Studying the relationship between environmental attitude with responsible behaviors towards the environment

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Abstract: in contemporary world, the environment issues and its related challenges, especially environmental responsible behavior has attracted the policymakers, sociologists and environmental researchers and managers' attention. One of the important ways for the risks and natural environment destruction is changing people's attitude and behaviors. Therefore, environmental attitude is considered as one of the main and influential factors in this case. this research has been done with 400 samples through multi stage cluster sampling method among Tabriz citizens. the results show that there is a correlation among independent variable (ecological word view with dependent variable (environmental behaviors towards the environment). The regression analysis of variables show that emphasize on technology, protection environment by humans, supporting the government policies have the most contribution in making the relationship between these variables.

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Introduction

The environmental changes as the result of human activities have been common since the beginning of the creation because they can not continue their lives without any changes in the environment. However, during the past century the relationship between human being and nature has changed to the tragic story. From one hand the population on the earth increases regularly and every day the exploitation of land has being done with high diversity. From the other hand, people have become aware from and sensitive to damages and environment hazards. We must search the causes of environmental degradation within the society and actors not in nature. In other words, the environmental issue has been emerged by human societies. An environmental problem is considered as problem when society or part of the society becomes aware from the risks and dangers of a problem. Basically, the phenomenon and events will be considered as an environmental problem only when:

- 1. Made by human activities or interference in natural events.
- 2. Criticized and judged as a problem or damage by human.

Both of these cases are being studied as a social problem in the society and in citizen's actions that results from actor's actions. These cases come from actor's worldview. So if we consider the

environmental problems as the effect of action, the only way for solving the problems is changing the action through changing the actor's worldview (figure.1) Environmental problems are the result of human's interference in environment that refers to people's perception from their behavior with environment (1). Dominant attitudes and values in a society determine and guide the individual and group life principles. Egbert and Martin argue that the dominant attitude towards the relationship between human and the environment is responsible for citizen's environmental awareness (1). Attitudes are foundation of behaviors that doing them are important for humans. If we accept this reality that our social, economical and political behaviors result from our worldview and then from our action, by redefining the relationships, values and norm's effect on people's behavior we can affect the society. Therefore, in order to clarify that whether values and the so-called attitudes in the contemporary discourse can make any change in people's action in environment, the present work aims to study the relationship between environmental worldview and the citizen's responsible behaviors toward environment.

Figure 1 shows the interaction between humans and the environment (Udo de Haes, 1991, p.22).

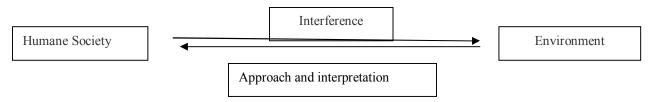


Figure 1. The interaction between humans and the environment

Literature

Since the economical system was applied by the political governments as need - solving tool, in many countries the economic growth and wealth led to much many changes in their lifestyles to achieve great prosperity. Now referring to social policies as a mean of welfare providing has been considered in state's agenda. However, the environmental crisis show that the welfare state can not fulfill to achieve sustainable development because any increases in demand will lead to increases in consumption growth that has directly or indirectly the serious environmental problems. So, we should proceed social policies that not only improve the life quality also try to achieve a sustainable society by solving the environment crisis. The origins of this procedure were believes that can be followed in Green-Liberalism. Eco-Socialism- Green Policy. Eco-Feminism and Ecological Modernization. The Liberal philosophy of west in contemporary life, which is mentioned as a dominant discourse, has especial believes about the relationship between environment and humans. Richard Routley. An Australian philosopher shows the central and key point of these philosophical principals as follows: "western Liberal Philosophy states that people should be able to do what they want if: 1.do not harm the others 2. Do not harm themselves that is not probably (3). According to "Harm principle" in this School we can see that this principle neglects any independent moral statues to non human things. If only the probability of being damaged limits his freedom from what they want, so that is just human being who pays attention to nature. The other things will only be important when any damage to them makes any problem to human being. Richard Routley believes that principle value, which is the central part of Western ethics, can be inferred from damage." The things that are used or utilized by human being and attracts their attention are valuable. Therefore, when we try to choose the best action way or show that what is good or what is bad, we must consider this principle". Such an instrumental attitude to nature helps the advocates of this theory to use natural sources in an uncontrollable way to answer the people's needs.

