

Article

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

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**Abstract:** Environmental sustainability has emerged as a critical global concern requiring the development of pro-environmental attitudes and behaviours among younger generations. The paper examined the effects of socio-economic and educational status of parents and parental encouragement on the environmental motivation of university students in the United Arab Emirates. The research design used was a quantitative descriptive-analytical study and data collection was done through a structured questionnaire given to a random sample of 200 students in Al Ain University. The results showed that the overall role of parents in the environmental guidance was moderate and students had high degree of environmental motivation, especially in the daily environmental activities like energy and water conservation. The findings also showed that no statistically significant differences in environmental motivation could have been attributed to socio-economic or education levels of parents. Nevertheless, parental encouragement and environmental motivation were significantly positive such that supportive parental behaviours play an important role in the development of environmental attitudes of the students. It was concluded that relational factors, including parental encouragement, affected the environmental motivation more than structural ones, including the socio-economic status or the educational level. It suggested the need to strengthen environmental education by developing partnership between families, schools and policymakers to encourage sustainable behaviour among students.

**Keywords:** *Environmental motivation, parental influence, socio-economic status, parental education, parental encouragement, university students, environmental motivation, United Arab Emirates*

## **Introduction**

Environmental sustainability has emerged as one of the most urgent global challenges, and the solutions to this challenge have to be implemented not only at policy levels but also at the individual and societal levels through behavioural change. Among the important determinants of pro-environmental motivation, environmental motivation has received growing interest, especially among university students who are the future decision-makers and change agents (Steg & Vlek, 2009).

Family is the first context of socialisation and where values, attitudes and behaviours are first formed. Parental influence is a key factor in the development of environmental awareness and motivation in children through parental modelling, reinforcement and communication of environmental values (Grønhøj & Thøgersen, 2012). In particular, the educational level and the socio-economic status (SES) of parents are considered critical factors that influence the transmission of environmental knowledge and pro-environmental motivations.

Socio-economic status, usually in terms of income, education and occupation, influences the availability of resources, exposure to environmental knowledge, and opportunities for environmental engagement (Bradley & Corwyn, 2002). Higher SES families tend to have a greater awareness and participation in environmental issues because they have greater access to education and information. However, empirical findings are still inconsistent, as some research indicates that concern for the environment is not only determined by socio-economic advantage, but also by cultural and value-based factors (Gifford & Nilsson, 2014).

Parental education, specifically, has been found to be a good predictor of children's attitudes and motivations. Educated parents are more likely to encourage critical thinking, environmental responsibility and sustainable practices in the household (Fan & Williams, 2010). Through direct instruction and behavioural modelling, parents play a role in developing students' environmental motivation and long-term behavioural orientations.

In addition, parental encouragement and involvement has been found to increase intrinsic motivation and engagement in academic and environmental areas. According to self-determination theory, the effects of supportive parenting on children's development of pro-environmental motivation include autonomy and internal motivation, which are essential for the development of pro-environmental motivation (Deci & Ryan, 2000).

Despite the recognised importance of the family factors, previous research has yielded mixed results as to the extent to which parental socio-economic and educational levels influence environmental motivation. While some research has shown significant relationships, other research is finding limited or no direct effects, which suggests the need for further empirical investigation (Murtagh et al., 2016). Moreover, most of the studies have focused on parental education, socio-economic status and environmental motivation each on its own, and there has been little interest in the combination of these factors in particular socio-cultural contexts. This gap is especially true in the context of the Middle East where environmental awareness is becoming increasingly important due to rapid urbanisation and environmental challenges.

Therefore, this study aims to investigate the impact of social and educational level of the parents and parental encouragement on environmental motivation of university students in the United Arab Emirates. By combining these variables in one analytical framework, this study aims to give a more holistic picture of the role of family factors in the development of environmental motivation.

This study contributes to the literature by integrating parental socio-economic status, educational level, and encouragement within a single analytical framework in the UAE context.

### **Literature Review**

A growing body of literature has investigated the influence of family-related factors—particularly parental socio-economic status, educational level, and encouragement—on the development of environmental awareness and motivation among students.

#### **1. Parental Influence and Socialisation from Environment**

Environmental attitudes and behaviours are influenced to a large extent by the process of early socialisation in the family. Parents are the role models for transmittal of environmental values, both through direct teaching and through daily practices. Grønhøj & Thøgersen (2012) (2012) found that parental behaviour has a significant influence on children's pro-environmental attitudes, especially if consistent behaviour modelling is present. This would imply that environmental motivation is not only taught but also observed and internalised.

