Black Sea J Health Science
doi: 10.19127/bshealthscience.1543889

Open Access Journal
e-ISSN: 2619 – 9041

Research Article
Volume 7 - Issue 6: 231-239 / November 2024

NURSING STUDENTS' HEALTH PERCEPTIONS AND AFFECTING FACTORS

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Abstract: This research was conducted to determine the health perception levels of nursing students and the influencing factors. The descriptive cross-sectional study was conducted between August 2023 and September 2023. The sample of the study consisted of 138 students studying in the Nursing Department of the Faculty of Health Sciences in the Aegean region who volunteered to participate in the study. The socio-demographic information (12 questions) questionnaire form and the Health Perception scale (15 questions) developed in line with the literature were used to collect data. The data were evaluated in the SPSS 27.00 package program. As a result of the research, it was determined that the average score that the students got from the health perception scale was 38.99±5.24. When the sub-dimensions of the health perception scale were examined; The Control Center sub-scale average score was determined as 12.82±3.15, the Certainty sub-scale average score as 12.44±2.75, the Importance of Health sub-scale average score as 6.90±1.97, and the Self-awareness sub-scale average score as 6.83±1.70. While there was a significant difference between the students' family type, smoking, financial level, health level, place of residence and family health status and health perception and its subgroups (P<0.05), it was determined that there was no statistically significant difference between age, gender, parental education level, chronic disease and regular medication use (P>0.05). It was concluded that the students' health perception general score and subscale scores were not at the desired level and that various factors negatively affected these scores in general. Various strategies should be planned to strengthen students' health perceptions.

Keywords: Health perception, Nursing, Students, Healthy behavior

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Received: September 05, 2024
Accepted: October 11, 2024
Published: November 15, 2024

Cite as: Çelik Y. 2024. Nursing students' health perceptions and affecting factors. BSJ Health Sci, 7(6): 231-239.

1. Introduction

Health perception can be defined as a combination of an individual's feelings, thoughts and expectations about their own health (Ozdelikara et al., 2018). In other words, health perception reveals a person's personal beliefs and explanations about their health status. Health perception is an important data in terms of showing the individual's physical, mental and social well-being, and it also refers to a process that aims to provide, develop and maintain healthy lifestyle behaviors for the individual (Shaw et al., 2012; Dilek and Aydanur, 2017).

Many factors such as the individual's gender, age, and education level, economic, environmental and sociocultural factors shape health perception and are effective in the development of health behaviors (Alkan Ağaçdiken et al., 2017). Students experience the last stage of adolescence with university education. The university period is a period in which some anxious periods such as separation from home and family, making new friends, learning a profession and finding a job are experienced. During this process, students may try to gain an identity and mature, and their health behaviors may also change. This change is especially important in terms of health-related perceptions and behaviors. During this period, students may develop health-enhancing behaviors according to their health perceptions or adopt unhealthy lifestyle behaviors that will harm themselves and society (Hür et al., 2014; Çelik and Soyer, 2022).

The high perception of health of nursing students can positively affect their approach to individuals, families and communities to whom they will provide health services in the future. Therefore, students are expected to develop behaviors that strengthen their health perceptions during their education process (Çilingir and Aydın, 2017; Doğu and Atasoy, 2017). The foundation of a healthy society is formed by individuals who have a high perception of health and have developed healthy lifestyle behaviors based on this perception. Nurses have important roles in developing public health and reinforcing positive health behaviors. The health perceptions of future nurses should be developed from the beginning of their university education-training period and they should be provided with knowledge, skills and attitudes regarding individual and community health, especially themselves (Can et al., 2008; Alkan Ağaçdiken et al., 2017; Çelik and Soyer, 2022). In this context, it is thought that some disease knowledge-

related courses, especially internal medicine and surgical disease nursing, given theoretically and practically in the second year according to the nursing curriculum, can contribute greatly to students' health perception. Therefore, the aim of this study was to examine the health perception level and influencing factors of nursing students, who are the future members of the nursing profession who have direct responsibility for protecting and improving the health of individuals. First, third and fourth year students were not included in the study because the aim of the study was to access data from students who were intensively exposed to disease information for the first time. Therefore, the aim of this study is to examine the health perception levels and influencing factors of nursing students, who are future members of the nursing profession who have direct responsibility for protecting and improving the health of individuals.

