

Subjective well-being and influencing factors in Turkish nursing students: A cross-sectional study

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Abstract

Objective: To investigate subjective well-being levels of nursing students and the factors affecting it.

Methods: The cross-sectional descriptive study was conducted at a health school of a state university in Aydin, western Turkey, from March to April, 2015, and comprised nursing students in the bachelor's programme. Personal information form, perceived stress scale, perceived social support scale, subjective well-being scale were used for data collection. Multiple linear regression analysis with stepwise method was employed using SPSS 18 for data analysis.

Results: Of the 297 subjects, 230(77.4%) were female. The overall mean age of the sample was 20.32 ± 1.65 years. Perceived stress, perceived social support, participation in social or cultural activities, perception of academic success and conscious choice of nursing career accounted for 54% of the variance in the students' subjective well-being and it is a useful model. Perceived stress alone accounted for 39% of the variance. However, students' perceptions of economic status and availability of teachers with whom students could share their problems did not explain subjective well-being in the model.

Conclusion: Perceived stress was found to play an important role in subjective well-being of the nursing students.

Keywords: Subjective well-being, Stress, Social support, Nursing students. (JPMA 70: 630; 2020)

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Introduction

Higher education is a period of transition to adulthood where adult roles and responsibilities are imposed, and significant changes are experienced. While university students, in this phase, strive to achieve the development level expected of them, they also have to deal with some problems posed by the university environment. Students experience problems such as making new friends, leaving the family, adapting to the life in student residences, financial difficulties, and worrying about future career and working life. A significant number of university students do not receive adequate preventive mental health support services when dealing with these problems. For this reason, students constitute a significant risk group for mental disorders such as depression, suicidal tendency and anxiety, and their well-being is negatively affected.^{1,2}

In addition to all these difficulties as a university student, nursing students also face a number of difficulties specific to nursing education. The most important of these difficulties is stress. Stress experienced by the nursing students negatively affects their physical and mental health, their academic

achievements and their clinical performance.³⁻⁸ The situations that nursing students perceive as stressful during nursing education vary. Literature shows that nursing students have academic stressors, such as intensive and long study hours, examinations, research assignments, fear of failure, workload and relations with academic staff, while they also experience clinical stressors, such as going to the clinics, managing emergency situations in clinical areas, death of patients, lack of clinical skills, fear of making mistakes and negative attitudes of the clinical staff.³⁻⁸

It has been reported that the use of social support is effective in managing stress. In other words, individuals who receive a high level of social support can cope with stress more easily.^{5,8} During nursing education, teachers are perceived as a source of social support in addition to family and friends.⁵ Since a positive educational environment is closely related to the well-being of nursing students, teachers should be aware of the stress experienced by nursing students and should support them in coping with stress.^{5,7,8}

The more psychologically healthy nursing students are, the more likely they will be productive and successful in academic life and clinical education.⁹ Therefore, it is important to determine the factors related to the well-being of nursing students.

Subjective well-being (SWB), the focus concept of

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positive psychology, refers to assessments people make about their own lives. These assessments include both cognitive judgments, such as life satisfaction and quality of life, and emotional reactions to life events, such as happiness.¹⁰ Although previous studies have revealed the factors affecting depression, stress and anxiety in nursing students,^{3,5,8} very little is known about the factors that influence their positive attitude and what makes them feel good. The review of studies about the well-being of nursing students revealed that emotional intelligence, body mass index (BMI), learning environment and resilience affect the well-being of nursing students.^{4,6,7,11} When studies conducted in Turkey are reviewed, a negative correlation between life satisfaction and loneliness,¹² a positive correlation between life satisfaction and quality of life,¹³ and a positive correlation between perceived social support and psychological well-being¹⁴ have been reported. As a result, current literature seems to be limited and further studies are needed. Since student well-being is closely related to better learning, it becomes important to study the factors related to the well-being of nursing students.

The current study was planned to examine SWB levels of nursing students and the factors affecting it.

Subjects and Methods

The cross-sectional descriptive study was conducted at a health school of a state university in Aydin, western Turkey, from March to April, 2015, and comprised nursing students in the bachelor's programme.

