

THE FIGURE PREFERENCES OF THE CONSUMERS ON THE PANEL FURNITURE SURFACES

Abdullah Cemil İLCE*, Hasan Huseyin CİRİTCİOĞLU*, Erol BURDURLU**, Suat ALTUN***

*Duzce University, Technical Education Faculty, Düzce. TURKEY

**Gazi University, Technical Education Faculty, Ankara. TURKEY

***Karabük University, Technical Education Faculty, Karabük. TURKEY

Abstract

This study has been conducted on the furniture quality indicator figure preferences, which are the variables in making furniture purchasing decisions, of the consumers with different demographic characteristics and income levels. A questionnaire, in which alternative visual figures have been included, has been prepared to determine the demographic characteristics and income levels of the consumers in order to provide data for the study. The questionnaire has been completed with face-to-face interviews with 644 persons living in Ankara, Turkey. The demographic characteristics and income levels of these individuals have been presented in the tables. The figure preferences on the wooden veneer surfaces depending on these characteristics have been determined and statistically analyzed.

The surface figure type on the wooden veneers was found to be important in furniture purchasing decisions. In general, when the most preferred figure type is taken into consideration, the consumer characteristics, other than educational level, were not found to be influential on the figure preferences. In this situation, the nested U's and V's figure is the figure preferred the most by all of the consumers. If market segmentation is made according to educational level, then the elementary school and university graduates preferred the nested U's and V's figure and the high school graduates preferred the knotty figure. When the second most and third most preferences are considered, then the fiddleback and the knotty figures are the other two figures, which are preferred the most.

According to these results, the panel furniture manufacturers must take the nested U's and V's figure, fiddleback and knotty figures into consideration the most for figure choices for the furniture surfaces and the figure choices in the manufacture of coating material types, which are used extensively at present, such as wood, PVC, melamine, and laminate.

Keywords: Wood, veneer, furniture making, figure type, consumer preference

1. Introduction

Color, luster, texture, grain, and figure are the major characteristics that aid in wood identification and provide a basis for decorative qualities. Figure results from combinations of color, luster, texture, and grain and may be defined as the pattern produced on wood surface by annual growth layers, rays, and knots; by irregular coloration; and by deviations from straight, regular grain [1].

The figure, along with form, is one of the most important elements, which contributes to the aesthetic appearance of wooden furniture and structural elements. For this reason, different figures are obtained by using special cutting techniques, such as rotary cutting, stay-log rotary cutting, eccentrically rotary cutting, radial cut, and tangential cut for veneers produced for coated panel furniture or producing from specific tree sections such as root, burl, stump wood, long wood and crotch. Using different figures on the same piece of

furniture creates visual differences and from the aspect of the effect it makes in the eyes of the user. The pieces of furniture that have surfaces with nested U's or V's figures, which are produced by tangential cutting (plain sawing or rotary cutting) add a mobility to the space, whereas relatively straight and upright figures and ray-fleck figures, which are produced by radial cutting or quarter sawing, add a sense of stability (balance) to the space. The same effect is seen on the solid wooden parts of the furniture. The surfaces with figures are more attractive and are visually in the forefront.

Producing geometrical parts on surfaces, such as tables, tops of coffee tables or cupboard doors, and using different figured veneers on each of these surfaces and setting forth aesthetically different looks is another way of using the figure for differentiating the product. The application of marquetry also has the same objective.

Despite the fact that in practice the type of surface figure to be used on the surfaces of the furniture elements is up to the initiative of the product designer to a certain degree, the preferences of the consumers should also be taken into consideration as a requirement of the modern marketing concept. Consumer orientation and customer satisfaction lie at the core of this concept. When the consumer preferences are considered, then the preferences can be concentrated on one or several figures. This concentration on preference is very important for the manufacturers of figured wood, PVC, and laminate veneer to show them on which figure type they should concentrate. Since it is impossible to sell veneers with figures without taking the preferences of the consumers into consideration, an increase in the stocks will be observed in businesses engaged in this field. The increase in the stock will also create an increase in the stock cost. In this situation, since all businesses that make up the supply chain in the related industrial branch will be losing time, raw materials and labor, it will also cause negative effects on the general economy of the country.