2. Materials and Methods

2.1. Purpose and Type of the Study

This study was conducted as a descriptive cross-sectional study to determine the health perception levels of nursing students and the influencing factors.

2.2. Sample of the Study

The universe of the study consisted of students who completed their 2nd year education at the Nursing Department of the Faculty of Health Sciences at Afyonkarahisar Health Sciences University between August 2023 and September 2023. The courses in which information about diseases is given most intensively in the nursing department curriculum (Internal Medicine Nursing, Pathology, Pharmacology, etc.) are held during the 2nd year. The fact that students, who were equipped with information about health and healthy human physiology in the previous process, encountered the disease phenomenon intensively in the 2nd year constituted an important point in the selection of the sample. In the later processes of nursing education, the education received in the 2nd year is expanded according to the fields. The aim of the study was to reach the data of students who encountered disease information intensively for the first time. No sample selection was made in the study, and the study was completed with 138 students who volunteered to participate in the study out of a class of 145. The survey forms were administered online because it was the summer term. The survey was tested with a few people before application and possible errors and deficiencies were corrected. On the other hand, the number of questions was prepared in small numbers so that the answers would not be boring.

2.3. Data Collection Tools

Data were collected using the "Sociodemographic Information" form and the "Health Perception Scale."

Sociodemographic information: was collected with a questionnaire form (12 questions) consisting of questions such as age, gender, family type, mother and father's education status, smoking, financial situation, prepared in line with the literature (Shaw et al., 2012; Dilek and Aydanur, 2017; Ağaçdiken et al., 2017; Ozdelikara et al., 2018).

Health Perception Scale (HPS): The scale developed by Diamond et al. (2007) was adapted to Turkish society by Kadıoğlu and Yıldız (2012). The Cronbach alpha coefficient of the scale was 0.77 for nursing students and 0.70 for their families, and it was found to have a good level of reliability in both groups. Kadıoğlu and Yıldız (2012) conducted the validity and reliability study of the Turkish translation of HPS by applying it to nursing students at two universities in Istanbul and their family members. In the retest, the Pearson correlation value was found to be 0.78 (P=0.000). As a result, the scale was accepted as valid and reliable. HPS is a five-point Likert-type scale consisting of 15 items and four sub-factors. The scale has 15 items and four sub-factors titled "control center", "self-awareness", "certainty" and "importance of health". Items 1, 5, 9, 10, 11 and 14 are positive attitudes, items 2, 3, 4, 6, 7, 8, 12, 13 and 15 are negative statements. Positive statements were scored as "I very much agree = 5", "I agree = 4", "I am undecided = 3", "I do not agree = 2", "I do not agree = 1". Negative statements were reverse scored. The minimum score that can be obtained from the scale is 15, and the maximum score is 75. As the score obtained from the scale increases, the Health Perception score increases positively. The lowest scores that can be obtained from the "center of control", "self-awareness", "certainty", "importance of health" subgroups are 5, 3, 4, 3, and the highest scores are 25, 15, 20, 15, respectively (Kadıoğlu and Yıldız, 2012). In this study, the general Cronbach alpha value of the scale was calculated and was found to be reliable as 0.811.

The control center (CCM) sub-dimension is aimed at determining whether the individual attributes being healthy to factors outside of himself (luck, fate, religious belief, etc.), that is, whether he gathers the control center in himself in being healthy and his self-confidence in changing his health (Kadıoğlu and Yıldız, 2012; Dündar Kurt, 2019; Bıçakcı, 2022).

