



The effect of parents' social and educational level and parental encouragement on environmental motivation among university students

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Abstract

Parental factors, such as educational and social levels, significantly influence children's personality development, creativity, and success. This study examines how parents' social and educational levels, along with parental encouragement, impact university students' motivation towards environmental protection. A random sample of 200 students from Al Ain University, Abu Dhabi campus, was surveyed. The results reveal no statistically significant differences in the responses regarding the role of parents in educating children about environmental preservation based on either parents' socioeconomic level ($p = 0.174$, $p > 0.05$) or educational level ($p = 0.174$, $p > 0.05$). The study found no statistically significant impact of parents' socioeconomic or educational levels on students' environmental motivation ($p > 0.05$). Implications for environmental education are discussed. The study underscores the importance of holistic environmental education efforts, advocating for raising awareness of pollution's impacts, fostering an environmental ethos, and encouraging responsible interaction with the environment, while recommending inclusive educational programs and enhanced community engagement to promote sustainable environmental stewardship.

Keywords: *Environmental awareness, parental influence, socioeconomic status, educational level, university students, environmental protection.*

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Introduction

The family plays a fundamental role in the upbringing and personality formation of children, with parents being the cornerstone in this context. The educational level and parental guidance significantly affect the development of children's personalities. Parental attention and care, starting from pregnancy, through childbirth, and into the various stages of childhood and adolescence, strengthen the bonds of love and effective communication within the family (Ibrahim, 2017). Parents are the first teachers of their children, and the family is the first place where the child receives basic principles that lay the foundation for their future. Parents must understand their children's needs and support their independence, providing them with the freedom to express themselves and explore their passions and talents. This also includes establishing clear educational rules and implementing them consistently and collaboratively (Ahmed, 2016). Parents should collaborate in fostering concepts of affection and security for their children, playing the most significant role in shaping their personalities and teaching them moral values, which become the foundation of their future characters. Healthy family relationships produce balanced individuals who are ready to face life's challenges (Khadr, 2022). The family also plays a pivotal role in environmental awareness by instilling the importance of cleanliness and environmental preservation. With increasing global environmental challenges, there is a pressing need to raise children with a highly developed stock of ecologically correct behavior and that should be from early childhood due to the speed of bad habits formation. Social institutions also serve an intermediary function between the transfer of culture and the social value system, which in turn influences the dissemination cultural values about environmental conservation and sustainability (Samir, 2018).

Parents can greatly influence the environmental motivation in students at university: the family is after all the first context of socialization through which awareness and moral values are transmitted. Promoting Environmental Behaviors. Home is somewhere the teachings of environmental behaviors begin because parents inculcate practices like recycling and endow the importance to conserve the environment (Usman & Nurul, 2019). Such way of growing up forms the concept of children as responsible towards nature, which are interested in environmental issues. More importantly, parental academic supervision and motivation is very important in leading the children to those studies related with our planet such as environmental science or management,

sustainable. This interest increases the number of experts in these fields, which contributes to research and innovation for environmental solutions. These students are more likely to be critical thinkers and participate in environmental events and initiatives in the community (Fan & Williams, 2010).

In addition to an often greater experiential impact, the effects of environmental education in the family go beyond that individual by generating ecological attitudes and behaviors which contributes to creating an ecological culture in society. When a generation emerges with a strong sense of environmental responsibility, they push for policy changes to embrace greater sustainability. The pressures on the decisions makers are growing, reasserting the need integration of Environmental issues in development strategies and public policies. Second, the integration of school curriculum with family values is essential. Such a process therefore reinforces environmental awareness when adopted by universities, along with existing cooperation between students and families, so to increase the number of graduates capable of dealing with relevant issues in due innovative manner (Ariani et al., 2022). This environmental incentive can also eventually prompt the creation of innovative technologies and durable solutions that meet future requirements. More importantly, the influence of parents in terms of fostering environmental motivation is not confined to an individual sphere but extends to more public domains as well (Murtagh et al., 2016). A future-oriented approach to the fulfillment of the Sustainable Development Goals is inconceivable had families as illicit objects and lack certain cooperable powers to provide a better environment for all.

The educational level of fathers, in particular, has a direct effect on the bringing up of children. In most instances, the fathers with high educational backgrounds are more knowledgeable about the social activities and incidences that are happening in the society. They know how the world has altered, and human beings play a part in such alterations. They are gifted to reason and when they do that, they can become the best at studying sustainable development as they have better chances of encouraging their off springs towards sustainable environmental caring than the non educated or low educated people (Salah, 2020).