After approval was obtained from the ethics committee of Adnan Menderes University, Aydin, Turkey, and permission for data collection from the directorate of the relevant health school, nursing students pursuing education in the academic year 2014-15 were taken as the target population. The sample size was calculated with 95% confidence interval (CI) ($\alpha=0.05$), $p=0.50$ and $n=775$ which was the number of target population. It was planned to enrol 310 students when taking 1.2 as the design effect, considering possible case losses. Each class was considered a stratum using stratified sampling method and the number of students to be included in the sampling for each class was calculated by setting a ratio according to student numbers. Students were selected using a simple random number table. After written informed consent, the students were given data-collection tools, and those who returned the forms incomplete were excluded. Data was collected during the classes using the Turkish

versions of personal information form (PIF), perceived stress scale (PSS), perceived social support scale-revised (PSSS-R), and subjective well-being scale (SWBS).

PIF was self-generated and consisted of questions about class, gender, age and economic status of the students, conscious choice of nursing career, participation in social or cultural activities, evaluation of their academic achievement and availability of teachers with whom students could share their problems.

PSS was developed by Cohen, Kamarck and Mermelstein and the validity and reliability of the Turkish version was evaluated by Eskin et al. in 2013.¹⁵ PSS consists of 14 items and measures how stressful certain situations in an individual's life are perceived. Participants evaluated each item on a 5-point Likert-type scale ranging from "Never (0)" to "Very often (4)". The PSS scores range from 0 to 56. High score indicated that the perceived stress of the person was high. Cronbach's α of the scale was found to be 0.86.¹⁵ The corresponding value in the current study was 0.84.

PSSS-R was developed by Yildirim in 2004.¹⁶ The scale was developed to determine the level of social support perceived by individuals from their families, friends and teachers, and consists of 50 items. It has 20 items on the family support subscale, 13 on the friend support subscale and 17 on the teacher support subscale. Individuals were expected to score the statement given in each item of the scale such as "It suits me=3", "It partially suits me=2", "It doesn't suit me=1". The scores range from 50 to 150. High score indicated that the individual perceived high social support. Cronbach's α of the scale was found to be 0.93 by Yildirim. In the current study it was 0.94.

SWBS was developed by Tuzgöl-Dost in 2005 and consists of 46 items.¹⁷ The purpose of the scale is to determine the level of SWB by identifying people's own cognitive assessments about their lives and the frequency and intensity of positive and negative emotions they experience. The answers are given on a five-point Likert scale, with "(5) Completely Suitable", "(4) Mostly Suitable", "(3) Partially Suitable", "(2) Somewhat Suitable" and "(1) Strongly Unsuitable" for each statement. The scores range from 46 to 230. High score indicated that the SWB level was high. Tuzgöl-Dost reported Cronbach's α value of 0.93, while it was 0.95 in the current study.

To determine the factors affecting SWB, multicollinearity was first investigated in the correlation

between independent variables. Burns and Grove in 2001 reported that the correlation >0.65 showed multicollinearity.¹⁸ In the current study, correlations between independent variables ranged between 0.005 and 0.879.

Data obtained was analysed using SPSS 18, and was expressed as frequencies and percentages, as well mean \pm standard deviation (SD), as appropriate. Multiple linear regression analysis with stepwise method was used for the selection of the predictors that affected SWB. Values at the level of $p < 0.05$ were accepted as statistically significant.

Results

Of the 310 students enrolled, 297(96%) completed the study, and, of them, 230(77.4%) were female and 117(39.4%) were in the second year of their studies. The overall mean age of the sample was 20.32 ± 1.65 years (Table-1). The mean SWB score of the students was 175.9 ± 28.7 PSS was 25.9 ± 7.3 and and PSSS-R was 125.3 ± 15.2 (Table-2).

Table-1: Sociodemographic Characteristics of Students.

Sociodemographic Characteristics	n	%
Academic Year		
1stYear	98	33.0
2ndYear	117	39.4
3rdYear	42	14.1
4thYear	40	13.5
Gender		
Female	230	77.4
Male	67	22.6
Age	Range	$\bar{x} \pm SS$
	(18.00-31.00)	20.32 ± 1.65
Students' Economic Level		
Income less than expense	85	28.6
Income equal to expense	190	64.0
Income more than expense	22	7.4
Academic Achievement		
Poor	19	6.4
Mediocre	153	51.5
Good	125	42.1
Conscious Choice of Nursing Career		
No	112	37.7
Yes	185	62.3
Participation in Social or Cultural Activities		
Does not participate in Social Activities	93	31.3
Participates in Social Activities	204	68.7
Availability of Teachers with Whom Students Can Share Their Problems		
No	170	57.2
Yes	127	42.8

Table-2: Mean Value Total Scores of SWBS, PSS, PSSS-R.

