

Satisfaction Level of the Nursing Students' Learning and Affecting Factors

Abstract

Aim: In order to achieve the desired level of quality in education, it is necessary to regularly assess the students' satisfaction with the education/opportunities offered by the universities they are studying at. The research was conducted to investigate the nursing students' levels of satisfaction with their education and the factors affecting these levels.

Method: The descriptive type research was conducted in the Faculty of Nursing of a State University between April 2019 and January 2020. The research was conducted with 703 nursing students studying at the related faculty in the 2019-2020 academic year. The Student Satisfaction Scale (Short Form) and an Introductory Characteristics Form to determine the descriptive characteristics of the students were used in the collection of the study data. The data were analyzed using SPSS 21 software. Descriptive tests, *t* test, ANOVA, Kruskal Wallis test and Mann–Whitney *U*-test were used for statistical analysis.

Results: The mean age of the students was 20.64 ± 1.54 . Of the students, 70.4% was female, and 98.4% was single. The SSS-SF total score average (165.06 ± 37.50) of the students was at a moderate level, and highest score average was in the "Instructors" sub-scale by 41.85 ± 8.70 points. The students' levels of satisfaction with their education were found to be affected by gender, year in university, academic achievement, status of preference of nursing department, status of love of the nursing profession, and participation in student clubs (P < .05).

Conclusion: As a result of the research, the level of satisfaction of the students was found to be moderate, and the level of their satisfaction was found to be affected by some introductory characteristics of the students.

Keywords: Student satisfaction scale, Education, Nursing

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Introduction

Universities are dynamic institutions that provide scientific and technical knowledge and professional development in order to increase the living standards of the students and society. To maintain these dynamic structures, universities today must be able to keep up with the rapid changes in the scientific, technological, educational, political, economic, social, and cultural fields.¹ In order to keep up with these changes, universities must periodically evaluate the quality of the education they offer to their students and take initiatives to improve the quality of education.^{2,3} In the understanding of quality education, the satisfaction and expectation of students, who are at the center of education, from the institution regarding the education and educational opportunities offered by the university, is an extremely important issue.³

The concept of satisfaction is defined in different ways today. According to some of these definitions, "Satisfaction refers to the existence of desired conditions or the absence of undesirable conditions".⁴ The concept of satisfaction in dictionaries is defined as "Fulfillment of a need or want, contentment, delectation, delight, enjoyment, gladness, gratification, happiness, pleasure, relish".⁵ Student satisfaction, on the other hand, refers to "A subjective assessment of educational experience and outcomes by students".⁶ In addition, it is stated that student satisfaction "positively affects students' ability to be motivated and to memorize, increases their academic achievement, and is closely related to their level of satisfaction so that students can be more successful and happy".⁷

The level of preference of universities that can meet student expectations and satisfaction is also increasing in line with the educational services they offer.⁸ Determining the level of student satisfaction and factors affecting their satisfaction and implementing the plans and initiatives to increase this satisfaction will contribute significantly to improving the quality of education for universities, as well as ensuring the reputation and recognition of the institution.^{9,10}

Although there are studies conducted in Turkey to determine the level of satisfaction of nursing students with the education they receive, these studies are limited in number.⁹⁻¹³ In their research, Lee, White, and Hong¹⁴ also addressed the factors that facilitate nursing students to learn in practice, and the methods developed to increase competence in this area, and emphasized that studies on student satisfaction in clinical education are still not at the desired level.

This research aims to investigate the levels of satisfaction of nursing students on their education and the factors affecting these levels.

Method

The descriptive and cross-sectional research was conducted in the Faculty of Nursing of a State University between April 2019 and January 2020. The study population consists of freshman students to senior students who continue their education in the nursing department of the relevant faculty. The sample of the study consisted of 703 individuals, in which their number was calculated using the formula for sampling with known study population.

Data Collection Instruments

The Student Information Form and Student Satisfaction Scale (Short Form) (SSS-SF) were used in the collection of research data.

