# Frequency of Sustainable Consumption Behavior of People: A Research on Class Teachers

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**Abstract:** The world's sources about to running out have been realised as a result of that population increase and economic development to be lived in the twentieth century have caused the transformation from the notion of unlimited economic development to sustainable development notion. Sustainable development is a model that predicts existing generation satisfies their needs without that next generation's satisfy their need. The target of sustainable development notion in regard of consumption is to be accepted sustainable consumption behavior. It requires inquiring the frequency of sustainable consumption behavior in question because sustainable consumption pattern to be accepted and spread to the world. This paper gives place to various definition about sustainable consumption behavior and then presents the findings of a research. In the study examined that frequency of sustainable consumption behavior of class teacher who work at elementary schools in Kutahya, Turkey. At the end of this study, it was found that there was a difference between frequency of sustainable consumption behaviors. Also, it was found that means of frequency of all sustainable consumption behavior is mid-level. The results of this research have significant implications for stakeholders of sustainable consumption and future research.

#### Introduction

The idea of sustainable development, which has been recorded in Brundtland Report of 1987 and entered into literature, asserts the necessity of satisfying the today's needs without having danger the necessities of the next generations. In this context, in order to leave a livable world for the next generations, it is frequently stated to make necessary reforms for the next generations. The concept of sustainable consumption has been developed in accordance with the paradigm of sustainable development. The concept and phenomenon of sustainable consumption has been emerged with the awareness of non-disregarding the needs of the next generations, having risk of excessive consumption and lessening the possible choices and alternatives. Sustainable consumption is the act of consuming by regarding the needs and alternatives of next generations.

#### **Definition of Sustainable Consumption Concept**

The environmental impact of humans in a modern society is relied on the behavior of consumers. Consumers in industrial countries damage the natural resources and cause environmentally pollution by consuming products and services. Natural resources is consumed during their composition, production, transportation, consumption, disposing and recycle. If natural resources is consumed in sustainable limits, this situation is named as "sustainable consumption behavior". As Peattie (2001, p.131) explained it:

"A sustainable approach to consumption and production involves enjoying a material standard of living today, which is not at the expense of the standard of living of future generations. It therefore involves using natural resources at a rate at which environmental systems or human activity can replenish them (or in the case of nonrenewable resources, at a rate at which renewable alternatives can be substituted in)".

When it has been analysed the literature, it has been seen that there are a lot of definitions about sustainable consumption (SC). Here, some of them has been taking place some of them.

Sustainable consumption behaviors (SCB) are behaviors by individuals or groups that contribute to three sustainability objectives which reducing resource consumption, waste and pollution (Williams and Dair, 2007).

SC is phenomenon that depends on persuasion, both of individual consumers and policy makers (Veenhoven, 2004).

SC is a discourse that try to find a solution to the ecological problems associated with industrial economic production (Dolan, 2002).

SC, is a consumption pattern about meeting our needs without destroying the environment or overexploiting natural resources, thereby not jeopardising the potential of future generation to meet their needs (Mortensen, 2006).

At the household level is considered, SC means buying less and changing lifestyle in the short run. (Kong et al., 2002). But, someone may not willing to change their buying behavior and lifestyle.

SC, at least, means that reduce natural resources using in terms of industrialised countries (Cooper, 2002). Less natural resources using have been helped turn to cyclic economic system from linear system.

SC is a consumption style that based on limiting using of world's resources and that look for the best ways which not damaged or fewest damaged natural living. In this sense, SCB is approach based on finding radical solutions. For example, SCB is to be found a solution which not using water and detergent instead of using detergent which damaged less natural environment.

It is required to advert which ways SCB must goes as it accomplishs. There are two fundemantal solution for exhibiting SCB (Mont and Pleyps, 2008; Schaefer and Crane, 2005):

- Transforming behavior to more sustianable consumption behavior,

- Reducing material consumption.

The first solution is exhibiting consumption behavior more environmetally sensibly and the second solution is reducing total consumption level.

## Method

The main aim of the study is to reveal the frequency of sustainable consumption behaviors of individuals. To these ends, it was determined class teachers who had been working in Kutahya city as both a population and sample of the study. Then, a questionnaire form was formed including sustainable consumption scale which was composed by searching various studies (Kaiser et al., 2003; Barr and Gilg, 2003; Thogersen, 2002; Karalar et al., 2008). There are 36 items in sustainable consumption scale. Frequency of behaviors in that scale were measured by using a five-point Likert type scale ranging from 1 (never) to 5 (always). The study was conducted on 614 class teachers but only 343 usable questionnaires were returned.

Descriptive research model was used in the study. It was exposed that demographic characteristics and frequency of sustainable consumption behaviors of participants of study by utilised descriptive statistical analysis.

Cronbach's alpha coefficient was used to determine the internal consistency reliability of the sustainable consumption scale was used in this study. Considering the result ( $\alpha$ =0,86) of the reliability analysis, it can be seen that reliability of the scale is in high level. In other words, this scale is can be easily used in order to utilize statistical analysis.

