

PAPER DETAILS

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THE HABITS OF THE CLEANING PRODUCTS USAGE IN TURKISH SOCIETY*

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Ekonometri Bölümü

THE SUMMARY

The research that explores the habits of the cleaning products usage in Turkish society has been realised in order to designate the cleaning habits and the factors that affect these habits in the society. We aim to shed light on the studies that train the society and make them to become conscious with the information that we get.

The research has been taken place in Ankara, İzmir and İstanbul and 966 people have been interviewed. In addition to that, 387 more people have been also exposed to additional questions. The findings have been evaluated and purchasing habits and user habits of these cleaning products in our society have been designated.

As in all matters, the result is that our people lack education and conscious in this matter too.

Besides, the increase in the income leads the society to consume foreign trademarks and expensive goods.

We see that especially in using tissue cleaning products, toothpastes, soap and other hygienic goods we have too many deficiencies.

The consumers stated that the habits and publicity of trademarks are coming first than the prices.

All these findings prove that the society should be trained well regarding the usage of these cleaning products.

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ÖZET

Türk toplumunda temizlik maddeleri kullanım alışkanlıkları araştırması, toplumdaki temizlik alışkanlıklarının ve bu alışkanlıkları etkileyen faktörlerin belirlenmesi için yapılmıştır. Elde edilen bilgilerle, toplumun eğitilmesi ve bilinçlendirilmesi yönündeki çalışmalara ışık tutmayı amaçladık.

Araştırma Ankara, İzmir ve İstanbul'da 966 denek ile anket yapılarak gerçekleştirildi. Ek olarak 387 deneye ek soru bülteni uygulandı. Elde edilen bulgular değerlendirilerek toplumumuzda temizlik maddeleri kullanım, satın alma alışkanlıkları belirlendi.

Birçok konuda olduğu gibi bu konuda da toplumumuzda bir eğitim ve bilinç eksikliği olduğu sonucuna varıldı.

Ayrıca, gelir artışının toplumu yabancı marka ve pahalı ürün kullanımına yönelttiğini anladık.

Özellikle kağıt temizlik ürünleri, diş macunu, sabun ve hijyen sağlayıcı ürünlerin kullanımı konusunda bazı eksikliklerimizin olduğunu gördük.

Tüketiciler, temizlik malzemesi satın almada alışkanlıklar ve markanın tanınmış olması fiyattan daha önemlidir demişlerdir.

Bütün bu bulgular temizlik maddeleri kullanımı konusunda toplumun eğitilmesi gerektiğini söylemektedir.

INTRODUCTION

This study is a general summary of another research, which has been realised in between March – September 2000, with The Rectorship of İstanbul University Research Fund support, in Ankara, İstanbul, İzmir. The title was the same with this one. Herewith, the comments of some important findings and results are presented. The aim is to transfer the project findings and evaluations in a simple and comprehensible way. Therefore, long and detailed explanations and method discussions are avoided.

1. The Subject of the Research and the Method Definition

One of the criteria, which measure the level of progressiveness of a country is the consumption of the cleaning products per capita. As far as Turkey population is considered, this is rather a large market. Therefore, the producer firms realise various market researches. But the aims of these researches do not contain social quality, but a commercial one. However, designating of the

cleaning products usage habits according to the social aims, would gradually provide help to form healthy society activities.

The expected advantages of the project can be summarised as follows:

1. Designating of the consumption habits.
2. Educating of the people according to their deficiencies.
3. Achieving data that establish the basis of the studies containing the society's becoming conscious about the usage of cleaning products.
4. Setting up planning studies that leads the realisation of the social aims.
5. Showing the way to advance the cleaning, health and environment studies.

The research has been realised with a thousand subjects (*random samples*) totally from İstanbul, İzmir and Ankara, who were representing the citizen section of Turkish society. These subjects have been chosen by Simple Incidental Sampling method and they were practised face to face public surveys. By means of the findings that have been obtained, the habits of cleaning products usage were tried to be designated.