Similarly, research has shown that parental encouragement is an important factor in developing intrinsic motivation towards environmental engagement. According to self-determination theory, supportive parental behaviours lead to increased autonomy and internalisation of values, and more sustainable behavioural outcomes (Deci & Ryan (2000), 2000).

## **2. Socio-Economic status and Environmental Motivation**

Socio-economic status has been widely studied as a determinant factor for environmental awareness and behaviour. Bradley and Corwyn (2002) argue that higher SES gives access to educational resources and information, which improves environment knowledge and awareness. However, Gifford and Nilsson (2014) emphasise the complex relationship between SES and environmental motivation and the mediation of the relationship by cultural values, social norms, and individual beliefs.

Empirical studies have found mixed results. While some research has shown that higher SES is linked to greater environmental engagement, other studies have shown that environmental motivation can be equally strong as a behaviour across different socio-economic groups when it is based on cultural or ethical values rather than material wealth (Steg & Vlek, 2009).

## **3. Parental Education and Student Motivation**

Parental education has repeatedly been found to be an important factor influencing the motivation and behaviour of students. Educated parents are more likely to be involved in conversations, encourage critical thinking and responsible behaviour, including environmental practices (Fan & Williams, 2010). In addition, parental education plays a role in the development of students' academic self-efficacy and intrinsic motivation, which are closely related to environmental engagement. Students from highly educated families tend to show more awareness and participation in environmental activities due to the exposure in knowledge-rich environments.

## **4. Environmental Motivation among University Students**

University students are a key population in the sustainability of the environment. Their attitudes and behaviours are formed by the combination of their family background, education and social influences. Murtagh et al. (2016) revealed that motivation is central in deciding students' engagement in sustainable practices.

However, extant literature shows discrepancies on the effect of family factors on environmental motivation. Some studies indicate powerful parental influence, while others find that peer influence, education systems and media exposure are more dominant.

Although previous research has examined parental influence, socio-economic status, and environmental awareness separately, limited attention has been given to their combined effect on environmental motivation among university students. Existing studies have often focused on either parental education, family socio-economic background, or general environmental awareness without integrating these

factors into a single explanatory framework. In addition, the empirical findings remain inconsistent regarding whether parental social and educational levels significantly shape students' environmental motivation, suggesting that the relationship may be context-dependent. This gap is particularly evident in the Arab region, and especially in the United Arab Emirates, where environmental sustainability has become a national priority but where context-specific evidence on family influences remains scarce. Therefore, this study addresses an important gap by examining how parents' social and educational levels, together with parental encouragement, influence environmental motivation among university students within the UAE context.

### **Problem**

Although there is an increasing focus on environmental sustainability in the world, encouraging environmental motivation in university students is a multifaceted issue that depends on a variety of social and family-related factors. Although the family is considered to be one of the key agents of socialisation, the degree to which the socio-economic status, education degree, and support of parents influence the environmental motivation of students remains unclear.

Past research has shown mixed results on the role of parental factors, some of them have found that parental factors have a bigger effect, and some have found that parental factors have little or no effect. This contradiction underscores the necessity of conducting additional empirical research, especially in certain socio-cultural settings, like the United Arab Emirates, where environmental consciousness is becoming a central focus when developing strategies to address national development.

In this regard, the gap in the current research is the absence of unified knowledge of the impact of parental social and educational status, as well as the parental encouragement on the environmental motivation of university students.

The study aims to achieve the following objectives:

1. To examine the role of parents in promoting environmental motivation among university students
2. To investigate the effect of parents' socio-economic level on students' environmental motivation
3. To analyse the impact of parents' educational level on environmental motivation
4. To explore the role of parental encouragement in shaping students' environmental attitudes and behaviours

The study is guided by the following research questions:

1. What is the role of parents in promoting environmental motivation among university students?
2. Does environmental motivation differ according to parents' socio-economic level?
3. Does environmental motivation differ according to parents' educational level?
4. To what extent does parental encouragement influence students' environmental motivation?

### **Hypotheses**

**H1:** There are no statistically significant differences in environmental motivation among university students attributable to parents' socio-economic level.

**H2:** There are no statistically significant differences in environmental motivation among university students attributable to parents' educational level.

**H3:** Parental encouragement is positively associated with environmental motivation among university students.

## **Methodology**

### **Research Design**

The research design adopted in this study was a quantitative descriptive-analytical research design to determine the effect of the socio-economic level, educational level, and parental encouragement of parents on the environmental motivation of university students. This type of design is suitable to the determination of patterns, differences and relationships among variables.

