

The Study of the Role of Social and Cultural Factors in the Environmental Behavior of Mazandarani Youth

Ali Asghar Gholami¹
Ali Asghar Abbasi Asfajir*²
Abolghasem Heiderabadi³

Received 6 January 2022, Accepted 12 March 2022

Abstract

This article examines the role of social and cultural factors on environmental behavior. Therefore, Ronald Inglehart's theory of values, Bourdieu's cultural capital, the pattern of environmental behavior of Kollmuss and Agyeman were used as a theoretical framework. The research method is survey and the statistical population is people over 18 years old in Sari and Juibar cities. The sampling method is multi-stage cluster and the sample size according to Cochran's formula is 600 people. Data collection instrument is a researcher- made questionnaire and analyzed using Pearson correlation coefficient, path analysis and regression analysis using SPSS software. Formal validity was used to measure validity and the reliability of the environmental behavioral variable was 0/858 which is very high and its items were able to have the necessary, internal harmonization.

The results show that the average environmental behavior among individuals is high on average to 3/78. There is a significant positive and direct relationship between religiosity, social participation, and cultural capital social trust environmental sociability and environmental behaviors they do. Socialization and religiosity have a positive and significant relationship with four, dimensions of environmental behavior (energy consumption behavior Environmental protection behavior, environmental behavior in travel and environmental purchasing pattern) and the use of media has a significant. Relationship only with the dimension of environmental purchasing pattern independent variables explain and predict 33% of variance and changes in environmental behavior. The result is that economic and social factors have a great impact on environmental behaviors. Socialization and transfer of environmental knowledge and information by family, school, social environment and society has an important role in increasing the environmental behaviors of residents of Sari and Joibar cities and its role is more important than the media and environmental propaganda. Sociocultural of environmental protection.

Keywords: environmental behavior, social trust, cultural capital, environmental sociability.

1. Ph.D. Student in Sociology of Economic Development, Babol Branch, Islamic Azad University, Babol, Iran. asghar_gholami85@yahoo.com

2. Associate Professor, Department of Sociology, Babol Branch, Islamic Azad University, Babol, Iran. (Corresponding Author) Asfajir@hotmail.com

3. Assistant Professor, Department of Sociology, Babol Branch, Islamic Azad University, Babol, Iran. Ashahin 2000 @yahoo. com

1. Introduction

Environment and environmental behaviors are one of the important indicators of sustainable development of any country. One of the studies in the field of sociology is environment and environmental behaviors. Due to the increasing attention and importance of the environment in recent years, attention to the sociology branch of the environment is of particular importance. The main subject of the present study is the environmental behaviors of Mazandaran citizens. The variable of social and cultural factors is considered as an independent variable and environmental behaviors as a dependent variable. The researcher seeks to explain the sociology of environmental behaviors and in other words the extent of the impact of social and economic factors. On the environmental behaviors of citizens living in Mazandaran environmental behaviors, while affecting most environmental issues and threats, also influenced by factors (Ahmadian and Haghghatian, 2016, 28). Environmental ethics the ideal behavior of human beings towards. Their living environment, including the natural environment, social and cultural environment (Ajdari, 2003, 27-28)

Researches have shown that community culture has a great effect on environmental behaviors and they point to the role of culture and social and cultural factors on environmental behaviors. (e.g. Dashtaki et al 2021, Salma and Shaterian 2012, Ahmadian and Haghghatian, 2016., Kalantari et al 2016, Salehi and Imamgholi, 2012, Nawah et al, 2011). Therefore, the researcher investigates the role of cultural factors such as cultural capital and the rate of the use of media, as well as social factors such as sociability- environmental acceptability, degree of religiosity, environmental awareness, social norms, social trust, social participation and traditional/ modern attitudes on environmental behaviors.

One of the current issues in the world is the protection of the environment. Environmental catastrophe not only robs the peace and security of human life but also threatens human existence, which is why in scientific and political circles, the environmental debate is the loudest and most serious debate of the day. (Valaei, 26: 2007) due to educational and environmental awareness gaps,

the lack of sense, the resulting cultural poverty, has pushed environmental and country pollution to the critical border. (Adhami and Akbarzadeh 2013, 37)

The results of many studies in Iran indicate the destruction of the environment and the role of social, cultural, economic or organizational factors on environmental destruction and environmental behaviors. (Adhami and Akbarzadeh, 2013; Ahmadian and Haghghatian, 2015 Kalantari et al 2015, Salehi and Emamgholi 2012, Nawah and others, 2011, Shobiri, 2013 Salehi, 2006, and Farahmand et al 2003. In the cities of Mazandaran province, there are all kinds of pollution that can be seen in everyday life, for example, air pollution environmental degradation, deforestation, overuse of chemical toxins, noise pollution, etc.

Some of these issues are environmental. Obviously, if basic measures are not taken to protect the habitat and natural resources of the province, we will have serious problems with the province's environment in the near future.

Today, environmental issues have deep social implications, and much of the environmental beliefs and behaviors of individuals change under the influence of cultural and social systems. Human behavior towards the environment under the influence of modernity and its processes has become a critical behavior (Kalantari et al. 2016: 2). Therefore, the article seeks to answer the question that what is the role of social factors (such as sociability, socio-economic class, religiosity, social trust, etc.) and cultural factors (such as cultural capital and media consumption) on environmental behavior? And which of these factors has the greatest impact on environmental behaviors.

2.Review of Literature

The study and investigation of environmental behaviors from different angles is important and necessary. That is why various researches have been done in this field. Dashtaki et al (2021) examined the explanation of citizen's environmental ethics for environmental improvement. Today, the environmental crisis of cities is due to the materialistic attitude of human beings towards the environmental system and, consequently, the incorrect ethics of citizens in the face of it. In the monotheistic worldview, citizens are not only responsible for the fair and trustworthy use of the elements of the environment, but also for the preservation, promotion and improvement of all

elements of the environment towards their own perfection and the purpose of their creation. In the proposed model, the three dimensions of citizens' divine worldview, tendency towards perfection and environmental actions and behavior of citizens within the framework of divine laws are emphasized and it is expected that this attitude will lead to environmental improvement. Jafari Nia (2016) has shown that social capital and its dimensions affect environmental behaviors. Therefore, there is a significant relationship between moderation, social interaction, social trust and social participation and environmental behaviors of Bushehr citizens and the type of this relationship is direct and positive.