Student Introductory Characteristics Form: It was developed by the researchers in line with the literature.⁹⁻¹³ The Student Introductory Characteristics Form includes items to determine descriptive characteristics of the students, such as age, gender, marital status, etc.

Student Satisfaction Scale (Short Form) (SSS-SF): In the study, the 2011 version, shortened and revised by Baykal,¹⁵ of the "Student Satisfaction Scale", developed by Baykal, Sökmen, and Korkmaz¹⁶ in 2002 was used. The five-point Likert-type scale was used for assessing the scale items (5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree, 1 = strongly disagree). In the scale total and in sub-scales, an average score close to 1 indicates a dissatisfaction and a score close to 5 indicates a satisfaction in the students. The scale has 5 sub-scales: "Instructors", "University Administration", "Participation in Decisions", "Scientific, Social and Technical Opportunities", and "Quality of Education". The lowest and highest scores of the 53-item scale are 53 and 265 respectively. The Cronbach's Alpha reliability coefficient of the scale was found to be 0.97. In this study, Cronbach's alpha coefficient was calculated as 0.94 for the total scale.

Data Collection

Research data were collected by the researcher on the days and times when students were free to participate. Questionnaires distributed to students by the researcher were collected back after being filled out by the students. Each questionnaire took about 15-25 min to complete.

Data Evaluation

The study data were analyzed in the SPSS 21 package program (IBM Corp Armonk, NY, USA, Released 2012). The distribution of the data was normal according to the Shapiro–Wilk test, and the variances were homogeneous according to the Levene test. The data were evaluated using mean, standard deviation, numbers, percentage calculations and chi-square test, ANOVA, and independent samples *t* tests. Post-hoc Scheffe tests were used for multiple comparisons. *P* < .05 was considered statistically significant for all results.

Ethical Principles of the Study

Before collecting research data, approval of the Ethics Committee of the Faculty of Nursing of the relevant university (no: 2019-2/6) and institutional permission were obtained from the dean of the Faculty of Nursing in order to conduct the research. Informed written and verbal consents were obtained from all the nursing students included in the research.

Results

The average age of the students was 20.64 ± 1.54 , 70.4% was female, and 98.4% was single. Of the families, 80.5% had a middle income level, 82.9% of the students had a primary school graduate mother,

55.3% of the mothers was a housewife, and fathers of 46.4% of the students was a primary school graduate, and 44.1% of the fathers was self-employed. Of the students who participated in the study, 62.7% graduated from Anatolian high school, 26.9% was sophomore, and 57.8% had a good academic achievement. It was found that 66.3% of the students preferred the nursing willingly and 55.3% preferred the nursing department in the first place. Of the students, 69.8% was found to love the nursing profession, and 82.8% was not participating in club activities at the university (Table 1).

The SSS-SF total score average of the students was 165.06 ± 37.50 . Students received the highest score in the "Instructors" sub-scale by 41.85 ± 8.70 points, and the lowest score in the "Participation in Decisions" sub-scale by 23.70 ± 5.22 points. It was determined that the students received 41.13 ± 10.67 points from the "Quality of Education" sub-scale, 30.56 ± 6.51 from the "University Administration" sub-scale, and 27.82 ± 6.40 from the "Scientific, Social, and Technical Opportunities" sub-scale (Table 2).

Looking at the statistical relationship between gender and sub-scale score averages of the students, the difference between gender and "Instructors" sub-scale score, "Scientific, Social, Technical Opportunities" sub-scale score, and SSS-SF total score average was found to be statistically significant (Table 3, P < .05). It was found that there was no statistically significant difference between the "School Management", "Participation in Decisions", and "Quality of Education" sub-scale score averages in terms of gender (Table 3, P > .05).

A statistically significant difference was found between the year in school and SSS-SF total score average, "Scientific, Technical, Social Opportunities" sub-scale, and "Quality of Education" sub-scale score averages (Table 3, P < .05). The difference between students' year in school and the "Instructors", "University Administration", and "Participation in Decisions" sub-scale score averages was not found to statistically significant (Table 3, P > .05).