There is a series of studies made on the factors, which are influential in the consumer preferences, consumer behaviors and in the purchasing decisions for wooden products and furniture. In the following studies, it has been found that the inclusion of environmental labeling on the wooden products is important in preferences [2]. Homeowners have positive thoughts about the security of treated wood products and the effects of these products on health, but they also have some hesitations from the aspect of health [3]. In New Zealand, the forest type from which the wood for furniture is obtained (plantation preferred to natural forest), whether or not there is environmental labeling, and the warranty period, influence the consumer preferences [4]. In Finland, quality, design, style, advertising and price are priorities, in that order, for the preference of wooden household furniture [5]. The presence of character-marks on the wooden household furniture is important up to a point for product evaluation [6]. In Southern Germany, the factors that are effective in marketing the furniture are design, species, price, green attributes and finishing, in that order [7]. In the Chinese furniture industry, the most frequently used materials are particleboard, hardwood lumber, dimension products and medium-density fiberboard and solid or veneer laminated hardwood furniture is preferred in high income groups [8]. Comfort, strength and aesthetic elements are of primary importance in the furniture choices of the women consumers, who live in Trabzon, Turkey [9]. The furniture purchasing decisions of consumers, who live in Ankara, Turkey, are influenced by the characteristics of the furniture, such as being practical, high quality, strength, comfort, low cost and quality of the workmanship [10]. Hue, value and chroma are influential for the color preferences of college students for upholstering materials [11].

As it can be observed from the above studies, despite the fact that studies that have been conducted on the factors that influence the consumer purchasing decisions for furniture and wooden products, there are not any studies concerning the surface figure preferences, which are an important means of product differentiation, especially in the veneer industry and furniture design. For this reason, it is aimed to determine the consumer figure preferences in this study and to set forth data that would guide the veneer manufacturers and furniture designers.

2. Method

A questionnaire was conducted with the objective of setting forth the figure preferences of the users on the wooden veneer surfaces with different demographic characteristics.

As the area of sampling, 6 central counties (Altındağ, Çankaya, Keçiören, Mamak, Sincan, Yenimahalle) of Ankara Province in Turkey was selected due to the fact that it is the second largest province from the aspect of population density and due to the fact that it has people from all segments of the society because of migration. The set of participants (Table 1) were constituted from the potential furniture buyers visiting the

furniture stores. Interviews were conducted on the first 5-person who came to a store in a street of the sampling and accepted to participate in the interview on Saturdays between the hours 10:00 and 18:00. After then, the interviewers passed through a new store by going ahead in clock wise direction on the street to interview with a new group of 5-person. It was interviewed with totally 644 potential furniture buyers selected from the samples environment. The data were obtained by 7 interviewers informed about the data collection forms.

Table 1. Number of participants according to the counties.

| | County | | | | | | Total |
|------------------------|----------|---------|-------|--------|-------------|----------|-------|
| | Altındağ | Çankaya | Mamak | Sincan | Yenimahalle | Keçiören | |
| Number of Participants | 81 | 160 | 86 | 74 | 126 | 117 | 644 |

The data for potential furniture consumers were gathered from data collection form. The data collection form was composed of two parts: In the first part, questions aimed at determining some demographic characteristics of the furniture users, such as gender, marital status, age, educational level, profession, monthly family income and the number of individuals in the family. For the second part of the survey, six different figures, which are thought to be produced and preferred the most, have been given on a single page, in order to be able to determine the preferences depending on these characteristics. All of the figures have been prepared in black and white to avoid the influence color might have on preferences (Figure 1).