Heidari Sarban (2009) showed that capital and social capital explain behaviors focused on environmental protection. Salehi and Emamgholi (2019) in a study show that the amount of media consumption affects the attitude, value and behavior of the environment. However, media consumption has no effect on environmental concerns awareness.

Radio and Television seems to be facing a shortage of experts and specialists who can present environmental problems in a different way. It seems programs typically deal and cultural aspects. This problem has been identified in environmental sociology as a pivotal event. Karami, Hejazi and Rezaei (2009) examined the role of media and components of environmental education on the environmental behavior of members of environmental NGOs in Tehran province. Media is recognized as the second influential variable in environmental intention and environmental behavior in this study. The role of the media in increasing the environmental knowledge and attitude of people in society is undeniable. The media should be used more than ever to facilitate the transmission of environmental information and promote a positive environmental attitude. Taliban and Memarzadeh studied religiosity and environmentalism: an empirical reflection on (2009) theoretical conflicts. The environmental situation of Iran and the thoughts and behaviors of the inhabitants of this system about this situation are becoming more and more important. Reviewing the theoretical literature on how religion and environmentalism are related, three possible types of relationship between the two variables of religiosity and environmental behavior (positive relationship,

negative relationship, and lack of relationship) were formulated in the form of three different hypotheses. The findings showed that only the hypothesis of a negative or inverse relationship between religiosity and environmental behavior has been empirically supported and the amount or intensity of this relationship has "been assessed as" weak.

The findings of Nabavi and Mokhtari Hashi (2015) showed that there is a direct relationship between cultural capital of families and their environmental behavior, but in relation to cultural capital's subscales, objectified and embodied cultural capital have a direct effect on family environmental behaviors and insitituationalized cultural capital have no direct effect. In sum, objectified cultural capital, embodied cultural capita, institutionalized cultural capital, age and the length of stay in the neighborhood have the greatest impact on family environmental behaviors. Hassanzadeh (2016) studied the sociology of social factors affecting environmental behaviors (a study of gas energy consumption among households in Shahrekord). Findings showed that there is a direct and significant relationship between the independent variables of environmental concerns, awareness of environmental consequences, accountability and institutional trust. There is a significant relationship between contextual variables of age, gender, marital status, employment status, economic class and gas energy consumption behaviors. Finally, the total variables of the study were able to explain 0.41% of the factors affecting the energy consumption behaviors of the residents of Shahrekord.

Hajizadeh Meymandi and Falakuddin (2012) showed that there is a significant relationship between the variables of age, income, and environmental awareness, and lifestyle, use of social networks, cultural capital and legalism with responsible environmental behaviors. Nowruzian (2020) shows that environmental factors, life satisfaction, cultural capital, individualism, social norms, are suitable predictors of environmental behaviors. Abdolmaleki and Sarukhani (2011) in an article entitled Sociological study of the role of mass media in the environmental sociability of adolescents in Tehran shows that the environmental sociability is one of the new and attractive topics in the field of sociological studies and means that to that extent institutions and the factors of sociability and sociability in society,

like family, school, media, etc. can influence people's attitudes, worldviews and ultimately their behavior? Although more than 80% of adolescents in Tehran use television and the role of television is more than other factors and mechanisms of sociability in changing the attitude of adolescents, to make television more effective in the more complete sociability of adolescents, you should think of other solutions. Sabzehi et al. (2015) believe that in order to improve environmental friendly behaviors, it is necessary to strengthen awareness resources. The process of environmental sociability is carried out with the help of all governmental and non-governmental organizations and institutions and the family, and the quality of the education is improved. Nawah et al. (2011) examined the relationship between religiosity and environmental values and behaviors in Ahvaz. Findings show that there is a significant relationship between age and gender and education with environmental behavior. The correlation coefficient for the relationship between the variables of religiosity and environmental behavior was 0.080, which has no meaningful relationship, but the correlation coefficient for relationship between religiosity and environmental value was 0.158 and the environmental value with environmental behavior was 0.168.

Smith and Kingston (2021) examined the effects of the demographic, attitudinal and social factors on environmental attention and behavior. Climate changes due to human is currently threatening system in human societies, and psychology plays an important role in human societies, and psychology plays an important role in exploring and re-predicting sustainable behaviors and environmental damage. The present study identifies several individual demographic factors (age, education and political ideology) as well as various attitudinal and social factors such as ecological worldview, social identity and attachment to the place and examines their relationship with pro-environmental attention and behavior. The results show that there is a complex and dynamic relationship between these demographic, attitudinal, social and environmental changes.

In an article, Halkos et al., (2019) have studied the environmental behavior in a private context: integrating theories of planned behavior and the norm of belief in value, self-knowledge and habit. The results show that the best

predictor of environmental behavior is following the habit and the mental norm is the main audience of intention. Awareness of consequence has a positive effect on personal and mental norms, and perceived behavioral control and attitudes while these constructs in turn have significant effect on behavioral intention.

Bernard (2019) believes that continuous education, improving attitudes, the sense of belonging to rural areas and promoting ethics are among the factors influencing environmental-oriented behaviors in rural areas. Preliminary findings support hypotheses of personal value, belief, and moral norm. Hypotheses that are the basis for people prone to environmentally responsible behaviors. In addition, the theory holds that beliefs about the general biophysical conditions of the environment are appropriate for relating values to environmental behavior. Akram (2016) in an article believes that one of the ways to prevent damage to the environment and prevent its destruction is to change human behavior to the other side of naturalism. His studies confirm the claim that the membership of most villagers in institutions and non-governmental organizations such as cooperatives, etc., protects the environment; because by becoming a member of popular organizations, the participatory spirit of the villagers increases and the collective effort and participatory spirit of the villagers increases and the collective effort and participatory spirit of the villagers preserves the environment of the rural areas.

