



Medical and Nursing undergraduate University Students' attitudes towards Sustainable Development Goals in Babylon Governorate, Iraq

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ABSTRACT

Background: It is essential to establish sustainability practice in the university environment, this can be evolved through raising the positive attitudes among university students especially among undergraduate health and medical sciences students for being future responsible citizens.

Objectives: To assess the attitudes of medical and nursing undergraduate university students in Babylon university, Iraq.

Methodology: This was a cross-sectional comparative study conducted on convenient samples of undergraduate nursing and medical students in Babylon university (nursing and Hammurabi medical colleges) during the period October 2024, through January 2025, data collection was done through a self-filled pre-determined and validated questionnaire adopted from other studies, this approach included the demographic characteristics and questions related to students beliefs about sustainable development goals mainly (environment, economy, society and education), differences of attitudes between the two group were assessed using t independent statistical test.

Results: Total of 302 students from both schools were enrolled in this study, males are predominant among medical students, more than half of the study sample were rural dwellers. There was a significant correlation for attitudes toward sustainable development goals (SDGs) as perceived by nursing and medical students across the four dimensions: environment, economy, society, and education. Overall, the results highlight that attitude toward SDGs are interrelated, with stronger correlations observed in the economy and society dimensions for both groups. The high mean score in the societal dimension in this study indicates that both nursing and medical students place significant importance on societal well-being and equity.

Conclusion: Both groups share a common positive attitude regarding economic dimension, nursing students had higher attitudes score in education dimension. Contents about SDGs strategy should be introduced in the college curricula, further large-scale analytic studies are strongly requested.

Keywords: Attitudes, Sustainable Development Goals, Medical students, Nursing students.

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INTRODUCTION

Sustainable development goals have been put as an important strategy to tackle global health challenges in 2015 ⁽¹⁾, to achieve these goals the perspectives and behaviour of individuals have to be changed through proper and effective education at individual, family and community levels ⁽²⁾. Sustainability covers different dimensions (environment, economy, sociology and education) universities play an important role in changing the behaviour of students and helping them to develop positive attitudes in addition to acquiring information ⁽³⁾.

Higher education institutions highlight the importance of pushing SDGs advance development through scientific researches and through providing future scientists and leaders in this field to overcome the sustainable development goals challenges, this was highlighted in SDG4 (quality education), this goal aims to lifelong education for all by the year 2030 ⁽⁴⁾.

Given the size of the task of universities to achieve the SDGs, there is a need to create awareness in the universities so that they contribute to achieve these goals in proper way ⁽⁵⁾. The crucial role of sustainability and the challenges that face goals achievement, higher education acts as hubs of knowledge and innovation for promoting sustainable development practice ⁽⁶⁾. In the twenty first century there are many increasing challenges to the global health such as population explosion, depleted resources and the increase of waste production ⁽⁷⁾. Many initiatives were developed to offer ideas for development of positive attitudes of university students in daily life ⁽³⁾.

Education remains the key medium concerning increasing knowledge and raising awareness regarding SDGs and building positive attitudes ^(8, 9).

Education in tertiary institutions is essential to train youth who are the best investment in the bright future. Thus, education can be the golden thread that connect economic development, social equity and

environmental sustainability ^(10, 11). When university students understand deeply the SDGs, they can participate actively in supporting and attaining development goals through research and entrepreneurship ⁽¹²⁾. Education about SDGs is essential not only to university students but to all members in the university to know about it ^(13, 14). Studies about the attitudes of nursing and medical students are limited, while training medical students and other health care providers can improve the competency of health care ⁽¹⁵⁾. To the best of our knowledge this study is the first one conducted in Iraq and at Babylon governorate universities to tackle this important issue.

AIMS OF THE STUDY

The purpose of this study is to assess the attitudes of medical and nursing undergraduate university students in Babylon university, Iraq.

