International Journal of
Digital Health & Patient Care
e-ISSN : 3023-851X
https://ndpapublishing.com/index.php/

The Examination of The Relationship Between Enviromental Behavior and Alienation in Nursing Students

Ayşenur BOLAT[*1] **and Serap GÜLEÇ KESKİN**[1]

[1]*Ondokuz Mayis University, Samsun, Türkiye*

Article Info
Received: 07.11.2024
Accepted: 19.12.2024
Published:30.12.2024

Keywords
Environmental Behaciour
Nurse Department
Alienisation

ABSTRACT
This research was conducted to examine the relationship between environmental behavior attitudes and student alienation levels in nursing students. The research is descriptive type and was conducted with 403 nurse candidates studying at Ondokuz Mayıs University Faculty of Health Sciences in the 2018-2019 academic year. Scale reliability of "Environmental Attitude Scale" and "Student Alienation Scale" was calculated as 0.82 and 0.80, respectively. The scores of nurse candidates from the attitude scale towards environmental problems were 61.91±10.96 for the first year; 61.75±10.62 for second grade; 65.45±8.86 for third grade; for the fourth grade it is 64.13±11.11The scores students received from the attitude scale towards alienation were 69.52±11.28 for the first grade; 66.35±12.04 for second grade; 66.97±11.31 for third grade; for the fourth grade it is 64.29±11.50. A positive correlation was found between the sub-dimensions of the Student Alienation Scale. A positive correlation was found between the Student Alienation Scale sub-dimensions "Abstracted" and the Environmental Attitude Scale sub-dimensions "Resource Conservation Activities for the Economic Benefit of the Person", and a negative correlation was found with "Environmental Activist". In conclusion; it should be ensured that nurse candidates, who play important roles in protecting and improving public health, graduate with awareness and competence in terms of global and environmental problems, the effects of the environment on health and ways to protect them.

1. INTRODUCTION

The environment is everything outside of human beings; it is the entities in the environment, the interactive relations between these entities and the power to sustain these relations [1]. Today, it is a fact that there is a global change depending on the developments in science and technology. The deterioration of the ecological balance with the negative developments in the air, water and soil as a result of various activities of people and the undesirable formations caused by odor, noise and wastes in the environment as a result of the same activities are called “environmental pollution” [1, 2].

This change and development leads to a power struggle between human beings and nature and eventually causes environmental problems that may even harm human beings' own species. The reasons for these problems are defined as globalization, scientific and technological developments, increasing population and related needs, and industrialization. According to Watson and Halse (2005), the biggest factor of this important problem that the world is facing is human beings and human beings show their impact on issues such as global warming, destruction of rainforests, damage to the ozone layer and threats to biodiversity. When we look at the interaction between environment, health and human beings, the environmental balance is disrupted as a result of environmental pollution caused by human beings and human health is threatened indirectly or directly [2].

Although many diseases that caused deaths have been eliminated or their fatal effects have been reduced, new infectious diseases such as AIDS, Crimean-Congo hemorrhagic fever, swine flu, bird flu have emerged due to new environmental conditions. In addition, we are faced with health-threatening problems such as respiratory and digestive system diseases, cancer and skin diseases due to environmental impacts [3]. These are just a few of the many factors that threaten health. At this point, the main thing should be to protect the

*Corresponding author
*e-mail: aysenr.blt@gmail.com
ORCID ID: 0009-0001-6277-0348

Research Article/ DOI: 10.5281/zenodo.14564711

How to cite this article
Bolat, A., and Güleç Keskin, S. (2024). The Examination of The Relationship Between Enviromental Behavior and Alienation in Nursing Students. *Int. J. Digital Health & Patient Care, 1(2), 84-93*

environment rather than fighting the problems that arise as a result of environmental pollution.

In order to combat this environmental problem, which is a global problem, all countries of the world have tried to take measures by holding various conferences and summits from past to present. Within this framework, the United Nations (UN) Environment Program (UNEP) was established in 1972 and they succeeded in bringing environmental problems to the world agenda through various meetings and studies. Apart from this organization, different meetings were held to address environmental problems in various dimensions and precautionary protocols were established. Some of these are CITES 1973; Mediterranean Action Plan 1975; Vienna Congress 1985; Cartagena Protocol 2000; Sustainable Development Meeting 2002 and Kyoto Protocol 1997 [4].

One of the basic concepts in professional nursing practice is the environment. Environment includes all situations, effects and events that affect and surround humans [5]. Defined as a bio-psycho-psycho-socio-cultural being, the human being continues to exist in a biological, physical and social environment by developing as a result of the mutual interaction of various factors in these environments [6]. The environment can be as small as a premature baby's incubator or as big as the universe. What encompasses the environment is social and cultural behaviors that consist entirely of human experiences. The environment should be protected by good individuals and balances and should not be harmed [7]. Environment is defined differently in many literatures. Some of them are as follows; Environment is defined as the environment or conditions in which an organism exists. This environment includes natural physical elements, as well as human-made conditions in which the organism interacts [6]. Environment is also considered as the area in which the organism interacts. Some scientists have also defined the environment as an area that includes all living and non-living beings and events outside the physical existence [7].