Alexander (2015) in an article entitles Sustainable Development believes that there is a relationship between social participation, increasing social communication lifestyles and the quality of life of villagers with the improvement of behaviors focused on environmental protection. Minani et al. (2015) believe that there is relationship between social trust and responsible and environmentally friendly behaviors of rural people; because social trust focuses on actions among rural people (that affect their behaviors and attitudes) and is part of their villagers' environmental behaviors and actions; so, it is illogical to ignore the effect of social trust on the behavior of villagers. Especially because the environmental threats are increasing every day. Molina et al. (2013) in their research entitled "environmental knowledge and other factors affecting pro-environmental behavior: a comparison of students in

developing and advanced universities" concluded that formal and informal sources of education, gender, motives and attitudes affect students' pro-environmental behavior.

In summarizing the backgrounds, it should be said that the relationship between social and cultural factors with the environment was studied and, in most cases, a significant relationship was found between variables and the environment or environmental behaviors and attitudes. Although in this research, various variables that affect environmental behaviors have been studied, but they have a number of shortcomings that have been partially eliminated in this research. In the present study, the relationship between social and cultural factors with environmental behaviors and its four dimensions (energy consumption behavior, environmental protection behavior, environmental behavior in travel and environmental purchasing pattern) according to Kaiser et al. (1999) and the environmentalism behavior pattern of Kollmus and Agyeman was addressed. No such study has been conducted in Mazandaran province and the cities of Sari and Joibar that the researcher has tried to test environmental behaviors in a newer statistical population.

In recent years, people's attitudes toward society and the environment have changed. Environmental sociology mainly deals with the scientific study of the relationship between modern society and environmental crises and issues, and as a branch of sociology, in the meantime, it focuses more on the social dimension of natural and man-made environments (Froutan Kia and Nawah, 2021: 81). Jurgen Habermas believes that our only relationship with the natural environment is a tool that is governed by our productive, accounting, and technical interests in how we can best exploit it (Moharram Nejad and Tehrani, 2010:6). On environmental issues, Anthony Giddens emphasizes social theory on urban and artificial environments. Urbanization has implications for how the natural environment is formed, perceived, and acted upon. For Bourdieu, the concept of cultural capital refers to a set of cultural abilities, habits, and temperaments, including knowledge, language, taste, or lifestyle. This cultural capital has three dimensions embodied, objectified and institutionalized. With the increase in the dimensions of cultural capital, the cultural capital of individuals increases and as a result, a bio-centered attitude

and environmental behaviors in society towards the environment take place (Salehi and Imam Gholi, 2012: 98). Therefore, cultural capital impacts on environmental behaviors, attitudes and actions.

Moharram Nejad Tehrani (2010) divide into four categories the types of attitudes toward the environment in social theory: attitudes toward the natural environment, attitudes toward the environment as a village or garden attitudes toward the environment as a village or garden, attitudes toward the urban environment, and attitudes toward the global environment. One of the existing approaches in the field of environment is social ecology. Social ecology believes that all environmental problems arise from social problems and without a serious determination to solve them, ecological problems cannot be clearly understood and solved (Soleiman pour et al., 2017: 48). Social ecology is a view according to which environmental problems arise from fundamental social issues and must be understood and addressed in the context of society. Social ecology studies the relationships of human beings in the context of space and time, which are influenced by the forces that select, distribute, and adapt the natural environment, "says Robert Azar Park in his book titled *The City*. (Coser, 2014: 128)

There is no direct relationship between environmental knowledge and environmental behavior in the pattern of environmental behavior of Kollmus and Agyeman; Rather, they consider environmental knowledge, values, and attitudes, along with emotional attachment, as a complex combination called environmental awareness. This complex concept is surrounded by broad individual values and, like external factors, is shaped by personality traits and other internal factors. In this model, social and cultural factors are considered as external dimensions. External and internal factors are directly related to environmental behaviors. Human behavior toward the environment is influenced by external factors and internal factors. Some factors affect large social groups; while others affect only a group of people (Kollmuss and Agyeman, 2002; 239). An environmentally friendly approach is easier when circumstances support supportive behavior (Krajhanzl, 2010: 257)

Another important theory in the field of religiosity and the environment is Schwartz's theory of arousal norm (Maleki and Abdollahi, 2013: 182).

Schwartz discusses material and met material values (Schwartz, 2006: 13). Values such as universalism, Goodwill and benevolence, respect for traditions and religious beliefs and harmony with society are spiritual values and the rest are material values. The theory of norm arousal revolves around altruistic tendencies of pro- environmental behavior. The theory emphasizes that pro-environmental actions occur in response to personal ethical norms about such actions, and that these actions are motivated by individuals who believe that environmental conditions pose a threat to other people.

Inglehart believes that due to economic development in industrialized countries, that has been a change in the material values of human beings in these societies, so that the process of this change shows the movement from material values to metamaterial values. Cultural transformation occurs when changes occur in the economic, technological, political, or social environment. These changes are realized slowly and through the sociability of new generations (Inglehart, 2016:12). And in this transformation, the quality of life and individual expression is more prominent the social, moral, political and religious norms of the past. He sees value change as a process that occurs from generation to generation, not continuously from year to year. (Yousefi, 2004). The proliferation of mass media has led to changes in values so that in the current era, the globalization of communications and media has not affected the generational value gap. Youth uniforms and pop music are manifestations of the influence of the media on changing the behaviors and values of the current generation and lack of commitment to their cultural relations (Inglehart, 2016: 114). In Inglehart's theory, values are the foundation of environmentalism. According to the theoretical topics presented, Pierre Bourieu's theory of cultural capital, Inglehart's theory of values, Schwartz's theory of normative arousal and the pattern of environmental behavior of Kollmus and Agyeman and Georges Tom's environmental culture can also be used as theoretical frameworks and theoretical support of this research and these views as the basis of one of the main hypotheses that indicates the relationship between cultural capital and environmental behaviors. Inglehart and Schwartz theories express the attitude and view of people towards and non- religious values such as environmental behaviors. Therefore, research hypotheses are:

