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Psychological Resilience, Pro Environmental Behaviors and their Relation to Climate Change Anxiety among Nursing Students

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Abstract
Background: Climate change is a global challenge that is expected to worsen and have long-lasting consequences. Students studying nursing may be particularly susceptible to the psychological repercussions of climate change. Research indicates that psychological resilience may be helpful in reducing climate change-related anxiety. **Aim** The current study aimed to assess psychological resilience, pro-environmental behavior and their relation to climate change anxiety among nursing students. **Research design**: The study utilized a descriptive correlational strategy. **Methods**: A random, stratified sample of 872 undergraduate students from the four academic years who enrolled in the Faculty of Nursing Minia University. **The data** were gathered using the resilience evaluation scale, pro-environmental behavior scale and Hogg eco-anxiety scale in addition to socio-demographic data. **Results**: The research result reveals that 58.4% of the studied sample was females with mean age were 22.2+1.1 years. 62.7% of students have a moderate psychological resilience level and 65.4% have fair pro-environmental behavior. **Conclusion**: more than fifty percent of the students have a low eco-anxiety level. Also, there was a high statistically significant positive correlation between the psychological resilience and pro-environmental behavior. **Recommendation:** The findings of this study emphasized the importance of offering additional climate change education programs for students, particularly focusing on enhancing their knowledge, attitudes, and practices in this regard.

Keywords: Climate change, Psychological resilience, Pro-environmental behaviors, Climate change anxiety & Nursing students

Introduction:
One of the biggest problems of the twenty-first century is climate change (CC), which is the current worldwide disruption of the ecological balance of our planet (**Innocenti et al., 2023**). A CC occurs when human actions, either directly or indirectly, modifies the atmosphere's composition or causes changes in the climate that go beyond the normal fluctuation seen over similar time periods **(United Nations., 2023**). A major global concern that has a substantial impact on personnel's health and well-being on a global scale is CC. It poses a significant risk to public health since it raises rates of morbidity and mortality as well as psychological anguish **(Nie, et al., 2024**).

In the upcoming decades, the effects of CC are predicted to intensify and have irreversible repercussions, particularly for vulnerable groups. CC has a wide range of negative repercussions, including tangible ones like heat-related illnesses, vector-transmitted infections, food and water contamination, respiratory and allergy disorders, famine, violence, and mental health issues **(Sahin-Bayindir et al., 2024**).

Addressing the health effects of climate change requires the involvement of the healthcare sector, particularly nurses and nursing students. Numerous detrimental psychological effects, such as anxiety, sadness, stress, complicated grieving, survivor's guilt, substance misuse, and suicidal thoughts, are linked to climate change **(Fuentes, 2024**).

A recently developed concept that describes a fear of climate-related events is called "climate change anxiety," also referred to as "ecological anxiety." Anxiety related to CC can impact personnel's cognitive, emotional, behavioral, and decision-making processes. These can include ongoing worries, psychological discomfort, trouble sleeping, and even impair cognitive processes, learning, adaptation, and interpersonal relationships **(Qin et al., 2024)**.

Human activities are one of the sources of environmental problems. These activities include burning fossil fuels for energy and deforestation. Surprisingly, the alleviation of these life-threatening impacts can be done by humans as well (**Lisboa et al., 2024**). **Kollmuss & Agyeman (2002)** coined the term "pro-environmental behavior (PEB)" to describe deliberate actions taken to lessen the effects of CC. Pro-environmental behavior, also described as green behavior, was conceptualized for the goal of encouraging humans to take action and be mindful of their environmental behavior and eventually lessen

the consequences of human behavior on the earth (**Grilli & Curtis, 2021).**

Both the public and private realms can benefit from this type of behavior, which can lessen ecological harm, preserve natural resources, and enhance environmental quality. Examples of this include recycling, energy-efficient appliances, low-carbon travel, and green consumption, as well as supporting environmental laws and contributing to environmental charities **(Anderson & Krettenauer, 2021).**

Climate change anxiety and pro-environmental behavior have a convoluted relationship. According to certain studies, climate change anxiety can actually help people behave more sustainably **(Elyssa et al., 2024).** One problem-focused coping mechanism for climate change anxiety is pro-environmental behavior. Instead, other research has shown that worry over CC is either unrelated to or negatively connected with pro-environmental behavior **(Shao & Yu, 2023; Geiger et al., 2021).** It can also impair a person's capacity to react, which can result in emotions of hopelessness and despair **(Wolfe& Tubi, 2018).**

Psychological resilience is about human adaptation and recovery when challenged with a difficult situation. Resilience, defined as the ability to overcome difficulties and cope successfully with stressful events **(Hart et al., 2014),** it is both an individual trait and a developmental process (**Younes et al., 2023**). **Ogunbode et al. (2022)** contended that resilience, a predominantly favorable characteristic, may influence individuals' emotions and behaviors in the face of environmental threats.

