=3.91, p=0.000** | **23.76±5.48** | **t=3.75, p=0.000** | **13.94±3.71** | **t=3.53, p=0.001** | 10.19±3.18 | t=.82, p=0.413 | 13.68±4.13 | t=1.79, p=0.076 | 12.59±3.77 | t=.28, p=0.780 | 11.85±2.97 | t=1.77, p=0.078 |
| | **Not useful** | 87.41±20.49 | | 20.45±6.31 | | 11.77±4.57 | | 9.77±3.73 | | 12.53±4.42 | | 12.42±4.39 | | 11.03±3.12 | |
| **Perception about usefulness of participating in a conference related to ethic in improving moral sensitivity** | **Useful** | 83.50 ±11.73 | t=1.27, p=3.363 | 19.75±2.06 | t=1.69, p=4.322 | 14.50±4.43 | t=.89, p=3.130 | 8.75±4.03 | t=.58, p=3.101 | 10.50±2.08 | t=2.29, p=3.599 | 8.25±2.50 | **t=3.36, p=0.037** | 12.25±2.87 | t=.65, p=3.153 |
| | **Not useful** | 91.16 ±19.35 | | 21.66±6.28 | | 12.49±4.40 | | 9.94 ±3.54 | | 12.99±4.37 | | **12.57±4.16** | | 11.30±3.09 | |

*t-test and MANOVA were used, F shows the MANOVA results and t shows the t-test results.

moral sensitivity and autonomy levels were getting lower by age and educational level. Students became more aware of the meaning of nursing care and its value for patients through their education and clinical placements (Murphy, Jones, Edwards, James and Mayer 2009). Reid-Ponte (1992) found that increasing age and experience lead to the acquisition of more interpersonal skills. Unlikely to literature as indicated before, our study showed that both the total moral sensitivity and the autonomy levels of students decreased with age and level of education. These findings can be explained by Normalisation Process Theory (NPT) which has three core elements; 1, bringing a practice into action (implementation), 2, practice become routinely incorporated in everyday work (embedding) and 3, practice being reproduced and sustained among the social matrices of an organization (integration) (May and Finch, 2009; May, Frances, Finch, MacFarlane, Dowrick, Treweek, et al. 2009). Whilst, clinical placements remain the most effective environment for developing nursing students' clinical skills (Papp and Von Bonsdorf, 2003), it may also be a breeding ground of negativity and disturbing experiences (Becher and Visovsky, 2012).Unethical behaviours in practice might become routinely embedded and accepted and sustained as 'normal' by students.

There is another interesting point in our results in respect of the implementation dimension of moral sensitivity. Implementation decreased in the 20-22 age group and also third and last year. It may be related to the finding that most of the students thought that nurses don't behave in a morally sensitive enough way while caring. Senior student may come up against high rates of unethical behaviour during their time in practice as a result of more placement times and increased awareness to health care environment and interactions. As they get closer to graduation, senior students are faced with the reality of the end of studentship, the start of real nursing and entrance into the health care system. This awareness may cause uncertainty about their capabilities and confusion between ideals and the reality. As a result of these uncertainties, students cannot improve moral sensitivity and experience moral distress which can result internalising unethical behaviours. Similarly, Nolan and Markert (2002) reported that students have uncertainty with ethical issues at the end of their educational program. Nurses in all clinical settings encounter ethical issues that frequently lead to moral distress (Pavlish, Brown-Saltzman, Hersh, Shirk and Nudelman 2011) and the literature includes lots of different studies relating to moral distress (Corley, 2002; McCarty and Deady, 2008; Lutzen, Cronqvist, Magnusson and Andersson 2003) and moral climate (Schluter, Winch, Holzhauser and Henderson 2008). The incidence of moral distress is common among novice nurses (Laabs, 2011) that can cause undermining the moral sensitivity while caring. In a study, many nurses reported feeling powerless in an encounter with ethical conflict (Pavlish et al., 2011). Promoting workforce retention and reducing distress can be made possible by assisting nursing students with educational strategies (Laabs, 2011) to provide better understanding of moral sensitivity and behaving ethical as a valuable part of the professional nursing care. In this regard, early understanding of ethical/moral values has greater importance (Gallagher and Tschudin, 2010). When students develop a better understanding and moral resilience during their education, they can cope with morally distressing situations more easily (Allmark, 2005; Gallagher, 2011). Thereby, this finding is a remarkable one to be taken into consideration by the nursing faculty. Nursing faculties are challenged to prepare practitioners who bring the necessary knowledge and abilities into practice (Benner, Sutphen, Leonard and Day 2009). Therefore, educational programs should consider ways to support students into the role of the nurse and to help them develop coping abilities with moral issues (Comrie, 2012). Nurse educators as role models and ethical leaders should ensure that both the explicit and the hidden curriculum is consistent with professional and ethical values (Gallagher and Tschudin, 2010).