This study seeks to examine how the educational or social levels of parents, and how different forms of parental encouragement affect university students' motivation towards environmental

issues. It will evaluate the way the aforementioned factors determine the students' environmental consciousness, their environmental everyday practices, and their environmental commitment in relation to green lifestyles. The aim of the research is to expand knowledge regarding the family aspects fostering environmental motivations in order to implement educational and social measures against a global menace.

Literature review

Impact of Parental Education on Environmental Awareness

Although many ways have been used to study motivation in the field of environmental conservation, few have emphasized family influences on motivation toward environmental conservation among students. Khader (2022) "The role of the educational level of the family in guiding their children towards environmental conservation" research, at Cairo University, has studied this effect using a random sample of 120 students. Results from a random sample of 120 students showed that the average impact of the family's educational level upon environmental conservation was. For instance, the study of Al-Walid (2022), "The role of family in raising environmental awareness: A study about a sample of Libyan families," pursues environmental awareness and care with family assistance, taking a random sample from Benghazi of 40 families.

In the paper "The role of mothers in environmental upbringing in Tunisia," Salah (2020) used a descriptive approach and a random sample of 130 mothers from Tunis, showing the importance of mothers in the preservation of the environment through educating children about the environment. Nizar (2019) also conducted research entitled "The role of parents in environmental awareness," using a random sample of 260 students from the Modern College in Amman. Results pointed out the moderate contribution of parents in encouraging the conservation of the environment.

Socioeconomic Factors in Environmental Motivation

Specifically, Saint et al. (2019) present the study of the contribution of real income and international tourist arrivals to per capita carbon dioxide emission, which increases by about 0.625% and 0.129%, respectively, in the short run, while in the long run, it increases by about 0.345% and 0.071%, correspondingly, while investigating the role of real income, globalization, and tourism to environmental sustainability. Thus, the study reached the conclusion that it is only

real income and globalisation that give a significant contribution to the carbon dioxide emissions in the long run. Further, it showed that the impact of a one standard deviation shock to carbon dioxide emissions has a significant and lasting positive impact on tourism and globalisation and economic growth in the long run.

Crosno et al., (2010) conducted a study aimed at understanding the socio-economic status of families and the impact of consistent environmental stimulation in early childhood. This study applied a growth curve model to a sample of 1,364 American children. The findings indicated that the children achieved higher levels of proficiency in mathematics when they received continuous stimulation in all three environments, while those who were consistently stimulated at home and in childcare showed greater success in reading. Notably, the benefits of ongoing environmental stimulation were more pronounced for children from low-income families. In the same field, Shamsi and Shoberi (2019) researched the socio-economic factors influencing women's environmental awareness, using Tehran as a case study. A random sample of 390 respondents was taken from the Cochrane district in Tehran. The results indicate that women's awareness of environmental issues is notably high. However, there was no significant relationship found between marital status, family size, and women's environmental awareness. Among the socio-economic factors, a strong correlation was observed, with 99% of women exhibiting high levels of environmental awareness, and 95% in certain areas. Therefore, we can conclude that enhancing environmental awareness among women necessitates opportunities for interaction, participation, and education at all levels, particularly in the management, design, implementation, and evaluation of environmental plans.

In a study examining the relationship between environmental consciousness and socio-economic and cultural structures, conducted in the Küçükçekmece Basin—home to one of Istanbul's most important water resources, Uston and Glebo (2007) found that the socio-economic and cultural backgrounds of the population significantly influence their environmental awareness and its impact on the region.

Importance of the Study

This study aims to identify the role of parents in promoting awareness towards the environment by examining the socio-economic factors of parents. The results of the study will provide a

theoretical framework that will help researchers and policymakers advance in this field. The findings can contribute to providing indicators on environmental awareness to decision-makers and social policy developers, enhancing the implementation of long-term strategic plans to develop awareness among students in schools and universities. This study also contributes to increasing environmental awareness among individuals and the overall social structure, motivating them to engage in environmental conservation and pursue sustainable environmental development.

Problem Statement

The study addresses the environmental changes that occur due to individual behaviors, industry, global warming, and pollution, all of which are influenced by human actions. The problem investigated in this study is to understand how family factors, including socio-economic status and parental education, affect the environmental motivation of university students. Specifically, the study seeks to find effective means to improve environmental awareness through educational and pedagogical strategies that contribute to environmental protection and sustainable development. This requires an in-depth examination of the relationships between family factors and students' environmental behaviors, enabling evidence-based recommendations to strengthen environmental education at the family and community level.