METHODOLOGY

- Research Design and Sampling Techniques

This study is a descriptive cross-sectional quantitative method to assess the attitudes towards sustainable development goals at Babylon undergraduate medical and nursing schools-Iraq. The participants were undergraduate students at a Babylon university located in Central Iraq for academic year 2024/2025. from nursing faculty and Hammurabi faculty of Medicine, between the period from October 2024 to January 2025.

A convenience sampling technique was employed to achieve about 20% of students who accepted to participate in the study based the target population of each college, a total of 302 participants were included in the current study 207 medical students and 95 nursing students from both sexes, questionnaires which were not completed were excluded.

- Data Collection Tools

Data were collected using self-administered questionnaire. The questionnaire section consists Demographic Information this included (Age, Sex, Marital Status, Grade level, Place of Residence and faculty), questions about the Attitudes Toward Sustainable Development Scale, this was adopted from the Attitudes toward Sustainable Development Goals Scale ⁽¹⁶⁾. which was developed by Biasutti and Frate (2017) to measure university students' attitudes toward sustainable development. A 5-point Likert scale was applied, it consists of twenty items and four sub dimensions, namely environment, economy, society, and education. on a five-point Likert scale structure with the following options: strongly disagree, disagree, undecided, agree, and 'strongly agree. The highest score that can be obtained from the scale is 100, and the lowest is 20.

Cronbach's alpha reliability coefficient measures the internal consistency of a scale essentially, do all the items on the scale measure the same underlying concept (in this case, attitude toward SD) in a consistent way. It was found as 0.85. A value of 0.85 is considered very good to excellent reliability. It indicates that the 20 items are highly consistent and the scale is a dependable measuring tool for this specific group of participants.

- Ethical Consideration

After receiving ethics approvals from both Hammurabi faculty of Medicine Ethics Committee and the Nursing research ethical committee. Participant's verbal consents and permission were sought before the questionnaires were administered. Employing an open, anonymous and free participation approach.

- Statistical Analysis

Descriptive statistics were used to summarize the characteristics of the study population. Categorical variables were presented as frequencies and percentages, while continuous variables (scores) were reported as means and standard deviations (SD). The differences in scores across age groups were analyzed using a one-way analysis of variance (ANOVA) Independent samples t-tests were

conducted to assess differences in scores based on binary categorical variables, including sex, residence, and marital status. Additionally, Spearman's rank correlation coefficient was employed to assess the relationship between attitudes toward sustainable development goals. All statistical analyses were performed using IBM SPSS Statistics version 29, with a significance level set at <0.05.

RESULTS

Table (1) presents the distribution of personal characteristics among studied medical and nursing students. Regarding age, the majority of students college of nursing (78.9%) were aged between 20–22 years, whereas most medical students (84.1%) were under 20 years old. A smaller proportion of students in both groups were older than 22 years, accounting for 9.5% of nursing and 2.9% of medical students.

In terms of sex, nursing students were predominantly female (69.5%), while females also formed the majority among medical students (59.9%). Male representation was higher among medical students (40.1%) compared to nursing students (30.5%).

The marital status data indicates that nearly all medical students (99.5%) were single, with only 0.5% married. Similarly, most nursing students were single (90.5%), with 9.5% being married.

As for residence, a higher proportion of medical students (44.4%) lived in urban areas compared to nursing students (36.8%). Conversely, rural residence was more common among nursing students (63.2%) than medical students (55.6%).

Table (2) summarizes the mean scores and standard deviations (SD) of nursing and medical students' attitudes toward sustainable development goals across four dimensions: environment, economy, society, and education, as well as the total scores.

For the environmental dimension, nursing students had a slightly higher mean score (3.6 ± 0.5) compared to medical students (3.5 ± 0.5). Both

groups demonstrated equal attitudes toward the economic dimension, with a mean score of 4 ± 0.6 . The societal dimension had the highest mean score among both groups, with nursing students scoring 4.2 ± 0.5 and medical students scoring 4.2 ± 0.6 . Regarding education, nursing students had a marginally higher mean score (4 ± 0.7) than medical students (3.9 ± 0.7).