#### Results

Respondents in the study were asked several demographic questions, including gender, school type, place where he/she grown up, age, marital status, educational level of him/his, his/her father and mother' and income level.

Demographic characteristics of sample are shown in table 1. It was found that nearly half of participants were female teachers and other half of participants were male teachers. On the other hand, results indicated that large majority of participants (% 93,9) were not member of any environment institute. % 6,1 of participants were member a unique environmental institution (TEMA).

Most of teachers are in 26-45 age group, whereas % 20 are over 46 and % 5,5 under 25. Nearly half of those who responded (% 47,2) are in 1251-1500 TL income group, whereas only % 3,8 of respondent in 2001 TL and upper income.

Only % 6,1 of respondent are member of any environmental institution and they are member of unique institution called "TEMA". This finding explains that TEMA is widespread among class teachers.

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Gender	F	%	School Type	F	%	Place	F	%
Bay	169	49,3	Government	331	96,5	Urban	288	84,0
Bayan	174	50,7	Private	12	3,5	Rural	55	16,0
Total	343	100	Total	343	100	Total	343	100
Marital Status	F	%	Educational Level	F	%	Age	F	%
Single	45	13,1	College	15	4,4	0-25	19	5,5
Married	293	85,4	Bachelor's level	313	91,3	26-35	123	35,9
Other	5	1,5	Postgraduate	15	4,4	36-45	129	37,6
Total	343	100	Total	343	100	46-55	68	19,8
						56+	4	1,2
						Total	343	100
		_	_					-
Educational			Educational			Income		
Level of Father	F	%	Level of Mother	F	%	Level (TL)	F	%
Primary school	224	65,3	Primary school	259	75,5	0-1000	11	3,2
High school	63	18,4	High school	20	5,8	1001-1250	28	8,2
University	24	7,0	University	7	2,0	1251-1500	162	47,2
Postgraduate	2	0,6	Postgraduate	0	0,0	1501-1750	110	32,1
Other	30	8,7	Other	57	16,6	1751-2000	19	5,5
Total	343	100	Total	343	100	2001 ve Üzeri	13	3,8
	•	•	•			Total	343	100
Working Year	F	%	Membership	F	%			
0-10	124	36,2	Yes	21	6,1			
11-20	132	38,5	No	322	93,9			
21-30	69	20,1	Total	343	100			
31-40	18	5,2						
Total	343	100						

**Table 1:** Sample Characteristics

As mentioned before, 36 sustainable consumption behaviors measured according to frequency items (neveralways) and findings was presented in table 2. These behaviors are presented in table 2, along with the mean scores. The findings in this table indicate that means of behaviors vary from 1,27 to 4,40. "Buying energy saving white goods" has the highest mean. Besides, "buying high efficiency bulbs", "donating old household items to charity or friends" and "keep off tap when cleaning teeth or soaping up" behaviors have high mean score. As for the behavior which has the least mean score, it can be seen that the behavior which stated as "when I need a car, I rent one" exhibited less than others.

No	Behavior	Mean	S.D.
1	I buy energy saving white goods (B, A, A+ energy label).	4,40	0,95
2	I buy high efficiency light bulbs to save energy.	4,37	1,15
3	I donate old household items to charity or friends, instead of putting	4,32	1,01
	them warehouse or garbage can them.		
4	I keep off tap when cleaning teeth or soaping up.	4,30	1,08
5	At home, I keep computer on even if I do not it. (-)	4,28	1,15
6	I reuse scrap paper (e.g. for writing notes)	4,23	0,98
7	I wait until I have a full load before putting on the washing machine	4,20	1,17
8	I control all taps, if there were any problem I would repair or have	4,17	1,17
	someone to repair them.		
9	When electrical appliance like iron, vacuum cleaner, blowdryer,	4,14	1,20
	toaster breakdown, I prefer to have someone repair them rather than		1
	buy a new ones.		
10	I keep TV on if I'm at home even I don't watch it (-)	4,04	1,24
11	Some of my doors, walls, loft and windows are insulated	3,97	1,22
12	I buy organic products	3,94	1,19
13	I buy local produce whenever possible	3,83	1,22
14	In winter, I turn down the heat when I leave my apartment for more	3,81	1,42
	than 4hours.		
15	I drive on freeways at speeds under 100 kph.	3,66	1,31
16	I buy recycled writing paper or toilet paper.	3,62	1,41
17	I leave electronic apparatus in the position "stand-by" (-)	3,45	1,48
18	I use rechargable batteries instead of disposable batteries.	3,42	1,42
19	I do not demand receipt when I transact by ATM.	3,42	1,43
20	I put dead batteries, used paper and bottles in recyling bin.	3,33	1,31
21	I want they to send to me the receipts of credit card, telephone,	3,32	1,53
	internet vb. only by e-mail.	2.21	
22	Dirty dishes is cleaned in dishwasher	3,31	1,51
23	In the winter, I leave the windows open for long periods of time to let	3,20	1,11
	in fresh air. (-)	2.10	1.44
24	I avoid products in aerosol containers.	3,10	1,44
25	I go to work by public transportation	3,08	1,66
26	I reduce the heating in rooms that aren't being used	3,02	1,56
27	I drive my car in or into the city (-)	2,90	1,50
28	At home, vegetables and fruits is cleaned in a pots and pans.	2,81	1,34
29	For long journey, I drive the car instead of bus or train.	2,80	1,57
30	In winter I keep the heat on so that I do not have to wear a sweater	2,69	1,27
31	I bike or walk to work	2,54	1,63
32	i snare some household appliances (with effects of ecological	2,31	1,31
22	concern)	1.02	1 10
55	the shop	1,85	1,19
24	Luce color people to produce energy	1 65	1 21
25	L buy second hand (used) products	1,00	1,31
26	When I need a car I rent one	1,05	0,95
30	when I need a car, I fent one	1,27	0,71