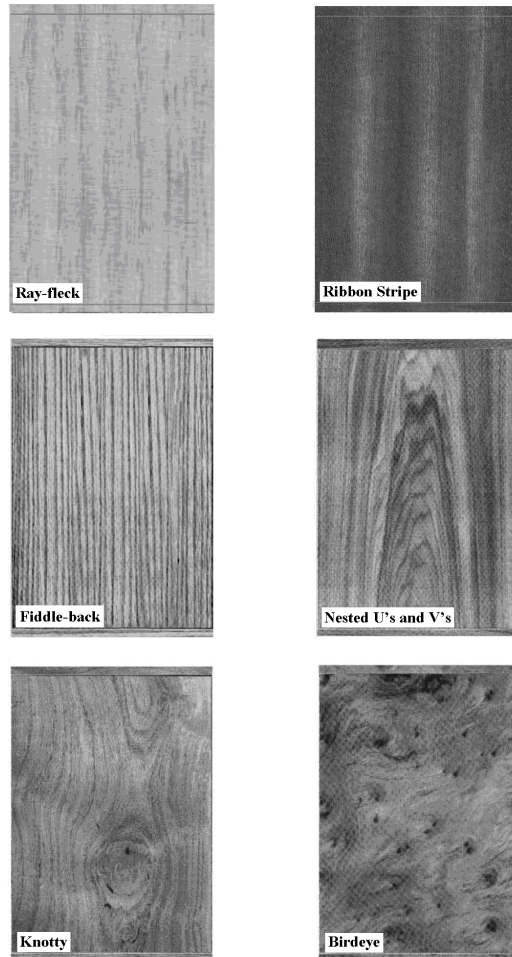


Figure 1. Wooden veneer surface samples shown

The data were coded in Statistical Package for the Social Sciences (SPSS 10.0) for windows, and evaluated in frequencies, percentages and chi-square analysis. Some of the demographic characteristics of the participants are given in Table 2.

3. Result and Discussion

In this section, the figure preference of the participants was evaluated according to demographic characteristics, and the findings were given in tables. The existence of statistical relationships between the participant's preferences and various demographic characteristics of the groups were analyzed by using the chi-square(X²) analysis. The relations among the variables were statistically analyzed and the results were interpreted. The tables, showing that there were no relations between the variables, were not included in the text.

3.1. Some demographic characteristics and income levels of the consumers who participated in the questionnaire

Some of the demographic characteristics and income levels of the 644 consumers, who have stated that the figure on wooden veneer surface is important when deciding to purchase furniture, are given in Table 2.

Table 2. Some of the demographic characteristics and income levels of the consumers.

| Consumer Characteristics | N | % |
|---------------------------|-----|-------|
| <u>Age</u> | | |
| Less than 25 years old | 163 | 25.31 |
| Between 25-35 years old | 241 | 37.42 |
| Between 36-45 years old | 139 | 21.58 |
| More than 45 years old | 101 | 15.68 |
| <u>Gender</u> | | |
| Male | 290 | 45.03 |
| Female | 354 | 54.97 |
| <u>Marital Status</u> | | |
| Married | 374 | 58.07 |
| Single | 270 | 41.93 |
| <u>Educational Level</u> | | |
| Elementary school | 75 | 11.65 |
| High school | 230 | 35.71 |
| University | 339 | 52.64 |
| <u>Monthly income (€)</u> | | |
| Less than 385 | 147 | 22.83 |
| Between 386 - 642 | 286 | 44.41 |
| More than 643 | 211 | 32.76 |

3.2. General figure preferences on the veneer surfaces

When the figure preferences of the consumers without considering any demographic characteristics and income levels are analyzed, the nested U's and V's figure is in the most place with 24.50%, the fiddleback figure is in the second most place with 24.80%, and the knotty designed figure is in the third most place with 22.00% (Table 3). Also, when total preference is considered without considering the order, the nested U's and V's figure is still the most preferred figure. The high preference for the nested U's and V's figure could depend on: this figure being applied more on the furniture surfaces, its being well-known by the consumers, and the fact that it is a figure, which defines the wood the best.

Table 3. Figure preferences of the consumers.

| Figure types on the wooden veneer surfaces | Order of Preference | | | | | | | |
|--|---------------------|-------|-------------|-------|------------|-------|-------|-------|
| | Most | | Second Most | | Third Most | | Total | |
| | N | % | N | % | N | % | N | % |
| Ray-fleck | 135 | 21.00 | 70 | 10.90 | 94 | 14.60 | 299 | 15.48 |
| Ribbon Stripe | 81 | 12.60 | 66 | 10.20 | 69 | 10.70 | 216 | 11.18 |
| Fiddleback | 108 | 16.80 | 160 | 24.80 | 137 | 21.30 | 405 | 20.96 |
| Nested U's and V's | 158 | 24.50 | 156 | 24.20 | 132 | 20.50 | 446 | 23.08 |
| Knotty | 99 | 15.40 | 137 | 21.30 | 142 | 22.00 | 378 | 19.57 |
| Bird's-eye | 63 | 9.80 | 55 | 8.50 | 70 | 10.90 | 188 | 9.73 |

3.2.1. Figure preferences according to age

The distribution of the figure preferences according to age is given in Table 4.