The self-awareness (SAF) sub-dimension is aimed at determining the level of the individual's self-awareness perception regarding exercise and proper nutrition for being healthy, and the belief that being healthy is in his own hands (Kadıoğlu and Yıldız, 2012; Dündar Kurt, 2019; Bıçakcı, 2022).

The certainty (CES) sub-dimension is aimed at determining whether the individual has a definite idea about what he/she needs to do to stay healthy and be healthier (Kadıoğlu and Yıldız, 2012; Dündar Kurt, 2019; Bıçakcı, 2022).

The importance of health (SGÖ) sub-dimension is aimed at determining the extent to which the individual attaches importance to his/her health, the extent to which he/she makes material sacrifices in this regard, and whether the importance he/she attaches to health is one of the priorities in his/her life (Kadıoğlu and Yıldız,

2012; Dündar Kurt, 2019; Bıçakcı, 2022).

2.4. Statistical Analyses

Data analysis was performed using the SPSS 27 statistical program. For reliability, internal consistency coefficient Cronbach's Alpha test statistics were used, and the reliability coefficient was determined as $0.01 \leq \alpha < 0.40$ (not reliable); $0.40 \leq \alpha < 0.60$ (low reliability); $0.60 \leq \alpha < 0.80$ (highly reliable) and $0.80 \leq \alpha < 1.00$ (highly reliable) (Kalaycı, 2008). Mean and percentage values were calculated, t test and ANOVA (variance analysis) analyses were performed. In parametric tests, when variances were not distributed homogeneously, Welch test results were taken as basis. In multiple comparisons of groups found to be significant as a result of ANOVA test, Tukey or Tamhane test was applied according to variance homogeneity. While interpreting the results, $P<0.05$ was considered as the significance level (Genç and Soysal, 2018).

3. Results

Of the students who participated in the study, 85 (61.59%) were between the ages of 18-21 and 118 (85.51%) were female. 123 (89.13%) of the students lived in a nuclear family, 101 (73.19%) of the mothers had primary school education while 61 (44.20%) of the fathers had primary school education. 115 (83.33%) of the students did not smoke, 99 (71.74%) of them had income equal to expenses and 74 (53.62%) of them considered their health level to be moderate. 100 students (72.46%) lived with their families, 125 (90.58%) did not have a chronic disease, 124 (89.86%) did not use any regular medication and 56 (40.58%) did not have a chronic disease in their families. The total number of participants is 138 (Table 1).

According to the analysis results of HPS and its sub-dimensions, the average HPS total score was 38.99±5.24, which is at a medium level close to weak, the average score of the CCM sub-dimension was 12.82±3.15, which is weak, the average score of the SAF sub-dimension was 6.83±1.70, which is weak, the average score of the CES sub-dimension was 12.44±2.75, which is medium, and the average score of the HPS sub-dimension was 6.90±1.97, which is weak.

Table 1. Descriptive characteristics of students (n=138)

Variable	Category	n	%
Age	18-21	85	61.59
	22-25	53	38.41
Gender	Female	118	85.51
	Male	20	14.49
Family Type	Nuclear Family	123	89.13
	Extended Family	10	7.25
	Divorced	5	3.62
Mother Education Level	Primary School	101	73.19
	High School	26	18.84
	University	11	7.97
Father Education Level	Primary School	61	44.20
	High School	48	34.78
	University	29	21.01
Smoking Status	Yes	23	16.67
	No	115	83.33
Financial Level	Income More Than Expenses	22	15.94
	Income Equals Expenses	99	71.74
	Income Less Than Expenses	17	12.32
Health Level	Good	62	44.93
	Average	74	53.62
	Poor	2	1.45
Place of Residence	State Dormitory	20	14.49
	Private Dormitory	6	4.35
	House with Friends	12	8.70
	Family	100	72.46
Chronic Disease Status	Yes	13	9.42
	No	125	90.58
Medication Status	Yes	14	10.14
	No	124	89.86
Family Health Status	Chronic Patient	36	26.09
	Hospitalization	19	13.77
	Chronic Disease and Hospitalization	27	19.57