In reality, the environment is a dynamic environment that people perceive with their senses and nervous system [7, 8]. (Florence Nightingale's basic concept focuses on the environment. However, Nightingale emphasized the importance of the physical environment rather than the psychological or social environment. The reason for this can be shown as the post-war conditions in the period in which Nightingale lived [9]. She considered the environment as all external conditions. For example, the concept of environment includes everything from the patient's food and drinks to the nurse's verbal and non-verbal interaction with the patient [9]. Nightingale included the psychological and social environment as well as the physical environment within the concept of environment [7, 9, 10]. In his writings, Nightingale stated that the natural renewal process of the organism will continue without interruption by providing ventilation, fresh air and water, cleanliness and warmth [7]. According to Nightingale; any one of the factors in the physical environment affects the other. He suggested that the patient's room should be at the appropriate temperature, quiet, odorless, clean and bright. Nightingale accepted that physical stressors in a negative environment will negatively affect the patient's emotional state [11]. The concept of alienation is derived from the Latin noun “alienatio” and the verb “alienarer”. The word shows two different meanings in its usage. In the first usage, the concept is to leave the ownership of something to someone else; in the second usage, it is the dissolution or separation between two elements [12]. Despite the two different meanings of alienation in Latin, it is known that this concept is used in different fields. In sociology, disiunctio-aversatio means separation from other people, from home, from God. The word then continued to exist in the form of the words 'alene' in French, 'alienado' in Spanish and 'alienist' in English [13]. In these uses, it was mostly used to describe mentally ill people and described people who were detached from themselves. The behavior brings up concepts such as self-efficacy expectation and belief, academic self-efficacy, etc. Bandura (1994) defines self-efficacy belief as the belief that an individual can organize and successfully perform an activity in order to achieve a certain level of performance [14]. Thus, perceived self-efficacy in the academic sense refers to the student's belief that he/she can complete an academic task on his/her own [15, 16].

Various academic studies have been conducted by researchers in this context. In other words, it constitutes one of the important variables in predicting students' academic success [17, 18, 19, 20 , 21]. It can be predicted that failure to take these measures at an adequate level leads to the emergence of an important phenomenon such as alienation from school as well as a decrease in the capacity to endure the educational process among students. In universities, students' learning situation, decreased interest in learning, distancing from learning-related processes, and education becoming a more boring activity for them result in dropping out of school due to the problem of alienation and loss of commitment to school. This loss of commitment constitutes an important

problem all over the world as an undesirable behavior [22].

This research was conducted to examine the relationship between environmental behavior attitude and alienation among nursing students.

Research Questions

Does the personal information of nursing students affect environmental behavior attitude?

Does the personal information of nursing students affect the level of alienation?

Is there a relationship between environmental behavior attitude and alienation among nursing students?

2. METHODOLOGY

2.1. Type of research

The research is a descriptive type research looking for a relationship.

2.1.1. Place and Time of the Study

The study was conducted with questionnaires administered to 403 nursing students in Ondokuz Mayıs University in the 2018-2019 academic year.

2.2. Population and Sample of the Study

The population of the study consisted of 403 students studying in the Department of Nursing at Ondokuz Mayıs University. Without using any sampling selection method in the research, the nurse candidates who were studying in the department and who voluntarily accepted to participate in the research at the school on the dates when the data of the research were collected were included in the scope of the research. An attempt was made to reach all students during data collection. There were 425 female and 142 male students enrolled in the school between 2018-2019, totaling 567 students. The number of students participating in the study is sufficient to represent the population. However, student nurses who were not present at the school on the dates when the questionnaires were filled out and did not want to participate in the study were excluded from the scope of the study. 18 students were excluded from the study because they did not accept the study and/or were absent.

2.3. Data Collection Tools - Validity and Reliability Information

"Personal Information Form", 'Environmental Behavior Scale' and 'Student Alienation Scale' were used as data collection tools.

2.3.1. Personal Information Form

It consists of 4 questions covering age, gender, grade, and place of residence of nursing students in the light of the literature [4].