Numerous studies have demonstrated that, in the context of CC coverage, people with high resilience will exhibit fewer pro-environmental actions and less eco-anxiety **(Shao & Yu, 2023; Shaw et al., 2014).** After natural disasters, those with strong resilience levels typically show reduced anxiety and negative emotions, which improves nurses' effectiveness on the job **(Shao& Yu, 2023).**

Significance of the study

According to the World Health Organization **(WHO)**, there would be an estimated 250,000 more fatalities annually between 2030:2050 as a result of CC-related extreme weather events and indirect effects as infectious diseases, a shortage of food as well as water**.** According to an American Psychological Association survey (2018), anxiety is one of the negative feelings brought on by CC, and it tends to be higher among young people **(Ediz & Yanik, 2023).**

Pro-environmental behavior decreases the natural environmental burden and mitigates CC and biodiversity loss (**Piao & Managi, 2024**). In this respect, hospitals require resilient nurses who can adapt successfully to extraordinary change and adapt successfully to challenging roles, tasks, and situations. There is limited research on how university students emotionally and behaviorally respond to CC **(Li & Liu, 2022).** Research to be conducted in different cultures on this issue can contribute to international and national discussions. So, it is considered significant to evaluate students' psychological resilience, pro- environmental behaviors, and CC anxiety related to CC.

Methodology

Aim: The present study aimed to assess psychological resilience, pro-environmental behavior, and their relation to climate change anxiety among nursing students.

Research questions:

- What are the levels of psychological resilience, pro-environmental, and climate change anxiety among nursing students?
- Is there a relation between psychological resilience, pro-environmental behavior and climate change anxiety among nursing students?

Research Design:

A descriptive correlational research design was employed to accomplish this study's goal.

Study Setting:

The current research was conducted at the Faculty of Nursing, Minia University, which is located in Minia City, Egypt. The college is located within Minya University and consists of five floors. The first floor contains administrative offices, quality assurance and accreditation unit, a discussion hall, and a library. Each of the other four floors is divided into two parts: one for classrooms and laboratories, and the other for teaching staff and administrative offices.

Sample:

The current study targeted the four academic years' students over the age of eighteen who enrolled in the Faculty of Nursing in the 2024–2025 academic year. A random, stratified sample of 872 students were enrolled according to the statistical equation that the sample size was calculated by the Isaac and Michael (1995) formula, which was calculated as (N = n x 30 / 100), in which (N = sample size) and (n = total number of students enrolled in the nursing faculty during the current academic year). The size of the sample for each academic year was proportional to the total number of students.

The academic year	Total number of students	Sample size	Ratio (%)
1st year	340	103	11.7
2nd year	676	203	23.3
3rd year	945	283	32.5
4th year	943	283	32.5
Total	**2904**	**872**	**100%**

Study Tools:

Tool (I): **Socio-Demographic Data:**

This tool was developed by the researchers to gather data about students' socio-demographic characteristics; including gender, age, residence, academic year, and source of knowledge about climate change.

Tool (II): The Resilience Evaluation Scale (RES)

The RES is a brief questionnaire that evaluates internal psychological resilience**.** This tool was developed by **Van der Meer et al., 2018,** and composed of nine items answered on a five-point Likert scale from zero (completely disagree) to four (completely agree) with a sum of scores (range: 0-36). Participants rate their agreement with the nine items that describe how they "typically handle challenging circumstances." Greater degrees of psychological resilience are indicated by higher total scores **(Dai et al., 2024)**.

Tool (III): Pro-Environmental Behavior Scale (PEBS)

PEBS was developed by **Stevenson and Peterson (2015)**. It is brief and enables the evaluation of various aspects (domestic behavior, information seeking behavior, and transportation choice). The PEBS consists of 10 items, and is answered through 5-point Likert scale, where 1 for "never" and 5 for "always". A higher score translates to the adoption of more pro-environmental behaviors. The scale contains three subscales: "household behavior" (items from 1: 5); "information-seeking behavior" (items 6:8); and, "transportation choice" (items 9 and 10).