Table 4. Figure preference distribution according to consumer age.

| Age | Ray-fleck | | Ribbon Stripe | | Fiddleback | | Nested U's and V's | | Knotty | | Bird's-eye | | Total N |
|-------------------------------------|-----------|-------|---------------|-------|------------|-------|--------------------|-------|--------|-------|------------|-------|------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | |
| Order of preference: 1 | | | | | | | | | | | | | |
| Less than 25 yrs | 39 | 23.90 | 16 | 9.80 | 27 | 16.60 | 36 | 22.10 | 28 | 17.20 | 17 | 10.40 | 163 |
| Between 25-35 yrs | 60 | 24.90 | 29 | 12.00 | 44 | 18.30 | 58 | 24.10 | 32 | 13.30 | 18 | 7.50 | 241 |
| Between 36-45 yrs | 22 | 15.80 | 20 | 14.40 | 24 | 17.30 | 38 | 27.30 | 22 | 15.80 | 13 | 9.40 | 139 |
| More than 45 yrs | 14 | 13.90 | 16 | 15.80 | 13 | 12.90 | 26 | 25.70 | 17 | 16.80 | 15 | 14.90 | 101 |
| Results: x2: 16.346 SD: 15 p: 0.359 | | | | | | | | | | | | | |
| Order of preference: 2 | | | | | | | | | | | | | |
| Less than 25 yrs | 12 | 7.40 | 20 | 12.30 | 47 | 28.80 | 34 | 20.90 | 35 | 21.50 | 15 | 9.20 | 163 |
| Between 25-35 yrs | 33 | 13.70 | 26 | 10.80 | 64 | 26.60 | 61 | 25.30 | 38 | 15.80 | 19 | 7.90 | 241 |
| Between 36-45 yrs | 15 | 10.80 | 15 | 10.80 | 30 | 21.60 | 34 | 24.50 | 35 | 25.20 | 10 | 7.20 | 139 |
| More than 45 yrs | 10 | 9.90 | 5 | 5.00 | 19 | 18.80 | 27 | 26.70 | 29 | 28.70 | 11 | 10.90 | 101 |
| Results: x2: 19.989 SD: 15 p: 0.172 | | | | | | | | | | | | | |
| Order of preference: 3 | | | | | | | | | | | | | |
| Less than 25 yrs | 25 | 15.30 | 15 | 9.20 | 32 | 19.60 | 34 | 20.90 | 33 | 20.20 | 24 | 14.70 | 163 |
| Between 25-35 yrs | 30 | 12.40 | 27 | 11.20 | 56 | 23.20 | 47 | 19.50 | 58 | 24.10 | 23 | 9.50 | 241 |
| Between 36-45 yrs | 22 | 15.80 | 17 | 12.20 | 27 | 19.40 | 27 | 19.40 | 35 | 25.20 | 11 | 7.90 | 139 |
| More than 45 yrs | 17 | 16.80 | 10 | 9.90 | 22 | 21.80 | 24 | 23.80 | 16 | 15.80 | 12 | 11.90 | 101 |
| Results: x2: 10.583 SD: 15 p: 0.782 | | | | | | | | | | | | | |

1: First Preference, 2: Second Preference, 3: Third Preference. Note: The percentages of the rows were taken.

As it can be observed from the table, while the persons younger than 25 years old and between 25-35 years old prefer the ray-fleck figure in most place with 23.90% and 24.90%, respectively and persons between 36-45 years old and older than 45 years old prefer the nested U's and V's figure with 27.30% and 25.70%, respectively. When the second most preferences are analyzed, persons younger than 25 years old and

between 25-35 years old prefer the fiddleback figure and persons between 36-45 years old and older than 45 years old prefer the knotty figure the most. For the third most preferences, persons younger than 25 years old and older than 45 years old prefer the nested U's and V's figure and persons between 25-45 years old prefer the knotty figure the most. In the statistical analysis made to determine the effects of age on figure preferences, it has been found that there is not a statistically significant difference between the two variables ($p > 0.05$). According to this, age is not important for figure preferences on the wooden veneer surfaces.