2.3.2. Environmental Behavior Scale (EBS)

The environmental behavior scale was adapted into Turkish by Timur and Yılmaz in 2013 and was originally developed by Goldman, Yavetz and Pe'er (2006). The original environmental behavior scale is structured in 5-point Likert type. The highest score in this scale is 100 and the lowest score is 20[23, 24]. To calculate the reliability coefficients of the scale, the reliability coefficient (Cronbach's Alpha) values of each sub-dimension were examined. There is 1 negative item in this scale. 1. Resource Conservation Activities for the Economic Benefit of the Individual: (3 items, α=0.68). 2. Environmentally Conscious Consumer: (3 items, α=0.66). 3. Nature Related Leisure Time Activities: (4 items, α=0.70). 4. Recycling Efforts: (3 items, α=0.63). 5. Responsible Citizenship: (5 items, α=.068). 6. Environmental Activism: (2 items, r=0.57; p<0.01).

2.3.3. Student Alienation Scale (SAS)

It was developed by Çağlar, Ç. in 2012. The Student Alienation Scale consists of a total of 20 items and four sub-dimensions: powerlessness 6 items, rulelessness 4 items, isolation 5 items and meaninglessness 5 items. For the total scale; (20-35) indicates very low level of alienation, (36-51) low level, (52-67) medium level, (68-83) high level, (84-100) very high level of alienation [25].

2.4. Evaluation of the Data

Research analyses were analyzed with SPSS (Statistical Package for Social Sciences) 21.0 statistical analysis program. Compliance of the alienation scale and environmental behavior scale with normal distribution was determined by one-sample Kolmogorov-Smirnov test, the distribution of nurses' descriptive characteristics was determined by frequency distribution (number and percentage), nurses' level of alienation and environmental behavior scale, The mean scores of the sub-dimensions were compared with the arithmetic mean and standard error, and the comparison of nurses' level of alienation from work and their descriptive characteristics were compared with the t test and one-way analysis of variance (ANOVA) in independent paired groups if they were suitable for normal distribution.

Multiple comparisons were evaluated with Duncan comparison test. Kruskal Wallis H non-parametric test was applied in case of non-compliance with normal distribution. Mann Whitney U test was used for pairwise comparisons. The relationship between the data and the percentage values explaining it were evaluated by Pearson Chi-Square test of independence. The correlation between the scales was calculated and Cronbach's Alpha value was calculated for internal consistency.

2.5. Ethical Dimension of the Research

Ethical approval (201-152) was obtained from Ondokuz Mayıs University Clinical Research Ethics Committee before the study. In addition, the nurses constituting the study group were given general information before the study.

3. RESULTS

The distributions obtained from the information given in the personal information forms are given in Table 1.

Table 1. Distribution of personal characteristics of nursing students

Variables	N	%
Gender		
Female	326	80.9
Male	77	19.1
Class		
1. Class	121	30.0
2. Class	97	24.1
3. Class	98	24.3
4. Class	87	21.6
Age (years (x))	19,89 ± 1,642 (Min. 17- Max. 34)	
Total	403	100

When Table 1 was examined, it was seen that the mean age of nursing students was 19.89±1.642. It was seen that 80.9% of the nursing students were female and 30.0% of them were first-year students (Table 1).

Table 2. Distribution of mean scores of sub-dimension of environmental behavior attitude

Dimensions	$\bar{x}$	SS	Min.	Max.
RAPFB	4.47	0.86	4.22	4.51
ERC	3.8	1.02	3.20	4.18
NLA	3.19	1.01	2.20	4.19
RE	3.15	1.01	2.63	3.57
CA	2.65	0.84	1.60	3.28
EA	1.96	1.07	1.92	2.23

Resource-conserving Actions with Personal Financial Benefit (RAPFB), Environmentally Responsible Consumerism (ERC), Nature-related Leisure Activities (NLA), Recycling Efforts (RE), Citizenship Action (CA) and Environmental Activism (EA)

When the mean scores of the sub-dimensions of the environmental behavior attitude of the students are examined in Table 2, it is seen that the highest score is in the sub-dimension of Resource Conservation Activities for the Economic Benefit of the Person, followed by Environmentally Conscious Consumer, Nature Related Leisure Time Activities, Recycling Efforts, Responsible Citizenship and Environmental Activism, respectively.

Table 3. Distribution of mean scores of environmental behavior attitude subscale according to personal characteristics of nurses