1. There is a significant relationship between cultural capital and environmental behavior.

2. There is a significant relationship between environmental Sociability and environmental behavior.

3. There is a significant relationship between religiosity and environmental behavior.

4. There is a significant relationship between media use and environmental behavior.

5. There is a significant relationship between social participation and environmental behavior.

6. There is a significant relationship between social trust and environmental behavior.

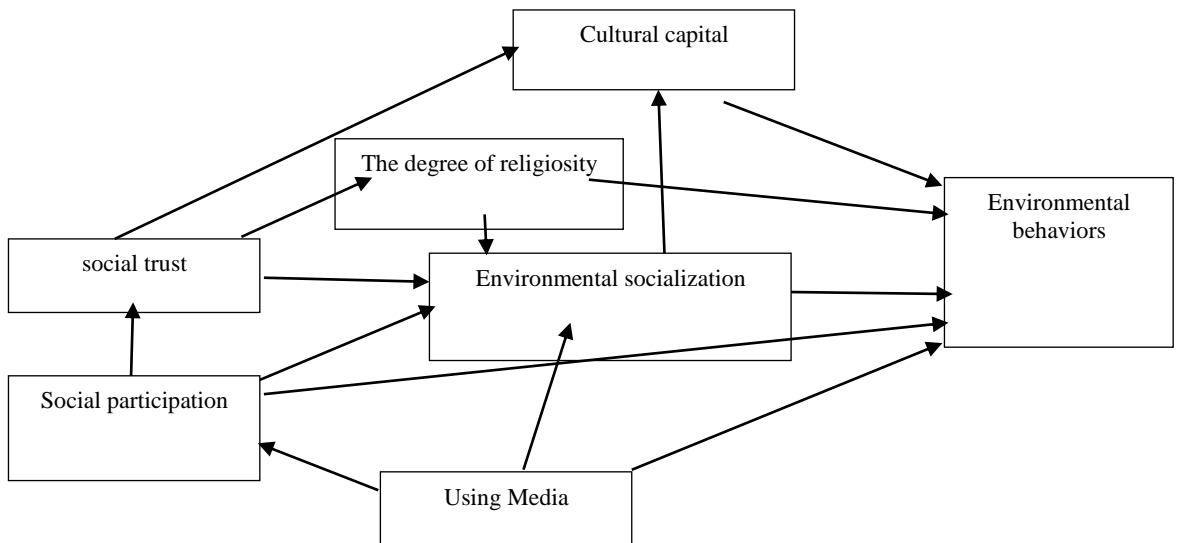


Figure 1: Theoretical model of research

3. Methodology

The research method is survey method seeks to identify the causes and why of phenomena by examining the changes of each variable on a case-by-case basis and by searching for other features that are regularly related to it. Two documentary methods (library and field survey and interview methods) were

used to collect information. The data collection tool is a standard questionnaire. The statistical population includes a group of people over 18 years old in Sari and Joibar. According to the official statistics of the country, their number is equal to 268062 people. The sample size is 400 people according Cochran formula.

The sampling method is multi-stage cluster. Pearson correlation coefficient and regression and path analysis were used to test the relationships of variables at the distance measurement level. Also, face validity is used and the measurement tool has the necessary reliability and the alpha value of environmental behavior is 0.858. In other variables, Cronbach's alpha coefficient value were greater than 0.70. For example, in the variables of cultural capital is 0.886, social trust is 0.841 and religiosity is 0.937.

Table 1: Reliability coefficient of variables

variables	Number of items	Cronbach's alpha
	32	0/858
Environmental Behaviors	Energy Consumption Behavior	12
	Environmental protection behavior	6
	Travel Behavior	6
	Purchase pattern	8
Attitude to the environment		15
Religiosity		28
Social trust		12
Cultural Capital		13
The amount of media use		10
Social participation		15
Environmental Sociability		10

The amount of media use with media consumption means the amount of media use, which in this study is limited to mass media. (Shokrbeigi et al. 2011: 146). A Likert scale was used to measure media consumption. Sociability is a mechanism for the continuation of society and culture (Cohen, 2008: 101). Environmental sociability is one of the new and attractive topics in the field of sociological studies and it means that the institutions and the factors of socialization and sociability in society, such as family, school, media, etc., can affect the people's attitudes, worldviews, and ultimately their behavior, and internalize environmental values. (Abdolmaleki and Sarukhani, 2016).

Environmental sociability was assessed based on the degree of internalization of environmental values among young people.

According to Bourdieu, cultural capital includes the use of language, manners, orientations and tendencies and has complex and subtle aspects in how one relates to culture and language (Jenkins, 2006: 178). Cultural capital is a set of relationships, information, data and privileges that a person uses to maintain or achieve a social position (Salehi Amiri, 2007: 64). Cultural capital is a form of qualitative capital that is not objectively visible. Therefore, cultural capital can be considered as a type of social capital (Rouhani, 2007: 12). Bourdieu division was used in the implementation of cultural capital (Bourdieu, 2018). Religiosity means believing in those rules. Of course, the religious man confesses and is proud of this religiosity in his language and appearance and reveals it (Alamzadeh, Nouri, 2009). Glark and Stark's model is the best model for measuring religiosity and can meet the goals of the researcher. In this model, religion includes four dimensions of belief (the extent to which people maintain and practice religious beliefs), the ritual dimension (the extent to which people engage in worship), and the empirical dimension (the degree to which people contact and feel and experience the connection with the supernatural) and then the consequence (the extent to which the previous dimensions affect the daily life of people) (Sarajzadeh, 2014: 65-64). Environmental behavior is the behavior that a person shows in dealing with the environment (Froutan Kia, Nawah and Porter Karouni, 2011). Kaiser et al.'s (1999) questionnaire was used to measure environmental behaviors. The questionnaire includes questions about how people perform about behaviors such as recycling, energy saving, and information about how people engage in environmental activities. This variable was measured in four dimensions: energy consumption behavior, environmental protection behavior, environmental travel behavior and environmental purchasing pattern.

4. Findings

Environmental behavior patterns are one of the main variables that were evaluated with 32 items. This variable is measured in four dimensions: energy consumption behavior, environmental protection behavior, environmental

travel behavior and purchasing pattern. The average patterns of environmental behavior among people are relatively high and the average of 5 is equal to 3.78. People have answered five options from very low to very high based on the Likert scale. In total about 10.2% consider their environmental behavior to be very low. About 19.3% consider it low, about 25.5% moderate, about 28% high, and about 17% consider their environmental behavior to be very high.