Tool (IV): Hogg Eco-Anxiety Scale (HEAS)

The HEAS is 30 items developed by **Hogg et al., 2021,** for assessing anxiety symptoms as well as experiences regarding to the climate as well as environmental crises. The scale is a four-point Likert-type scale (zero for not at all to three for nearly every day). The scale composed of four sub-dimensions of eco-anxiety as: affective symptoms (items 1: 4), rumination (items 5: 7), behavioral symptoms (items 8: 10), and anxiety about personal impact (items 11: 13). High levels of eco-anxiety are indicated by higher scores on the HEAS, which was computed by averaging the items of the individual subscales.

Validity and reliability of tools:

The tools were translated into Arabic and validated by a panel of seven experts in psychiatric and mental health nursing, and psychiatric medicine to evaluate the tools' clarity, feasibility, and applicability. Necessary modifications were made based on the experts' feedback. The reliability of the tools was evaluated through an Alpha Cronbach test, and they were found to be reliable, with a score of 0.90 for the psychological resilience scale, 0.82 for the pro-environmental behavior scale, and 0.86 for the eco-anxiety scale.

Pilot Study:

A pilot study was undertaken with ten percent of the total sample (87 students) to evaluate the clarity and applicability of the instrument and identify any potential challenges that might arise during the study. Notably, participants who participated in the pilot study were not included in the study to prevent duplication of data and ensure the integrity of the results.

Ethical consideration:

Common ethical standards for scientific research were followed during the research. The study received approval from the Research Ethics Committee of the Faculty of Nursing at Minia University, Egypt (Approval No: REC2024121). The objectives and significance of the study were thoroughly explained to each participant. Subsequently, informed oral and written consent was obtained. Participants were assured that their participation was voluntary, and they had the right to withdraw from the study at any time. To ensure confidentiality and anonymity, all data were coded appropriately.

Data collection procedure:

Using the books and journals that were available, a review of related literature covering different elements of the study was conducted in order to familiarize oneself with the research problem and to choose the right study tools. After outlining the nature of the work, the relevant authorities granted the official licenses that were required. Following the selection of the measuring devices, the study aids were translated into Arabic and then reversed.

The researchers explained the aim of the study through a direct personal interview with the students to get their approval, cooperation, and voluntary participation in the study. The data was collected over three months from mid-December 2024 to mid-March 2025 during free periods of the academic day. The students were given and filled out the tool sheet, which took an average of 10-15 minutes to complete under the assistance and supervision of the researcher. The researcher concluded by thanking the students for their cooperation.

Statistical Analysis:

Version 24.0 of SPSS for Windows was the software employed for all data analysis. The mean ± standard deviation (SD) was used to express continuous normally distributed data. The percentage and number were used to convey the categorical data. Correlation co-efficient tests were applied to look for the correlation between the variables of continuous data. A reliability test was conducted on the study's questionnaires. For statistical significance, $p<0.05$ was used as the cutoff point.

Results:

Table (1): Percentage distribution of the nursing students' socio- demographic data (No.=872)

Socio- demographic data	Nursing students (No.= 872)	
	No	%
Gender		
- Female	509	58.4
- Male	363	41.6
Age		
- 18-19yrs	138	15.8
- 20-21yrs	341	39.1
- 22-23yrs	376	43.2
- > 23	17	1.9
Mean ± SD= 22.234+1.123		
Academic's level		
- First	103	11.7
- Second	203	23.3
- Third	283	32.5
- Fourth	283	32.5
Residence		
- Ruler	618	70.9
- Urban	254	29.1

