

Full Length Research Paper

The perceptual evaluation of wall paintings in living quarters

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This study was carried out in three different cities (Erzurum, Artvin and Tokat). The aim of the study was to determine people's preferences about wall paintings or pictures they have in their living quarters and the related wall painting-natural environment by putting forward the perceptions people get from the places in the pictures about their daily life. A total of 300 subjects, 100 in each city, were interviewed personally. It was found that the subjects mostly preferred the pictures characterizing a combination of seasons (37.0%), and they rarely preferred pictures characterizing winter season (1.0%). Pictures including seaside and sea landscape characteristics were the first on the preference list (M: 0.32). This was followed by pictures including forest, water and rural house landscape characteristics (M: 0.29). The majority of the interview participators (46.7%) stated that they would like to live in such places as illustrated in wall paintings and 22.0% of them reported they would not. It was determined that the paintings aroused a feeling of esthetical pleasure in people in their daily life (M: 0.47). It was concluded as a result of the study that wall paintings were significant, in that, they are one of the ways through which people living in urban settings could satisfy their longing for living in natural places.

Key words: Wall paintings, perception, longing for natural places.

INTRODUCTION

When a person buys a painting, he or she makes decisions that are rather based, to a great extent, on experiences and repertoires than feelings brought about by what he or she has seen. Perhaps, what the buyer saw in the painting is the reflection of an image coming from the past well beyond what the artist had tried to illustrate. With the cognitive processes they develop along their life, people give different responses to what they have seen and perceived.

Landscape paintings and photographs require the viewers' comments. They include some specific points emphasized by the artist. People do not only look at things, they also use their experiences to interpret what they see. Experience is the sum of the things, which people observe, learn and are exposed to, that is, it is the

total knowledge obtained from what people have seen, heard, felt, smelt and tasted (Scott and Canter, 1997).

Efforts are spent to improve the quality of life by considering the visual aspects as the environment gets richer. These improved environments can provide mediums for restoring and giving inspirations as much as they offer a positive esthetical experience, and therefore, they can contribute positively to mental and physical health as well. Visual component is usually dominant in esthetical experiences involving touching, smelling and hearing (Ode and Fry, 2002).

In the present day, the public improvements carried out in cities without considering the mass-space relations deprive the city dwellers with green lands and oblige them to live among dense and high building masses. When the air and noise pollution is added to the situation, city dwellers are disconcerted in the place they are living in and they start to have a tendency to move away from such environments physically and psychologically.

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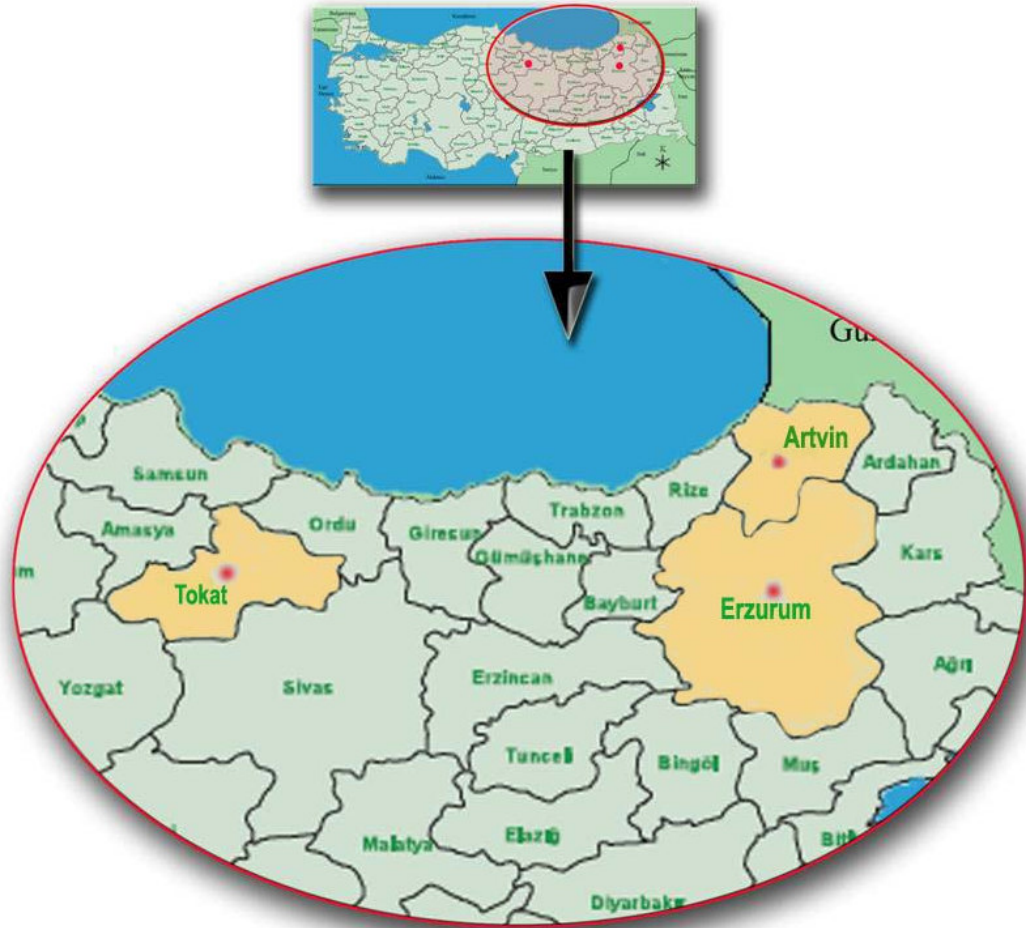