Table 2: Distribution of respondents according to environmental behavior

Patterns of environmental behavior		Very low	Low	Average	High	Very high	Total	Average of 5
Energy consumption behavior	No.	36	74	80	146	64	400	3.92
	%	9	18.5	20	36.5	16	100	
Environmental protection behavior	No.	2	50	77	110	121	400	4.18
	%	10.5	12.5	19.2	27.5	20.3	100	
Environmental behavior in travel	No.	45	97	130	98	30	400	3.46
	%	11.3	24.3	32.5	24.5	7.5	100	
Environmental purchasing pattern	No.	40	84	123	97	56	400	3.48
	%	10	21	30.7	24.3	14	100	
Total environmental behavior	No.	41	77	102	112	68	400	3.78
	%	10.2	19.3	25.5	28	17	100	

The study of the distribution of respondents in terms of environmental behavior shows that the pattern of energy consumption behavior is between 27.5% low, 20% medium and 52.5% high and average energy consumption behavior is 3.92. The pattern of environmental protection behavior is between 26% low, 19.2% medium and 47.8% high, and the average characteristic of environmental protection behavior is 4.18. The characteristic of environmental behavior in travel are between 35.6% low, 32.5% medium and 32% high, and the average environmental behavior in travel is 3.46. The environmental purchasing pattern is between 31% low, 30.7% medium and 38.3% high, and the average environmental purchasing is 3.48.

Table 3: Distribution of respondents according to independent variables

Patterns of environmental behavior		Very low	Low	Average	High	Very high	Total	Average of 5
Sociability	No.	36	71	117	114	62	400	3.92
	%	9	17.8	2.29	28.5	15.5	100	
Religiosity	No.	45	71	102	114	68	400	3.79
	%	11.3	17.7	5.25	28.5	17	100	
Social trust	No.	50	109	139	61	41	400	2.48
	%	12.5	27.2	8.34	15.3	102.2	100	

Social participation	No.	51	107	118	87	37	400	2.97
	%	12.8	26.8	5.29	21.7	9.2	100	
Cultural capital	No.	52	84	127	89	48	400	2.79
	%	13	21	8.31	22.2	12	100	
Use of media	No.	55	97	124	85	39	400	2.88
	%	13.8	24.2	31	21.2	9.8	100	

The table above examines the distribution of respondents in terms of the variables of socialization, cultural capital, religiosity, social trust, media use and social participation. The socialization variable was measured with ten items. About 9% of their socialization in the field of environmental issues has been very low. About 17.8% are low, about 29.2% are average. About 28.5% are high and about 15.5% are very social in the field of environmental issues. Their average sociability in the field of environmental issues is high and its average of 5 is equal to 3.92. The average religiosity is 3.58. The average social trust among people is low and its average is 2.48.

The average cultural capital among people is relatively low and its average is 2.79. The average social participation among individuals is moderate and its average is 2.97. The average use of communication media is relatively low and its average of 5 is equal to 2.88.

Table 4: Results of Kolmogorov-Smirnov test of variables

Variable	Statistical value	Significance level
Environmental behaviors	0.088	0.292
Religiosity	1.202	0.111
Social trust	1.458	0.028
Cultural capital	0.789	0.562
Media usage rate	0.983	0.289
Social participation	1.344	0.054
Environmental sociability	1.384	0.043

Kolmogorov-Smirnov test was used to evaluate the normality of the distribution of variables. The test value is equal to 0.880 and its significance level is 0.292 in the dependent variable of environmental behaviors. In Kolmogorov-Smirnov test, the level of significance for the variables of environmental behaviors, social participation, cultural capita, religiosity and media use was more than 0.05. Therefore, their normality is confirmed in terms of this test.

Considering the level of measurement and testing of data normality in independent variables such as sociability, religiosity and cultural capital with environmental behavior, Pearson correlation coefficient was used to investigate the relationship between the variables. Examining the relationship between variables show that there is a positive and direct relationship between cultural capital and environmental behavior. Pearson correlation coefficient between the amount of cultural capital and environmental behavior is equal to 0.135 and its significance level is 0.007. Because the level of significance in the correlation coefficient is less than five percent, so there is a significant relationship between the two variables of cultural capital and environmental behavior. Therefore, the more cultural capital, the higher the environmental behavior, and conversely, the less cultural capital, the lower the environmental behavior among them. This positive correlation is significant with a probability of more than 99%. In the variables of environmental Sociability, religiosity and social participation, a positive and direct relationship has been observed with environmental behavior.

Table 5: Pearson correlation coefficient between independent variables and environmental behavior

Variable	Pearson correlation coefficient value	Significance level	result
Cultural capital	0.135**	0.007	Positive and significant correlation
Environmental sociability	0.454**	0.000	Positive and significant correlation
Religiosity	0.465**	0.008	Positive and significant correlation
Social participation	0.122**	0.014	Positive and significant correlation
Social trust	0.071	0.151	No significant correlation
Media usage rate	0.049	0.323	No significant correlation

** Significant correlation at the level of one percent error

* Significant correlation at the level of five percent error

Regression analysis has been used in this research, in addition to correlation coefficients, to examine and test the research hypotheses. Regression analysis allows the researcher to predict the changes of the dependent variable to extent of environmental behavior through independent variables and determine the contribution of each of the independent variables in explaining the dependent variable. The multivariate regression method is used simultaneously in this research.

One of the important assumptions of regression analysis is the lack of high alignment relationship between independent variables because it falsely increases the coefficient of determination (R²), which is measured in the table of high regression impact coefficients, through tolerance and VIP statistics. Since the tolerance of all independent changes is 1 and VIP is less than 2, it indicates the absence of different like alignments. Another important premise of regression analysis is the independence of the errors (the difference between the actual and the predicted values by the regression equation) in that it was examined by the Watson Camera Test, which because in this model is in the range of 1/5 up to 2.5, indicates that the errors are independent. Therefore, multivariate regression analysis can be used to investigate the relationship between independent variables and environmental behavior.

The value of multiple correlation coefficient is 0.574, which indicates a higher correlation coefficient. The coefficient of determination is 0.330, which indicates that it represents different sets of variables explains and predicts 33% of the variance and changes in environmental changes.