When we look at the sub-scale averages according to the Cumulative Grade Point Averages (CGPA) of the students, no statistically significant difference was found between the "Social, Scientific, Technical Opportunities" and "Quality of Education" sub-scale score averages (Table 3, P > .05). The difference between CGPA and SSS-SF total score average, "Instructors", "University Administration", "Participation in Decisions" sub-scale score average, was found to be significant (Table 3, P < .05).

A statistically significant difference was found between SSS-SF total and all sub-scale averages of the students participated in the research, according to their willingness in choosing the nursing department and love of the nursing profession (Table 3, P < .05).

In the evaluation of the statistical relationship between students' participation in club activities and SSS-SF total and sub-scale score averages, a statistically significant difference was found between the SSS-SF total score average, "University Administration", "Participation in Decisions", and "Quality of Education" sub-scale score averages (Table 3, P < .05). There was no statistically significant difference between the state of participation in club activities and the "Instructors" and "Scientific Social Technical Opportunities" sub-scale score averages of the students (Table 3, P > .05).

Discussion

As a result of the research, the overall SSS-SF score average of the students was found to be moderate. When the score averages of the students from the SSS-SF sub-scales were examined, it was found

Table 1. Distribution of Students' Descriptive Characteristics

| Descriptive Characteristics | Mear | Mean ± SD | | |
|-------------------------------|-------|--------------|--|--|
| Years | 20.64 | 20.64 ± 1.54 | | |
| | Nn | % | | |
| Gender | | | | |
| Female | 495 | 70.4 | | |
| Male | 208 | 29.6 | | |
| Marital status | | | | |
| Married | 11 | 1.6 | | |
| Single | 692 | 98.4 | | |
| Economic status | | | | |
| Poor | 73 | 10.4 | | |
| Medium | 566 | 80.5 | | |
| Good | 64 | 9.1 | | |
| Mother Education Status | | | | |
| Illiterate | 178 | 25.3 | | |
| Primary education | 389 | 55.3 | | |
| High school | 95 | 13.5 | | |
| University | 41 | 5.8 | | |
| Mother Employment Status | | | | |
| Officer/worker | 98 | 13.9 | | |
| Retired | 22 | 3.1 | | |
| Housewife | 583 | 82.9 | | |
| Father's Education Status | | | | |
| Illiterate | 49 | 7 | | |
| Primary education | 326 | 46.4 | | |
| High school | 210 | 29.9 | | |
| University | 118 | 16.7 | | |
| Father Employment Status | | | | |
| Officer/Worker | 245 | 34.9 | | |
| Retired | 148 | 21.1 | | |
| Self-employment | 310 | 44.1 | | |
| High School Graduated | | | | |
| Normal high school | 165 | 23.5 | | |
| Health vocational high school | 81 | 11.5 | | |
| Anatolian high school | 441 | 62.7 | | |
| Science high school | 16 | 2.3 | | |
| Class | | | | |
| 1 | 169 | 24 | | |
| 2 | 189 | 26.9 | | |
| 3 | 184 | 26.2 | | |
| 4 | 161 | 22.9 | | |
| CGPA | | | | |

| Table 1. Distribution of Students' Descriptive Characteristics (Continued) | | | | | | | |
|--|-----|------|--|--|--|--|--|
| Descriptive Characteristics Mean ± | | | | | | | |
| Good | 293 | 41.7 | | | | | |
| Middle | 410 | 58.3 | | | | | |
| Bad | 0 | 0 | | | | | |
| Choosing the nursing department willingly | | | | | | | |
| Yes | 466 | 66.3 | | | | | |
| No | 237 | 33.7 | | | | | |
| The order of choosing the nursing department | | | | | | | |
| First choice | 389 | 55.3 | | | | | |
| 5 and above choice | 314 | 44.7 | | | | | |
| Loving the nursing profession | | | | | | | |
| Yes | 491 | 69.8 | | | | | |
| No | 212 | 30.2 | | | | | |
| Participation in club activities at school | | | | | | | |
| Yes | 121 | 17.2 | | | | | |
| No | 582 | 82.8 | | | | | |