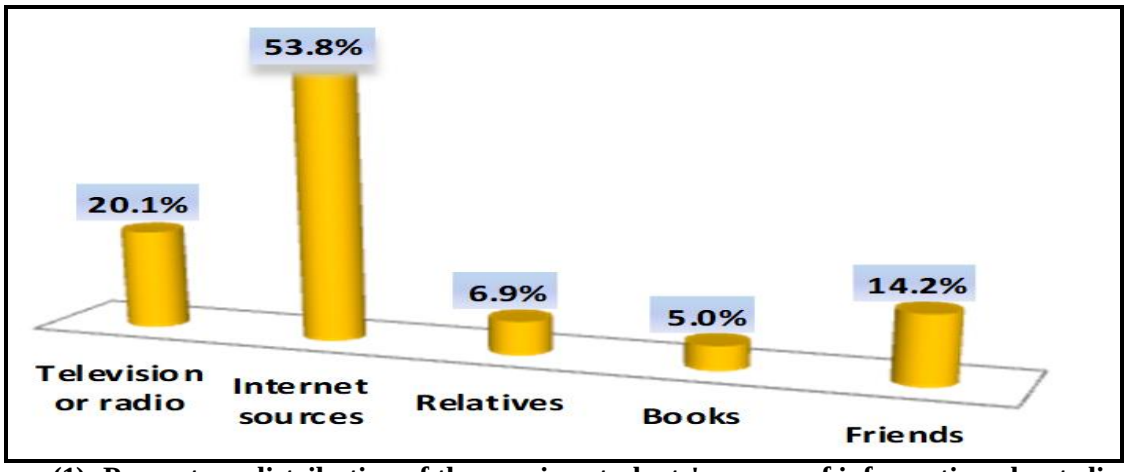
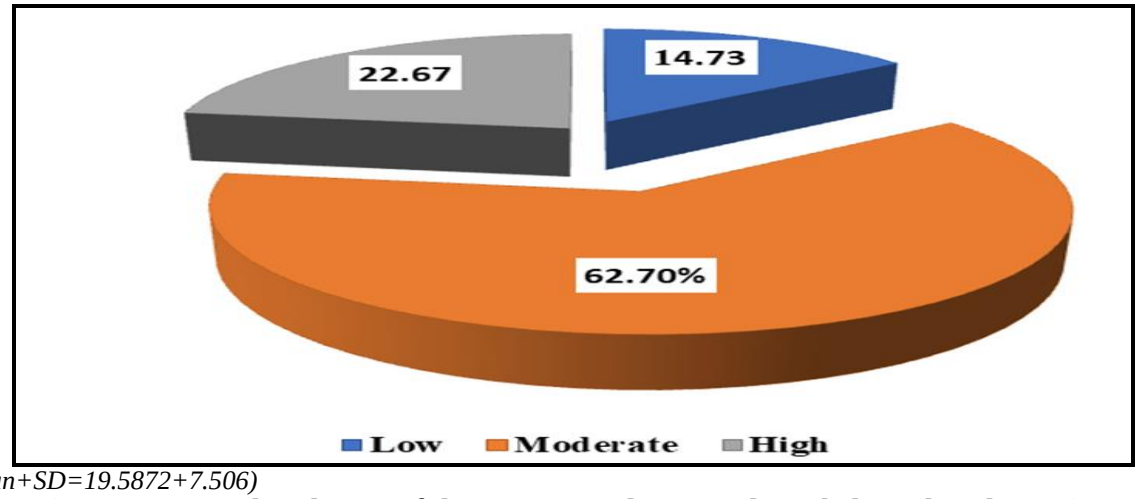


Figure (1): Percentage distribution of the nursing students' sources of information about climate change (No.=872)



(Mean+SD=19.5872+7.506)

Figure (2): Percentage distribution of the nursing students' total psychological resilience (No.=872)

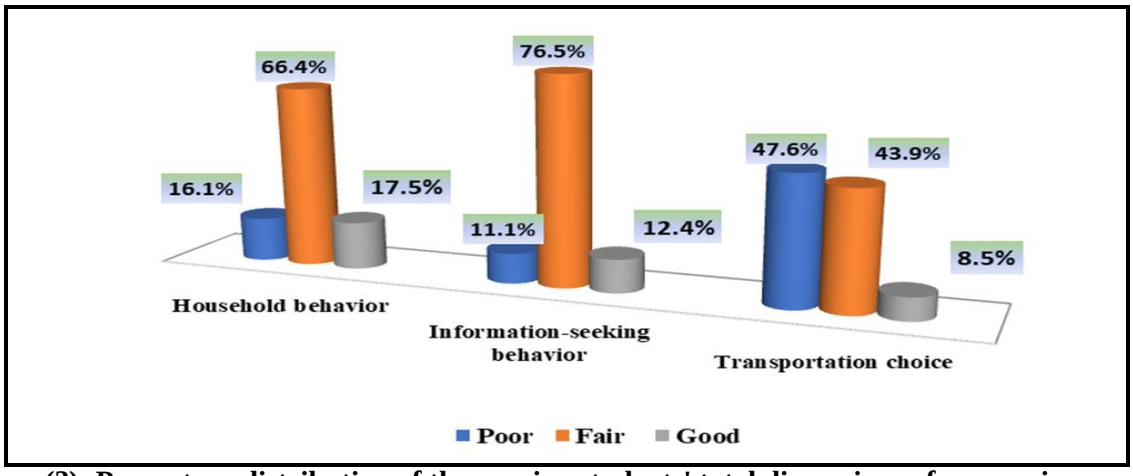


Figure (3): Percentage distribution of the nursing students' total dimensions of pro-environmental behavior (No.=872)