3.2.2. Effects of gender on figure preferences

The figure preference distribution according to the gender of the consumers is given in Table 5. Males prefer the nested U's and V's figure most with 21.70%, the nested U's and V's figure and fiddleback figure second most with 23.10% each, and the fiddleback figure third most with 23.10%. Females prefer the nested U's and V's figure most with 26.80%, the fiddleback figure second most with 26.30%, and the knotty figure third most with 24.00%. As a result of the statistical analysis, it has been found that according to all three preference orders the relationship between gender and figure preference is statistically insignificant ($p > 0.05$). In other words, gender does not have an effect on figure preferences on the wooden veneers.

Table 5. Figure preference distribution according to gender.

| Gender | Ray-fleck | | Ribbon Stripe | | Fiddleback | | Nested U's and V's | | Knotty | | Bird's-eye | | Total N |
|--|-----------|-------|---------------|-------|------------|-------|--------------------|-------|--------|-------|------------|-------|------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | |
| Order of preference: 1 | | | | | | | | | | | | | |
| Male | 60 | 20.70 | 36 | 12.40 | 50 | 17.20 | 63 | 21.70 | 44 | 15.20 | 37 | 12.80 | 290 |
| Female | 75 | 21.20 | 45 | 12.70 | 58 | 16.40 | 95 | 26.80 | 55 | 15.50 | 26 | 7.30 | 354 |
| Results: χ^2 : 6.588 SD: 5 p: 0.253 | | | | | | | | | | | | | |
| Order of preference: 2 | | | | | | | | | | | | | |
| Male | 33 | 11.40 | 28 | 9.70 | 67 | 23.10 | 67 | 23.10 | 65 | 22.40 | 30 | 10.30 | 290 |
| Female | 37 | 10.50 | 38 | 10.70 | 93 | 26.30 | 89 | 25.10 | 72 | 20.30 | 25 | 7.10 | 354 |
| Results: χ^2 : 3.558 SD: 5 p: 0.615 | | | | | | | | | | | | | |
| Order of preference: 3 | | | | | | | | | | | | | |
| Male | 43 | 11.80 | 34 | 11.70 | 67 | 23.10 | 58 | 20.00 | 57 | 19.70 | 31 | 10.70 | 290 |
| Female | 51 | 14.40 | 35 | 9.90 | 70 | 19.80 | 74 | 20.90 | 85 | 24.00 | 39 | 11.00 | 354 |
| Results: χ^2 : 2.803 SD: 5 p: 0.730 | | | | | | | | | | | | | |

1: First Preference, 2: Second Preference, 3: Third Preference. Note: The percentages of the rows were taken

3.2.3. Effects of marital status on figure preferences

The figure preference distribution according to the marital status of the consumers is given in Table 6. It has been determined that the 28.10% of the married persons prefer the nested U's and V's figure most, the fiddleback figure and the nested U's and V's figure second most, both with 24.60%, and the knotty figure third most with 23.80%. A total of 21.50% of the single persons prefer the ray-fleck figure most, the ribbon stripe figure second most with 33% and the nested U's and V's figure third most with 20.70%. The figure-marital status relationships for the most and second most preferences are statistically insignificant, whereas the relationship is statistically significant for the third most preferences ($p < 0.05$). Single persons are the aspect that makes this relationship significant ($\chi^2 = 7.962$). According to this, marital status is considered significant for the third most place figure preferences.

Table 6. Figure preference distribution according to marital status.

| Marital status | Ray-fleck | | Ribbon Stripe | | Fiddleback | | Nested U's and V's | | Knotty | | Bird's-eye | | Total N |
|---|-----------|-------|---------------|-------|------------|-------|--------------------|-------|--------|-------|------------|-------|---------|
| | N | % | N | % | N | % | N | % | N | % | N | % | |
| Order of preference: 1 | | | | | | | | | | | | | |
| Married | 77 | 20.60 | 42 | 11.20 | 57 | 15.20 | 105 | 28.10 | 56 | 15.00 | 37 | 9.90 | 374 |
| Single | 58 | 21.50 | 39 | 14.40 | 51 | 18.90 | 53 | 19.60 | 43 | 15.90 | 26 | 9.60 | 270 |
| Results: χ^2 : 7.254 SD: 5 p: 0.202 | | | | | | | | | | | | | |
| Order of preference: 2 | | | | | | | | | | | | | |
| Married | 41 | 11.00 | 33 | 8.80 | 92 | 24.60 | 92 | 24.60 | 86 | 23.00 | 30 | 8.00 | 374 |
| Single | 29 | 10.70 | 33 | 33.00 | 68 | 25.20 | 64 | 23.70 | 51 | 18.90 | 25 | 9.30 | 270 |
| Results: χ^2 : 3.372 SD: 5 p: 0.643 | | | | | | | | | | | | | |
| Order of preference: 3 | | | | | | | | | | | | | |
| Married | 54 | 14.40 | 44 | 11.80 | 84 | 22.50 | 76 | 20.30 | 89 | 23.80 | 27 | 7.20 | 374 |
| Single | 40 | 14.80 | 25 | 9.30 | 53 | 19.60 | 56 | 20.70 | 53 | 19.60 | 43 | 15.90 | 270 |
| Results: χ^2 : 13.708 SD: 5 p: 0.018 | | | | | | | | | | | | | |