Study Objectives

1. To identify the role of parents in guiding their children towards environmental preservation.
2. To determine the level of children's awareness of the importance of environmental preservation.
3. To study statistically significant differences in parents' role in educating children about environmental preservation based on parents' social level.
4. To study statistically significant differences in parents' role in educating children about environmental preservation based on parents' educational level.

Research Questions

1. What is the role of parents in guiding their children towards environmental preservation?
2. What is the level of children's awareness of environmental preservation?

3. Do the environmental protection behaviors of university students differ based on the educational level of their parents (university, postgraduate) and social level?

Hypotheses

1. There are no statistically significant differences in the role of parents in educating their children about environmental preservation attributed to the parents' social level.
2. There are no statistically significant differences in the role of parents in educating their children about environmental preservation attributed to the parents' educational level.

Methodology

Study Method

The current study utilized the descriptive method, which quantitatively and qualitatively describes the phenomenon or problem under investigation, providing interpretation and analysis. This method is most suitable for such studies as it offers substantial data in a short time with less effort.

Sample

The study population consists of all students at Al Ain University. The study sample comprises 200 students from Al Ain University for the academic year 2023/2024, selected using a simple random sampling method.

Table 1

Demographic and socioeconomic data.

Variable	Category	Frequency	Percentage
Gender	Male	19	63.3%
	Female	11	36.7%
Total		30	100%
Age	20-30 years	5	16.7%
	31-40 years	19	63.3%

	41-50 years	5	16.7%
	51 and above	1	3.3%
Total		30	100%
Marital Status	Single	6	20%
	Married	19	63.3%
	Divorced	4	13.3%
	Widowed	1	3.4%
Total		30	100%
Employment Sector	Government Employee	18	60%
	Private Sector Employee	9	30%
	Self-employed	3	10%
Total		30	100%
Family Size	Less than 4 members	3	10%
	5-8 members	17	56.7%
	9-12 members	6	20%
	More than 12 members	4	13.3%
Total		30	100%
Father's Educational Level	Illiterate	3	10%
	Literate	4	13%
	High School	6	20%
	Bachelor's Degree	13	43%
	Postgraduate Degree	4	20%
Total		30	100%
Mother's Educational Level	Illiterate	6	20%
	Literate	4	13%
	High School	10	33%

Bachelor's Degree	8	27%
Postgraduate Degree	2	7%
Total	30	100%

From Table (1), it is evident that the study sample predominantly comprised males at 63.3% compared to females at 36.7%. The highest percentage distribution by age group was 63.3% for individuals aged 31-40, with the lowest at 3.3% for those aged 51 and above. Marital status distribution showed around 64% for married individuals and about 3% for widows. In terms of employment nature, 35% were government sector employees, contrasting with 10% self-employed. Family size distribution peaked at 56.7% for families with 5-8 members and hit a low of 10% for those with fewer than 4 members. Educational level distribution for fathers revealed 43% with bachelor's degrees and 10% with no education, while for mothers, 33% held high school diplomas and 7% were postgraduates, as per Table (1).

Instrument

The study tool comprised a questionnaire divided into two parts: the first part focused on personal data of the study sample including gender, age, marital status, employment nature, family size, father's educational level, and mother's educational level. The second part consisted of 10 items distributed across two axes. The first axis addressed parental roles in environmental conservation, encompassing items such as parents' efforts to educate their children about water conservation, tree preservation, eco-friendly energy use, proper waste disposal, and attendance of environmental seminars. The second axis gauged children's awareness of environmental conservation, covering items like participation in cleanliness campaigns, attendance of environmental awareness seminars, controlled water usage, efficient use of lighting, and dissemination of environmental preservation information through social media. To ensure the tool's validity, it was initially presented in its raw form to the supervisor, underwent modifications, and was finalized (see Appendix 1). The tool's reliability was confirmed through internal consistency analysis (Cronbach's alpha) for each axis, with Table 2 displaying the internal consistency coefficients, deemed appropriate and acceptable for this study's purposes.

Table 2

Internal Consistency Reliability Coefficient of the Study Tool

Fields of the Questionnaire	Internal Consistency
Overall Tool	0.80

Table (2) demonstrates that the overall stability coefficient of the study tool is 0.80, indicating high and acceptable reliability for survey implementation within the study sample. Responses to the items in the current study tool are distributed based on the Likert five-point scale, with respondents receiving varying points for different levels of agreement. The range, calculated from the difference between the highest and lowest values assigned to respondents' orientations, is 4, which is then divided into three categories.