	Min	Max	Mean Score	Standard Deviation
Subjective well-being	77	230	175.9	28.7
Perceived Stress	10	48	25.9	7.3
Perceived Social Support	81	150	125.3	15.2

SWB: Subjective Well-Being Scale

PSS: Perceived Stress Scale

PSSSR: Perceived Social Support Scale-Revised.

Table-3: Independent Variables of the Model.

Independent Variables
Less income than expense
More income than expense
Poor academic achievement
Good academic achievement
Conscious choice of nursing career
Participating in social or cultural activities
Having teachers with whom students can share their problems
The mean Perceived stress scores of students
The mean Perceived social support scores of students

Since multicollinearities were detected between students who thought that their income was less than their expenses and students who thought that their income was equal to their expenses (-0.844), and between students who perceived their academic achievement as good and students who perceived it as mediocre (-0.879), one of the variables with multicollinearity was selected and included in the analysis alongside 9 independent variables that were used in multiple linear regression model (Table-3). The error analysis obtained from the model showed that the assumptions of normality, linearity and homoscedasticity of the data were met. There was also no autocorrelation within the data. It was determined that this model did not have extreme values.

The stepwise multiple regression analysis used to determine the variables affecting the SWB showed that there were 5 statistically significant variables and that increased the descriptive power (Table-4). These were PSS, PSSS-R score, participation in social or cultural activities, good academic perception of success and conscious choice in nursing career shown in order of the level of their contribution to the model's power. This model explained 54% of the variance in the influence factors of SWB of nursing students. Perceived stress alone accounted for 39% of the variance.

Table-4: Factors Affecting subjective well-being (SWB).

Factors	Regression Coefficients		t	Sig.	95% Confidence Interval for B		Cumulative R ²
	Beta	Std. Error			Lower Bound	Upper Bound	
Constant	153.441	12.185	12.593	p<0.01	129.459	177.422	-
Perceived stress score	-1.895	0.169	-11.204	p<0.01	-2.228	-1.562	0.395
Perceived social support score	0.453	0.080	5.667	p<0.01	0.296	0.611	0.466
Participants in social or cultural activities †	13.066	2.566	5.092	p<0.01	8.016	18.117	0.519
Good Academic Success †	6.636	2.380	2.788	p=0.006	1.951	11.321	0.532
Those who made a conscious choice of nursing career †	5.085	2.387	2.131	p=0.034	0.388	9.782	0.539

† Dummy coding: yes=1, no=0.

Discussion

The results showed that a high level of perceived stress reduced SWB, while high perceived social support, participation in social or cultural activities, perception of good academic success and conscious choice of the nursing career increased SWB. The fact that stress was clearly associated with well-being is consistent with previous findings that showed that stress negatively affected well-being and its cognitive (life satisfaction) and affective (happiness) components.^{6,19,20} Yildirim et al. in 2017 reported that there is an important relationship between stress coping, self-esteem, social support and mental health levels among nursing students.⁸ Our finding is a predictable result when considering the nature of stress, as the right level of stress allows for the development and change, but depletes physiological and psychological sources if it is extreme.³ Stress may lead to a decrease in SWB level and is an indicator that the individual is exposed to negative situations in life.

The current study showed that perceived social support predicted SWB. This finding is consistent with previous findings.^{14,19-22} Social support provides a buffer effect and protects people against the adverse effects of stressful life events.²³ Dogan in 2008 reported that perceived social support of university students negatively predicted psychological symptoms, such as somatisation, depression, anxiety, and anger/aggression.²⁴ Social support is effective in coping with stress during the education of nursing students,⁸ therefore perception of social support may lead students to feel better psychologically. The prediction of the SWB by social support is an expected result. Considering the contribution of support from various social support sources, such as family, friends, significant others and educators, educators can provide social support to students by providing constructive and timely feedback.⁵