Figure 1. The locations of the study areas.

Especially in the recent years, despite the technological and economic developments, humankind has been unable to stop the gradual extinction of natural and cultural environment. Improvement, industrialization and urbanization process create unhealthy living environments contradicting the human nature by bringing about uncontrollable demographic movements (Yilmaz et al., 1996). The landscape pictures and paintings used in living quarters have paved a way for city dwellers to satisfy their longing for nature.

The hypotheses considering the emotional, perceptual and psychological sides of nature's stress reducing effects were derived from psycho-evaluation theory of Ulrich et al. (1991).

Several studies agree that though urban environments hinder improvement, visiting safe natural environments has stress reducing or restoring effects when people are stressed (Hartig et al. 1991, Ulrich et al., 1991, Kaplan, 2001).

Likewise, Ulrich et al. (1991) concluded as a result of psychological and verbal evaluations that those who moved to natural environments improved and got better

faster than those who stayed in urban settings.

This study aimed at determining landscape preferences of urban people by evaluating the way these people perceive and give responses to wall paintings and pictures they have in their living quarters. The study was especially carried out to reveal how increasing environmental problems influenced the urban people's longing for nature.

MATERIALS AND METHODS

Materials

The study was carried out in three different cities: Erzurum (East Anatolian Region), Artvin (East Black Sea Region) and Tokat (Middle Black Sea Region). Erzurum is the biggest city of East Anatolian Region and it has the severest climatic conditions. Artvin is a small border city by the sea. Tokat is a typical inner city, it has a transition climate between terrestrial and marine influences (Figure 1).

Erzurum has an area of 25.066 km² and it is the highest situated city in Turkey with 1859 m elevation (Anonymous, 2001). It is at 39° to 55° N and 41° to 16° E geographical coordinates. The population

of the central county is 338.073 (Anonymous, 2008a). The city has a terrestrial climate. The average temperature is annually 5.4°C, and the average precipitation is annually 411.1 mm. The average number of days with snow cover is 112.3 (Anonymous, 2008c).

Artvin is at 40° 35' to 41° 07'N and 41° 07' to 42° 00'E geographical coordinates. It is in the far east of East Black Sea Region and also in the neighborhood of Georgia. The elevation is 520 m (Anonymous, 2008b). The population of the central county is 24.502 (Anonymous, 2008a). Artvin is a province of Black Sea Region with the most unsteady climate. It has a temperate climate. The average temperature is 2.3 C, and the average precipitation is 689.4 mm annually. The average number of days with snow cover is 36.3 (Anonymous, 2008c). It is one of the smallest provinces in Turkey with 7.436 km² area.

Tokat province has an elevation of 650 m with a transition climate between Middle Black Sea Region and Inner Anatolian Region. Tokat is at 39° 52' to 40° 55'N and 35° 27' to 37° 39'E geographical coordinates (Susam, 2006). Its area is 9.958 km². The population of central county is 127.988 (Anonymous, 2008a). It has a temperate climate. The average temperature annually is 12.3°C, and the average precipitation annually is 456.4 mm. The average number of days with snow cover is 29 (Anonymous, 2008c).