1: First Preference, 2: Second Preference, 3: Third Preference. Note: The percentages of the rows were taken

3.2.4. Effects of educational level on figure preferences

The figure preference distribution according to the educational level of the consumers is given in Table 7.

Table 7. Figure preference distribution according to the educational level of the consumers.

| Educational level | Ray-fleck | | Ribbon Stripe | | Fiddleback | | Nested U's and V's | | Knotty | | Bird's-eye | | Total N |
|--|-----------|-------|---------------|-------|------------|-------|--------------------|-------|--------|-------|------------|-------|---------|
| | N | % | N | % | N | % | N | % | N | % | N | % | |
| Order of preference: 1 | | | | | | | | | | | | | |
| Elementary | 17 | 22.70 | 10 | 13.30 | 14 | 18.70 | 18 | 24.00 | 9 | 12.00 | 7 | 9.30 | 75 |
| High school | 36 | 15.70 | 21 | 9.10 | 43 | 18.70 | 52 | 22.60 | 54 | 23.50 | 24 | 10.40 | 230 |
| University | 82 | 24.20 | 50 | 14.70 | 51 | 15.00 | 88 | 26.00 | 36 | 10.60 | 32 | 9.40 | 339 |
| Results: χ^2 : 25.791 SD: 10 p: 0.004 | | | | | | | | | | | | | |
| Order of preference: 2 | | | | | | | | | | | | | |
| Elementary | 12 | 16.00 | 10 | 13.30 | 16 | 21.30 | 20 | 26.70 | 13 | 17.30 | 4 | 5.30 | 75 |
| High school | 15 | 6.50 | 22 | 9.60 | 59 | 25.70 | 55 | 23.90 | 54 | 23.50 | 25 | 10.90 | 230 |
| University | 43 | 12.70 | 34 | 10.00 | 85 | 25.10 | 81 | 23.90 | 70 | 20.60 | 26 | 7.70 | 339 |
| Results: χ^2 : 12.110 SD: 10 p: 0.278 | | | | | | | | | | | | | |
| Order of preference: 3 | | | | | | | | | | | | | |
| Elementary | 14 | 18.70 | 8 | 10.70 | 16 | 21.30 | 16 | 21.30 | 15 | 20.30 | 6 | 8.00 | 75 |
| High school | 31 | 13.50 | 31 | 13.50 | 41 | 17.80 | 52 | 22.60 | 45 | 19.60 | 30 | 13.00 | 230 |
| University | 49 | 14.50 | 30 | 8.80 | 80 | 23.60 | 64 | 18.90 | 82 | 24.20 | 34 | 10.00 | 339 |
| Results: χ^2 : 10.177 SD: 10 p: 0.425 | | | | | | | | | | | | | |

1: First Preference, 2: Second Preference, 3: Third Preference. Note: The percentages of the rows were taken

The most, second most and third most preferences of the elementary school graduates is the nested U's and V's figure in the order of 24%, 26.70%, and 21.30%, respectively. Also for the third most preference, the preferences for the fiddleback figure and the nested U's and V's figure are equal (21.30%). The high school graduates prefer the knotty figure most with 23.50%, the fiddleback figure second most with 25.70%, and

the nested U's and V's figure third most with 22.60%. The university graduates prefer the nested U's and V's figure most with 26.00%, the fiddleback figure second most with 25.10%, and the knotty figure third most with 24.20%. According to the statistical analysis, the relationship between educational status and figure preference is important for the most preferences ($p < 0.05$). The high school graduates make this relationship important ($x^2 = 16.053$). In other words, as the educational status changes the preference for figures changes. For the other preference orders a relationship between educational status and figure preferences has not been determined.