 Table 2. Distribution of Mean Scores of Student Satisfaction Scale

 and Sub-Dimensions

| SSF-SF and Sub-Dimensions | Min- Max | Mean ± SD |
|---|-------------|----------------|
| Instructors | 13-60 | 41.85 ± 8.70 |
| University administration | 9-45 | 30.56 ± 6.51 |
| Participation in decisions | 7-35 | 23.70 ± 5.22 |
| Scientific, social and technical Opportunities | 13-65 | 27.82 ± 6.40 |
| Quality of education | 12-60 | 41.13 ± 10.67 |
| Total | 53-265 | 165.06 ± 37.50 |

that they have the highest average score in the "Instructors" sub-scale and the lowest average score in the "Participation in Decisions" subscale (Table 2). In their study, Özdelikara and Bodur¹³ found that the average score of nursing students taken in the SSS-SF was 167.56 ± 40.59, and that their highest average score was in the "Instructors" sub-scale, and the lowest average score was in the "Participation in Decisions" sub-scale. In their study, Bülbül, Ateş, and Öztürk¹³ found that the nursing students' level of satisfaction with the education they receive was moderate, similar to our study findings. In their study, Yangın and Kırca¹⁰ found that the average score of the students on the Student Satisfaction Scale was 160.71 ± 37.39, and that the highest score was in "Quality of Education" sub-scale. In their study, Kaynar et al.⁸ found that the satisfaction level the students was 131.83 \pm 53.05. In our study results, it is pleasing that the average SSS-SF score of students higher than that of reported in the study by Yangın and Kırca,10 and Kaynar et al.,8 and that the highest score taken by the students was in the "Instructors" sub-scale. In the