Table 6: Regression coefficient values of environmental behavior

variables	B	Std. E	Beta	T	Sig	Tolerance	VIF
Constant	54.841	6.198		8.849	0.000		
Religiosity	0.293	0.039	0.366	7.503	0.000	0.725	1.380
Sociability	0.699	0.114	0.300	6.127	0.000	0.720	1.388
Cultural capital	0.017	0.068	0.012	0.242	0.809	0.741	0.349
Use of media	0.027	0.103	0.120	0.261	0.794	0.811	1.233
Social trust	-0.007	0.103	-0.003	-0.071	0.944	0.822	1.216
Social participation	-0.189	0.078	-0.122	-2.412	0.016	0.669	1.495
R	R ²	Std.Error		Durbin-Watson			
0.574	0.330		12.63		1.76	19.123	0.000

The constant value with the y-intercept (541/841) is the same as the y-intercept and shows the amount of the dependent variable without the intervention of independent variables. The value of regression coefficients show that the variables of religiosity, sociability and social participation are significant at the level of more than 95%. The highest beta values belonged to the variables of religiosity, sociability and social participation, respectively.

Path analysis was used to analyze the extent and the path of direct and indirect effects of independent research variables on the dependent variable. The highest direct effect, which is the beta coefficient of regression analysis, belonged to the variables of religiosity, sociability and social participation,

respectively and the highest indirect effect, respectively, belonged to variables of religiosity and social participation, and the highest total effect, respectively, belonged to variables of religiosity and sociability on environmental behavior.

Table 7. Direct, indirect and total effects of independent variables on the dependent variable of environmental behavior

Independent variables	Type of effects		
	Direct	Indirect	total
Religiosity	0.37	0.38	0.75
Environmental sociability	0.30		0.30
Social participation	-0.12	0.12	0
Social trust	-	0.10	0.10
Cultural capital	-	0.07	0.07

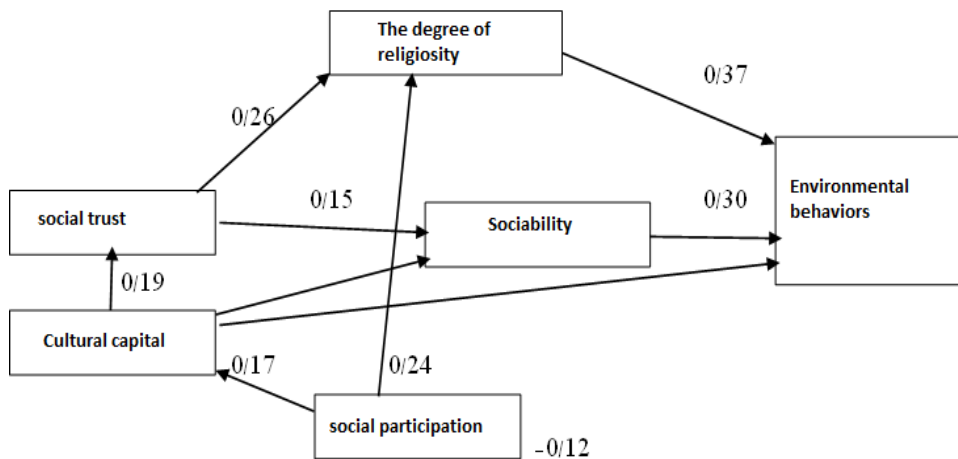


Figure 2: Model of environmental behavior path analysis

5. Conclusion

The environmental behaviors of citizens are the main subject of the present study. The environmental behaviors of citizens are the main subject of the present study. While affecting most environmental issues and threats, environmental behaviors, are also influenced by factors. Numerous factors influence the formation of environmental behaviors. In this study, the relationship of some of these factors with environmental behaviors has been investigated. The first finding of this study is that there is a significant relationship between cultural capital and environmental behavior. There is a

positive and direct relationship between cultural capital and environmental behavior. The higher the cultural capital, the higher the environmental behavior, and conversely, the lower the cultural capital, the lower the environmental behavior among them. The results obtained in this hypothesis are consistent with the findings of Nabavi and Mokhtari Hashi (2018), Ahmadian and Haghghatian (2016), Salehi and Imamgholi (2012), Hajizadeh Meymandi et al. (2014) and Nowruzian (2017).

The relationship between environmental socialization and environmental behavior was investigated in one of the hypothesis. As environmental sociability increases, so does environmental behavior, so awareness resources need to be strengthened to improve pro- environmental behaviors. Kalantari et al. (2016) showed that with the increase of environmental sociability in all its dimensions, the level of sense of belonging to the environmental has also increased. Also, Abdolmaleki and Sarukhani (2016) showed that socialization affects environmental behaviors.

The results showed that there is a significant relationship between religiosity and environmental behaviors. It was found that in this study, there is a direct relationship at the level of zero significance and a correlation of 0.465 between the variable of religiosity and the variable of environmental behavior; that is, with the increase in religiosity, the rate of environmental behavior; that is, with the increase in religiosity, the rate of environmental behavior also increases, and with the decrease in religiosity, the rate of environmental behavior also decreases. According to the theories of environmental sociologists, people with different religious backgrounds have different environmental values that lead to the formation of different behaviors in dealing with the environment. The obtained results are consistent with the findings of Ahmadi and Akbarzadeh (2011), Nawah et al. (2011), Kalantari et al. (2016), Haghghatian (2014). The higher the degree of religiosity, the greater the tendency to engage in environmental behaviors.

The relationship between components of social capital such as social trust and social participation with environmental behavior is another important finding. The findings indicate that no significant relationship was found between social trust and environmental behavior. The test results indicate that

there is no significant relationship between social trust and environmental behavior. The results of this study showed that there is a significant relationship between social participation and environmental behavior. So, the higher the level of social participation, the higher the level of environmental behavior, and conversely, the lower the level of social participation, the lower the level of environmental behavior among them.

Findings of environmental researchers show that social capital is a variable influencing environmental behaviors. However, the mere existence of community capital is not a sufficient condition for improving the environmental preferences of individuals and the policies of governments. Because the type of social capital and its results are different, and its overall impact on individuals' environmental preferences and government policies is different. Accordingly, social capital seems to have two types of positive and negative actions and behaviors. As a result of this process, environmentally responsible behaviors towards the environment take place. In addition, the negative consequences of social capital are expected to lead to negative actions and behaviors and, consequently, irresponsible environmental behaviors towards the environment. This strong relationship between the amount of social capital of individuals (institutional trust, public trust, social participation, social security and civic membership) with their responsible behaviors towards the environment suggests that the norms of trust and participation as well as the sense of security affect people's social action. They have a great impact on the natural environment around them.