In this study, active participation in social or cultural activities seemingly had a positive influence on SWB of

nursing students. Social or cultural activities provide opportunities for individuals to mitigate stress, improve social interactions with others, review their personal values and reach their targets.²⁵ Wang and Wong in 2014 reported that certain leisure activities and their role in social interactions were significantly related to personal happiness.²⁵ When the literature was reviewed, only one study was found which investigated the relationship between well-being of nursing students and their participation in socio-cultural activities. Hawker in 2012 showed no significant relationship between physical activity and well-being of nursing students.¹¹ However, when studies conducted in other student groups were reviewed, significant relationships were found between physical activity and well-being of university students.²⁶ This difference may be due to differences in the level and intensity of physical activity of the groups. An optimum exercise level may be useful to improve well-being. Karpaviciute and Macijauskiene in 2016 reported that well-being of nurses participating in silk painting activities was higher than the control group.²⁷ As well as participating in activities, satisfaction from these activities is also important.²⁸ Leisure satisfaction plays a significant mediator role between leisure participation and well-being.²⁹

In this study, nursing students' perceptions of their academic achievement have a positive effect on SWB. Academic achievement is important as it provides opportunities to people for their future life. Different studies have investigated the relationship between academic achievement and well-being; some reporting that academic achievement had significant relationship with well-being and happiness of the nursing students,^{21,30} while others not finding any relationship between happiness and nursing students' grade point average (GPA).^{20,31} The cultural diversity of the sample groups and the difference in the tools used to measure well-being can explain this conflict. Review of studies conducted in university students showed that academic

achievement was an important factor to explain well-being.³² Chow in 2007 reported that there was a relationship between academic stress and psychological well-being of university students.³² Academic achievement can reduce academic stress and can positively affect well-being as a result. More comprehensive studies, including meta-analyses, are needed to determine the relationship between nursing students' perceptions of academic achievement and their SWB.

In the current study, conscious choice of nursing career increased SWB. This finding supported previous findings, including those of a study by Gündoğar et al. in 2007 which showed that the desire for being in the department predicted life satisfaction of university students.³³ Kim and Han in 2015 found that preference motivations of nursing department affected the happiness index of the nursing students.¹⁹ Jun and Jo in 2016 reported that the reasons of the students entering the nursing department affected their happiness levels.²¹

In this study, nursing students' perceptions of their economic conditions did not explain their SWB levels. Some studies have reported no relationship between economic conditions and happiness of nursing students,²⁰ but some studies conducted among Turkish nursing students found that socioeconomic level significantly affected life satisfaction.^{12,13} Kim and Kim in 2012 reported that students with good subjective economic conditions had higher happiness scores.³¹ Brajsa-Zganec et al. in 2017 reported a significant relationship between socioeconomic status of nursing students and life satisfaction, which is a cognitive component of well-being. However, there was no relationship between socioeconomic status and happiness, which is an affective component of well-being.²² This may be due to cultural diversity of the sample groups and the differences in the tools used to measure well-being. Further studies in a cross-cultural context might lead to a better understanding of the concept of well-being. In addition, more qualitative studies can provide valuable insight.

Another finding of the current study is that availability of teachers with whom students could share their problems did not explain the level of SWB. Kim and Jeon in 2016, reported a relationship between the subjective happiness of nursing students and the satisfaction with their relationship with professors.²⁰ No similar study has been found in literature. Nursing students use teachers as a source of support less frequently compared to their peers, significant others or parents.⁵ The fact that students do not prefer faculty members to have support may limit the

contribution of faculty members to the SWB of students. Qualitative studies can be helpful in providing valuable insight in this regard.

The current study has some limitations. First of all, it has a cross-sectional design, so the data obtained has limited validity and may vary over time. In addition, the main data of the study was obtained by self-reporting scales.

Despite the limitations, the results are important because they show the factors affecting SWB in Turkish nursing students. The results of this study provide important information for the planning of nursing education and guidance for future studies.

Conclusion

High level of perceived stress reduced SWB, while a high perceived social support, participation in social or cultural activities, perception of good academic achievement and conscious choice of nursing career increased SWB.

Disclaimer: The study is based on a Master's degree thesis, and was presented as a Poster in 2016 at the 4th International and 8th National Psychiatric and Mental Health Nursing Congress, Manisa Province, Turkey.

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