Overall, the total mean scores indicate that medical students (3.96 ± 0.4) had slightly higher attitudes toward sustainable development goals compared to nursing students (3.93 ± 0.4).

Table (3) presents the Spearman's correlation coefficients and significance values for attitudes toward sustainable development goals (SDGs) as perceived by nursing and medical students across four dimensions: environment, economy, society, and education.

For **nursing students**, the environment dimension showed a significant positive correlation with economy ($r = 0.350$, $p < 0.001$) and society ($r = 0.315$, $p = 0.002$), but no significant correlation with education ($r = 0.110$, $p = 0.286$). The economy dimension correlated significantly with society ($r = 0.540$, $p < 0.001$) but had a weaker, non-significant correlation with education ($r = 0.196$, $p = 0.057$). Society and education were significantly correlated ($r = 0.349$, $p < 0.001$).

For **medical students**, the environment dimension demonstrated significant positive correlations with economy ($r = 0.410$, $p < 0.001$), society ($r = 0.282$, $p < 0.001$), and education ($r = 0.297$, $p < 0.001$). The economy dimension correlated significantly with both society ($r = 0.427$, $p < 0.001$) and education ($r = 0.284$, $p < 0.001$). Similarly, society and education showed a significant correlation ($r = 0.268$, $p < 0.001$).

Overall, the results highlight that attitude toward SDGs are interrelated, with stronger correlations observed in the economy and society dimensions for both groups.

Table (4) presents the comparison of attitudes toward sustainable development goals (SDGs) across different age groups of nursing and medical students using ANOVA testing. The results include mean scores (\pm SD), F-values, and corresponding p-values for the environment, economy, society, and education dimensions.

For **nursing students**, no significant differences were observed in attitudes across the age groups (<20, 20–22, >22 years) for any dimension. The mean scores for the environmental goal ranged from 3.4 ± 0.3 for students under 20 years to 3.6 ± 0.6 for those above 22 years ($F = 2.06$, $p = 0.13$). Similar stability was observed in the economic ($F = 0.61$, $p = 0.54$), societal ($F = 2.82$, $p = 0.06$), and educational ($F = 0.15$, $p = 0.85$) goals.

For **medical students**, age differences did not yield statistically significant results either. The mean scores for the environmental goal were consistent across groups (<20: 3.5 ± 0.5 ; >22: 3.7 ± 0.7 ; $F = 0.71$, $p = 0.49$). Although the mean score for the economic goal was slightly higher for students older than 22 years (4.5 ± 0.5), the difference was not significant ($F = 2.82$, $p = 0.06$). Similarly, no significant variation was found for societal ($F = 0.13$, $p = 0.87$) and educational ($F = 2.15$, $p = 0.19$) goals.

In summary, attitudes toward SDGs did not significantly vary by age among either nursing or medical students.

Table (5) compares the attitudes toward sustainable development goals (SDGs) across the sexes of nursing and medical students using an independent t-test. The results include mean scores (\pm SD) and corresponding p-values for the environment, economy, society, and education dimensions.

For **nursing students**, no significant differences between males and females were observed in the environment goal (male: 3.62 ± 0.57 , female: 3.71 ± 0.5 ; $p = 0.45$) or the economic goal (male: 3.86 ± 0.61 , female: 4 ± 0.54 ; $p = 0.07$). However, a significant difference was found in the

society goal, where females (4.32 ± 0.47) scored higher than males (3.93 ± 0.61 ; $p = 0.001$). A marginal difference in the education goal was observed, with females scoring slightly higher (4.09 ± 0.56) than males (3.84 ± 0.68 ; $p = 0.06$).

For **medical students**, there were no significant differences between males and females in any of the dimensions. The mean scores for the environment goal were 3.55 ± 0.5 for males and 3.53 ± 0.5 for females ($p = 0.7$). Similar consistency was observed in the economic (male: 4.02 ± 0.53 , female: 4 ± 0.56 ; $p = 0.87$), society (male: 4.09 ± 0.52 , female: 4.24 ± 0.56 ; $p = 0.052$), and education goals (male: 4.05 ± 0.6 , female: 3.87 ± 0.75 ; $p = 0.071$).