### **Population and Sample**

The study population consisted of all undergraduate students in Al Ain University, Abu Dhabi campus, in the academic year 2023/2024.

The representativeness was achieved through the application of a simple random sampling technique. The last sample consisted of 200 students who were both male and female and were of various academic disciplines.

Frequencies and percentages were employed to analyse the demographic traits of the study sample to give a clear description of the background variables among the participants. Such traits are gender, age, marital status, employment, family size, and the education level of parents as in Table 1.

**Table 1**

*Demographic characteristics of the study sample*

Variable	Category	Frequency	Percentage
<b>Gender</b>	Male	120	60.0%
	Female	80	40.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Age</b>	18–22 years	90	45.0%
	23–26 years	70	35.0%
	27 years and above	40	20.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Marital Status</b>	Single	140	70.0%
	Married	50	25.0%
	Other	10	5.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Employment Sector</b>	Government	90	45.0%
	Private	70	35.0%
	Unemployed	40	20.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Family Size</b>	Less than 4 members	40	20.0%
	4–6 members	90	45.0%
	More than 6 members	70	35.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Father’s Educational Level</b>	High school or below	70	35.0%
	Bachelor’s degree	90	45.0%
	Postgraduate	40	20.0%
<b>Total</b>		<b>200</b>	<b>100%</b>
<b>Mother’s Educational Level</b>	High school or below	80	40.0%
	Bachelor’s degree	85	42.5%
	Postgraduate	35	17.5%
<b>Total</b>		<b>200</b>	<b>100%</b>

Table 1 indicates that most of the participants (60.0 percent) were men and females constituted 40.0 percent of the sample. Majority of the respondents were aged 18 to 22 years (45.0%), and then 23 to 26 years (35.0%). Most of the respondents were single (70.0%), which is the average representation of the students at the university.

With regard to socio-economic indicators, a significant percentage of the respondents gave their family sizes of four to six members (45.0%). With respect to parental education, the education of fathers was more balanced, as most of them had a bachelor's degree (45.0%), whereas the educational background of mothers was more distributed, with 42.5% having a bachelors degree. These traits offer a wide range of sample on which to analyse how parental factors impact environmental motivation.

### **Research Instrument**

The data to be used in this study were gathered through the use of a structured questionnaire formulated in accordance to the pertinent literature on the field of parental influence, environmental awareness, and environmental motivation among students. The tool was created to measure the family-related variables that were related to environmental guidance and the extent of environmental motivation exhibited by college students. Besides the study variables, the questionnaire contained a demographic section which contained background information about the study participants like gender, age, marital status, employment status, family size, and the education level of both parents.

The questionnaire was made up of substantive content comprising of ten items which were arranged in two broad dimensions. The first dimension was concerned with parental role in environmental guidance and contained items regarding the degree of parental education to their children on the importance of environmental preservation including conserving water, protecting trees, using environmentally friendly energy, disposal of waste, and attending environmental seminars. The second dimension was the environmental motivation of students and had questions that touched on the participation in environmental campaigns, participation in awareness seminars, responsible use of water and electricity, and sharing of environmental information using social media. These items were supposed to capture both the practical and attitudinal sides of environmental engagement of students.

The answers to the questionnaire were scaled on a five-point Likert scale that ranged between strongly disagree and strongly agree. This format was chosen due to the fact that it gives the respondents the opportunity to indicate the different levels of agreement with each statement and gives a reasonable ground to carry out quantitative analysis. The specialists in the related areas reviewed the instrument to make sure it is clear, relevant, and appropriate of the items. After this review, slight changes were done to make the wording and general coherence of the questionnaire better before it was finally administered.

The research instrument validity was determined by content validation process to be sure that the questionnaire measures constructs it is supposed to measure. The original draft of the instrument was submitted to a group of specialists in the field of sociology, education, and environmental studies, who rated the items in the areas of clarity, relevance, and alignment with the study goals. Their comments helped to perfect the phrasing of some of the statements, remove ambiguity, and make sure that the items are sufficient to measure the dimensions of parental influence and environmental motivation.

This procedure contributed to the overall content validity of the tool by ensuring that the items are suitable in the measurement of the role of parents in environmental guidance and the environmental motivation of students. The amendments applied after the assessment of experts made sure that the instrument is used to capture the theoretical concepts as well as the practical aspects of the environmental motivation in the study environment.