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Table 3*Categories of the Study Tool*

Category	Categories of the Mean	Rating
First	1.00-2.33	Low
Second	2.34-3.67	Medium
Third	3.68-5.00	High

Data analysis

The study utilized SPSS 26 software to analyze the data. Frequencies and percentages were used to obtain the demographic characteristics of the study population. Mean and standard deviation were employed to answer the study's questions. Normality tests, specifically the Shapiro-Wilk test, were conducted to ensure the distribution nature of the dependent variable. Additionally, One-Way Analysis of Variance (ANOVA) was employed to test the research hypotheses.

Table 4*Shows Normality Tests*

Social Level	W Value	p-value
High	0.923	0.309
Low	0.903	0.236

Middle	0.814	0.040
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The table 4 displays normality test results for various social levels. Each row corresponds to a different social level (High, Low, and Middle), with "W Value" and "p-value" columns indicating the test statistics. The "p-value" represents the probability of obtaining the observed test statistic or a more extreme value under the assumption that the data follow a normal distribution. A low p-value suggests rejecting the null hypothesis of normality. For the High and Low levels, p-values exceed 0.05, indicating no significant evidence against normality. However, for the Middle level, the p-value is 0.040, suggesting significant evidence against normality at this level.

Table 5*Shapiro-Wilk test*

Social Level	W Value	p-value
High	0.923	0.309
Low	0.903	0.236
Middle	0.814	0.040

The table5 shows the result of the Shapiro-Wilk test used to assess the normality of the data within each social level group. The p-value is greater than 0.05, so we fail to reject the null hypothesis. This indicates that the data for the High social level group is normally distributed.

To answer this question, the researcher computed the means and standard deviations of the study sample's responses to the questionnaire items related to the role of parents in guiding children to preserve the environment. Table (4) illustrates this.

Findings

Presentation of data related to the first question: What is the role of parents in guiding children to preserve the environment?

To answer this question, the researcher computed the means and standard deviations of the study sample's responses to the questionnaire items related to the role of parents in guiding children to preserve the environment. Table 6 illustrates this.

Table 6*Parental Role in Environmental Guidance: Means & Deviations*

Rank	#	Dimension	Mean	Standard Deviation	Rating	Relative Value %	T-test	Significance Level
1	1	Parents ensure their children are aware of water conservation.	3.69	0.94	High	73.80	52.183	0.000
2	3	Parents use environmentally friendly energy.	3.53	1.31	Medium	70.60	48.913	0.000
3	4	Parents educate their children on proper garbage disposal.	3.32	1.91	Medium	66.40	52.013	0.000
4	2	Parents educate their children on preserving trees.	3.29	1.89	Medium	65.80	56.574	0.000
5	5	Parents attend environmental seminars.	2.15	1.91	Low	43.00	52.127	0.000
Combined Dimensions			3.19	0.49	Medium	63.80	52.282	0.000

Table (6) indicates that the role of parents in guiding children to preserve the environment is of moderate significance, with a mean score of 3.19. The mean scores for the items ranged from 2.15 to 3.69. Item (1), "Parents ensure to educate their children about water conservation," ranked first with a high mean score of 3.69. Following it in second place was item (3), "Parents use environmentally friendly energy," with a mean score of 3.53, also at a moderate level. Lastly, item (5), "Parents ensure to attend environmental seminars," ranked last with a mean score of 2.15, indicating a low significance level.

Presentation of data related to the second question: What is the level of awareness among children regarding environmental preservation?

Presentation of Data Related to the Second Question: What is the level of awareness among children regarding environmental preservation?

To answer this question, the researcher computed the means and standard deviations of the study sample's responses to the questionnaire items related to the level of awareness among children regarding environmental preservation. Table 7 illustrates this.

Table 7

Sample Responses: Means & Deviations on Environmental Awareness

Rank	#	Skill	Mean	Standard Deviation	Rating	Relative Value %	T-test	Significance Level
1	4	I make sure to turn off unnecessary lights.	4.42	0.86	High	88.40	48.437	0.000
2	3	I use a limited amount of water for personal purposes.	3.63	1.16	Medium	72.60	46.666	0.000
3	5	I use social media to share information about environmental preservation.	3.60	1.25	Medium	72.00	46.280	0.000
4	1	I participate in public cleaning campaigns.	3.52	1.13	Medium	70.40	39.607	0.000
5	2	I am interested in attending	3.30	1.14	Medium	66.00	52.402	0.000

environmental awareness seminars.