Methods

This study reflects the results of a survey conducted in three different cities: Erzurum, Artvin and Tokat. A total of 300 subjects, 100 in each city, took part in the survey. The subjects were interviewed one by one. The survey involved two parts: Questions about personal details and questions about wall paintings and pictures. The questions revealed the mental reflections of the participators about the wall paintings and pictures in living quarters. The surveys were conducted in different mediums with different socio-economic structures (university, districts with high-medium-low income groups). Non-parametrical tests were applied in the study. Chi-square was used for the significance test and Kruskal Wallis H test was used for the multi-comparisons (Özdamar, 2002).

RESULTS

The Chi-square results and percentage distributions of responses to the questions of the survey about personal details of the participators in three cities are given in Table 1. 59.3% of the subjects were male and 40.7% were female. The highest age group was 26 to 35 with 34%. 48.7% of the subjects were officials. The highest income group among the subjects was middle income group of 1000 to 1500 TL with 39.3%. The education profile mostly included university graduates with 60.7%.

The residences in our country are mostly multi-flatted apartments and most of them lack even a garden. The home types of the subjects also reflect this reality. 52.3% of them reported they lived in buildings without a garden in city centers.

It was found that 60.3% of the subjects personally bought a wall painting or picture, while 39.7% received it as a present (gift).

The features of the wall paintings or pictures owned by the participators are given in Table 2. According to this table, 49.3% of the paintings or pictures are hand made and 44% is photograph.

The percentage distribution of the seasons illustrated in the wall paintings and pictures owned by the participators are given in Table 3.

According to the survey results, winter was the least preferred season with 1.3% in wall paintings and pictures owned by the participators, while assorted seasons were the most preferred with 37.0%.

The subjects were asked in the survey whether they would want to live in the place illustrated in the painting they owned. According to the responses given to this question, 46.7% reported that they would, 22.0% percent responded that they would not and 31.3% that replied they did not have an idea.

The statistical correlation between the personal feature features of the subjects and the responses they provided about the wall paintings or pictures they owned are given in Table 4. A statistical significance was found between the features of the wall paintings and pictures and the city they were located ($p < 0.05$). It was found out that handmade paintings were mostly preferred in Erzurum city (63.0%) and that subjects in Tokat (49.0%) and Artvin (53.0%) mostly preferred photographs. Carpets and rugs were generally the least preferred wall decorations (1.7%). Another statistical significance was found between the painting features and age at 5% level. The participators stated that they owned mostly handmade wall paintings or pictures (49.3%). The difference between the season illustrated in the wall painting and income level was also found significant ($p < 0.05$). Accordingly, winter was the least illustrated season in the paintings or pictures owned by the subjects (1.3%) (Table 3).

The correlation between the period of time illustrated in the paintings and the income levels of the participators was found significant ($p < 0.05$). In general, all income groups stated that they would like to live in places illustrated in the pictures they owned (46.7%). The highest percentage regarding this response belonged to 1000 to 1500 TL income group (21.3%) and the lowest percentage belonged to the group with over 2000 TL income (1.3%) and the group with less than 500 TL income (6%). The correlation between whether the subjects would like to live in the place and time illustrated in the pictures and education level was found significant ($p < 0.05$). While the majority of primary school (2.7%) and secondary school (2.0%) graduates reported that they did not have any idea, high school (11.3%) graduates, graduates (28.3%) and post-graduates (5.7%) responded that they would like to live in the place and time illustrated in the pictures. In general, 46.7% of the subjects stated they would like to live in the place and time illustrated in the pictures or wall paintings (Table 4).

The mean ratings obtained from the responses given to the question, how the wall painting or picture influenced the subject in his/her daily life are given in Table 5.

According to the survey results, the wall paintings or pictures in the living quarters of the subjects mostly

Table 1. The percentage distributions of the subjects' personal details who participated the survey in three cities (Erzurum, Artvin and Tokat) and the results of chi-square test.