In summary, significant sex differences were observed only in the societal dimension for nursing students, where females demonstrated more favourable attitudes. No significant differences were found across sexes for medical students.

Table (6) compares the attitudes toward sustainable development goals (SDGs) across the residence of nursing and medical students (urban vs. rural) using independent t-tests. The results include mean scores (\pm SD) and p-values for the environment, economy, society, and education dimensions.

For **nursing students**, no significant differences in attitudes were observed between urban and rural residents for any dimension. The environment goal scores were nearly identical (urban: 3.686 ± 0.41 , rural: 3.690 ± 0.57 ; $p = 0.96$). Similarly, the economic goal (urban: 4 ± 0.5 , rural: 4.033 ± 0.54 ; $p = 0.82$), society goal (urban: 4.177 ± 0.55 , rural: 4.217 ± 0.54 ; $p = 0.73$), and education goal (urban: 4.034 ± 0.62 , rural: 4 ± 0.6 ; $p = 0.83$) did not show significant differences.

For **medical students**, the results also showed no significant differences between urban and rural residents. The environment goal scores were 3.502 ± 0.48 for urban students and 3.57 ± 0.52 for rural students ($p = 0.33$). Similarly, no significant differences were noted in the economic goal (urban:

3.952 ± 0.52 , rural: 4.056 ± 0.52 ; $p = 0.18$), society goal (urban: 4.165 ± 0.52 , rural: 4.197 ± 0.67 ; $p = 0.6$), or education goal (urban: 4.165 ± 0.7 , rural: 4.197 ± 0.7 ; $p = 0.17$).

In conclusion, residence (urban or rural) did not significantly impact attitudes toward sustainable development goals among either nursing or medical students across any of the studied dimensions.

Table (7) compares the attitudes toward sustainable development goals (SDGs) across marital status (married vs. single) of nursing and medical students using independent t-tests. The results include mean scores (\pm SD) and p-values for the environment, economy, society, and education dimensions.

For **nursing students**, no statistically significant differences were observed between married and single participants in any of the SDG dimensions. The mean scores for the environment goal were 3.667 ± 0.56 for married students and 3.691 ± 0.52 for single students ($p = 0.8$). Similarly, the economic goal (married: 4.044 ± 0.51 , single: 4.021 ± 0.58 ; $p = 0.9$), society goal (married: 4.178 ± 0.57 , single: 4.205 ± 0.58 ; $p = 0.8$), and education goal (married: 3.844 ± 0.8 , single: 4.035 ± 0.59 ; $p = 0.3$) showed no significant differences.

For **medical students**, the results also showed no significant differences between married and single students in any dimension. The environment goal scores were 3.6 for married students and 3.54 ± 0.5 for single students ($p = 0.9$). Similarly, no significant differences were found in the economic goal (married: 4.6, single: 4 ± 0.55 ; $p = 0.2$), society goal (married: 4, single: 4.183 ± 0.55 ; $p = 0.7$), or education goal (married: 4, single: 3.945 ± 0.7 ; $p = 0.9$).

In conclusion, marital status (married or single) did not significantly influence attitudes toward sustainable development goals among either nursing or medical students across any of the studied dimensions.

DISCUSSION:

The equal attitudes toward the economic dimension might reflect a shared understanding of the importance of economic stability in achieving sustainable development goals. Both groups recognize the interdependence of economic growth and sustainable practices. The high mean score in the societal dimension indicates that both nursing and medical students place significant importance on societal well-being and equity. This aligns with the SDGs' focus on reducing inequalities and promoting social inclusion ^(17, 18).

The overall higher score among medical students suggests a slightly greater overall commitment to sustainable development goals. This could be due to the broader scope of medical education, which often includes global health and policy aspects ⁽¹⁹⁾.

There are subtle differences in their focus areas. Nursing students show a greater emphasis on environmental and educational dimensions, whereas medical students have a marginally higher overall commitment. This indicates an understanding that environmental sustainability can drive economic growth by reducing costs and creating new opportunities ⁽²⁰⁾.