Variables	RAPFB	ERC	NLA	RE	CA	EA
Age	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
18	4.22±0.86	3.51±0.93	2.97±0.82	3.02±0.83	2.4±0.7[b]	1.73±0.88 [c]
19	4.40±0.73	3.70±0.85	3.08±0.71	3.06±0.85	2.5±0.6[ab]	2.02±0.95 [bc]
20	4.15±0.79	3.73±0.77	3.23±0.78	3.15±0.79	**2.8±0.6[a]**	2.17±0.96 [ab]
21	4.25±0.72	3.70±0.84	3.27±0.76	3.29±0.87	2.6±0.6[ab]	2.05±0.92 [bc]
22	4.14±0.81	3.61±0.63	3.06±0.64	2.98±0.83	2.65±0.6[ab]	**2.44±0.93 [a]**
P	0.408	0.478	0.075	0.241	0.006**	0.005**
Gender						
Female	**4.33±0.72[a]**	**3.74±0.76 [a]**	3.18±0.72	3.11±0.82	2.66±0.67	2.07±0.96
Male	4.08±0.94[b]	3.40±1.01[b]	3.03±0.89	3.22±0.86	2.50±0.68	2.07±0.88
P	0.011*	0.001**	0.12	0.288	0.066	0.965
Class						
1. Class	4.32±0.84	3.57±0.95	3.07±0.8	3.10±0.81	2.53±0.68[b]	1.96±1[bc]
2. Class	4.33±0.75	3.71±0.82	3.09±0.8	3.02±0.91	2.49±0.64[b]	1.86±0.83[c]
3. Class	4.19±0.74	3.71±0.68	3.23±0.69	3.25±0.71	**2.85±0.6[a]**	**2.35±0.93[a]**
4. Class	4.29±0.74	3.75±0.77	3.24±0.70	3.16±0.9	2.65±0.72[b]	2.15±0.92[ab]
P	0.591	0.383	0.22	0.25	0.001**	0.001**

a,b: Different letters in the same column indicate statistical difference (p<0.05).

It was observed that students' Responsible Citizenship and Environmental Activism sub-dimensions were significantly affected by age (Table 3). On the other hand, when different ages are compared with Environmental Activism, there is a significant difference between students aged 22 years and students of other ages (Table 3). Gender-related responses differed in the sub-dimensions of Resource Conservation Activities for Economic Benefit (p<0.05) and Environmentally Conscious Consumer (p<0.05) (Table 3). As a result of the comparison between the classes of the students, it was seen that there was a difference between the classes on Responsible Citizenship (p<0.05) and Environmental Activism (p<0.05). When the mean scores of the alienation sub-dimensions of the students were examined, it was seen that the highest score was in the Powerlessness sub-dimension, followed by Rulelessness, Isolation and Meaninglessness, respectively (Table 4).

Table 4. Distribution of mean scores of sub-dimensions of alienation

Dimension	Mean	SD	Min.	Max.
Weakness	3.74	0.84	3.22	3.93
Rulelessness	3.28	0.96	2.71	3.36
Isolation	3.53	0.94	2.96	3.69
Meaninglessness	3.16	1.16	2.83	3.42

When the mean scores of the alienation sub-dimensions of the students are examined in Table 4, it is seen that the highest score is in the Powerlessness sub-dimension, followed by Rulelessness, Isolation and Meaninglessness, respectively.

Table 5. Distribution of mean scores of alienation scale sub-dimension according to personal characteristics of nurses

Variables	Weakness	Rulelessness	Isolation	Meaninglessness
Age	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
18	3.69±0.7	**3.33±0.94[a]**	3.33±0.75	**3.40±0.9[a]**
19	3.63±0.67	3.30±0.77[ab]	3.41±0.79	3.20±0.91[abc]
20	3.69±0.74	3.10±0.8[ab]	3.40±0.81	3.00±0.87[bc]
21	3.52±0.71	3.01±0.83[b]	3.27±0.79	2.92±0.93[c]
22	3.67±0.47	2.99±0.51[b]	3.65±0.78	3.28±0.65[ab]
P	0.55	0.03*	0.26	0.01*
Gender				
Female	**3.69±0.67[a]**	**3.23±0.83[a]**	3.40±0.8	**3.19±0.91[a]**
Male	3.43±0.73[b]	2.86±0.81[b]	3.33±0.76	2.85±0.89[b]
P	0.004**	<0.001**	0.45	0.004**
Class				
1. Class	3.71±0.69	**3.43±0.91[a]**	3.30±0.7	**3.40±0.9[a]**
2. Class	3.63±0.76	3.06±0.8[bc]	3.47±0.82	2.97±0.93[b]
3. Class	3.64±0.71	3.17±0.7[b]	3.40±0.82	3.12±0.82[b]
4. Class	3.55±0.6	2.87±0.81[c]	3.40±0.85	2.92±0.94[b]
P	0.45	<0.001**	0.47	<0.001**

a,b: Different letters in the same column indicate statistical difference (p<0.05).

As a result of the analysis, it was determined that age was effective on rulelessness and meaninglessness (p<0.05). As a result of multiple comparisons, it was determined that nursing students who were 18 years old showed more rulelessness and meaninglessness than other ages (Table 5). The effects of gender on the sub-dimensions of powerlessness, irregularity and meaninglessness were found to be significant (p<0.05). When the results of the analysis are analyzed in Table 5, it is seen that women have higher levels of powerlessness, rulelessness and meaninglessness than men. Classes were found to have an effect on rulelessness and meaninglessness (p<0.001) (Table 5).