Green Policy or Green Ideology is one of the other discourses in contemporary world for which the nature has main importance. Advocates of these policies in most countries started their activities since 1970_s and 1980_s . The name "Green" for this ideology comes from German's "Green political Party" that was the first advocate of environment in 1970_s (4).

The proponents of this ideology try to separate the superficial signs of environmental problems from root causes. They believe that if a society wants to have a satisfying and enduring future, their work with environment, moderate technology, sustainable economy should consider the true needs of human, population size that is parallel with long term capacity and potential of environment as their main goals (5). The other dominant discourse in contemporary world is Eco-socialism which is made of integration and combination of aspects of Marxism, Socialism and Green politics. Ecosocialism suggests an economical policy which is based non monetary measures and ultra economical to answer social needs and balance in environment. (6) In general, Eco-socialists believe that Capitalism system causes social deprivation, poverty and destruction of environment through globalization and implementing industry in capitalism-directed ways (5). Victor Wallis introduces socialism as the best replacement for capitalism and stats that if capitalism wants to make better environment in each phase it should mix and integrate intentionally the environment- protection and democracy policies (7). Wallis introduces environment crisis as capitalism crisis (8). O'Connor believes that aim of Ecosocialism is making a modern society which is based an Ecological Rationality, democratic control, social equality and priority of use- value to Exchange value (6). In most of these theories, it is traditionally believed that there is a natural contrast between environment protection and economical growth. Because rapid process of economical growth, which leads to treasure increase and higher economical income, may inevitably increase the sources and destruct the environment through much more exploitation nature. Economical modernization is a procedure that wars against this idea and states that the consumed energy in economy is not much more

than the consumed energy in economy about 20 years ago(4). Modern ecological theories never try to predict a society in future, rather that they believe that having exact and especial management policies can empower the Capitalist society to continue their existence.

To do this, it is necessary for economical policies to have much more interaction with environment protection policies. If we want to have an environment responsible economy, modernization will be necessary. Economical modernization tries to produce the products and gods in an optimized way with lower energy. In this way, it supports the industries which have higher efficiency and less environment destruction. From the other hand, it tries to make changes in infrastructures because it is believed that its correction equals with lower energy consuming as a result of public transportation much more implementation of information Technology. Economical modernists can see the attractiveness of consuming Capitalism, in spite of that they try to encourage a kind of consumption which is compatible with environment. They allocate a higher share to science and technology to come over the environmental problems (4). Therefore, it is obvious that changes in attitude and instrumental norms between human and environment empowering the responsibility about feelings and emotional environment protection will lead to responsible behavior.

Literature of Foreign studies:

Maria Partidario et al. in their study," how the sustainability view directs the life style sustainability?" state that during the two decades sustainability perception has caused many changes in technological, social and political fields. This change in paradigm basically is reflected from changes in natural-source consuming, overcoming patterns and economical modernization with considering the environmental principles. These researchers, through reviewing integrated and complete views about sustainability, show that a procedure based on a much interaction with designed beds for sustainability causes these principles to be reflected in people's consuming behavior and motivation in choosing life style(9). Indra Munshi in his report, "environment is social theory", after discussing environment dangers and contemporary social theory studied the ratio of attention to environment crisis in India's social science and concluded that ecological and environment views offer many important aspects in social concepts which have not been considered till vet. He believes that understanding and knowing the life's risks, questions and challenges in this field make new political tensions and new policies in development. It also offers ideas for life style and

value's replacement. In other words, it runs a much more stable human improvement. He believes that present unstable views comes from modernization /development and industrial capitalism with this consumption and production way destructs most of necessary and basic resources and it can even be a threat to human's life style. By growing the number of environment advocates and movements and also improving ecological policies we face with new ways of social justice and equality which is based on redefinition of human relationship and natural environment. It also needs a review about the effect of human's activities on nature(10). Buttel in his study, "Ecological modernization" as social theory tries to evaluate the reasons and consequences of overcoming ecological modern believes. He stresses that the reason of paying much more attention to this procedure is not that it had developed suitably as a social theory, but that is because of this reason that it had adapted well with different political and economical factors outside the sociology and environmental sociology. So in modernization process, all the ecological modernization turns around political processes and natural phenomenon turn around modernization(11). Gret Spaargaren and Peter Osterveer in their work, "consumer citizens as changing agents in global modernity: the case study of sustainable consumption", state that in economical globalizing changes, through analyzing the individuals role we can identify 3 kinds of commitment:

- 1) As a environment protector citizens
- 2) Political consumers
- 3) Individual and ethical agents.