The results of Salehi and Emamgholi (2012) research show that despite the unfavorable conditions and limited environmental facilities in Kurdistan province, the environmentally responsible behaviors of the subjects have been high. In addition, the findings indicate that the social capital of the subjects is close to average. Hypothesis testing shows that there is a positive and direct relationship between social capital and environmental behaviors. In other words, with increasing social capital, environmentally responsible behaviors also become responsible. Kiani Salmi and Shaterian (2017) showed that there is a significant relationship between social participation and social and cultural education on environmental issues and environmental protection, so that the

more social participation of people in the community, the more is the protection of the environment by them and also more and more people in the community receive more training on environmental issues, we will face people that are more concerned with preserving the natural environment around us.

Another finding was that there was a significant relationship between media use and environmental behavior. The results showed that there is no significant correlation between the two variables of media use and environmental behavior. But the level of media use has a significant correlation with the component of the buying pattern of environmental behavior. The test results indicate that there is a direct relationship of the significant level of 0.001 and a correlation of 0.156 between the use of media and the component of the purchase pattern of environmental behavior; that is, with the increase in the use of media, the purchase pattern of environmental behavior also increases, and the decrease in the use of media, the purchase pattern of environmental behavior also decreases.

The media are the most important element in promoting and transmitting environmental knowledge in society. Today all over the world, the media determine the direction, thoughts and culture at all levels of life as well as human behavior in protecting the environment. By giving environmental information to different levels of society in accordance with the needs of each section of society and inducing and institutionalizing this information, the media change the behavior and spread the environmental culture of society. Environmentalists and environmental organizations try to raise the level of environmental knowledge and create a culture of environmental protection by informing and giving environmental information to the public and various segments of society. This is not possible without the participation of the media. Because the media is the most important factor in communication between professionals, environmental experts and environmental organizations with the people. People's attitude and influence from the media affect the way they treat the environment, so the media has a great impact on promoting the environmental culture of the people and environmental protection. Therefore, their impact on various aspects of people's personality is of considerable importance.

The most important suggestions are to raise the level of cultural capital, to get more young people familiar with religious teachings related to environmental protection, to pay more attention to respect, commitment, acceptance of customs and ideas offered by traditional culture or religions, environmental awareness development transfer of environmental knowledge and information, attention to the concept of socialization and transfer of environmental knowledge and information by family, school, social environment and society cited. Therefore, in order to promote and develop responsible behaviors towards the environment, social capital and its dimensions, especially institutional trust, membership in civil institutions and the network of intergroup relations should be strengthened.

References

- Ahmadian, D., and Haghghatian, M.(2016). *Sociological analysis of the role of cultural factors in urban environmental behaviors (Case study: Citizens of Kermanshah)*. Urban Sociological Studies, Volume 6, Number 18, pp. 76-51.
- Adhami, A., and Akbarzadeh, E. (2011).*Study of cultural factors affecting the protection of the environment in Tehran (Case study of the regions 5 and 18)*. Quarterly Journal of Social Sciences, Islamic Azad University, Volume 5, Number 12: 113-140.
- Inglehart, R.(2016). *Cultural Transformation in the Advanced Industrial Society*.translated by Maryam Vatar, Tehran: Kavir Publications.
- Bourdieu, Pi Per. (2018). *Distinction*.translated by Hassan Chavoshian, Third Edition, Tehran.
- Jafari Nia, Gh.(2016). *A Study of the Impact of Social Capital on Citizens' Environmental Behaviors (Case Study: Bushehr City)*. Regional Planning Quarterly, Volume 10, Number 37, Spring 2016, Pages 141-150.
- Jenkins, R. (2006). *Pierre Bourdieu*. translated by Leila Jo Afshani, Hassan Chavoshian, Tehran: Ney Publishing.
- Hajizadeh Meymandi, M., Falakuddin, Z. (2017). *Study of socio-cultural factors affecting responsible environmental behaviors (Case study: Citizens of Khorramabad)*. Social Development, 12 (1), pp. 7-36.
- Hassanzadeh, N. (2016). *Sociological study of social factors affecting environmental behaviors (case study of gas energy consumption among households in Shahrekord)*, Master Thesis in Sociology, Yasouj University.
- Haghghatian, M. (2014). *An Analysis of the Environmental Behaviors of the Citizens of Isfahan and the Factors Affecting It*. Urban and Regional Studies and Research, Volume 6, Number 23, pp. 133-144.

- Heidari Sarban, V.(2009). *The Study and Analysis of Social Factors Affecting the Improvement of Environmental Behaviors in Rural Areas, Case Study: Ardabil County, Applied Sociology*. Year 30, Issue 74, Issue 2, Summer 2009), Page 47-64
- Khoshtar; Gh., Salehi, S., Vesal, Z., Abbaszadeh, M. R. (2015). *A Study of Social Factors Affecting the Environmental Awareness of Villagers (Case Study: Jagharq County, Binalood County)*, Rural Research, Volume 6, Number 1, Spring 2015, pp. 1-232.
- Dashtaki, N., Habib, F.,Majedi, H. (2021). *Explaining the environmental ethics of citizens in environmental development: Presenting a conceptual model*, urban research and planning, Spring 1400, No. 44, pp. 161-172.
- Rouhani, H. (2007). *An Introduction to Cultural Investment*. Tehran: Rahbard Magazine, No. 44, Summer 2007
- Sabzehi, M.T., Gholipour, S., Adinehvand, M. (2016). *A Study of the Relationship between Awareness, Attitude and Environmental Supportive behavior of Qom University Female Students*, Journal of Environmental Education and Sustainable Development, Fourth Year No. 4, Summer 2016, Pages 5-16.
- Soleimanpour Omran, Mahboubeh et al. (2017), *Globalization, Environmental Politics and Literacy: A Historical Guide to Schools and Environmental Theorists*, Environment Quarterly, Volume 2, Number 58, Winter 2017, pp. 43-56.
- Shobeiri, Mohammad; Et al., (2014). *Investigating the factors affecting the creation of environmental ethics in the citizens of the world*, Journal of Knowledge. Twenty-third year, No. 201, pp. 95-83.
- Shokrbeyg, A., Aghaee Noor, M.,Ghobadi, A.,Abdolalipour, Q. (2011). *The effect of mass media on the feeling of social security - a case study, people aged 38-18 in Chaharmahal and Bakhtiari province*.Law Enforcement Research, Winter 2011, No. 53, pp. 31-62.
- Salehi, S. (2006). *A Study of Social and Cultural Factors Affecting Environmental Protection in Karaj*. Districts 1, 2, 6 and 7, Master Thesis in Sociology, Azad University, North Tehran Branch, Management and Social Sciences, Supervisor Dr. Reza Fazel.
- Salehi Amiri, S. R. (2007). *Cultural concepts and theories*. Tehran: Phoenix, 2007. Salehi, Sadegh and Loghman, Emamgholi (2016) *The Role of Individual and Social Norms in the Formation of Pro-Environmental Behavior*, Environmental Education and Sustainable Development, Fourth Year, Spring 2016 No. 3, pp. 11-20.
- Taliban, M. R.,and Memarzadeh, A.(2009). *Religiosity and Environmentalism, An Empirical Reflection on Theoretical Controversies*. Contemporary Sociological Research, 8 (15), pp. 89-12.
- Abdolmaleki, J., and Sarukhani, B. (2016). *Sociological study of the role of mass media in environmental socialization of adolescents in Tehran Case study of the Islamic Republic of Iran TV*, Communication Research Spring 2013 No. 1 (85 consecutive).
- Karami, R., Hejazi, S. Y., Rezaei, A. (2009). *The Role of Media and Components of Environmental Education on Environmental Behavior of Members of Environmental Non-Governmental Organizations in Tehran Province*, Quarterly Journal of Environmental Sciences, Year 17 No. 1 (63 spring 2009), Pp. 195-210.