Table 6. The relationship between environmental behavior attitude and alienation

	Weakness		Rulelessness		Isolation		Meaninglessness	
	CC	**P**	**CC**	**P**	**CC**	**P**	**CC**	**P**
RAPFB	**0.222**	**<0.001**	**0.149**	**0.003**	**0.123**	**0.013**	**0.134**	**0.007**
ERC	**0.182**	**<0.001**	**0.121**	**0.015**	-0.038	0.444	0.070	0.163
NLA	**0.120**	**0.016**	0.047	0.348	-0.053	0.288	0.009	0.849
RE	**0.146**	**0.003**	0.064	0.201	-0.014	0.784	0.057	0.250
CA	0.067	0.177	0.039	0.439	-0.076	0.128	0.074	0.139
EA	-0.010	0.841	0.073	0.145	**-0.131**	**0.009**	0.051	0.304

Correlation Coefficient (CC), Resource-conserving Actions with Personal Financial Benefit (RAPFB), Environmentally Responsible Consumerism (ERC), Nature-related Leisure Activities (NLA), Recycling Efforts (RE), Citizenship Action (CA) and Environmental Activism (EA)

A positive correlation was found between Powerlessness, one of the sub-dimensions of the Student Alienation Scale, and 'Resource Conservation Activities for One's Economic Benefit', 'Environmentally Conscious Consumer', 'Nature Related Leisure Time Activities' and

activities that increase students' knowledge about the environment but also activities that will make a positive difference in their attitudes can be included.

The lowest possible score from the alienation attitude scale is 20 and the highest score is 100. The scores that the students received from the alienation attitude scale are (mean ± standard deviation) 69.52±11.28 for the first grade; 66.35±12.04 for the second grade; 66.97±11.31 for the third grade; and 64.29±11.50 for the fourth grade. Since these scores are above the average for each grade, it can be said that the students have a positive attitude towards alienation. Although the alienation scale results in this study are above the average, the study conducted by Çelik and Babaoğlan (2017) determined that university students experienced moderate alienation in all dimensions of powerlessness, irregularity, isolation and meaninglessness [37]. It is thought that alienation is above moderate due to situations such as the fact that the practice courses are held in the hospital, that they receive education related to a field that completely affects human life, and that the responsibility taken is important.

Another result of the study is that the levels of irregularity and meaninglessness of university students differ according to their ages ($p<0.05$). It was found that 18-year-old students showed more irregularity ($p<0.05$) and meaninglessness ($p<0.05$) than students of other ages (Table 4). In contrast to this result, Emir (2012) concluded in his study that the level of alienation did not change according to age, while Ataş (2012) and Erjem (2005) concluded that the level of alienation differed according to age [38, 39, 40]. According to Ericson's widely accepted character development theory of the stages of human development, the identity-building efforts of students who come to school at the end of adolescence cause alienation behavior [41]. With the end of adolescence, the individual who takes a definite step towards adulthood strengthens concepts such as work, family and friendship and moves away from alienation. Students' irregularity is due to reasons such as rejecting authority, conflict with the role expected of them, and accepting their own rules instead of complying with the rules of the system. The decrease in alienation with increasing age is thought to be due to maturation.

Another result reached in this study is that the levels of powerlessness ($p<0.05$), irregularity ($p<0.001$) and meaninglessness ($p<0.05$) of university students differ according to their gender (Table 4). It was found that female students showed more alienation than male students. In the research conducted on university students, there are studies showing that female students experience higher alienation than male students (Bayhan, 1995) or male students experience higher alienation than female students [42]. There are many studies that have previously shown that the level of alienation of students does not differ according to gender [42, 43, 44]. It is thought that this result is due to the role of women in the country and the cultural characteristics of the country.

In the study, it was found that the attitudes of nurse candidates towards alienation differed according to the grade level ($p<0.05$) (Table 4). As a result of the comparison between the grades of nursing students, it was determined that the 1st grades were significantly different from the other grades in both the irregularity ($p<0.001$) and meaninglessness ($p<0.001$) alienation sub-dimensions (Table 4). In the alienation behavior measurement conducted by Ataş and Ayık (2013) on university students, it was found that the alienation attitude differed according to the grade variables [39]. According to Ataş and Ayık, 3rd and 5th grade students had higher alienation in the meaninglessness sub-dimension than the 1st grades [39]. These results contradict our study. It is thought that students who come to school show alienation behavior more than other grades because they are in different variables such as a different city, a new school and a new environment in their first year. On the other hand, as the grades progress, the level of alienation decreases.