In the research, 590 people from İstanbul, 180 from İzmir; 230 from Ankara have been planned to be interviewed. Also the weight of the population rates have been taken into consideration. 1000 public surveys which were realised, have been put to be printed and coded operations simultaneously. Therefore, the districts, where the interviews have been realised and the appropriateness of the socio-economic groups living there have also been checked out, while the public survey was going on. Besides, as far as 10 % was checked out, the errors were left under the limit of 5%. After this check out had been finished, 966 public survey were included for the evaluation.

The research included 1000 subjects (samples) from the districts, which were chosen randomly and in order to get some additional information, to test the rightness and appropriateness of the answers, 400 subjects were chosen randomly among these 1000 subjects to be asked some ADDITIONAL QUESTIONES. This formed the second phase of the public survey. At that point, totally 387 additional questions; 186 from İstanbul, 100 from Ankara, 101 from İzmir, were included in the evaluation.

The research was put into practice according to the Socio-economic Statutes of the groups, which were chosen from several regions that were designated at random. As far as the application difficulties for the different peculiarities like education, age, income and also other objections were considered, no quota was applied.

In the research, the positions, which were stated by the subjects, were fundamentally taken into consideration. The previous studies revealed that the subjects had stated their choice, which they would like to come true. They had not stated the real one. The social judgement and anxieties caused the subjects to state the unreal or something close to the real. Therefore, we seek for support from these additional information forms, controls and other scientific findings. In the research, there were also findings, which had been got from additional information form.

Please find below TABLE 1 that shows the dispersion of the samples by the cities according to districts.

Table 1

Sampling plan in respect of the cities

CITIES	Planned Public Survey	Planned Additional Public Survey	Realised Public Survey	Realised Additional Public Survey
İstanbul	590	200	560	186
İzmir	180	100	178	101
Ankara	230	100	228	100
TOTAL	1000	400	966	387

2. General Findings Obtained in the Research

If the questions, which are used in inquiry forms, are well-known, this would make the evaluation to be more useful.

There were 17 cleaning products, which had been designated. The subjects were asked for which one would they use, in what frequency and how would they use them? They were asked to choose one of these alternatives; Use regularly, use occasionally, use rarely (very rarely), not using. Besides, in order to determine the best user manners and habits, they were asked if they had read the user instructions or not, and in what frequency, if they had put these into practice or not, in what frequency do they put them into practice? People, who had stated that they did not read the user instructions, were asked the reason for that. Also they were asked to enumerate the factors, which are effective in purchasing the goods (publicity of the trademark, advertisement, promotional products, prices,

habits, recommendation of the acquaintances) from the most important (1) one to the unimportant. At the last part, in order to draw the user profile and do the controls, the subjects were asked about their age, marital status, education background and profession of themselves and their husbands/wives, if any, how many people do they live at home including themselves. What are their income levels? Furthermore, the trademarks and consumption amounts per month were asked in the additional information form. However, the trademarks were not mentioned in the evaluation part.

Below, in Table 2, the subjects' way of using the 17 sort of cleaning products or in what frequency do they use them, **separately are shown in line basis** with percentage values. But in order to be more frank, the choices of "rarely using" and "very rarely using" are put together because the findings from the research, showed that they could be easily merged.

Table 2
The usage frequency in the cleaning products (%)

Products	Regularly use (%)	Rarely (%)	Don't use (%)
Washing machine			
Detergent	99,2	-	0,8
Softner	66,1	21,4	12,5
Limeremover	45,5	20,1	34,4
Bleech	33,2	21,9	44,9
Dishwasher machine			
Detergent	61,1	-	38,9
Salt	50,3	7	42,7
Shiner	53,7	3,7	42,6
Surface Clener			
Floor Clener	88	8,4	3,6
Bathroom Clener	92,5	6,2	1,2
Bleech	85,7	9,4	4,9
Tissue Cleaning Goods			
Toilet Paper	92,2	4	3,8
Paper Towel	55	18,4	26,6
Tissue Paper	90	7,9	2,1
Personal Cleaning			
Shampoo	94,3	3,4	2,3
Toothpaste	98	1,5	0,5
Beauty Soap	98,9	0,7	0,4
Soap	99,5	0,5	-