Personal details		Erzurum (%)	Artvin (%)	Tokat (%)	Total (%)	Chi-Square values
Gender	Male	43	55	80	59.3	$\chi^2=29.536$ p: (0.00 < 0.05)
	Female	57	45	20	40.7	
Age	15-25	41	36	21	32.7	$\chi^2 = 26.550$ p: 0.03 < 0.05
	26-35	39	32	31	34	
	36-45	15	20	39	24.7	
	46-55	2	6	7	5.0	
	56-65	2	4	2	2.7	
	>65	1	2	0	1.0	
Job	Self-employed	2	15	19	12	$\chi^2 = 27.569$ p: 0.00 < 0.05
	Official	53	42	51	48.7	
	Farmer	0	5	0	1.7	
	Other	45	38	30	37.7	
Income	<500 YTL	9	27	13	16.3	$\chi^2=30.350$ p: 0.00 < 0.05
	500-1000 YTL	22	21	36	26.3	
	1000-1500 YTL	47	36	35	39.3	
	1500-2000 YTL	11	15	13	13	
	>2000 YTL	11	1	3	5.0	
Education	Primary school	3	8	1	4.0	$\chi^2=18.675$ p: 0.017 < 0.05
	Secondary school	4	7	2	4.3	
	High School	20	20	18	19.3	
	Graduate	68	53	61	60.7	
	Post-graduate	5	12	18	11.7	
Dwelling	Rural area – Village	3	13	3	6.3	$\chi^2 = 29.105$ p: 0.00 < 0.05
	Building with no garden in city center	50	39	68	52.3	
	House in city center	11	18	14	14.3	
	Flat with garden in city center	36	30	15	27	

Table 2. The percentage distributions of the features of the wall paintings or pictures owned by the participators.

	Feature			
	Handmade	Photograph	Carpet or rug	Other
Percentage	49.3	44.0	1.7	5.0

Table 3. The percentage distribution of the seasons illustrated in the wall paintings and pictures owned by the participators.

	Seasons				
	Spring	Summer	Autumn	Winter	Assorted
Percentage	23.0	26.7	12.0	1.3	37.0

provided them with an esthetical pleasure (M. 0.47). This was followed by the “relaxing” response (M: 0.28).

The Kruskal Wallis test Chi-Square values showing the correlation between how the wall painting or picture

Table 4. Chi- square results of the responses to the questions about wall paintings and pictures.

	Location	Gender	Age	Job	Income	Education	Dwelling
How the subject obtained the wall painting or the picture	1.45	0.01	5.63	1.69	5.89	5.16	2.34
The features of the wall painting or the Picture	13.43*	1.72	28.9*	13.45	4.19	12.56	14.91
The season illustrated in the wall painting or the Picture	12.25	0.53	27.21	15.42	26.93*	17.93	8.18
Whether the subject wanted to live in the place and time illustrated in the wall painting or the Picture	3.44	0.34	10.92	11.25	17.04*	18.07*	8.46

*p < 0.05 (significant at 5% level).

Table 5. The mean ratings obtained from the responses given to the question how the wall painting or picture influenced the subject in his/her daily life.

In what way do wall paintings or pictures affect you?	Mean (M)	Total (S)	Standard deviation
Relaxing	0.28	85	0.451
Providing hope and happiness	0.17	50	0.373
Satisfying my longings	0.10	31	0.305
No effect	0.11	32	0.309
Providing an esthetical pleasure	0.47	140	0.500
Other	0.03	8	0.161

Table 6. The Kruskal Wallis test chi-square values showing the correlation between how the wall painting or picture affected subjects and personal details.

In what way do the wall paintings or pictures affect you?	Gender	Age	Job	Income	Education	Dwelling
Relaxing	2.002	4.098	2.708	1.457	1.985	1.173
Providing hope and happiness	0.011	5.668	2.422	0.401	1.428	0.964
Satisfying my longings	1.010	4.807	0.623	7.114	2.507	5.743
No effect	2.327	9.832	5.866	2.276	2.495	1.155
Providing an esthetical pleasure	0.048	5.487	4.579	4.114	9.687	1.448
Other	5.615*	16.267*	5.518	3.260	12.836*	5.960

*p < 0.05 (significant at %5 level).

affected subjects and personal details are given in Table 6.

The mean ratings obtained from the responses given to the question about the theme of the wall paintings or the pictures are presented in Table 7. Seaside or sea views were the most illustrated themes in the wall paintings and pictures the subjects owned (M: 0.32). This was followed by forest, water and rural house themes (M: 0.29). The lowest mean belonged to the local costumes theme (M: 0.02).

The Kruskal Wallis test Chi-square values showing the correlation between the theme of the wall paintings or

pictures and personal details are given in Table 8.