A positive significant relationship was found between all sub-dimensions of alienation behavior (powerlessness, meaninglessness, anomie, isolation) and the environmental behavior sub-dimension Resource Protection Activities for the Economic Benefit of the Person ($p<0.05$). In Kohlberg's moral theory, social expectations at the pre-conventional level remain outside the self. The perspective here is the perspective of the concrete individual actor who follows the rules in the face of needs and to protect personal interests. The reason for obeying the rules or the right behavior is to avoid the authority's superior power and possible punishment [45]. The conflict between social expectations and the self in the theory reminds us of alienation. For this reason, it is thought that nursing students show Resource Protection Activities for the Economic Benefit of the Person while showing alienation (powerlessness, meaninglessness, anomie, isolation) behavior.

It was determined that there is a positive and significant relationship between the environmental behavior sub-dimension Environmentally Conscious Consumer and the powerlessness and irregularity ($p<0.05$) sub-dimensions (Table 6).

In Kohlberg's moral development theory, in the post-conventional period, people develop abstract moral principles towards freedom, equality, individual well-being, unity and respect for dignity. Principles differ from specific rules in many ways. Principles include high-level reasoning above concretely formulated rules. While many rules say you should not steal, you should not kill, you should not lie, principles include positive values such as respect for life, freedom and dignity. These principles based on rights and values are above all rules. Therefore, in conflict situations, principles can take precedence over concrete rules and cultural habits [45]. Therefore, it can be said that students who show irregularity behavior develop the principle of being sensitive to the environment. According to the findings obtained from the research, nursing students' sensitivity to the environment increases as they feel powerless. The low expectations of students who show weakness have also increased their environmental sensitivity. It is thought that students who show weakness behavior with low self-belief try to compensate for these deficiencies from the environment. When these findings are examined, while the students' irregular behavior increases, their environmental attitudes also increase in the same direction. The behavior of rejecting authority that emerged with the students' irregular behavior and their attitude towards the system has improved the student's sensitivity towards the environment. The students' irregular behavior has improved their attitudes towards the environment in a positive way.

A positive significant relationship was found between the powerlessness sub-dimension, nature-related leisure activities and Recycling Efforts ($p<0.05$) (Table 6). Existential anxiety is related to human existence and is different from fear, which is related to being afraid of something. We can escape from this anxiety or try to understand its message and importance. Understanding the positive aspect of anxiety shows itself for the individual in the movement towards the "most advanced point of potential for being-being-, which is the free being that has the freedom to choose and hold on to oneself" [46]. The authenticity of being in the face of itself also indicates its powerlessness [47]. People with existential anxiety exhibit powerlessness behaviors and try to find themselves by distancing themselves from society. Individuals who exhibit powerlessness behaviors try to spend their free time in nature in an effort to find a place for themselves. At the same time, they feel the need and necessity to ensure the continuity of the natural environment they live in. They aim to be a part of nature by becoming environmentally sensitive through recycling efforts.

A significant ($p<0.05$) and negative correlation was found between the sub-dimension of isolation and Environmental Activism (Table 6). If the physical world reflects our body's relationships with objects, the social world reflects our emotional relationships with other people. We are always thrown into a world of togetherness (with-world, Mitwelt in German) with other people, and most of the actions we undertake on a physical level cause us to interact with others [46]. The necessity of interacting with others for the actions taken requires socialization, as opposed to isolation. These findings show that while the sub-dimension of alienation, isolation, increases, the sub-dimension of Environmental Activism changes negatively compared to this behavior.

3. Conclusion

The results and suggestions obtained from the research conducted to examine the relationship between environmental behavior and alienation among nursing students are given below. According to the results obtained from the research, it was determined that nursing students exhibited a positive attitude towards environmental problems. When the relationship between gender and alienation was examined, it was determined that women showed more alienation. It was determined that environmental attitudes increased with the increase in powerlessness. A positive relationship was found between students' irregular behavior and environmental attitudes. It was determined that there was a significant relationship between the sub-behavior of isolation and Environmental Activism and Resource Protection Activities for the Economic Benefit of the Person. It was determined that there was a negative relationship between the behavior of isolation and Environmental Activism. It was determined that as the person becomes more isolated, their attitude towards Environmental Activism decreases, while with isolation, resource protection activities for the economic benefit develop. While students exhibited isolation behavior, their environmental activism decreases.

A positive correlation was found between powerlessness and Resource Protection Activities for the Economic Benefit of the Person, Environmentally Sensitive Consumer, Leisure Activities Related to Nature and Recycling Efforts. A positive correlation was found between irregularity and resource protection activities for the economic benefit of the individual and environmentally sensitive consumer. A positive

correlation was found between abstracted and resource protection activities for the economic benefit of the individual, and a negative correlation was found with environmental activism. A positive correlation was found between meaninglessness and resource protection activities for the economic benefit of the individual. In line with these results, universities should primarily encourage and assist students to establish clubs and associations related to the environment. Starting from the first semester, events such as congresses, symposiums and forums should be organized and their frequency should be increased in order to raise environmental awareness and interest in environmental problems for students placed in universities. More studies are recommended.