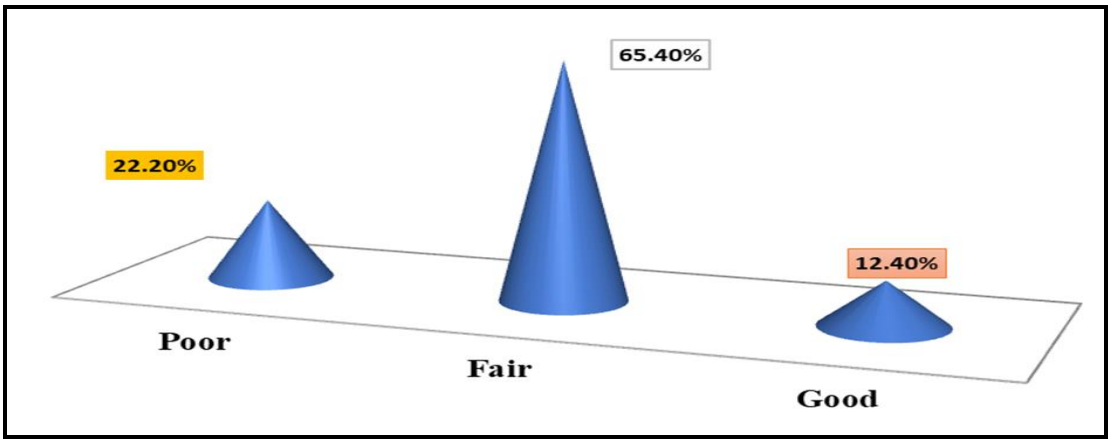


Figure (4): Percentage distribution of the nursing students' total pro-environmental behavior (No.=872)

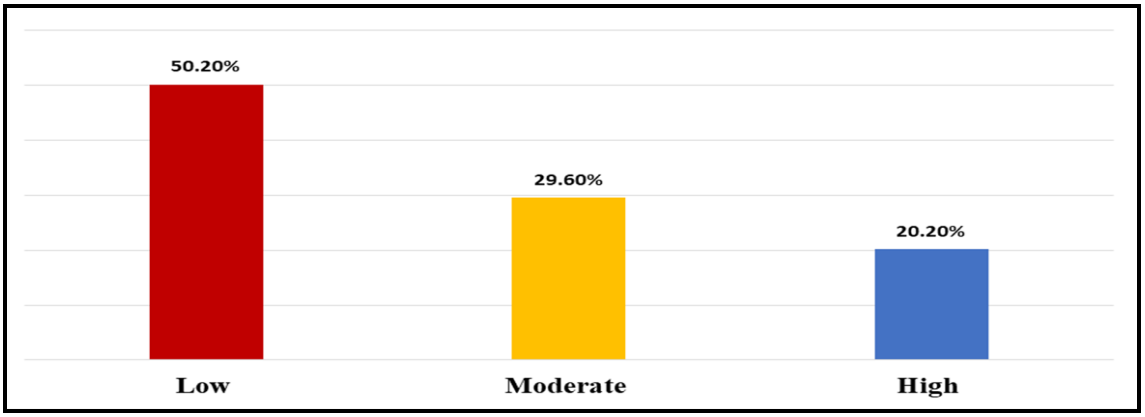


Figure (5): Percentage distribution of the nursing students' total Eco anxiety (No.=872)

Table (2): Mean Score of nursing students' total pro-environmental behavior with its dimensions (No.=872)

Pro-environmental dimensions.	Mean + SD	Minimum	Maximum	Range
Household behavior	14.964+4.557	6	23	17
Information-seeking behavior	9.237+2.466	5	15	10
Transportation choice	4.800+1.992	2	9	7
Total Pro-environmental behavior	28.928+7.829	15	47	32

Table (3): Mean Score of nursing students' total eco anxiety and its dimensions (No.=872).

Eco anxiety dimensions	Mean + SD	Minimum	Maximum	Range
Affective/ emotional	5.495+3.721	1	12	11
Rumination	3.848+2.399	1	8	7
Behavioral	4.145+2.580	1	9	8
Anxiety about personal impact	3.745+2.514	0	9	9
Total -anxiety	17.285+10.60	4	36	32

Table (4): Relation between psychological resilience and nursing students' socio- demographic data (No.=872).