As it is seen in the table that, the subjects stated that they were using most of the cleaning products regularly because of the effect of some individual, social and psychological factors. In some side products, which are not seen to be necessary much, the usage frequency decreases and "I do not use" answer can be seen in high ratios. In fact, when the people, who declares that they use these products regularly, the answer become more clear when they are asked how many amounts do they use them. The average consumption amounts are divided by the number of the individuals who are living at the same home and monthly average consumption amounts per capita have been found by the data, which has been obtained by additional public survey bulletin. Below, there are tables that contain monthly average consumption amounts per capita of some necessary products. As it is seen in the tables, products being sold and found at home do not indicate the sufficiency of the usage amount and it is still not indicating that people are consciously using them. These findings openly reveal that the citizens of Turkey should be educated and become more conscious regarding this subject.

Tablo 3

The percentages of detergent usage amounts per capita in monthly basis average

Per capita monthly usage (Kilogramme)	%
Less than 0,350	18,9
Between 0,350-0,700	37,2
" 0,700-1,050	27,9
More than 1,050	14,5
Unanswered or don't use	1,5
TOTAL	100,0

Tablo 4

The percentages of toilet paper usage amounts per capita in monthly basis average

Per capita monthly usage (Roll-unit)	%
Less than 1,5	31,3
Between 1,51-2,5	32,8
2,51-3,5	12,4
3,51-4,5	7,5
More than 4,51	10,9
Unanswered or don't use	1,5
TOTAL	100,0

Tablo 5

The percentages of paper towel usage amounts per capita in monthly basis average

Per capita monthly usage (Roll-unit)	%
Less than 0,5	24,5
Between 0,51-1	22,7
More than 1,01	9,6
Unanswered or don't use	43,2
TOTAL	100,0

Tablo 6

The percentages of shampoo usage amounts per capita in monthly basis average

Per capita monthly usage (Litre)	%
Less than 0,125	27,7
Between 0,125-0,250	42,1
" 0,251-0,375	9,3
More than 0,376	15,5
Unanswered or don't use	5,4
TOTAL	100,0

Tablo 7

The percentages of soap usage amounts per capita in monthly basis average

Per capita monthly usage (Unit)	%
Less than 1,5	26,9
Between 1,5-2,5	39,0
" 2,5-3,5	17,0
More than 3,5	14,0
Unanswered or don't use	3,1
TOTAL	100,0

Tablo 8

The percentages of toothpaste usage amounts per capita in monthly basis average

Fert başına tüketim (120 gramme tube)	%
Less than 0,25 tube	39,6
Between 0,26-0,50 tube	47,0
More than 0,51 tube	11,1
Unanswered or don't use	2,3
TOTAL	100,0

As far as the amounts of usage amounts per capita are considered as upwards, the necessary cleaning products like toilet paper, toothpaste and soap differ a lot. Especially, the tissue cleaning papers, which are very important for health are insufficiently being used. The 92.2% of the subjects declare that they use toilet papers, 18.5% of them declare that they consume a roll per week. The paper quality are mostly inadequate therefore, the usage amount gets increased. Another important product is the toothpaste. Toothpaste consumption per capita is 1/3 tube on average monthly basis. In other words, 98% of the subjects state that they regularly brush their teeth and 11% of them consume half of the toothpaste tube or more. As far as the usage amounts are examined, people brush their teeth once a day or less on average. In city centres, the habit of brushing the teeth regularly is around 11%. If we look at generally all through Turkey that amount falls down. The most optimistic estimation is only one citizen among ten, is regularly (twice or more per day) brushing his/her teeth.