Researchers study these three roles in people's everyday life based on sustainability changes. In this study they consider the style of consumption as analysis unit to focus on consumer citizen's role as an agent for changing environment. They also look at technologies role as an industrial infra-structure in consumption globalizing, process. In studying green process, the relationship between individuals and earth was explored. The authors come to this result that the citizens, who are environment advocates, in their first step, follow the ways in which each citizen as a consumer becomes aware of consequences and result of consumption in his/her area or region. In a similar way, when political consumer lives in globalizing markets, the debates about commitment and consumer's potential power and their control on consumption will start(12).

Internal studies

Habibi in 1383, his work "Islam and sustainable development" came to these results: By performing Islamic believes, the use of natural sources will be optimized in a way that nature can compensate it and suitably exploit the rare resources. (13). Aminzadeh in 2002, "Religious worldview and environment: An introduction to Islam's attitude to nature," stated that: Islamic attitude to human environment relationship is obvious and different from western views. Through reviewing Islamic believes and some subjects such as knowing nature system and building or repairing the land in which the human has a grate role, we can achieve a unique version of sustainability. It can be applied in the general politics governing on Islamic society. In performing these policies we need a background that is accessible by social equality (14).

Methodology

This study is a descriptive and applied work. It is cross-sectional and a expanded research. The study method is survey and measurement tool is questionnaire. To answer all the questions in questionnaire we used face to face interview with respondents.

	Table 1: the results of factor analysis and reliability of Ecological worldwide						
Independent variable	Independent variable's dimensions	Items	Factor load	variance	reliability	Total reliability	% Cumulative
Ecological worldwide	Protecting environment by human	Protecting environment is important even if the life level of people is low The plants and animals health is much more important than human's happiness. We should protect the environment even if it leads to human's hurt We have to keep the rivers and lake clean. In other words, we keep the nature clean not just for human beings There is just a point about cutting the trees that is we will not have enough wood for next generation.	0.75 0.74 0.68 0.57 0.54	11.03	0.76		
	Environmental risks	The environment balance is so strong that it can overcome the industries consequences. I cannot see a problem in environment and ever thing is in our agreement. This idea that environment balance is vulnerable is pessimistic. People, who believe that much more exploitation from nature leads to ecological crisis, are wrong.	0.75 0.74 0.71 0.69	10.87	0.74	0.75	55.11
	population control policies	Government should train us about having two or less children. Families should be encouraged to have just two children. If we control the population, the world will follow better way. People, who believe that population exploration is a problem, are wrong. This idea that we should control the population is wrong.	0.83 0.78 0.49 0.53 0.48	10.33	0.74		
	s domina ncd on environ	The nature should be controlled by human in every part. The nature is made to be used by human It is all human's right to use the nature to achive their economical goals.	0.80 0.73 0.55	8.62	0.63		
	supportin the government policies	People, who live in developed societies, should follow a balance life style in future. Government should control the raw materials in industry in a way that we can have raw materials in a long run. Government should support the researches about replaceable energy such as solar energy Government's control on industry should lead to environment protection even if it	0.72 0.71 0.63 0.42	7.41	0.62		
	focus on technolog	leads to higher in prices. Technology finally solves all the problems such as pollution, population exploration and the decreasing number of resources. The more useful Technology is, the more harmful the technology will be. This believe that any improvement in technology can solve the environmental problem, is wrong.	0.81 0.64 0.57	6.82	0.70		
	BTS=23	98.88 KMO=0.724				Sig= .00	00

Statistical population/sampling/sample number

The Statistical population of this study is over 15 year's old citizen in Tabriz, who was 1168745 based on census in 2006, 586710 women and 5820225 men. In order to find the samples we used Cochran formula and choose 385 people but we increased this number to 400 in order to decrease the risk of errors in sampling: The sampling method was multi clustering method. We choose the over 15-year-old citizen's among the 8 regions of Tabriz and then allocate especial number to each part.

Measuring tool

The measuring tool was questionnaire which was made by Milfont and Duckitt (15). We used the original questionnaire and after translation we revised it and in some parts omitted the unrelated items.