Students' personal data	Mean +SD
Gender	
- Female	20.002+7.51
- Male	19.005+7.46
T test (p-value) 1.935 (0.043*)	
Age	
- 18-19yrs	18.058+7.56
- 20-21yrs	19.114+7.48
- 22-23yrs	20.516+7.43
- > 23	20.941+6.84
Anova (p-value) 1.300 (0.149 NS)	
Academic's year	
- First	17.524+**7.35**
- Second	18.059+7.39
- Third	20.459+7.39
- Fourth	20.561+7.46
Anova (p-value) 1.382 (0.101 NS)	
Residence	
- Ruler	19.485+7.46
- Urban	19.834+7.62
T test (p-value) 0.624 (0.533 NS)	

Table (5): Relation between pro-environmental behavior and nursing students' socio- demographic data (No.=872)

students' personal data	Mean +SD
Gender	
- Female	29.453+7.80
- Male	28.192+7.81
T test (p-value) 2.350 (0.019*)	
Age	
- 18-19yrs	28.985+8.20
- 20-21yrs	29.328+7.63
- 22-23yrs	28.595+7.86
- > 23	27.823+8.07
Anova (p-value) 0.478 (0.945NS)	
Academic's year	
- First	29.378+**7.96**
- Second	28.734+7.76
- Third	28.968+7.83
- Fourth	28.865+7.84
Anova (p-value) 0.034 (1.000NS)	
Residence	
- Ruler	29.009+7.63
- Urban	28.732+8.28
T test (p-value) 0.475 (0.635NS)	

Table (6): Relation between total eco-anxiety and nursing students' socio- demographic data (No.=872)

	Mean +SD
Gender	
- Female	17.180+10.91
- Male	16.355+10.24
T test (p-value) 1.129 (0.259 NS)	
Age	
- 18-19yrs	18.130+10.90
- 20-21yrs	16.445+10.86
- 22-23yrs	16.648+10.27
- > 23	18.352+1208
Anova (p-value) 0.805 (0.722NS)	
Academic's year	
- First	17.116+**10.95**
- Second	16.679+10.86
- Third	16.833+10.63
- Fourth	16.851+10.43
Anova (p-value) 1.074 (0.370NS)	
Residence	
- Ruler	16.875+10.87
- Urban	16.744+10.07
T test (p-value) 0.1654 (0.869NS)	

Table (7): Correlation between total nursing students' psychological resilience, pro-environmental behavior and eco anxiety (No.=872).

Variable	r p	Psychological resilience	Pro environmental behavior	Eco anxiety
Psychological resilience	r p	1		-0.109* 0.045
Pro environmental behavior	r p	0.106** 0.002	1	
Eco anxiety	r p		- 0.184** 0.001	1

Table (1): Clarified that 58.4% of them were females, and 43.1% were within the age 22-23 years with Mean ± SD (22.234±1. 123) who were in the 3rd and 4th grades. Also, 70.9% of students are found to reside in rural areas.

Figure (1): Illustrates that 53.8% of students are receiving their information about climate change from internet followed by television or radio (20.1%) while, books represent about 5% only.

Figure (2): Reveals that 62.7% of students have a moderate psychological resilience level, and 22.6% of them have a high psychological resilience level, whereas only14.7% of them has a low psychological resilience level.

Figure (3): Demonstrates that 66.4% of students have fair household behavior, 76.5% of them have seeking information behavior with a fair level, while 47.6% have poor transportation choice behavior.

Figure (4): Illustrates that 65.4% of students have a fair pro-environmental behavior while 12.4% of them have good behavior, and only 22.2% of them demonstrated poor pro-environmental behavior.

Figure (5): Reveals that 50.2% of students have a low eco anxiety level, 29.6% have a moderate eco-anxiety level, and only, 20.2% of them have a high eco anxiety level.

Table (2): Demonstrates nursing students' responses to the three dimensions of pro-environmental behavior. The items of first dimension (house hold behavior) showed the highest levels of agreement (mean= 14.9, SD = 4.5), followed by the second dimension (information seeking behavior) (mean = 9.2, SD = 2.4), while the third dimension (transportation choice) showed the lowest level of agreement (mean = 4.8, SD = 1.9).

Table (3): reveals that Affective/ emotional eco anxiety symptoms mean are 5.4 (SD = 3.7), eco-rumination 3.8 (SD = 2.3), behavior 4.1 (SD = 2.5), and anxiety about one's personal impact on the planet 3.7 (SD = 2 .5).

Table (4): Clarifies that there was a statistically significant relation between the mean score of studied students' psychological resilience and their gender at P-value (0.053*). Concerning students' gender,

females have the higher mean score (20.00± 7.5) of psychological resilience than males.

Table (5): Discloses that there was a statistically significant relation between the mean score of studied students' pro-environment behavior and their personal characteristics regarding gender with p= (0.019).

Table (6): Revealed there is no significant relationship between total echo anxiety and demographic characteristics among the studied students.