In order to see how the consumer behaves carefully and consciously regarding the usage of cleaning products, they have been asked if they had read the user instructions on the product packs. 66% of the subjects declare that they read the instructions definitely, approximately 20% of them declare that they do not read and 14% of them declare that they read them rarely. The subjects have been asked why they were not reading the user instructions.

Among the reasons of not reading user instructions, "habits" come first with 89.3% share. 3.2% share belongs to the people, who declare that the instructions are incomprehensible. When they have been asked if they put the user instructions into practise adequately or not. Previously, 187 people have stated that they do not read the instructions. Totally 123 people do not read the instructions and do not put them into practise either. In other words, 64 people who have stated that they do not read the user instructions, **evaluate other information, which they learn from other places, as user instructions.** Referring the subjects' answers, approximately 50% state that they always read user instructions, 21% of them state that they generally put them into practise. Among the total amount of the subjects, 45% of the subjects put these instructions always into practise, %19 of them put them into practise generally, 23.2% of them put the instructions into practise sometimes and lastly 12.7% of the subjects never put them into practise or never read them at all. Just the same, if we would like to do a general evaluation, 66% share belongs to the subjects who read the user instructions definitely and 45% share belongs to the subjects who put them into practise. In other words, among the subjects who state that they read the user instructions, 32% of them do not always prefer to put these instructions into practise. The answers;

Table 9
User Instruction Practise

Practise frequency	General %	Readers %
Every time	45,0	49,8
Usually	19,1	21,1
Sometimes	23,2	25,7
Never	3,1	3,4
Don't read user instruction	9,6	-
TOTAL	100,0	100,0

The enumerating of the factors, which are effective in product purchasing are designated. The results are shown below in Table 10.

The weighted figures are calculated and put into parenthesis near every choice as far as the scale has been taken into consideration. Besides, when the results are evaluated as the subjects stated the level of significance in North West Diagonal method, the habits come first, product prices come second, a well-known trademark come third, an acquaintance recommendation come fourth, the promotional gifts come fifth and the advertisement come sixth.

Table 10
Significant factors enumeration in product purchase

Factors	Significance					
	1	2	3	4	5	6
Publicity for Trademark (4007)	254 % 27.2	236 % 25.3	184* % 19.7	113 % 12.1	81 % 8.7	66 % 7.1
Advertisement (2137)	22 % 2.4	48 % 5.3	85 % 9.4	202 % 22.3	271 % 29.9	277* % 27.1
Promotional gifts (2181)	20 % 2.2	48 % 5.3	110 % 12.1	164 % 18	321* % 35.3	247 % 27.1
Product prices (4423)	305 % 32.1	292* % 30.8	179 % 18.9	102 % 10.7	40 % 4.2	31 % 3.3
Habits (4404)	328* % 34.9	255 % 27.2	205 % 21.8	68 % 7.2	54 % 5.8	29 % 3.1
Acquaintance recommendation (2600)	44 % 4.9	78 % 8.4	176 % 19.5	256* % 28.4	124 % 13.7	226 % 25.1
WEIGHTS	6	5	4	3	2	1

As far as the weighted total points are taken into consideration, which has been calculated by the balances given according to the significance; the product prices and habits share the first two turns with an unimportant difference. The trademark's being well known, the acquaintance recommendations, promotional gifts and advertisement factors follow these factors. Shortly, although the evaluation criterion changes, it can be said that the enumeration do not change. People who are buying cleaning products, prefer "the most appropriate price and well-known trademark among the acquaintance recommendations"

3. Other Findings that are Obtained in the Research

The crosswise evaluation of the questions in the inquiry has been realised in the quota tables that are provided by SPSS 7.0 programme and Pearson Chi-square value has been used. In the tests, 95% Confidence Degree, in other words, 5% Significant Level have been used. Below, some of the important findings that have been obtained:

Does the educational background effect the usage of cleaning products or not? As the public survey asks how it comes to exist the result is the education itself.