No Disease	56	40.58	

Table 2. Mean scores and reliability results of the health perception scale and its sub-dimensions

Variable	Score Range	Mean ±SD	Min.	Max.	Cronbach alfa
Control Center	5-25	12.82±3.15	5.00	25.00	0.782
Self-Awareness	3-15	6.83±1.70	3.00	12.00	0.766
Certainty	4-20	12.44±2.75	6.00	20.00	0.786
Importance of Health	3-15	6.90±1.97	3.00	13.00	0.801
Health Perception Scale	15-75	38.99±5.24	24.00	51.00	0.811

According to the normality and reliability analyses of HPS and its sub-dimensions, the total scores of the CCM, SAF, CES and SGÖ sub-dimensions and the HPS are close to normal distribution according to skewness and kurtosis values, and the reliability coefficients (Cronbach alpha values ranging from 0.766 to 0.811) show that these scales and their sub-dimensions are reliable (Table 2).

According to the obtained data, it was determined that the family types of the students had a significant effect on the HPS and its sub-dimensions. Accordingly, the scores of the students with a divorced family type were higher in the CCM and CES than in other family types, and the scores of the students living in a nuclear family were higher in the SGÖ and SAF than in other family types (P<0.05) (Table 3).

It was determined that the scores of the students who did not smoke were statistically significantly higher than those who did (P<0.05), but smoking status did not have a significant effect on the scores of the CES, SGÖ, SAF and HPS (P>0.05) (Table 3).

When the financial levels of the students were examined, the scores of those whose income was higher than their expenses were found to be lower in terms of the SGÖ than those whose income was lower than their expenses; and the scores of those whose income was higher than their expenses were found to be lower in terms of the HPS than those whose income was equal to their expenses (P<0.05). On the other hand, it was revealed that the scores of the CCM, CES and SAF did not show a significant difference according to financial levels (P>0.05) (Table 3).

The students who perceived their health level as poor health had higher scores in terms of SGÖ than those who perceived their health level as good and moderate health level (P<0.05), but it was determined that the scores of CCM, CES, SAF and HPS did not show significant differences according to health levels (P>0.05) (Table 3).

It was determined that the CCM, CES and SAF sub-dimensions showed significant differences according to the place of residence (P<0.05). In terms of place of residence, students staying in state dormitories had higher CCM scores than those staying with their families, while those staying in state dormitories had lower scores than those staying with their friends in terms of CES, and those staying in state dormitories had lower scores than those staying with their families in terms of SAF (P<0.05). On the other hand, it was concluded that the SGÖ and HPS scores did not show significant differences related to the place of residence (P>0.05) (Table 3).

The HPS scores of students with a family history of chronic illness were found to be higher than those with a family history of hospitalization (P<0.05), but it was observed that the sub-dimensions of the CCM, SAF, CES and SGÖ did not show a significant difference in terms of the health status of the family (P>0.05) (Table 3).

The obtained data revealed that the HPS and its sub-dimensions (CCM, SAF, CES and SGÖ) did not show a significant difference in terms of age, gender, mother's education level, father's education level, the student's chronic disease status and medication use status. (P>0.05) (Table 3).

4. Discussion

Health perception is effected by various factors such as education, social, cultural and economic status and is related to how the individual perceives his/her own health. An individual may feel healthy when he/she is sick or sick when he/she is healthy. Therefore, healthy behavior requires knowing health perception first for a healthy lifestyle. The World Health Organization points to nurses as the basic human power in health protection and development activities. Nurses, who play an important role in health services, need to understand and emphasize the importance of health development and be a guide and model in gaining these behaviors (Aristizabal Castano and San Martin Rodriguez, 1998; Whitehead, 2005). One of the main purposes of professional education in nursing is to provide nursing students with the knowledge, skills and attitudes that will enable them to protect and develop both their own and individuals' health. Nursing students are expected to understand the importance of developing their health from their student years. The purpose of examining the health perception and affecting factors of nursing students is to determine and evaluate the goals related to health development in nursing education curricula and to contribute to the literature on health perception and affecting factors.