Table 2: the results of factor and	lysis and reliability of environment	responsible behavior of citizens
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Dependent variable	Variable dimensions	items	Factor load	variance	reliability	Total reliability	Percentage
ior of citizens	self control behaviore	In my every day life I try to save water and energy. All the times I try to protect the natural sources. I try to turn off the lamps at home in my idle times. I try to have a short shower as much as possible to save the water I can definitely say that during the winter I never turned up the heater in my room or office.	0.83 0.79 0.72 0.71 0.69	31.83	0.81		
environment responsible behavior of citizens	Working and supporting the environment movements	I do not help the environment supporter economically. I don't help the environment supporter I do not want to interfere in environment problems. Protecting the environment is expensive so I want to support these organizations economically.	0.79 0.75 0.71 0.54	23.39	0.68	0.68	55/19
	BTS=985.778 KMO=0.768 Sig=.000						

Table 3: correlation between ecological modernization and environment responsible behavior					
environment responsible behavior					
	Pearson correlation	0.34			
ecological worldview	Sig	.000			
	Ν	400			

Table 4: multi regression coefficients					
R	R square	Adjusted R Square	Durbin Watson		
0.35	0.23	0.22	1.713		

Table 5: regression coefficients of dependent variables on independent variable					
	Unstandardized regression	standardized			
Dependent variables	coefficient	coefficient	t	sig	
	В	β			
constant	29.006		9.87	.000	
Focus on technology	1.10	0.37	6.90	.000	
Environment protection by humans	0.53	0.21	4.20	.000	
Supporting the government policies	0.23	0.13	2.75	.000	

Variables

The independent variable of this study is ecological worldview. Its dimensions were identified through explorative Factor Analyses Method in a way that we have 6 dimensions for independent variable. In table 1 its dimensions, variance, reliability of these variables are shown. The results show that kmo=0/724 and sig=0/000. On the whole, it can explain 55/11% of changes in independent variable. We measured the independent variable with 24 items

and ordinal levels with a 6 degree scale from completely disagree to completely agree. Dependent variable of this study is environmental responsible behavior which has 2 dimensions. Table 2 shows this variable, variance and the reliability. Dependent variable, environmental responsible behavior, was measured by 9 items with a 6 degree scale from completely disagree to completely agree.

Findings and the results

According to the variables scale that is, in order to study the relationship between dependent and independent variables we use the Pierson correlation coefficients. The results show that there is significant correlation between ecological worldview and environment responsible behavior variable (Sig=0/000) in a way that when the ecological worldview increases, the environment responsible behavior will increase, too (table 3). We used the multiple regressions to find the effect of dependent variable on independent variable. The results (table 5) show that the influential variable with 95% probability is R2=0/37 for technology, R2= 0/21 environment protection by humans, R2= 0/13supporting the government policies. So based on the results of table 4 we can say that dependent variables can explain 22% of changes of independent variable.

Conclusion and discussions

Human society as a part of natural world is in a mutual interaction with environment. The increasing number of population and their gradual increasing demands cause the human's interference in natural process and especially recently some dangers.It seems that the human's behavior with environment has not been in a responsive and thoughtful way. The theories came from this problem state that human's view to environment has an important role. Then, for changing human's actions and making them much more responsible against environment it is necessary to change the attitudes and values. The results of this study show that there is a positive and significant relationship between human's attitude to environment in an ecological worldview and environment responsive behavior. In other words, people's attitude to their environment affects the way of their behavior with it. The results of regression between these variables show that in a significant relationship between ecological worldview and environment responsive behavior . Some items such as technology, environment protection by human and supporting the government policies have the highest share in making relationship between these variables. Among them, technology has the highest share. Although Spargan and Steriev believe that the step for protecting the environment is

citizen's behavior which results in understanding the consequences of consumption in region or area, they focused on the effect of technology, as an industrial infrastructure making factor in globalization and also the consumer's green consumption choosing. The ecological modernization procedure focuses on technologist's role so that it forces the modern economy to offer optimized ways for energy saving, high efficiency ways. It makes possible to have much more compatible behavior with the environment by consumers of this technology. Another influential case in responsible behavior is protecting environment by human. It is mostly affected by nonmaterial values. So in modern societies which is dominated by instrumental attitude to human and nature, the effect of this factor faded. It seems that trying to change the instrumental attitude based on religious worldview, which is mentioned in Aminzadeh and Habibi's work, can be effective on citizen's responsible behavior against environment. The effect of supporting government's policies on

dependent variable show that following social policies based on getting sustainable society, preparing welfare for people not only leads to social support of these policies but it affect the citizen's responsible behavior of citizen's. Therefore, it is necessary for governments to follow balanced economical policies about environment and redefine their policies to make the citizens much more responsible.

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