3.2.5. Effects of income level on figure preferences

The figure preference distribution according to the income level of the consumers is given in Table 8.

Table 8. Figure preference distribution according to income levels.

| Monthly Income | Ray-fleck | | Ribbon Stripe | | Fiddleback | | Nested U's and V's | | Knotty | | Bird's-eye | | Total N |
|---|-----------|-------|---------------|-------|------------|-------|--------------------|-------|--------|-------|------------|-------|------------|
| | N | % | N | % | N | % | N | % | N | % | N | % | |
| Order of preference: 1 | | | | | | | | | | | | | |
| 380 €* and less | 33 | 22.40 | 13 | 8.80 | 29 | 19.70 | 36 | 24.50 | 19 | 12.90 | 17 | 11.60 | 147 |
| Between 381 €- 635 € | 67 | 23.40 | 34 | 11.90 | 51 | 17.80 | 60 | 21.00 | 50 | 17.50 | 24 | 8.40 | 286 |
| 636 € and above | 35 | 16.60 | 34 | 16.10 | 28 | 13.30 | 62 | 29.40 | 30 | 14.20 | 22 | 10.40 | 211 |
| Results: x^2 : 15.458 SD: 10 p: 0.116 | | | | | | | | | | | | | |
| Order of preference: 2 | | | | | | | | | | | | | |
| 380 €* and less | 23 | 15.60 | 21 | 14.30 | 32 | 21.80 | 35 | 23.80 | 27 | 18.40 | 9 | 6.10 | 147 |
| Between 381 €- 635 € | 23 | 8.00 | 24 | 8.40 | 89 | 31.10 | 74 | 25.90 | 51 | 17.80 | 25 | 8.70 | 286 |
| 636 € and above | 24 | 11.40 | 21 | 10.00 | 39 | 18.50 | 47 | 22.30 | 59 | 28.00 | 21 | 10.00 | 211 |
| Results: x^2 : 25.874 SD: 10 p: 0.004 | | | | | | | | | | | | | |
| Order of preference: 3 | | | | | | | | | | | | | |
| 380 €* and less | 20 | 13.60 | 22 | 15.00 | 28 | 19.00 | 29 | 19.70 | 30 | 20.40 | 18 | 12.20 | 147 |
| Between 381 €- 635 € | 34 | 11.90 | 18 | 6.30 | 58 | 20.30 | 66 | 23.10 | 78 | 27.30 | 32 | 11.20 | 286 |
| 636 € and above | 40 | 19.00 | 29 | 13.70 | 51 | 24.20 | 37 | 17.50 | 34 | 16.10 | 20 | 9.50 | 211 |
| Results: x^2 : 24.719 SD: 10 p: 0.006 | | | | | | | | | | | | | |

1: First Preference, 2: Second Preference, 3: Third Preference. Note: The percentages of the rows were taken

When the most preferences according to income levels are taken into consideration, in the first and third income groups the nested U's and V's figure is preferred the most with 24.50% and 29.49% respectively, in the second income group the ray-fleck figure is preferred the most with 23.40%. For the second most preferences, in the first income group the nested U's and V's figure is preferred the most with 23.80%, in the second income group the fiddleback figure is preferred the most with 31.10%, and in the third income group the knotty figure is preferred the most with 28.00%. For the third most preferences, in the first and second income groups the knotty figure is preferred the most with 20.40% and 27.30%, respectively and in the third income group the fiddleback figure is preferred the most with 24.20%. In the analysis to determine the effect of income levels on figure preferences, it has been determined that income levels are not effective on figure preference for the most preference ($p > 0.05$), but it is effective for the second most and third most preferences ($p < 0.05$). The second income group makes the income significantly effective on figure preferences with ($x^2 = 9.526$ and $x^2 = 11.280$) values for the second most and third most preferences.

4. Conclusion

When the figure preferences of the consumers on the wooden veneer surfaces without considering any demographic characteristics and income levels are analyzed, the nested U's and V's figure is in the most

place, the fiddleback figure is in the second most place, and the knotty designed figure is in the third most place. Also, when total preference is considered without considering the order, the nested U's and V's figure is still the most preferred figure. The high preference for the nested U's and V's figure could depend on: this figure being applied more on the furniture surfaces, its being well-known by the consumer, and the fact that it is a figure which defines the wood the best.