- Kalantari, Abdolhossein et al. (2016). *A Study of Social Factors Affecting attention to the Environment (Case Study: Citizens of Tehran)*, *Applied Sociology*. Volume 27, Number 2, Number 62, Summer 2016, Page 16-1.
- Kozer, L. (2014). *Life and Thought of Sociological Elders*, translated by Mohsen Salasi, Tehran: Elmi, 19th edition.
- Coen, B. (2008). *Introduction to Sociology*, translated by Mohsen Salasi, Contemporary Culture Publications, Tehran.
- Kiani Salmi, S., and Shaterian. M. (2017). *Identifying Socio-Cultural Factors Affecting Environmental Protection (Case Study: Citizens of Kashan)*, *Quarterly Journal of Environmental Education and Sustainable Development*, Volume 6, Number 2, Winter 2017, pp. 101-116.
- Farahmand, M., Shokoohefar, K., Sayar Khalaj, H. (2014). *A Study of Social Factors Affecting Environmental Behaviors (Case Study: Citizens of Yazd)*; *Urban Sociological Studies (Urban Studies; Volume 4, Number 1)*.
- Muharram Nejad, N., Tehrani, M. (2010). *A Review of Social Theories and Environmental Management*. *The Man and the Environment*, Volume 8, Number 1 (12- 23 in a row), pp. 3-11.
- Nabavi, S.H., and Mokhtari Hashi, A. (2016). *Cultural Capital and Environmental Behaviors of Tehran Families*. *Social Issues of Iran*, Year 9, Fall and Winter 2016 No. 2.
- Norouzian, F. (2017). *Sociological study of factors affecting environmental behaviors in Nurabad Delfan*, M.Sc., Ayatollah Boroujerdi University, Faculty of Humanities.
- Nawah, A., Forootan Kia, Shahrozeh Portarkarouni, M. (2011). *Investigating the relationship between religiosity and Environmental Values and Behaviors of Citizens (Case Study: Ahvaz City)*. *Urban Sociological Studies*, Winter 2011, Volume 1, Number 1, pp. 77-97.
- Nawah, A.H., and Forootan Kia, Sh. (2015). *Sociology of Environment, Tehran: Sociologists. Valaei, Issa (2005) Patterns of Behavior with Nature (Environment) from the Perspective of Quran and Tradition*. PhD Thesis, Quran and Hadith Sciences, Azad University, Science and Research Branch, Tehran.
- Yousefi, N. (2004). *Gap between generations, theoretical and experimental study*. Tehran: University Jihad Research Institute for Humanities and Social Sciences.
- Akram, D. M. (2016). *Sanitation, Health and Development Deficit in India: A Sociological Perspective*. *The Environmentalist Journal*, 9 (11): 121-145.
- Arbuckle, M., D., Konisky, M. (2015). *The Role of Religion in Environmental Attitudes*, November 2015, *Social Science Quarterly*, 96(5).
- Barnard, S. (2016). *Impact of Indian total Sanitation Campaign on Latrine Coverage and Use: A Cross-Sectional Study in Orissa Three Years Following Programmed Implementation*. *Social Service Review*, 3(8): 65-75.
- Halkos, G., Steriani, M., Gkargkavouzi, A. (2019) *Environmental behavior in a private-sphere context: Integrating theories of planned behavior and value belief norm, selfidentity and habit*, *Resources, Conservation and Recycling*, Volume 148, September 2019, Pages 145-156.

Krajhanzl, J. (2010). *Environment and Proenvironmental Behavior*, School and Health, 21: 251-274. Kollmuss, A. & Agyeman, J. (2002) “*Mind the Gap: Why Do People Act Environmentally and What are the Barriers to Pro-Environmental Behavior?*” Environmental Education Research, 8 (3): 239-260.

Molina.M.A- Fernandez-sainz.A. Izagirre-Olaizola.,J. (2013) *Environmental Knowledge and other variables affecting pro- environmental behavior: comparison of university student from emerging and advanced countries*. Journal of Cleaner production. Nol. 61. Pages 130-138.

Schwartz, Shalom H. (2006).*Basic human values: Theory, measurement and applications*. Review Francaise sociology, No12:11-38.

Smith, Meredith ,A., & Kingston, Sh. (2021). *Demographic, Attitudinal, and Social Factors That Predict Pro-Environmental Behavior*, Sustainability and Climate Change. Vol. 14, No. 1, Feb 2021.47-54.

Schwartz, Shalom, H. (2006). *Basic human values: Theory, measurement and applications*. Review Francaise sociology. No12:11-38.