After a test has been realised referring to 95% Confidence Degree, a relation was found between the education levels and dish wash machine detergent usage. 41.4% of the people, whose education are primary school level or below the primary school level, use regularly the wash machine detergent. 55.2% of the people, who are secondary school graduates, 73.5% of them, who are high school graduates and 84.8 % of them, who are university graduates state that they are using dish wash machine detergent regularly. In short the dish wash machine detergent usage increase according to the education level.

Also the usage of the toilet paper was related to 95% Confidence Degree and the education level. The more education level increases, the more toilet paper usage increases regularly. 84% of the people whose education are primary school level or below the primary school level, 93% of the people, who are secondary school graduates, 97% of them, who are high school graduates and all of the university graduates state that they are using toilet papers regularly. In short, the toilet paper usage increases according to the education level too. But the amount and quality of the paper differ. Another important point is that *regularly usage does not mean adequate usage*.

After the chi-square test, it has been accepted that regarding the usage of the paper towels, the education levels are related to 95% Confidence Degree. 44% of

the people whose education are primary school level or below the primary school level, 53.8% of the people, who are secondary school graduates, 60.4% of them, who are high school graduates and 69% of the university graduates state that they are using paper towels regularly. In short, the usage of paper towel increases depends on the education level.

Briefly, the use of paper towels increases depending on the education level. However, the amount that is used and the quality of the tissue variety. Another important point is that *regular usage* does not mean *sufficient usage*. Still, with the view to provide some information, the estimated percentage of regular usage of paper towels by the mentioned town-dwelling age group, based on the percentages of paper towels usage according to education levels obtained from the examples, is 48,9%. In our opinion, these estimations should be regarded as the upper limits of actual usage percentages; because our researches reveal that the information given is influenced by some social and individual judgements. Indeed, monthly consumption amount per person, according to the findings of the enclosed questionnaire, confirms this opinion.

It has been accepted, at tests conducted with a confidence degree of 95%, that education level and reading the user instructions are proportional to one another. The higher the education level is, the higher the percentage of reading the user instruction is. 56% of those with an education level of primary school or less, 69% of those who graduated from secondary school, 70% of those who graduated from high school, 77% of those who graduated from university state that they definitely read the user instructions. Still, it can be said that every two users out of 5 users in towns do not read the instructions regularly.

Besides, it has been accepted, with a confidence degree of 95% that following the user instructions and education level are also proportional. When the education level is higher, the percentage that consumers follow the instructions gets also higher. 38,8% of those who have an education level of primary school or less, 49% of those who graduated from secondary school, 55,4% of those who graduated from high school and 62,6% of those who graduated from university state that they always follow the user instructions. Whereas the percentage of those who rarely follow the instructions that they read is 35% among those who have an education level of primary school or less, it decreases to 13,6% among university graduates. In other words, when the education level is higher, the frequencies of both reading and following the usage instructions increase.

It has been accepted, at tests conducted with a confidence degree of 95%, that there is a correlation between education level and the importance that people attach to price as a product purchase criterion. 42% of those with an

education level of primary school or less consider price as the *priority*, 31% of secondary school graduates and 33,8% of high school graduates have listed it in the second place. 32,7% of university graduates have listed price in the second place, 23% in the third place. The proportion of those who consider price as the priority, other than the first group whose education level is primary or less, is low.

That there has not been found any significant relation between the use of dishwasher products and education level or income reveals another important finding. Besides the fact that cleaning materials have very wide price and quality ranges, the fact that usage amounts significantly vary among people is another difficulty faced during the study. It is an important point that the usage of both dishwasher and washing machine detergents is always regular.

It is understood that there is a significant relation between income and reading the instructions of usage, with a confidence degree of 95%. The proportion of reading the instructions of usage on the packaging increases depending on the income. For example, whereas 25% of those who earn less than two hundred million TL per month *do not read the instructions at all*, only 10,5% of those who earn more than eight hundred million TL per month do not read these instructions. *Disharmony of income and socio-economical status; the habit of meeting daily requirements out of home easily but at a higher expense is found in groups with high income.*

The fact that consumers are highly educated and employed results in the tendency to finish the housework in short time.