### **Instrument Reliability**

Cronbach alpha coefficient was used to test the reliability of the instrument in order to identify internal consistency of items in a questionnaire. The findings showed the total reliability coefficient of the instrument to be 0.80, which is acceptable in social science studies and indicates a high degree of internal consistency of the items.

The reliability level shows that the instrument provides constant and consistent findings when used on the study sample. The acceptable level of reliability serves as an argument in favour of the appropriateness of the questionnaire to the measurement of the variables of the study and increases the belief in the quality of the data obtained and the following statistical processing.

**Table 2**

*Internal Consistency Reliability of the Study Instrument*

<b>Dimension</b>	<b>Number of Items</b>	<b>Cronbach's Alpha</b>
Parental role in environmental guidance	5	0.78
Environmental motivation among students	5	0.82
<b>Overall instrument</b>	<b>10</b>	<b>0.80</b>

Table (2) shows that the internal consistency reliability of the research instrument is satisfactory. The alpha values of Cronbach were between 0.78 and 0.82 in the two dimensions as well as the reliability coefficient was 0.80 at large. These values indicate that the instrument has acceptable degree of internal consistency and can be used to measure the variables of the study.

## Data Analysis

The analysis of data was done with SPSS (Version 26). The statistical methods used were as follows:

Percentages and frequencies to describe demographic characteristics.

Standard deviations and means to respond to research questions.

One-Way ANOVA to test:

H1: Differences according to the socio-economic level of parents.

H2: The differences depending on the level of education of parents.

Pearson correlation analysis was conducted to test H3:

H3: Parental encouragement and environmental motivation relationship.

The statistical significance was calculated at  $\alpha$  0.05.

## Results

### Descriptive Results

To address the research questions related to the role of parents in environmental guidance and the level of environmental motivation among university students, means and standard deviations were calculated, as presented in Tables (3) and (4).

**Table 3**

*Parental Role in Environmental Guidance*

Item	Mean	Std. Deviation	Level
Parents educate children about water conservation	3.69	0.94	High
Parents use environmentally friendly energy	3.53	1.31	Moderate
Parents educate children about proper waste disposal	3.32	1.91	Moderate
Parents promote tree preservation	3.29	1.89	Moderate
Parents attend environmental seminars	2.15	1.91	Low
<b>Overall Mean</b>	<b>3.19</b>	<b>0.49</b>	<b>Moderate</b>

The results in Table 3 indicate that the overall role of parents in guiding their children towards environmental preservation is moderate ( $M = 3.19$ ). The highest-rated practice was educating children about water conservation, while the lowest was parental participation in environmental seminars. This suggests that while parents contribute to environmental awareness within the household, their direct engagement in broader environmental activities remains limited.

**Table 4**  
*Students' Environmental Motivation*

Item	Mean	Std. Deviation	Level
Turning off unnecessary lights	4.42	0.86	High
Limiting water consumption	3.63	1.16	Moderate
Sharing environmental awareness via social media	3.60	1.25	Moderate
Participating in cleaning campaigns	3.52	1.13	Moderate
Attending environmental seminars	3.30	1.14	Moderate
<b>Overall Mean</b>	<b>3.69</b>	<b>0.94</b>	<b>High</b>

Table 4 indicates that the degree of environmental motivation among students is quite high (M = 3.69). The most consistent results were recorded with regard to the energy-saving behaviour, and the least ratings were received by the involvement in environmental seminars. This implies that students exhibit practical environmental motivations as compared to formal involvement in environmental activities.

**Hypothesis Testing**

**Testing H1:** There are no statistically significant differences in environmental motivation attributable to parents' socio-economic level

A one-way ANOVA test was conducted to examine differences based on parents' socio-economic level.

**Table 5**  
*ANOVA Results for Socio-Economic Level*

Source	F-value	Sig.
Between Groups	1.60	0.174

The findings show that the differences in environmental motivation as determined by the socio-economic status of parents are not statistically significant ( $p = 0.174 > 0.05$ ). This means that the null hypothesis is accepted.

**Testing H2:** There are no statistically significant differences in environmental motivation attributable to parents' educational level

**Table 6**  
*ANOVA Results for Educational Level*

Source	F-value	Sig.
Between Groups	1.60	0.174

The results indicate that the differences between the levels of environmental motivation depending on the educational level of parents are statistically not significant ( $p = 0.174 > 0.05$ ). Thereby, the null hypothesis is accepted.