Overall Score	3.69	0.94	High	73.80	45.282	0.000
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From Table (7), it is evident that the mean scores of the study sample's responses to the statements about salaries and incentives averaged at 3.69 overall, indicating a high level of agreement. The scores ranged from 3.30 to 4.42 for these statements. Additionally, the table reveals that one statement received a significantly high agreement score, which is statement (4) stating, "I make sure to turn off unnecessary lights," with a mean score of 4.42. However, the remaining statements received moderate agreement scores, with mean scores ranging from 3.30 to 3.63. Statement (3), "I use a limited amount of water for personal purposes," had the highest mean score at 3.63, while statement (2), "I prioritize attending environmental awareness seminars," had the lowest mean score at 3.30.

Presentation of data related to the first hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) in environmental protection attitudes among university students concerning the educational level of their parents.

Table (8) Results of One-Way Analysis of Variance (ANOVA) for Significance of Differences in the Role of Parents in Educating Children about Environmental Preservation Attributed to the Parental Socioeconomic Level.

Table 9

ANOVA Results: Parental Role in Environmental Education by Socioeconomic Level

Dimension	Source of Variation	Sum of Squares	Mean Squares	F Value	Significance Level
Parents' Social Level	Between Groups	0.887	0.2956	1.600	0.174
	Within groups	44.0863	.2449		
	Total	55.073			

From Table (9), it is evident that there are no statistically significant differences at the significance level (0.05) in the responses of the study sample individuals regarding the role of parents in educating children about environmental preservation attributed to the parents' socioeconomic level. This is indicated by the P-value (0.174), which is greater than the significance level (0.05). Therefore, the null hypothesis is accepted.

Presentation of data related to the second hypothesis: There are no statistically significant differences at the significance level ($0.05\alpha\leq$) in environmental protection attitudes among university students concerning the socioeconomic status of their parents.

Table 10

ANOVA Results: Parental Role in Environmental Education by Educational Level

Dimension	Source of Variation	Sum of Squares	Mean Squares	F Value	Significance Level
Parents' Social Level	Between Groups	.787	.3935	1.604	.174
	Within groups	54.0863	.2988		
	Total	55.073			

From Table (10), it is evident that there are no statistically significant differences at the significance level (0.05) in the responses of the study sample individuals regarding the role of parents in educating children about environmental preservation attributed to the parents' educational level. This is indicated by the P-value (0.174), which is greater than the significance level (0.05). Therefore, the null hypothesis is accepted.

Discussion

The research results reveal important insights into how parents influence children in conservation efforts, showing moderate importance with varying average scores in various fields. In particular, parents place a high priority on educating their children about water conservation, while less emphasis is placed on their participation in environmental seminars. These results are consistent with the study of Khader (2022), Al-Waleed (2022), and Salah (2020), which emphasized the importance of family awareness in spreading environmental awareness.

Referring to the previous part of the research results related to the research questions, we conclude that the university students have a culture towards the importance of the environment and its preservation, and that the majority of them pointed to the importance of the economic and social factor in environmental awareness, however, despite this, we basically put forward the study hypotheses to investigate further and research. They claim that there is a correlation between the socio-economic status of parents in environmental awareness, denying this relationship, as the results confirmed the absence of correlation between the socio-economic level and the environmental level. Consciousness. These results are consistent with the results of the study of al-Khader (2022), al-Walid (2022), and Nazar (2019).

Implications & Recommendation

The issue of raising awareness of environmental conservation among students is extremely important, as it contributes to spreading a culture of sustainable development among children, which helps in preserving the environment and promoting sustainable social development. The role of the government in the field of preserving the environment and spreading awareness of the importance of the environment is considered a vital factor. It is important for the family to strive to educate children about the importance of the environment, regardless of the economic and social level of the parents. However, we cannot deny the role of these factors in motivating individuals to do such things. Issues, and in order for a clean, sustainable environment, all efforts must be intensified in this regard, not only the family, but also the school, the university, and the neighborhood. However, we chose the family, represented by the parents, as it is the first cell and the basic base upon which the individual is built. Social upbringing produces a generation that is aware of the neglect of the environment and health in... Life, so we had to start from this institution to spread environmental culture and teach it to the children so that it stays with them and becomes an integral part of their personality. This appears in society as a whole as a single unit cooperating in many fields, most notably the environment and its preservation.