Nursing students who value environmental sustainability also place importance on societal well-being. This reflects an awareness of how environmental issues, such as pollution and resource depletion, directly impact society, especially vulnerable populations.

The non-significant correlation indicates that attitudes towards the environment and education are not strongly linked for nursing students. This might suggest that their education on sustainable development is more compartmentalized, without strong integration of environmental topics ⁽²¹⁾.

A strong positive correlation between Economy and Society in nursing students suggests that nursing students who are focused on economic sustainability also emphasize societal well-being. This aligns with

the idea that economic growth should be inclusive and benefit all members of society. The weaker correlation between Economy and Education suggests that the link between economic attitudes and educational focus is less pronounced. This could indicate that economic topics are not as deeply integrated into the education curriculum related to SDGs for nursing students ⁽²²⁾.

Nursing students who prioritize societal issues also value education. This reflects an understanding that education is a crucial tool for addressing social inequalities and promoting societal well-being.

The stronger correlation between Environment and Economy in medical students compared to nursing students suggests that medical students see a clearer connection between environmental sustainability and economic benefits. This might be due to a broader perspective on global health and economic policies included in their education ⁽²³⁾.

Medical students also recognize the link between environmental health and societal well-being, although the correlation is slightly weaker than in nursing students. This reflects an understanding of the broader impacts of environmental issues on public health ⁽²⁴⁾.

Unlike nursing students, medical students show a significant correlation between environment and education. This indicates a more integrated approach in their curriculum, where environmental education is emphasized as part of their overall training.

The significant correlation between Economy and Society highlights that medical students also see economic growth and societal well-being as interconnected. This supports the concept of sustainable economic practices that foster societal equity and health.

The significant correlation between Economy and Education in medical students suggests that medical students who focus on economic sustainability also value educational efforts in this

area. This could be due to the inclusion of economic sustainability topics in their training.

Medical students who prioritize societal well-being also recognize the importance of education. This reflects their understanding that education is a key driver for societal improvements and achieving SDGs.

Overall, the correlations indicate that attitudes toward SDGs are interrelated among both nursing and medical students, with particularly strong correlations observed in the economy and society dimensions. Nursing students show significant correlations between societal and educational dimensions, highlighting the role of community education in their training. Medical students demonstrate a more integrated approach, with significant correlations across all dimensions, reflecting a broader and more interconnected understanding of sustainable development.

Regarding attitudes toward sustainable development goals, the lack of significant differences suggests that nursing students across all age groups have similar attitudes toward environmental sustainability. This indicates that age does not play a significant role in shaping their environmental perspective. Similar to the environmental dimension, economic attitudes are consistent across age groups. This could imply a uniform understanding of the importance of economic stability in sustainable development among nursing students, regardless of their age. Although the societal dimension shows slight variation in attitudes, the differences are not statistically significant. This suggests that nursing students' attitudes toward societal well-being and equity are relatively stable across different age groups (25).

Overall age does not significantly influence attitudes toward SDGs among nursing and medical students. Both groups demonstrate stable attitudes across the environmental, economic, societal, and educational dimensions, reflecting a shared commitment to sustainable development (26).

The marital status does not significantly influence attitudes toward SDGs among nursing and medical students. Both groups demonstrate similar attitudes across the environmental, economic, societal, and educational dimensions, regardless of their marital status (27).

The current study findings reveal a favourable attitude of students in both groups toward SDGs this may be related to the characteristics of medical and nursing policies and the contents of curricula in nursing and medical schools in Babylon university, which agrees with the findings of other studies (28, 29, and 30) but in contrast with the findings reported by others (31, 32).

STRENGTHS AND LIMITATIONS

It's an updated study that offers an important extension of prior literature. Two main limitations to the conclusion drawn by this study are noted. First, the data are cross-sectional, making it impossible to determine the direction of association between variables or to determine causal relationships. Second, self-reporting of perspectives makes the data subject to bias, monitoring and surveillance are needed to observe the trend of student's attitudes toward SDGs overtime, and future research, preferably with a longitudinal studies and case-control designs to examine various covariates are crucial.