Whereas *habits* are the most important factor in buying a product in *Ankara* with a percentage of 53,5%, it is *well-known brand* in *Istanbul* with a percentage of 33,8%, and *price* in *Izmir* with a percentage of 37,6%. *Recommendation of acquaintances* is of medium importance (3 or 4) in three cities. *Effect of advertisement* is the last in terms of importance in *Istanbul*; number 5 in *Ankara* and number 4 in *Izmir*.

It has been accepted, with a reliability level of 95%, that there is a correlation between education and *monthly toilet paper usage per person*. Monthly average toilet paper usage increases depending on the education of people.

Toilet paper brands can be distinguished into two groups, taking into account their prices, as “low quality – economical” and “good quality”. In this case, it is seen that toilet paper consumption per person is related also with quality. It is seen that good paper is mostly preferred by those, who consume more than 2,5 rolls. In other words, those who consume less do not use expensive papers of good quality. Even if we consider the normal consumption as 2,5 rolls, the percentage of sufficient consumption of paper with good quality is around 7,8%.

It is understood that there is a correlation, with a reliability level of 95%, between education and *monthly average paper towels consumption per person*. As the education level gets higher, monthly average paper towels consumption per person increases.

Briefly, it is found that increase in income leads variance in brand, quality and product, rather than leading an increase in the amount.

The tests conducted did not reveal a correlation between monthly average toothpaste consumption per person and education, income or socio-economical status. Therefore *insufficient consumption is an indication of, before all else, the lack of social consciousness*.

Finally, socio-economical status and monthly average consumption amounts per person have been tested **chi-square** using cross tables. Correlation that has been found with the reliability level of 95% is as follows:

Monthly average toilet paper consumption is related with socio-economical status. In groups with high socio-economical status, monthly average toilet paper consumption per capita is more than other groups. In other words, increase in income leads both to the consumption of products of better quality and to consuming more products. Likewise, it has been accepted that there is a correlation between paper towel consumption per capita and socio-economical status. In higher socio-economical statuses, consumption of paper towels increases.

4. Conclusion and Evaluation

As we expressed at the beginning, the level of progress of a country is closely related with the cleanliness habits of its people. The essential conditions to form a healthy society are cleanliness and knowledge.

In the research we performed, subjects, as expected, claimed that they regularly use the cleaning materials for which they felt social pressure. However, their answers to some other questions showed that many products that subjects stated to use regularly are in fact used only insufficiently and erroneously. For example, although nearly 90% of the subjects expressed that they use toothpaste regularly, it is only a portion of 11% who consume 60 grams or more toothpaste in a month. We experienced a similar case in regard to the usage of toilet paper. Although almost all subjects stated that they use toilet paper regularly, it is found that the proportion of those who use minimum sufficient amount (2,5 rolls in a month) is only 33%; and the proportion of those who use sufficient amount of paper and of good quality is 8%.

In general, habit of using cleaning products is closely related firstly with education. Although income seems to have a positive effect, education is a much more important and evident factor. Socio-economical structures of cities are different from each other. This fact affects the decision to use and purchase cleaning products. Our people make the decision of purchase either under the effect of their habits, or by considering the brand, or upon recommendation of others, or considering the price of the product. Especially those are employed and well educated seem to be more faithful to their habits. But educated people are not so fast in the decision to use supplementary products; for these people, the necessity and the benefit of the product affects the decision to use that product. It is understood that especially consumers in Ankara are more conscious in this respect.

In general, the society needs to be educated in respect of cleanliness habits. Especially in regard to tooth health, people are not aware of the mistake they make. It is necessary to take urgent measures regarding this and many other similar matters; for which the main duty should be undertaken by country's esteemed universities.

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