The current study aimed to identify the role of parents in raising children's awareness by measuring their economic and social level and its relationship to environmental awareness among students, the results indicate the importance of these factors in the upbringing of children and their awareness of the environment, but the results showed that these factors are not considered as the main motivation for environmental conservation, that is, all groups of society, regardless of their

socio-economic level, are involved in preserving the environment and raising children's awareness in this field, and therefore cooperation and interaction among community members is necessary, both through initiatives, workshops and social programs to promote environmental awareness among children, some of them considering about their social backgrounds. These results emphasize the importance of having social policies and purposeful plans to focus on environmental awareness for a sustainable environment.

The recommendations are also made to the importance of focusing official and private institutions on spreading awareness of the importance of the environment and preserving it, through social initiatives and festivals targeting all segments of society, regardless of the family's economic level or social status, with the need to focus on the importance of cooperation between different social and cultural backgrounds in this area. In addition to the importance of involving school and university students in the importance of cleanliness and the environment, this begins by teaching students in the early stages and up to the twelfth grade social and personal responsibility as a member of the class to maintain your class, and here the presence of cleaners is dispensed with at these stages in order to teach students self-reliance in cleanliness and environmental conservation as a social responsibility to become a social custom used by society as a whole, and away from punishment or offense that stimulates a sense of fear for a clean environment, but awareness lies in the human self and grows with it and is transmitted to future generations generation after generation. Finally, the study suggests that further studies in this regard should be conducted in different social environments, and the use of different methods and approaches may provide useful results.

References

- Ahmed, Heba (2016). Family sociology. Alexandria. University House.
- Al-Walid, Talaat (2022). The role of the family in environmental awareness: A study on a sample of Libyan families. *Journal of Sociology*, 8(4), 345- 400.
- Ariani, F., Ulfatin, N., Supriyanto, A., & Arifin, I. (2022). Implementing Online Integrated Character Education and Parental Engagement in Local Cultural Values Cultivation. *European Journal of Educational Research*, 11(3), 1699-1714.
<https://doi.org/10.12973/eu-jer.11.3.1699>
- Crosnoe, R., Leventhal, T., Wirth, R. J., Pierce, K. M., Pianta, R. C., & NICHD Early Child Care Research Network. (2010). Family socioeconomic status and consistent environmental

- stimulation in early childhood. *Child development*, 81(3), 972-987.
<https://doi.org/10.1111/j.1467-8624.2010.01446.x>
- Fan, W., & Williams, C. M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational psychology*, 30(1), 53-74. <https://doi.org/10.1080/01446193.2016.1178392>
- Ibrahim, Naji (2017). *Environmental sociology*. Cairo. House of Mecca.
- Khader, Muhammad (2022). The role of the family's educational level in directing their children towards preserving the environment: A study on a sample of Cairo University students. *College of Education Journal*. 8 (12). 90- 120.
- Murtagh, N., Roberts, A., & Hind, R. (2016). The relationship between motivations of architectural designers and environmentally sustainable construction design. *Construction management and economics*, 34(1), 61-75.
<https://doi.org/10.1080/01446193.2016.1178392>
- Nizar, Tariq (2019). The role of parents in environmental awareness: A study on a sample of modern college students in the Sultanate of Oman. *Journal of Social Sciences*. 7(4). 44-89.
- Saint Akadiri, S., Alola, A. A., & Akadiri, A. C. (2019). The role of globalization, real income, tourism in environmental sustainability target. Evidence from Turkey. *Science of the total environment*, 687, 423-432. <https://doi.org/10.1016/j.scitotenv.2019.06.139>
- Salah, Badr (2020). The role of mothers in environmental upbringing in Tunisia. *College of Arts Magazine*. 23 (4). 50- 111.
- Samir, Ahmed (2018). *Environmental sociology*. Beirut. Wael's house.
- Shamsi Papkiade, S. Z., & Shobeiri, S. M. (2019). Evaluation of socio-economic factors affecting the environmental awareness of women (Case study: Tehran). *Quarterly Journal of Woman and Society*, 10(38), 319-334.
- Usman, O., & Nurul Fadilah, R. (2019). The Effect of Family Environment, Environmental Campus, Motivation and Learning to Learn Student Behavior. *Rismawati, The Effect of Family Environment, Environmental Campus, Motivation and Learning to Learn Student Behavior (December 28, 2019)*. <https://doi.org/10.2139/ssrn.3510669>
- Üstün, B., & Celep, B. (2007). The connection between environmental awareness and socio-economic and cultural structure. *WIT Transactions on Ecology and the Environment*, 102. <https://doi.org/10.2495/SDP070602>

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