Educational interventions improve knowledge, skills and attitudes including critical thinking, diagnostic reasoning, ethical reasoning and the ability to allocate human resources to problems (Thompson and Stapley, 2011). Moral sensitivity and autonomy are key points of the everyday decision-making of nurses (Traynor, Boland and Buus 2010) and nurses are expected to show an increase in these qualities through their professional education. Current students are the nurses and leaders of the future and have a key role in shaping the culture of generations to come. Hence, developing moral sensitivity during nursing education is extremely valuable for members of the nursing profession to be able to better cope with ethical issues. Ethic education is an essential part of the undergraduate nursing curriculum in order to develop the necessary critical thinking skills to deal with these dilemmas (Grob, Leng and Gallagher 2012), and to gain insights about ethical reasoning (Cannaerts et al., 2014) and ethical decision-making strategies (Kalaitzidis and Schmitz, 2012).

In our study, the students who had taken ethic courses before, and found taking ethic courses useful, surprisingly had lower moral sensitivity, autonomy and implementation levels. In contrast, Nolan and Markert (2002) found that students had progressive awareness in ethical issues and progressive improvement in ethical thinking through their education. This result makes us think about our educating methods which occasionally includes didactic methods. On the other hand, students' perceptions about joining conferences related to ethic didn't have the same effect on student nurses in our study. The students who thought that joining conferences related to ethic was useful for improving moral sensitivity had higher beneficence levels than others. This result may be related to the highly qualified theoretical context of conferences, which may be impressive in developing moral sensitivity of students.

The development of ethical values is a process that begins in childhood and continues throughout life; role-modelling and identification are a part of this process (Gallagher and Tschudin, 2010). Interactions with family and friends also have an importance in the development of values. As expected, students who lived with either their family or their friends would have higher moral sensitivity, our study revealed that the students who were living with their family had a higher level of orientation and moral sensitivity than those who were living in halls of residence or with their friends. Through the developmental process from childhood to young adulthood, family gives way to understand of social and professional interactions. Social learning and values are also influenced by this process and experiential learning with profession becomes prominent. Our result may be related to this phenomenon. Therefore, nurses are important role models for nursing students through their practices and viewpoints related to ethic (Gallagher and Tschudin, 2010). Nursing students observe the interpersonal and leadership skills of qualified nurses (Arries, 2009). The ethical quality of leadership can lead to either good or bad ends such as manipulative and

unethical ends (Gallagher and Tschudin, 2010). Unfortunately, nurses do not always recognise the ethical dimensions of care and what constitutes unethical practice (Redman and Fry, 2000). Nurses can also have moral blindness that can lead to practices which don't comprise ethical components of care (Johnstone, 2009). In our study, the students reported that nurses should have higher levels of moral sensitivity. However, they also reported that "*nurses do not behave in a morally sensitive manner".* In the light of these findings, an assumption may be that the students might have unwanted experiences about the ethical approaches of nurses who are potential role models. On the other hand, this opinion of the students may arise from their under-recognition of the factors that lead nurses to behave in those ways. Nurses often cannot act according to their own values in clinical environments, which creates difficulties in coping with ethical issues (Goethals et al., 2010) and causes feelings of guilt and inadequacy when ethical issues occur (Strandberg et al., 2003). Therefore, some nurses may act unethically owing to moral unpreparedness (Allmark, 2005).

## Limitations

This is a descriptive study based on a specific sample limited to one nursing faculty. Therefore, its results cannot be generalised to all nursing students in Turkey. There is a need for further research involving students of various nursing faculties. Also, some open-ended questions of *Student information form* could have possible effects on the answers of students.

## The Use of the Results in Practice

Throughout a nursing student's training many factors influence their professional aspirations and their level of moral sensitivity with the work but undoubtedly negative experiences, such unethical behaviours, will cause doubt and disillusionment and may ultimately lead to students internalising negative behaviours as a part of the profession. Our results showed that the total moral sensitivity and autonomy dimension of moral sensitivity dramatically decreased by age and educational level. Thus, educational strategies to improve the moral sensitivity of nursing students need to be restructured. By working together clinicians and academicians can develop a joint strategy that acknowledges and raises awareness of the problem.

It needs to be acknowledged that those entering nurse education are the nurses and leaders of the future and will have a key role in shaping the culture and expectations of generations to come. Nurse educators and placement providers have a responsibility to tackle this problem in order to avoid bringing the nursing profession into disrepute.

We think that our results will be useful to the nurse educators and researchers who are interested in improving the moral sensitivity of nursing students. The underlying causes of these results should be explored with further quantitative and qualitative studies.

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