Table (7): Shows that there is a high statistically significant positive correlation between the psychological resilience and pro-environmental behavior (r=0.106, p= 0.002). While a high statistically significant negative correlation was found between eco anxiety and psychological resilience (r=-0.109, p= 0.045), as well as pro-environment behavior (r=-0.184, p= 0.001).

Discussion:

As the world and its people move ahead with time, new challenges present themselves. One such most relevant threats of our times is that of the climate change, which brings with it feelings of climate change anxiety. In such difficult times, it becomes necessary to have resources that can help deal with these feelings. The role of resilience becomes necessary here, as it can help people to cope as well as indulge themselves by taking climate action and engaging in environmental behavior. Hence, this study was conducted to assess psychological resilience, pro-environmental behavior and their relation to climate change anxiety among nursing students.

In relation to socio demographic data among the studied students, the actual study results revealed that above half of the studied nursing students were females. This is because the number of female students in the faculty of Nursing is relatively greater than the number of male students. This finding is congruent with the studies conducted by **Ahmed et al., (2024),** and **Abousoliman et al., (2024)** among a sample of university nursing students in Egypt, who found that above half of the sample were females.

Concerning the residence area, the current study's findings illustrated that, more than two-thirds of the studied nursing students were from rural areas. This outcome might be due to the nature of Minia governorate where most people live in rural areas and consequently, almost all nursing students were from rural area. This result is consistent with that done by **Ibrahim et al., (2024),** among nursing students in Minia University, which revealed that above two thirds of nursing students were living in rural areas.

Regarding the nursing student's source of information about CC, the current research's findings showed that, greater than half of the studied nursing students were receiving their information about climate change from internet followed by television or radio. This could be due to the availability of the internet in which it provides instant updates on climate-related news, making it a fast and convenient source for nursing students. In addition, the internet allows students to engage in discussions, participate in forums, and exchange ideas with peers and experts about CC and its impact on health.

This finding was in line with the results of **Kamel & Mahmoud (2024),** who decided that about half of the nursing students had the information regarding CC from the internet. Also, **Abdel Nabi et al. (2023)** showed that the majority of studied nursing students' source of information regarding CC was the internet followed by television. Similarly, **Eren & Yıldız (2024)** reported that the majority of the students' information about CC was from television, social media, and the internet.

Regarding the psychological resilience levels, the actual study's analysis showed that about two-thirds of the studied students have a moderate psychological resilience level. One possible explanation for these findings is the nature of nursing education. Nursing students are trained to handle stressful situations, adapt to changing conditions, and provide care under challenging circumstances. This training may contribute to their ability to manage climate-related stressors, such as extreme weather events affecting public health or increased patient cases due to climate-induced diseases.

However, their resilience remains moderate rather than high, possibly due to gaps in climate-related healthcare education or limited personal experiences with severe climate crises. This finding is consistent with the research conducted by **Ruppamercy et al. (2022),** about psychological resilience among university nursing students which revealed that nearly two-third of the sample have moderate level of psychological resilience. Additionally, **Sirin Gok et al., (2024)** reported that the psychological resilience scores of the students were at moderate levels.

Concerning the pro-environmental behaviors, the actual study demonstrated that more than two thirds of students have fair pro-environmental behaviors with a mean of 28.9 + 7.8. Several factors contribute to these scores, including environmental education in nursing programs, institutional policies, clinical exposure, and personal attitudes toward sustainability. Moreover, climate change coverage and reports on social media, television and internet can also raise youth awareness and increase motivation for positive climate and environmental actions **(Parry et al., 2022).**

However, time constraints and financial limitations may prevent them from consistently engaging in sustainable practices. So, pro-environmental behavior remains fair rather than high. This result agrees with **Örs, (2022)** who found that nursing students' environmental behaviors were at a moderate level. This result also, not in the same line as the study of **Ravi et al., 2025**, who reported that the majority of the nursing students engaged in inadequate levels of pro-environmental behaviors.

As referring to eco anxiety, the results of the actual study demonstrated that more than three-quarters of the students have low and moderate levels of echo anxiety, with a mean of 17.2+ 10.6. In addition, regarding the eco-anxiety's sub-domains; the actual study's findings demonstrated that, the highest score was for Affective/ emotional symptoms mean (5.4954+3.721). This may be due to their lack of experience or direct exposure to serious climate changes such as floods or earthquakes, so the climate change may not be perceived as an immediate threat and the students may not view climate change as an urgent personal concern.