**Testing H3:** Parental encouragement is positively associated with environmental motivation

A Pearson correlation analysis was conducted

**Table 7**

*Correlation between Parental Encouragement and Environmental Motivation*

<b>Variable</b>	<b>Environmental Motivation</b>
Parental Encouragement	0.61**

The findings show that the environmental motivation and parental encouragement have a significant positive correlation ( $r = 0.61, p < 0.01$ ). This implies that the greater the parental support, the more the environmental motivation among the students. Therefore, H3 is supported.

### **Discussion**

This study examined socio-economic and educational status of the parents, and parental encouragement affect the environmental motivation among students in the university. The results offer subtle views of how the family influences affect the pro-environmental attitudes and behaviours.

The findings showed that the general contribution of parents in environmental instruction is moderate which means that parents maintain the environmental awareness in the home but still not involved in organized activities on environmental policies. This implies that the socialisation of the environment in the family setting is more likely to centre on the day to day activities than the involvement in the larger environmental programs. These results suppose the past studies that parental impact is frequently manifested in ordinary behaviours and modelling and not through official taking part (Grønhøj & Thoersen, 2012).

Conversely, the case of environmental motivation was very high among students especially with regard to practicable actions like saving electricity and water. This implies that the students can learn to be environmentally responsible in a world where there is no robust parental involvement in formal environmental activities. This observation serves as a reinforcement to the argument that family factors are not the only determiners of environmental motivation, but other factors such as education institutions, social values and general societal factors also contribute to environmental motivation (Steg and Vlek, 2009).

Notably, the results indicated that there were no statistically significant differences in environmental motivation depending on the level of socio-economic/educational level of parents. This finding indicates the possibility that the issue of environmental awareness and motivation is not reliant solely on socio-economic privilege, but is also shaped by common cultural values and extensive environmental rhetoric. This is in line with reports that the issue of environmental motivation may cross socio-economic lines with collective awareness and education (Gifford and Nilsson, 2014).

Nonetheless, these findings also revealed that environmental motivation and parental encouragement positively relate in a significant manner. This brings out the significance of positive parental behaviours in instilling intrinsic motivation and accountability towards the environment. Theoretically, this observation aligns with the self-determination theory, which stresses the importance of encouragement and autonomy support in increasing the internal motivation (Deci and Ryan, 2000).

Generally, the results indicate that even though the structural factors like socio-economic status and parental education are not considered to directly dictate the motivation in the environment, relational factors, especially, parental encouragement are more influential. This reminds the value of paying attention to quality of parental interaction and not only pay attention to their socio-economic features.

### **Conclusion**

The paper examined how parental socio-economic status, education and parental encouragement influence the motivation of environmental motivation among university students. Rising out of the findings, the socio-economic and educational backgrounds of the parents do not have a significant difference in environmental motivation of the students, though parental positive support is essential to increase the levels of environmentally responsible behaviours.

The authors conclude that environmental motivation forms in students of universities in a mixture of family factors and the general social and educational environment. Although structural determinants can offer a background, it is the character of parental involvement and support that contributes to the formation of the pro-environmental attitude to a greater extent.

Such results underline the necessity to go beyond traditional socio-economic introductions and start to concentrate on behavioural and relational elements in the family to facilitate environmental accountability.

### **Practical Implications**

The results of this study have significant implications to teachers, policy makers and family.

Educational institutions ought to incorporate environmental education in curricula in such a manner that would support hands-on learning and engagement.

The parents are to be urged to use supportive and motivating strategies that will instil environmental responsibility to their children.

Awareness campaigns should be structured by the policymakers that target both student and family to enhance the intergenerational values about the environment.

The community-based programs would be designed to enhance environmental motivations outside of the educational institutions.

### **Theoretical Implications**

This paper leaves a mark in the literature by showing that the motivation aspect of the environment is more affected by relationship factors and behaviour as opposed to structural socio-economic aspects. It also emphasizes the role of parental encouragement as a major construct in environmental attitudes formation and thus, expands models of environmental motivation.

### **Limitations**

Although this study has made contributions, it has a number of limitations. First, self-reported data can be susceptible to response bias, especially where the measure of a socially desirable behaviour, like environmental responsibility is being taken. Second, the cross-sectional design does not allow one to determine the causal relation among variables. Third, the research was carried out in one university, which might jeopardise the overall extrapolation of the results to other situations.

It is further suggested that future studies should employ longitudinal research designs and involve more institutions to have a more clear picture of the variables determining environmental motivation.

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