In the study, it was determined that the students' HPS average score was 38.86±5.11 and it was seen that it was at a moderate level close to weak. In similar studies on health perception (Zaybak and Fadıloğlu, 2004; Can et al., 2008; Dilek and Aydanur, 2017), it was stated that the health perception scores of nursing students were at a moderate level. This result shows that the students' health perceptions were not at the desired level, but they could control their behaviors that could affect their

health and their health responsibility was at a moderate level.

Table 3. Comparison of the students' descriptive characteristics and HPS and sub-dimension score averages (n=138)

	HPS Mean±SD	CCM Mean±SD	SAF Mean±SD	CES Mean±SD	SGÖ Mean±SD
Age					
18-21	38.86±5.11	12.84±3.23	6.75±1.76	12.33±2.72	6.94±2.07
22-25	39.21±5.48	12.79±3.06	6.96±1.60	12.62±2.82	6.83±1.82
Test / P	t= -0.379/ 0.705	t= 0.077/ 0.938	t= -0.703/ 0.483	t= -0.608/ 0.544	t=0.321/ 0.749
Gender					
Female	39.07±5.15	12.81±3.22	6.77±1.68	12.58±2.74	6.90±1.93
Male	38.55±5.88	12.85±2.81	7.20±1.82	11.60±2.72	6.90±2.25
Test / P	t= 0.407 / 0.684	t= -0.048 / 0.962	t= -1.044 / 0.298	t= 1.487 / 0.139	t= -0.004 / 0.997
Family Type					
Nuclear Family(1)	39.12±5.10	12.78±2.82	6.95±1.65	12.34±2.67	7.05±1.93
Extended Family(2)	35.50±4.25	11.60±2.55	6.30±1.77	12.10±2.28	5.50±0.85
Divorced(3)	42.80±7.66	16.20±8.04	5.00±1.87	15.60±4.04	6.00±3.32
Test / P	F=3.722/0.027*	F=3.777/0.025*	F=3.857/0.023*	F=3.587/0.030*	F=3.531/0.032
Difference	3>1	3>1.3>2	1>3	3>1.3>2	* 1>2
Mother Education Level					
Primary School(1)	38.81±5.17	12.46±2.62	6.86±1.70	12.40±2.53	7.10±1.98
High School(2)	39.77±5.22	13.65±4.22	6.65±1.79	12.92±3.14	6.54±2.00
University(3)	38.82±6.23	14.18±4.24	7.00±1.55	11.73±3.74	5.91±1.45
Test / P	F=0.348 / 0.706	F=2.673 / 0.073	F=0.209 / 0.811	F=0.781 / 0.461	F=2.398 / .095
Difference	-	-	-	-	-
Father Education Level					
Primary School(1)	38.49±5.24	12.54±2.46	6.97±1.74	12.08±2.80	6.90±2.04
High School(2)	39.83±5.79	13.29±4.01	6.63±1.86	12.94±2.77	6.98±2.10
University(3)	38.66±4.15	12.62±2.86	6.90±1.29	12.38±2.57	6.76±1.62
Test / P	F=0.956 / 0.387	F=0.831 / 0.438	F=0.567 / 0.568	F=1.316 / 0.272	F=0.112/0.894
Difference	-	-	-	-	-
Smoking Status					
Yes	38.00±5.93	11.17±3.30	6.57±2.09	13.00±2.56	7.26±1.66
No	39.19±5.10	13.15±3.03	6.89±1.62	12.33±2.78	6.83±2.02
Test / P	t= -0.995 / 0.321	t= -2.808 / 0.006*	t= -0.828 / 0.409	t= 1.066 / 0.288	t= 0.967 / 0.335
Financial Level					
Income More Than Expenses(1)	36.45±4.38	11.68±1.91	6.73±1.35	12.00±2.67	6.05±1.40
Income Equals Expenses(2)	39.66±5.28	13.14±3.39	6.86±1.83	12.68±2.80	6.98±1.96
Income Less Than Expenses(3)	38.41±5.22	12.41±2.72	6.82±1.33	11.65±2.47	7.53±2.35
Test / P	F= 3.613/0.030*	F= 2.124 /0.124	F= 0.053/ 0.948	F= 1.362 /0.261	F=3.118/0.047
Difference	1<2	-	-	-	* 1<3
Health Level					
Good(1)	38.94±5.94	12.87±3.45	6.94±2.00	12.34±3.08	6.79±2.10
Average(2)	38.89±4.60	12.78±2.95	6.69±1.37	12.58±2.48	6.84±1.64
Poor(3)	44.50±2.12	12.50±0.71	9.00±1.41	10.50±0.71	12.50±0.71
Test / P	F= 1.124 /0.328	F= 0.023 /0.977	F= 2.037 /0.134	F= 0.634 /0.532	F= 9.218 /0.001*
Difference	-	-	-	-	3>1.3>2