This result was congruent with **Er et al., (2024)** who found that participants' mean scores of the Eco-Anxiety Scale 25.65 ± 7.49 and regarding sub-dimensions, the highest score was for affective symptoms. Also, **Eren & Yıldız, (2024)** discovered that nursing students had a moderate level of climate change anxiety, with a mean overall score of 21.27 ± 8.75 on the study's climate change anxiety measure.

Regarding the relation between the students' psychological resilience and their personal characteristics, this study found that there was a statistically significant relation between the mean score of the studied students' psychological resilience and their gender and those females have the higher mean score of psychological resilience than males. One of the primary reasons for the higher resilience levels in female nursing students is their ability to use adaptive emotional coping approaches. Additionally, emotion-focused coping strategies, like looking for social support, reflecting on oneself, and overcoming problems, are more common among women.

In contrast, male students may be more inclined to use avoidance or denial as coping strategies, which can be less effective in managing stress over the long term. In addition, female students generally have stronger interpersonal relationships and support groups than males which help in providing emotional and psychological reinforcement during stressful experiences. Support from peers, family, and mentors helps buffer stress and enhances adaptability. This finding is similar to **Atak & Meric (2023)** who demonstrated that female students had higher resilience total average scores than male students, and that this gender-based difference in psychological resilience was statistically significant.

Another outcome of this study is that, there was a statistically significant relation between the mean score of the studied students' pro-environment behavior and their gender and those females have a higher mean score of pro-environment behavior than males. This could be attributed to that women are more likely to adopt sustainable behaviors such as recycling, walking, reducing plastic use, and supporting environmental policies. This tendency may be reflected in their higher mean scores in pro-environmental behavior.

This finding is similar to **Li et al., (2022)** who supported that females are reporting a higher level of environment behavior. Also, **Tien & Huang (2023)** supported that compared to men, women exhibited noticeably more environmental values and pro-environmental behavioral intentions. Similarly, **Chung et al., (2024)** found that, women had a higher environmental sustainability attitude score than men.

Concerning correlation, the actual study results indicated that there was a positive statistically significant correlation between the psychological resilience and pro-environmental behavior. This outcome could be attributed to that individuals with high psychological resilience are more likely to respond with problem-solving behaviors rather than avoidance. This means they actively seek solutions to decrease waste, conserve energy, or advocate for workplace policies. This result is supported by a study done by **Wilborts, (2024) & Shao& Yu. (2023),** who reported that psychological resilience was positively associated with pro-environmental behavior.

Another finding of this research is that, there was a negative correlation was found between eco anxiety and pro-environment behavior. This could be attributed to that anxiety makes individuals feel helpless or powerless. This sense of powerlessness can lead to emotional paralysis, and inhibit personnel from translating their concerns into tangible actions. As a result, their attitudes may shift toward pessimism, and they may become disengaged from environmental issues.

This finding is similar to **Atta et al., (2024)** who demonstrated that climate anxiety and environmental behaviors are negatively correlated. Similarly, **Abousoliman et al., (2024)** revealed a negative correlation between nursing students' psychological anxiety and behaviors towards climate change. Additionally, **Qin et al. (2024)** discovered a negative relationship between adolescents' pro-environmental behavior and their climate change anxiety. On the contrary, a study conducted by **Shao & Yu. (2023),**

reported that there is a positive correlation between eco-anxiety and pro environmental behavior.

Regarding eco anxiety and psychological resilience, the current research's findings showed that there was a statistically significant negative correlation illustrated between eco anxiety and psychological resilience. This revealed that personnel with a high eco-anxiety score tended to have low levels of resilience, and vice versa.

This relationship can be explained by the possibility that individuals who are more anxious about environmental issues may be more likely to undergo experiences of adversity and stress in life, making it difficult for them to maintain a sense of resilience in their lives. This result is consistent with a study done by **Arafat et al., (2023), Sharma & Soni., (2023).** Also, **Shao & Yu., (2023)** demonstrated a significant negative correlation between total anxiety as well as resilience scores among nursing students.

Conclusion:

From the findings of the actual research, it can be summarized that above fifty percent of the students were females with a mean age was 22.2+1.1 years. About two-thirds of students have a moderate psychological resilience level and fair pro-environmental behavior, while more than half of the students have a low eco anxiety level. Also, there was a statistically significant positive correlation between the psychological resilience and pro-environmental behavior. A statistically significant negative correlation was found between eco anxiety and psychological resilience.

Recommendations:

University students must participate in awareness campaigns to raise their level of knowledge and strengthen their climate change prevention strategies.

Regardless of the study's' field, a lot of attention is needed to include climate change issues into university curricula.

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