CONCLUSIONS:

The study reveals that both nursing and medical students share a common understanding of the importance of economic stability in achieving SDGs. Both groups emphasize the interdependence of economic growth and sustainable practices, with a high mean score in the societal dimension. Nursing students' higher score in the education dimension may be due to their training, which often includes community education and health promotion. Medical students, on the other hand, have a slightly greater overall commitment to SDGs due to their broader scope of medical education.

The study also reveals a strong positive correlation between the environment and economy in nursing students, indicating that those concerned about environmental issues are aware of the economic implications of sustainable practices. However, the weaker correlation between the economy and education suggests that economic topics are not deeply integrated into the education curriculum related to SDGs for nursing students.

The study also shows a strong correlation between the environment and education in medical students, indicating a more integrated curriculum that emphasizes environmental education as part of their overall training. Age does not significantly influence attitudes toward SDGs among both nursing and medical students, and marital status does not significantly influence attitudes toward SDGs. Overall, the study highlights the interrelated nature of attitudes towards SDGs among both groups.

RECOMMENDATIONS:

- Ministry of higher education should emphasize the education on advance SDGs
- Refreshment training courses and seminars should be held periodically to raise the level of awareness of universities staff members regarding this field.
- The curricula for all higher education institutions should include education materials on SDGs
- Research activities should encourage undergraduate nursing and medical students to adopt SDGs and supporting solution through district team problem solving approach by engaging communities within the available resources.

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TABLES:

Table (1): Distribution of Personal characteristics data of studied medical and nursing students, n=302

Characteristics Data		Nursing students		Medical students	
		N	%	N	%
Age (years)	< 20	11	11.6%	174	84.1%
	20 - 22	75	78.9%	27	13.0%
	> 22	9	9.5%	6	2.9%
Sex	Male	29	30.5%	83	40.1%
	Female	66	69.5%	124	59.9%
Marital status	Married	9	9.5%	1	0.5%
	Single	86	90.5%	206	99.5%
Residence	Urban	35	36.8%	92	44.4%
	Rural	60	63.2%	115	55.6%

Table (2): Mean Scores of nursing and medical students' attitudes toward sustainable development goals

Sustainable Development Goals	Nursing students		Medical students	
	Mean ± SD		Mean ± SD	
Environment	3.6 ± 0.5		3.5 ± 0.5	
Economy	4 ± 0.6		4 ± 0.6	
Society	4.2 ± 0.5		4.2 ± 0.6	
Education	4 ± 0.7		3.9 ± 0.7	
Total	3.93 ± 0.4		3.96 ± 0.4	

Table (3): Spearman's Correlation between attitudes toward sustainable development goals as perceived by nursing and medical students

College	Spearman's Correlation	Environment	Economy	Society	Education	
Nursing students	Environment	Correlation Coefficient		0.0350**	0.315**	0.110
		P Value		< 0.001*	0.002	0.286
	Economy	Correlation Coefficient	0.350**		0.540**	0.196
		P Value	< 0.001*		< 0.001*	0.057
	Society	Correlation Coefficient	0.315**	0.540**		0.349**
		P Value	0.002	< 0.001*		< 0.001*
	Education	Correlation Coefficient	0.110	0.196	0.349**	
		P Value	0.286	0.057	< 0.001*	
Medical students	Environment	Correlation Coefficient		0.410**	0.282**	0.297**
		P Value		< 0.001*	< 0.001*	< 0.001*
	Economy	Correlation Coefficient	0.410**		0.427**	0.284**
		P Value	< 0.001*		< 0.001*	< 0.001*
	Society	Correlation Coefficient	0.282**	0.427**		0.268**
		P Value	< 0.001*	< 0.001*		< 0.001*
	Education	Correlation Coefficient	0.297**	.284**	0.268**	
		P Value	< 0.001*	< 0.001*	< 0.001*	