When the effects of age on figure preferences on the wooden veneers are analyzed, while persons younger than 25 years old and between 25-35 years old prefer the ray-fleck figure in most place, persons between 36-45 years old and older than 45 years old prefer the nested U's and V's figure. When the second most preferences are analyzed, persons younger than 25 years old and between 25-35 years old prefer the fiddleback figure and persons between 36-45 years old and older than 45 years old prefer the knotty figure the most. For the third most preferences, persons younger than 25 years old and older than 45 years old prefer the nested U's and V's figure and persons between 25-45 years old prefer the knotty figure the most. In the statistical analysis made to determine the effects of age on figure preferences it has been found that there is not a statistically significant difference between the two variables ($p > 0.05$). According to this, age is not important for figure preferences on the veneer surface.

When the effects of gender on figure preferences are analyzed, it has been found that males prefer the nested U's and V's figure most, the nested U's and V's figure and fiddleback figure second most with equal ratios, and the fiddleback figure third most. Females prefer the nested U's and V's figure most, the fiddleback figure second most, and the knotty figure third most. As a result of the statistical analysis, it has been found that according to all three preference orders the relationship between gender and figure preference is statistically insignificant ($p > 0.05$). In other words, gender does not have an effect on figure preferences.

When the effects of marital status are analyzed, it has been determined that the married persons prefer the nested U's and V's figure most, the fiddleback figure and the nested U's and V's figure second most, and the knotty figure third most. Single persons prefer the ray-fleck figure most, the ribbon-stripe figure second most and the nested U's and V's figure third most. The figure-marital status relationships for the most and second most preferences are statistically insignificant, while the relationship is statistically significant for the third most preferences. According to this, marital status is considered important for the third most place figure preferences.

The most, second most and third most preferences of the elementary school graduates are the nested U's and V's figure. However, for the third most preference, the fiddleback figure and the nested U's and V's figure are preferred in equal ratios. The high school graduates prefer the knotty figure most, the fiddleback figure second most, and the nested U's and V's figure third most. University graduates prefer the nested U's and V's figure most, the fiddleback figure second most, and the knotty figure third most. According to the statistical analysis, the relationship between educational status and figure preferences is important for the most preferences. In other words, as the educational level changes, preference for the figures changes. For the other orders of preference a relationship between educational status and figure preferences has not been determined.

When the most preferences according to income levels are taken into consideration, in the first and third income groups the nested U's and V's figure is preferred the most and in the second income group the ray-fleck figure is preferred the most. For the second most preferences, in the first income group the nested U's and V's figure is preferred the most, in the second income group the fiddleback figure is preferred the most, and in the third income group the knotty figure is preferred the most. For the third most preferences, in the first and second income groups the knotty figure is preferred the most and in the third income group the fiddleback figure is preferred the most. In the analysis to determine the effect of income on figure preferences, it has been determined that income levels are not effective on figure preference for the most preference, but they are effective for the second most and third most preferences.

In general, when the most preferred figure type is considered, the consumer characteristics, other than educational status, are not effective on figure preferences. In this situation, the nested U's and V's figure is the most preferred figure by all of the consumers. If market segmentation is to be made according to the educational status, then along with the nested U's and V's preference of elementary and university graduates, the knotty figure preference of the high school graduates should also be considered. When the second most and third most preferences are considered, the fiddleback and knotty figures are the other two figures, which are preferred the most.

The t-test has been used to determine the significance between the percentages of the figure preferences and the individual characteristics. According to the hypothesis, "The difference between the percentages is insignificant", it has been determined that for all the factors other than the most preference (fiddleback figure) of the elementary and high school graduates, the difference between the variable percentages is significant with a reliability of 95%.

According to these results, the figures that the panel furniture manufacturers should consider for the furniture surfaces and in the production of contemporary coating materials such as wood, PVC, melamine and laminate are the nested U's and V's figure, the fiddleback figure and the knotty figure. Applying these figures in the production of panel furniture and coatings would eliminate unnecessary stocks and lower the stock costs. Furthermore, the customer satisfaction would increase, since the consumers would not have to choose from a substitute figure, but the figure they prefer at the time of purchase. This is a requirement for the modern marketing concept based on consumer orientation.

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