| Descriptive Characteristics | n | Instructors X ± SD | University Ad- ministration X ± SD | Participation in Decisions X ± SD | Scientific, Social and Tech- nical Opportunities X ± SD | Quality of Edu- cation X ± SD | SSS-SF Total X ± SD |
|---|-----|-------------------------------------|--|---|--|----------------------------------|---------------------------------------|
| Gender | | | | | | | |
| Female | 495 | 41.41 ± 8.51 | 30.33 ± 6.52 9 | 23.53 ± 5.14 | 30.84 ± 7.13 | 39.07 ± 9.31 | 165.18 ± 36.61 |
| Male | 208 | 42.90 ± 9.08 | 31.10 ± 6.4 | 24.15 ± 5.39 | 32.02 ± 6.78 | 40.16 ± 9.99 | 170.33 ± 37.73 |
| | | t = - 2.085 P = .037* | t = - 1.419 P = .156 | t = - 1.462 P = .144 | t = - 2.030 P = .043* | t = - 1.387 P = .166 | t = - 2.072 P = .039* |
| Class | | | | | | | |
| la | 169 | 42.12 ± 8.18 | 31.59 ± 6.51 | 24.28 ± 5.09 | 32.55 ± 6.56 | 40.94 ± 9.26 | 171.50 ± 28.22 |
| 2 ^b | 189 | 42.61 ± 8.75 | 30.49 ± 6.16 | 23.52 ± 5.05 | 31.76 ± 6.73 | 39.64 ± 8.88 | 168.05 ± 28.8 |
| 3 ^c | 184 | 41.20 ± 8.26 | 30.45 ± 6.67 | 29.90 ± 5.21 | 30.76 ± 6.90 | 39.20 ± 9.25 | 165.52 ± 30.53 |
| 4 ^d | 161 | 41.42 ± 9.62 | 29.68 ± 6.65 | 23.08 ± 5.53 | 29.58 ± 7.71 | 37.72 ± 10.58 | 161.50 ± 32.76 |
| | | <i>F</i> : 1.017 <i>P</i> = .384 | F: 2.407 P = .066 | F:1.624 P = .182 | F: 5.666 P = .001** Post Hoc: a > b,c | F: 3.239 P = .022* | <i>F</i> : 3.261 <i>P</i> = .021* |
| CGPA | | | | | | | |
| Good | 293 | 41.11 ± 7.97 | 29.81 ± 6.24 | 23.09 ± 5.19 | 30.78 ± 7.05 | 38.89 ± 8.93 | 163.69 ± 28.02 |
| Middle | 410 | 42.38 ± 9.17 | 31.09 ± 6.65 | 24.15 ± 5.20 | 31.48 ± 7.03 | 39.76 ± 9.92 | 168.88 ± 31.55 |
| | | t = 1.914 P = .012* | t = 2.570 P = .010* | t = 2.661 P = .014* | t = 1.300 P = .217 | t = 1.197 P = .216 | t = 2.247 P = .025* |
| Choosing the nursing department willingly | | | | | | | |
| Yes | 466 | 42.69 ± 8.49 | 31.27 ± 6.37 | 24.18 ± 5.14 | 31.81 ± 6.78 | 40.23 ± 9.35 | 170.18 ± 36.13 |
| No | 237 | 40.19 ± 8.90 | 29.15 ± 6.57 | 22.78 ± 5.27 | 29.96 ± 7.39 | 37.75 ± 9.67 | 159.83 ± 37.8 |
| | | t = 3.628 P < .001 | t = 4.130 P = .001** | t = 3.387 P = .001** | t = 3.328 P = .001** | t = 3.286 P = .001** | t = 4.352 P < .001 |
| Loving the nursing profession | | | | | | | |
| Yes | 491 | 42.81 ± 8.40 | 31.45 ± 6.35 | 24.23 ± 5.13 | 31.59 ± 6.95 | 40.72 ± 9.09 | 170.80 ± 35.92 |
| No | 21 | 39.62 ± 9.00 | 28.50 ± 6.43 | 22.48 ± 5.24 | 30.25 ± 7.18 | 36.33 ± 9.83 | 157.18 ± 37.68 |
| | | t = 4.517 P < .001 | t = 5.609 P < .001 | t = 4.127 P < .001 | t = 2.328 P = .020* | t = 5.720 P < .001 | t = 5.596 P < .001 |
| Participation in club activities at school | | | | | | | |
| Yes | 121 | 43.09 ± 9.35 | 32.07 ± 6.74 | 25.04 ± 4.94 | 32.31 ± 6.96 | 41.31 ± 9.03 | 173.82 ± 37.02 |
| No | 582 | 41.59 ± 8.55 | 30.24 ± 6.42 | 23.43 ± 5.24 | 30.96 ± 7.04 | 39.00 ± 9.58 | 165.22 ± 36.83 |
| | | t = 1.730 P = .084 | t = 2.817 P = .005** | <i>t</i> = 3.119 <i>P</i> = .002** | t = 1.926 P = .054 | t = 2.437 P = .015* | <i>t</i> = 2.867 <i>P</i> = .004** |

Table 3. Comparison of Students' Average Scores They Got from Student Satisfaction Scale and Sub-Dimensions

literature, it is stated that student satisfaction can be affected by many institutional differences, such as the academic staff in the institution, the physical facilities of the institution, the administrators

and officials of the institution. We believe that this difference between our study results and other studies in the literature is due to the differences in institutional structure and academic staff. $^{17-19}$

^{*}*P* < .05, ***P* < .01

When we look at the statistical relationship between SSS-SF total and sub-scale score averages of the students according to gender variable, the average score of male students was found to be higher than that of female students, and a statistically significant and positive difference was found between gender and "Instructors", "Scientific, Social, Technical Opportunities" sub-scales, and SSS-SF total score average (Table 3, P < .05). Looking at the literature, it is seen that studies investigating satisfaction with learning by gender report varying results. In their study, Bülbül, Ates, and Öztürk¹³ and Egelioğlu et al.⁹ reported that the average satisfaction score of female students was higher than the average score of male students, but the difference was not statistically significant. In these studies, the satisfaction of female students with their education higher than that of male students may be due to the fact that nursing was considered a female profession, until recently, and male students are affected by this situation. In our study, it is pleasing that the satisfaction of male students is higher than that of female students, and we believe that this is related to a change in the view of the nursing profession and an increase in the number of male nurses in Turkey every day.