Author Contribution

Study Design, SGK; Data Collection, SGK, AB; Statistical Analysis, SGK, AB; Data Interpretation, SGK, AB; Manuscript Preparation, SGK; Literature Search, SGK, AB. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

No conflict of interest is declared by tehe authors. In addition, no financial support was received.

Ethics Statement

This research has met ethical rules. Research ethical approval was obtained from the UPGRIS Research Ethics Committee with project number 075/LPPM-UPGRIS/VII/2024.

REFERENCES

1. Algül E. Contemporary approaches and strategies in the environmental problem – 1 environmental policies for turkey in the environmental problem.
2. Watson, K., & Halse, C.M. (**2005**). Environmental attitudes of pre-service teachers: a conceptual and methodological dilemma in cross-culturel data collection. *Asia Pasific Education Review*, 6 (1): 59-71. [CrossRef]
3. Güler, Ç., & Vaizoğlu S.A. (**2012**). Environmental Health. Güler Ç, Akın L. Editor, Public Health Basic Information. II. Volume, Istanbul, *Hacettepe University Publications*, 73.
4. İncekara, S., & Tuna, F. (**2010**). Measuring the knowledge levels of secondary school students on environmental issues: The example of Çankırı province. *Marmara Geography Journal*, 22: 168-82. [CrossRef]
5. Chitty, KK. (**1997**). Professional nursing concepts and challenges: Second edition, *WB Saunders Company*, 197-201.
6. Velioğlu, P.(**1999**). Concepts and theories in nursing: 1st Edition, *Istanbul, Alaş Ofset*, 54:75: 93-116.
7. İnanç, N. (**1994**). Principles of Nursing. 1st Edition, Ankara, *GATA Publishing House,* 26-27.
8. Sabuncu, N., Babadağ, K., Taşocak, G., Atabek, T. (**1993**). Principles of Nursing, *Open Education Faculty Publications*, 225:4-5.
9. Ünsal, A. (**2017**). Four Basic Concepts of Nursing. Human, environment, health and disease, nursing. *Ahi Evran University Journal of Health Sciences*, 1(1): 11-25. [CrossRef]
10. Birol, L. (2002). Nursing Process. 5th Edition, Izmir, *Bozyaka Printing House*, 10-83.
11. George, JB. (**1990**). Nursing Theories the Base for Professional Nursing Practice. Third Edition, *Appleton ve Lange,* 17: 32-33.
12. Kanungo, RN. (**1992**). Alienation and empowerment: some ethical imperatives in business. *Journal of Business Ethics*, 11: 413–422. [CrossRef]
13. Coşturoğlu, M. (**1999**). Social schizophrenia and its pressure on creative thinking. 1st Edition, Ankara, *Gül Dikeni Publications*.
14. Bandura, A. (**1997**). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2): 191-215. [PubMed]
15. Zimmerman, BJ. (**1995**). Self-efficacy and educational development. In A. Bandura (Ed.), *Selfefficacy in changing societies* , 202-231. [CrossRef]
16. Solberg, VS., O'Brien, K., Villareal, P., Kennel, R., Davis, B. (**1993**). Self-efficacy and hispanic college students: Validation of the college self-efficacy instrument. *Hispanic Journal of Behavioral Sciences*, 15(1): 80-95. [CrossRef]
17. House, JD. (**1992**). The relationship between academic self-concept, achievement-related expentacies, and college attrition. *Journal of College Student Development,* 33. [CrossRef]
18. Wood, R., Locke, E. T. (**1987**). The relationship of self-efficacy and grade goals to academic performance. *Educational and Psychologyical Measurements*, 47: 1013-1024. [CrossRef]
19. Elias, S., Loomis, R. (**2002**). Utilizing need for cognition and perceived self efficacy to predict academic performance. *Journal of Applied Social Psychology,* 32(8):1687- 1702. [CrossRef]
20. Yılmaz, M., Gürçay, D., Ekici, G. (**2007**). Adaptation of the academic self-efficacy scale into Turkish. H.U. *Journal of the Faculty of Education*, 33: 253-259. [CrossRef]
21. Joët, G., Usher, EL., Bressoux, P. (**2011**). Sources of self-efficacy: An investigation of elementary school students in France. *Journal of Educational Psychology*, 103(3): 649. [CrossRef]
22. Finn, JD., Voelkl, KE. (**1993**). School characteristic related to school engagement. *Journal of Negro Education,* 249-268.
23. Timur, S., Yılmaz, M. (**2013**). Adaptation of the environmental behavior scale into Turkish. *GEFAD/GUJGEF*, 33(2): 317-333. [CrossRef]