Table 3. Comparison of the students' descriptive characteristics and HPS and sub-dimension score averages (n=138) (continue)

	HPS Mean±SD	CCM Mean±SD	SAF Mean±SD	CES Mean±SD	SGÖ Mean±SD
Place of Residence					
State Dormitory(1)	39.15±6.35	14.70±4.92	6.20±1.91	12.05±3.94	6.20±2.21
Private Dormitory(2)	38.33±6.56	12.83±4.22	5.83±0.75	13.67±3.39	6.00±1.79
House with Friends(3)	39.42±3.50	12.42±1.88	6.33±0.49	14.33±1.97	6.33±1.50
Family(4)	38.95±5.16	12.49±2.64	7.08±1.73	12.22±2.42	7.16±1.94
Test / P Difference	F= 0.065/ 0.978 -	F= 2.917/ 0.037* 1>4	F= .774/0.044* 1<4	F= .742/0.046* 1<3	F= 2.234/ 0.087 -
Chronic Disease Status					
Yes	39.54±4.58	12.85±3.36	7.00±1.83	12.08±2.02	7.62±1.89
No	38.94±5.32	12.82±3.15	6.82±1.69	12.48±2.82	6.82±1.97
Test / P	t= 0.393 / 0.695	t= 0.033 / 0.974	t= 0.371 / 0.712	t= -0.502 / 0.617	t= 1.385 / 0.168
Medication Status					
Yes	39.71±4.60	13.07±3.20	7.00±1.75	12.43±2.10	7.21±1.58
No	38.91±5.32	12.79±3.16	6.81±1.70	12.44±2.82	6.86±2.01
Test / P	t= 0.542 / 0.589	t= 0.315 / 0.753	t= 0.386 / 0.701	t= -0.019 / 0.985	t= 0.632 / 0.529
Family Health Status					
Chronic Patient(1)	41.14±4.55	13.47±3.95	7.31±1.72	13.31±2.59	7.06±2.24
Hospitalization(2)	36.89±5.71	11.74±3.96	6.42±1.50	12.11±3.07	6.63±1.86
Chronic Disease and Hospitalization(3)	38.56±4.23	12.30±2.49	6.48±1.31	12.52±2.06	7.26±2.23
No Disease(4)	38.54±5.59	13.02±2.44	6.84±1.87	11.96±2.95	6.71±1.68
Test / P Difference	F= 3.404 / 0.020* 1>2	F= 1.603 / 0.192 -	F= 1.714 / 0.167 -	F= 1.884 / 0.135 -	F= 0.654 / 0.582 -

*P<0.05, F=ANOVA test, Difference=Tukey test, t=independent samples t test.