Table 2: Means of Sustainable Consumption Behaviors

Considering the whole sustainable consumption behaviors, means of those were mid-level with 3,34 mean score. On the other hand, means of some behaviors by the respondents was very high. Table 3 shows that the behaviors which were exhibit frequently with over 4 mean score.

No	Behavior	Mean	S.D.
1	I buy energy saving white goods (B, A, A+ energy label).	4,40	0,95
2	I buy high efficiency light bulbs to save energy.	4,37	1,15
3	I donate old household items to charity or friends, instead of putting	4,32	1,01
	them warehouse or garbage can them.		
4	I keep off tap when cleaning teeth or soaping up.	4,30	1,08
5	At home, I keep computer on even if I do not it. (-)	4,28	1,15
6	I reuse scrap paper (e.g. for writing notes)	4,23	0,98
7	I wait until I have a full load before putting on the washing machine	4,20	1,17
8	I control all taps, if there were any problem I would repair or have	4,17	1,17
	someone to repair them.		
9	When electrical appliance like iron, vacuum cleaner, blowdryer,	4,14	1,20
	toaster breakdown, I prefer to have someone repair them rather than		
	buy a new ones.		
10	I keep TV on if I'm at home even I don't watch it (-)	4,04	1,24

 Table 3:
 Behaviors
 Which Have High Means

Finally, it require that mention the behavior which exhibit fewer than others. Aforesaid behaviors are:

- Car renting instead of buying it
- Product sharing instead of buying it
- Second-hand product buying instead of buying a new one
- Using his/her bag instead of bag provided by the shop
- Sharing household appliances instead of buying them
- Biking or walking instead of driving a car

## Conclusion

As mentioned before, it is possible to pose the sustainable consumption behavior by transforming the behavior of the individual much more sustainable and using fewer amounts of resources. Thus, the problem of excessive consumption has been emerged. Many studies prove that the level of consumption has been rapidly increased within last 50 years. However, it has been predicted that people will consume twofold of the amount which they can produce until 2050. All of these data shows the importance of sustainable consumption behavior for future of the world. If we want our child to live in a livable world, we realize the real which sustainable consumption behavior is necessary not a choice.

This paper gaves place to various definition about sustainable consumption behavior and then presented the findings of a research. In the study, only a part of the research findings was mentioned and frequency of sustainable consumption behavior of class teacher was presented in brief. According the results, it can be stated that very few of class teachers in Kutahya city is member of an environmental institution. At the end of this study, it was found that there were differences between frequency of sustainable consumption behaviors. Behaviors which stated as "when I need a car, I rent one", "I buy second-hand (used) products", "I use solar panels to produce energy", "I use my own bag when going shopping, rather than one provided by the shop", "I share some household appliances (with effects of ecological concern)" and "I bike or walk to work" exhibited less than others whereas behaviors which stated as "I buy energy saving white goods (B, A, A+ energy label)", "I buy high efficiency light bulbs to save energy", "I donate old household items to charity or friends, instead of putting them warehouse or garbage can them", "I keep off tap when cleaning teeth or soaping up", "At home, I keep computer off if I do not it", "I reuse scrap paper (e.g. for writing notes)" and "I wait until I have a full load before putting on the washing machine" were exhibit more frequently. The results of this research exposed that it required to be strive to increase the frequency of some of sustainable consumption behaviors like "product sharing", "biking", "walking" and "second-hand buying".

After has mentioned the findings of research about the first way which transforming behavior to more sustianable consumption behavior, it is useful to touching on the second way which reducing material consumption of people. The global financial crisis which has been suffered within the last period of time has influenced directly consumption behaviors of Turkish people like the others. The rapid decrease has been observed in consuming the group of product and it has been determined that people lessen their expenditure. By regarding the sustainable consumption behavior, it can be welcomed but actually this shift towards the sustainable consumption behavior may be compulsory. Because the idea of the sustainable consumption behavior desires that the individuals should

decrease their levels of consumption by focusing the ecological concern and changing voluntarily their behaviors towards the sustainable consumption behavior.

In this study, frequency of sustainable consumption behavior was examined. The best impartant limitation is that this research was carried out on class teacher instead of determining a sample including huge and different segments of society.

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