Table (4): Comparison of Attitudes Toward Sustainable Development Goals Across age groups of Nursing and medical Students Using ANOVA test

Variables	Nursing students					Medical students				
	Age groups			F	P-	Age groups			F	P-
	Mean scores \pm SD			Value	Value	Mean scores \pm SD			Value	Value
	<20	20 – 22	>22			<20	20 – 22	>22		
Environment goal	3.4 \pm 0.3	3.7 \pm 0.5	3.6 \pm 0.6	2.06	0.13	3.5 \pm 0.5	3.6 \pm 0.5	3.7 \pm 0.7	0.71	0.49
Economic goal	4 \pm 0.6	4 \pm 0.6	4.2 \pm 0.4	0.61	0.54	4 \pm 0.5	4 \pm 0.6	4.5 \pm 0.5	2.82	0.06
Society goal	4.5 \pm 0.3	4.1 \pm 0.6	4.3 \pm 0.4	2.82	0.06	4.2 \pm 0.6	4.2 \pm 0.5	4.3 \pm 0.5	0.13	0.87
Education goal	3.9 \pm 0.6	4 \pm 0.6	4.1 \pm 0.9	0.15	0.85	3.9 \pm 0.7	4.2 \pm 0.6	4.1 \pm 0.4	2.15	0.19

Table (5): Comparison of Attitudes Toward Sustainable Development Goals Across sex of Nursing and medical Students Using independent t test

Variables	Nursing students			Medical students		
	Sex			Sex		
	Mean scores \pm SD		P Value	Mean scores \pm SD		P Value
	Male	Female		Male	Female	
Environment goal	3.62 \pm 0.57	3.71 \pm 0.5	0.45	3.55 \pm 0.5	3.529 \pm 0.5	0.7
Economic goal	3.86 \pm 0.61	4 \pm 0.54	0.07	4.017 \pm 0.53	4 \pm 0.56	0.87
Society goal	3.93 \pm 0.61	4.32 \pm 0.47	0.001	4.09 \pm 0.52	4.24 \pm 0.56	0.052
Education goal	3.84 \pm 0.68	4.09 \pm 0.56	0.06	4.048 \pm 0.6	3.87 \pm 0.75	0.071

Table (6): Comparison of Attitudes Toward Sustainable Development Goals Across residence of Nursing and medical Students Using independent t test

Variables	Nursing students			Medical students		
	residence			residence		
	Mean scores \pm SD		P Value	Mean scores \pm SD		P Value
	Urban	Rural		Urban	Rural	
Environment goal	3.686 \pm 0.41	3.690 \pm 0.57	0.96	3.502 \pm 0.48	3.57 \pm 0.52	0.33
Economic goal	4 \pm 0.5	4.033 \pm 0.54	0.82	3.952 \pm 0.52	4.056 \pm 0.52	0.18
Society goal	4.177 \pm 0.55	4.217 \pm 0.54	0.73	4.165 \pm 0.52	4.197 \pm 0.67	0.6
Education goal	4.034 \pm 0.62	4 \pm 0.6	0.83	4.165 \pm 0.7	4.197 \pm 0.7	0.17

Table (7): Comparison of Attitudes Toward Sustainable Development Goals Across Marital status of Nursing and medical Students Using independent t test

Variables	Nursing students			Medical students		
	Marital status			Marital status		
	Mean scores \pm SD		P Value	Mean scores \pm SD		P Value
	Married	Single		Married	Single	
Environment goal	3.667 \pm 0.56	3.691 \pm 0.52	0.8	3.6	3.54 \pm 0.5	0.9
Economic goal	4.044 \pm 0.51	4.021 \pm 0.58	0.9	4.6	4 \pm 0.55	0.2
Society goal	4.178 \pm 0.57	4.205 \pm 0.58	0.8	4	4.183 \pm 0.55	0.7
Education goal	3.844 \pm 0.8	4.035 \pm 0.59	0.3	4	3.945 \pm 0.7	0.9