When the three cities were examined separately, no outstanding differences were observed. The responses given to the following questions were proportional in three cities (Table 9): How the wall painting or the picture was obtained, which season was illustrated in the painting, whether the subjects would like to live in the place and time illustrated in the painting or the picture, what theme was portrayed in the painting, and in what way did the painting affected the subjects?

As mentioned earlier, a statistical significance was found between the feature of the wall painting or the

Table 7. The mean ratings obtained from responses given to the question about the theme of the wall paintings or pictures.

What is the theme illustrated in the painting?	Mean (M)	Total (S)	Standard deviation
Seaside or sea view	0.32	95	0.466
Lake, stream or fall	0.20	61	0.403
Forest	0.19	58	0.391
Forest or rural house	0.14	42	0.348
Forest, water and rural house	0.29	87	0.495
Historical places	0.16	47	0.364
Local costumes	0.02	7	0.151
Agricultural landscape	0.04	11	0.188
Domestic animals	0.04	13	0.204
Sport	0.03	9	0.171
Family members	0.17	50	0.373
Paintings by famous artists	0.05	14	0.211
Seasons	0.07	20	0.250
Other	0.11	34	0.318

Table 8. The Kruskal Wallis test chi-square values showing the correlation between the theme of the wall paintings or pictures and personal details.

What is the theme illustrated in the painting?	Gender	Age	Job	Income	Education	Dwelling
Seaside or sea view	0.09	1.736	2.091	6.684	2.878	2.119
Lake, stream or fall	0.409	9.817	12.440*	8.092	9.561*	1.562
Forest	0.514	3.175	2.449	2.567	1.528	1.151
Forest and rural house	0.133	16.467*	1.476	3.127	2.597	1.186
Forest, water and rural house	0.175	8.217	0.640	3.961	8.082	8.947*
Historical places	0.082	1.848	3.524	4.025	2.930	6.581
Local costumes	0.014	2.303	2.398	4.596	3.082	7.787
Agricultural landscape	2.385	1.558	1.819	2.899	3.958	3.079
Domestic animals	1.737	2.089	4.796	1.737	1.200	6.981
Sport	6.338*	9.729	5.704	9.633*	4.190	2.080
Family members	1.333	2.306	3.437	3.147	8.098	3.189
Paintings by famous artists	0.029	4.090	0.328	2.826	4.634	2.395
Seasons	0.771	11.142*	2.950	3.257	3.322	1.665
Other	0.004	4.557	0.711	4.563	2.047	14.450*

* $p < 0.05$ (significant at 5% level).

picture and the city being located ($p < 0.05$). While handmade paintings were the most preferred ones in Erzurum (63%), it was determined that photographs were preferred in Tokat (49%) and Artvin (53 %). In general, carpets and rugs were found to be the least preferred decorations (Table 9).

DISCUSSION AND CONCLUSIONS

People have a tendency to own such paintings and pictures as they help escape from the monotonous atmosphere of life. They are also a source of inspiration allowing people to imagine the places and times where they would like to be. Likewise, it was found out that

60.3% of the participants had personally bought the paintings or the pictures.

According to the survey results, among the seasons illustrated in the paintings the subjects owned, winter was the least preferred theme with 1.3% and assorted seasons was the most preferred theme with 37%. In addition, 46.7% of the subjects stated they would like to live in the place and time illustrated in the paintings, whereas, 22.0% stated they would not. The studies regarding the preferences report that rural area pictures are preferred more than urban area pictures (Hull and Revell, 1989; Van den Berg et al., 2003).

According to Van den Berg et al. (2003), people prefer natural environments much more than artificial or rural areas and the tendency to pay high prices to the real

Table 9. The separate presentation of the values obtained in Erzurum, Artvin and Tokat provinces.