24. Goldman, D., Yavetz, B., Pe'er, S. (**2006**). Environmental literacy in teacher training in Israel: environmental behavior of new students. *Journal of Environmental Education,* 38(1): 3–22. [CrossRef]
25. Caglar, C. (**2012**). Development of the student alienation scale. *Education and Science,* 37(166): 195-205. [CrossRef]
26. Sadık, F., Sarı, M. (**2010**). Student teachers' attitudes towards environmental problems and their level of environmental knowledge. *Çukurova University Faculty of Education Journal,* 3(39): 129-141. [CrossRef]
27. Altın, M. (**2001**). Environmental education in prospective biology teachers. Gazi University Education Institute of Sciences, *Ankara, Master's Thesis,* 2-7.
28. Erten, S. (**2005**). Investigation of environmentally friendly behaviors in pre-school teacher candidates. *Hacettepe University Faculty of Education Journal* 28:91-100. [CrossRef]
29. Çabuk, B., Karacaoğlu, C. (**2003**). Examination of University Students' Environmental Awareness. *Ankara University Faculty of Educational Sciences Journal,* 36(1-2): 189-198. [CrossRef]
30. Ek, NH., Kılıç, N., Öğdüm, P., Düzgün, G., Şeker, S. (**2009**). Adnan Menderes University has different Environmental studies of first and senior students studying in academic fields their attitudes and sensitivity towards their problems. *Kastamonu Education Magazine,* 17(1): 125–136. [CrossRef]
31. Uzun, YÖ. (**2006**). Effects on school alienation levels of 5th grade primary school students. Determination of socio-demographic variables. *Çukurova University Education Institute of Sciences, Adana, Master's Thesis*, 7-24.
32. Uzun, N., Sağlam, N. (**2007**). Development and development of an environmental attitude scale for secondary school students. validity. *Hacettepe University Faculty of Education Journa*l, 30: 240-250. [CrossRef]
33. Erol, GH. (**2005**). Environment and Environmental Problems of Second Year Classroom Teaching Students Attitudes Towards. *Pamukkale University Institute of Science and Technology, Denizli, Master's Thesis,* 32-43. [CrossRef]
34. Yılmaz, M., Gürçay, D., Ekici, G. (**2007**). Adaptation of the academic self-efficacy scale into Turkish. H.U. *Journal of the Faculty of Education*, 33: 253-259. [CrossRef]
35. Gıerveld, DJ. (**1987**). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology,* 53(1): 119-128. [PubMed]
36. Seeman, M. (**1983**). Alienation motifs in contemporary theorizing: The hidden continuity of the classic themes. *Social Psychology Quarterly*, 46(3): 171-184. [CrossRef]
37. Çelik, E., Babaoğlan, E. (**2017**). alıenatıon level of unıversıty students. *Ahi Evran University Kırşehir Faculty of Education Journal,* 18(1), 405-427.
38. Emir, S. (**2012**). Alienation levels of secondary school teachers (Aydın Province Sample). *Adnan Menderes University Institute of Social Sciences, Aydın, Master's Thesis,* 38-42. [CrossRef]
39. Ataş Ö., Ayık, A. (**2013**). School alienation among teacher candidates. Turkish Studies - International Periodical For The Languages, *Literature and History of Turkish or Turkic,* 8(8): 103-122. [CrossRef]
40. Erjem, Y. (**2005**). The phenomenon of alienation in education and the teacher: On high school teachers a sociological research. *Turkish Journal of Educational Sciences*, 3(4). [CrossRef]
41. Douvan, E. (**1997**). Erik Erikson: Critical times, critical theory. *Child psychiatry and human development,* 28, 15-21. [PubMed]
42. Bayhan, V. (**1995**). Anomie and alienation in university youth. *İnönü University Social Institute of Sciences, Malatya, Doctoral Thesis,* 25-33. [CrossRef]
43. Polat, M, (**2015**). Dilekmen M, Yasul F. School alienation and academic problems in teacher candidates Self-efficacy: A review of chaid analysis. *International Journal of Educational Sciences*, 2(4): 214-232. [CrossRef]
44. Coşkun, Y., Altay, CA. (**2009**). The relationship between alienation and self-perception in high school students. M.Ü. *Atatürk Faculty of Education Journal of Educational Sciences*, 29:41-56. [CrossRef]
45. Kohlberg, L., Hersh, R.H. (**1977**). Moral development: A review of the theory. *Theory into practice,* 16(2), 53-59. [CrossRef]
46. Deurzen, E., Arnold, C. (**2017**). Existential perspectives on human affairs. *Aletheia Kitap, Istanbul.*
47. Öcal, O. (**2010**). Existential problems, individual and new life. *Kırıkkale university science and literatüre faculty,* 28. [CrossRef]