When the health perception scale sub-dimensions were examined, it was observed that the CES sub-dimension mean score (12.44±2.75) was at a moderate level and similar studies (Çilingir and Aydın, 2017; Deleş and Kaytez, 2020; Demir et al., 2021) supported the literature. When the obtained result is examined based on the definition of certainty, it shows that students have a moderately certain idea about what they need to do to stay healthy and be healthier.

It was determined that the CCM sub-dimension mean score (12.82±3.15) was weak, and the study by Özsoy and Şentürk (2021) supports the obtained result. According to this result, it is seen that the students participating in the study attribute being healthy to factors outside of themselves (luck, fate, religious belief, etc.) and have low self-confidence in changing their health. From this perspective, it is thought that students are inadequate in taking responsibility for their health and paying attention to positive behaviors related to health.

The mean score of the SAF sub-dimension (6.83±1.70) was found to be at a weak level, similar to some literature (Lee and Loke, 2005; Nacar et al., 2014). This result shows that the students' self-awareness perceptions regarding exercise and proper nutrition related to being healthy and their beliefs about whether being healthy is in their own hands are weak.

The mean score of the SGÖ sub-dimension (6.90±1.97) was found to be at a weak level and some similar literatures on this subject (Alkan Ağaçdiken et al., 2017; Çilingir and Aydın, 2017) support the obtained result. This situation reveals the view that the students do not attach much importance to health, do not make financial sacrifices for their health and that the importance they give to health is not a priority in their lives.

The weak perception mostly seen in HPS and its sub-dimensions (CCM, SAF, CES and SGÖ) suggests that students who encounter disease information intensively for the first time in the 2nd grade do not fully acquire positive health perception, or even if they do, they cannot implement it, or this situation may be related to factors outside of education.

Students with divorced family types had higher CCM and CES scores than other family types, and students living in nuclear families had higher SAF and SGÖ scores than other family types (P<0.05). No literature was found

directly related to sub-dimension scores, but Şimşek et al. (2012)'s study is similar in terms of general health perception. The obtained result can be explained by the fact that students are significantly affected by family structure and dynamics, and parents' attitudes and behaviors regarding health have a direct effect on children.

It was determined that the CCM scores of the non-smokers were significantly higher than the smokers (P<0.05), and similar literature (Lee, 2019; Solak, 2022) supports the result obtained. This suggests that the students are aware of the health hazards of smoking and that this awareness positively affects the control center sub-dimension score.

When the financial status of the students is examined, the scores of those whose income is higher than their expenses are found to be lower than those whose income is lower than their expenses in terms of SGÖ; and the scores of those whose income is higher than their expenses are found to be lower than those whose income is equal to their expenses in terms of HPS (P<0.05). Most of the literature that affects the financial status of the students and their health perceptions and general health behaviors (Özbaşaran et al., 2004; Cihangiroğlu and Deveci, 2011; Çilingir and Aydın, 2017) shows the opposite of the study result. Financial status is one of the important factors that affect individuals' access to health services, eating habits and stress levels, and therefore their health perceptions. The obtained result can be explained by the fact that the financial status perceptions of the students are lower than expected and that their socioeconomic status may limit their access to factors that improve their health perception (access to health services, healthy nutrition, gym membership, etc.).

The scores of the students who perceived their health level as poor were found to be higher in terms of SGÖ than those who perceived their health level as good and moderate (P<0.05). Similar literature (Sentell et al., 2013; Çilingir and Aydın, 2017; Doğan and Çetinkaya, 2019; Kerkez and Şahin, 2023) indicates that the total mean scores of the health perception scale of the students who perceived their health as good were found to be low. The findings suggest that students who evaluated their health status as poor may become more conscious of issues such as increased awareness of health problems, personal experiences, motivation and health literacy, and give more importance to health-related issues.