		Erzurum (%)	Artvin (%)	Tokat (%)	General (%)
How was the painting or picture obtained?	Bought	59	57	65	60.3
	Received as a present	41	43	35	39.7
What is the feature of the material?	Handmade	63	41	44	49.3
	Photograph	30	53	49	44.0
	Carpet or rug	1	2	2	1.7
	Other	6	4	5	5.0
Which season is illustrated in the painting or picture?	Spring	20	20	29	23
	Summer	29	29	22	26.7
	Autumn	7	19	10	12.0
	Winter	2	1	1	1.3
	Assorted	42	31	38	37
Would you like to live in the place and time illustrated in the painting?	Yes	44	45	51	46.7
	No	24	26	16	22.0
	No idea	32	29	33	31.3
		Erzurum (ort.)	Artvin (ort.)	Tokat (ort.)	General (ort.)
What is the theme of the painting or picture?	Seaside or sea	0.27	0.27	0.36	0.32
	Lake. stream or fall	0.23	0.23	0.16	0.20
	Forest	0.18	0.18	0.20	0.19
	Forest and rural house	0.16	0.16	0.14	0.14
	Forest. water and rural house	0.31	0.31	0.36	0.29
	Historical places or monuments	0.10	0.10	0.16	0.16
	Local costumes	0.04	0.04	0.01	0.02
	Agricultural landscape	0.03	0.03	0.06	0.04
	Domestic animals	0.05	0.05	0.04	0.04
	Sport	0.04	0.04	0.03	0.03
	Family members	0.16	0.16	0.13	0.17
	Paintings by famous artists	0.04	0.04	0.04	0.05
	Seasons	0.03	0.03	0.08	0.07
	Other	0.10	0.10	0.07	0.11
How does the wall painting or the picture you own affect you?	Relaxing	0.28	0.26	0.1	0.28
	Providing hope and happiness	0.16	0.16	0.07	0.17
	Satisfying my longings	0.09	0.15	0.16	0.10
	No effect	0.08	0.13	0.11	0.11
	Providing an esthetical pleasure	0.50	0.37	0.53	0.47
	Other	0.01	0.04	0.03	0.03

estates in natural environments support this. In addition, contacting the natural environment improve the state of mind and increase the concentration.

According to the results of the survey, the paintings and pictures at home and work mostly provided people with an esthetical pleasure (M: 0.47). This was followed by the "relaxing" response (M: 0.28).

Likewise, when the studies regarding the view and visual quality were examined, it was found that naturalness was a strong factor on decisions and it increased the quality of the atmosphere (Kaplan and Kaplan, 1989; Parsons, 1991; Purcell and Lamb, 1998; Tips and Savasidara, 1986). The places, which people find esthetical and give high ratings and therefore prefer far

more, are also the places with high natural value.

The results also revealed that wall paintings or pictures relaxed people and decreased stress. Accordingly, the relation between landscape and health is gradually gaining importance in research and policy grounds. As European Landscape Agreement handle landscape as an element of individual and social improvement, it aims at supporting the protection, management and planning of landscape. The World Health Organization (WHO) defines the health as “a whole welfare mentally, physically and socially” rather than being free of sickness and disabilities (Velarde et al., 2007).

Similarly, According to Korpela and Ylen (2007), people visit naturally organized places in order to have their personal experiences and feelings organized.

Seaside or sea views were the most illustrated themes in the wall paintings and pictures the subjects owned (M: 0.32). This was followed by forest, water and rural house themes (M: 0.29).

The studies regarding the quality of the view found that the existence of water element in the picture increased the quality of the scenery (Blankson and Green, 1991; Arriaza et al., 2004). From past to present, men have assimilated water as part of the life and settled in areas nearby water. The existence of water element is a strong factor on decision. In a study conducted in the USA, Raitz and Dakhil (1988) investigated some specific physical environment types. Seaside and mountains were on the top of the preference list, found their study.

In the present study, it was determined that people who participated this study used wall paintings in their living quarters and they personally bought the paintings. The themes in the majority of the pictures were seaside, forest, water and rural areas respectively. Also, people stated they would like to live in the place and time illustrated in the paintings.

One should not deny the fact that these paintings providing their owners with an esthetical pleasure, and relaxation also contribute to their mental/spiritual welfare. The urban people living away from the nature in closed places are under stress because of the hurly-burly in daily life. Undoubtedly, the urban life deprived of natural elements is contrary to human nature. Therefore, in this context, urban people satisfy their longing for nature and contribute to their psycho-social process, intentionally or not (moreover, the majority of the subjects bought the paintings themselves). Wall paintings or pictures are materials having the strength to create a ground for happy and cheerful urban people.

After negative conditions such as attention deficit and stress, visiting and seeing a natural environment produces positive results (Ulrich et al., 1991; Korpela and Ylen, 2007; Van den Berg et al., 2007). Green parks opened for public use should include natural elements. This will help improve urban environments and especially add positively to the health of urban people (Shulin, 2009). In parallel to this, it was concluded that increasing

the natural spaces in the city and city environs in public development plans was important for urban people. The increasing problems in where people are living increase the longing for natural areas.

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