In the comparison of the SSS-SF total and sub-scale score averages of the students according to their years in university, a statistically significant relationship was found between the students' year in university and "Scientific, Technical, Social Opportunities" sub-scale, "Quality of Education" sub-scale, and SSS-SF total score averages, and freshman students were found to have the highest score average (Table 3, P < .05). Looking at the results of other studies on the subject, it is seen that the average score of freshman students is higher than those of other students, and the difference is statistically significant in the comparison of the average SSS-SF total and sub-scale scores.^{10-12,20}

As a result of the study, it was found that there was a statistically significant difference between CGPA of the students and their total SSS-SF score average, and "Instructors", "University Administration", "Participation in Decisions" sub-scale score averages and that students with moderate CGPA were found to have higher total and sub-scale score averages (Table 3, P < .05). We believe that this result is due to the fact that students with a moderate CGPA are outnumbered. In their study conducted to determine the impact of satisfaction of nursing students on their academic achievement, Egelioğlu et al.⁹ found a significant relationship between students' academic achievement and satisfaction levels. Karatzias, Power and Swanson²¹ have found that students' satisfaction with their education and satisfaction levels were effective in increasing their academic achievement, similar to our study results.

According to the study results, it was found that the SSS-SF total and all sub-scale score averages of the students who had chosen their department willingly were higher than that of other students, and the difference was statistically significant (Table 3, P < .05). In accordance with our study results, it was found in the studies in the literature that the average satisfaction score of students who were happy to be in the nursing department was higher than in other groups.^{10,12}

As a result of the study, it was found that the SSS-SF total and all subscale score averages of the students who love their profession were higher than that of other students, and the difference was statistically significant (Table 3, P < .05). It was found in many studies conducted with nursing students that students love their profession.^{10,22,23} A student's love of their chosen profession is an important factor that increases his/her satisfaction with the education. In their study, Özdelikara and Bodur¹² also found that the difference between the status of love of the profession and the scale total and sub-scale score averages was statistically significant. As a result of the research. 82.8% of the students was not found to participate in club activities in their university. In the evaluation of the statistical relationship between students' participation in club activities and SSS-SF total and sub-scale score averages, a statistically significant difference was found between the SSS-SF total score average, "University Administration", "Participation in Decisions", and "Quality of Education" sub-scale score averages (Table 3, P < .05). In their study, Görgen and Bingöl²⁴ found that 49.7% of the students did not participate in club activities, and that the satisfaction of students who did not participate in club activities was lower than those who participated in such club activities. In their study, Yangın and Kırca¹⁰ found that students who did not participate in student clubs were dissatisfied. We believe that this decrease in student participation rates in school clubs may be due to the insufficient number of clubs and inadequate club activities in universities, which cannot meet students' expectations, and may be due to the excessive course burden of the students.

Limitations of the Study

Conducting the research on the relevant dates and only with students of the Faculty of Nursing of Atatürk University is the limitation of the research.

Conclusion

As a result of the research, it was found that the level of students' satisfaction with the education was moderate, that they have the highest satisfaction in the "Instructors" sub-scale and lowest in the "Participation in Decisions" sub-scale and that the satisfaction levels of students were affected by some introductory characteristics.

In line with these results, it may be recommended to take measures to improve satisfaction, especially in areas where students' satisfaction level is low, such as "Participation in Decisions", and to plan and implement initiatives to increase the level of participation of students in decisions. In addition, it will be useful to conduct new and larger scale research at different institutions to determine the expectations of students from the universities they are studying at.

Ethics Committee Approval: Ethics committee approval was received for this study from the Atatürk University Faculty of Nursing (date and number: 19.04.2019/2019-2/6).

Informed Consent: Informed consent was obtained from the students who participated in the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – E.T., M.K.; Design – E.T., M.K.; Supervision – M. K.; Resource – E.T., M.K.; Materials – E.T., M.K.; Data Collection and/or Processing – E.T.; Analysis and/or Interpretation – E.T., M.K.; Literature Search – E.T., M.K.; Writing – E.T., M.K.; Critical Reviews – E.T., M.K.

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