It was determined that the CCM, CES and SAF sub-dimensions showed significant differences according to the place of residence (P<0.05). In terms of place of residence, students staying in state dormitories had higher CCM scores than those staying with their families, while those staying in state dormitories had lower scores than those staying with their friends in terms of CES, and those staying in state dormitories had lower scores than those staying with their families in terms of SAF (P<0.05). Various studies conducted on the subject show different findings regarding the place of residence not having an effect on HPS (Lee, 2019; Dündar Kurt, 2019) and having an effect (Ünalan et al., 2007; Tuğut and Bekar, 2008; Şimşek et al., 2012). Based on this situation, the obtained result can be interpreted as students living in clean, safe and well-equipped environments perceive their health more positively, while students living in crowded and unhygienic environments may negatively affect their health perceptions.

The HPS scores of students with a family history of chronic disease were found to be higher than those of students with a family history of hospitalization (P<0.05). When the literature was examined, no study was found explaining the relationship between chronic diseases, hospitalization history and health perception in family members. The obtained result can be explained by the fact that family members with chronic diseases regularly apply to health services and closely follow the treatment processes, and this long-term observation may have helped students better understand the importance of health services and increase their health perception more than students with only a family history of hospitalization.

5. Conclusion

It was determined that the students' average score on SAS was at a medium level close to weak. When the HPS sub-dimensions were examined; the CCM sub-scale average score was weak, the CES sub-scale average score was medium, the SGÖ sub-scale average score was weak, the SAF sub-scale average score was weak and it was seen that the average scores were not at the desired level. While there was a significant difference between the students' family type, smoking, financial level, health level, place of residence and family health status and health perception and sub-groups (P<0.05), it was determined that there was no statistically significant difference between age, gender, parental education level, chronic disease and regular medication use (P>0.05).

In line with these results:

- It is recommended that assessments be made during vocational training to reveal students' attitudes not only on the health of the patients they care for but also on their own health, that responsibilities be given to develop these attitudes positively and that they be supported to transform them into behavior,
- In order for students to make the right decisions about their own health and create a control mechanism, the curriculum should be supported with the necessary training in this field, that comprehensive information be provided on the importance and sustainability of health, and that cross-sectional studies be conducted to determine the effect of the basic training to be given on students' health perceptions,
- It is recommended that the findings regarding the students' poor perception of health in general

should be emphasized in the curriculum, especially in courses with a lot of lecture hours, such as Internal and Surgical Diseases Nursing, which is taught in the second year of the education period, and that the objectives related to this subject in the curriculum should be evaluated.

Limitation of the Study

The limitation of the study is that the study was conducted only with students who completed their 2nd year education at the Nursing Department of the Faculty of Health Sciences at Afyonkarahisar Health Sciences University and that there was no similar group studying in a department not related to health. Therefore, the results of the study do not reflect the general results.

Author Contributions

The percentage of the author contributions is presented below. The author reviewed and approved the final version of the manuscript.

	Y.Ç.
C	100
D	100
S	100
DCP	100
DAI	100
L	100
W	100
CR	100
SR	100
PM	100

C=Concept, D= design, S= supervision, DCP= data collection and/or processing, DAI= data analysis and/or interpretation, L= literature search, W= writing, CR= critical review, SR= submission and revision, PM= project management.

Conflict of Interest

The author declared that there is no conflict of interest.

Ethical Approval/Informed Consent

Participants were informed that participation in the study was voluntary, and verbal and written permissions were obtained from the participants and from the institution. Permission was obtained from the Afyonkarahisar Health Sciences University Clinical Research Ethics Committee (Approval date: March 03, 2023, protocol code: 2023/3) for the conduct of the study.

Acknowledgments

The author would like to thank the students and faculty administrators who contributed to the realization of this study.

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