

EXPERIMENT FOR TESTING THE CONCEPT OF PRODUCT PERSONALITY

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În literatura de specialitate a fost introdus recent conceptul de personalitate a produsului. S-au efectuat experimente bazate pe acest concept. Această lucrare prezintă rezultatele unui experiment conceput și desfășurat de autor pentru verificarea conceptului de personalitate a produsului. Experimentul a confirmat validitatea acestui concept pentru toate produsele supuse analizei. De asemenea, experimentul a confirmat validitatea tuturor trăsăturilor de personalitate analizate.

Recently, the concept of product personality was introduced in specialised literature. Experiments were carried-out using this concept. This paper presents the results of an experiment conceived and run by the author for testing the concept of product personality. The experiment confirmed the validity of this concept for all analysed products. Also, the experiment confirmed the validity of all personality features that were analysed.

Keywords: product personality

1. Introduction

In 1997, Patrick Jordan introduced in the world of industrial design the concept of product personality. As its author stated, the product personality is “the set of human personality characteristics used to describe a specific product variant”. [1]

Jordan thought that products can be regarded as similar to people and, therefore, they can have a distinct personality. The product personality is given by their industrial design.

Jordan considered that this concept is useful for industrial designers in their activity, because he presumed that people prefer products with a personality similar to their own personality. So, the designer is able to create a product with a personality similar to the personality of the customer. The new product would be obviously a successful product.

The model of personality used by Jordan in his product personality assessment was based on the classical Briggs-Myers model. This model uses four dimensions of personality. These dimensions and their associated values are indicated in Table 1.

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Table 1

The Briggs-Myers Model of Personality

Dimension	Values	
Orientation of natural energy	Extroversion	Introversion
Understanding reality	Sensing	Intuition
Way of thinking	Thinking	Feeling
Way of action	Judging	Perceiving

The product personality assessment, as introduced in 1997, “has been criticised by designers on the grounds that the model of personality used - Briggs-Myers - is not something that is easy for the non-psychologist to understand without explanation. In particular, the terminology does not reflect that which a layperson would use when describing personality.” [2]

In 2002, Jordan presents in a paper [2] the results of a new experiment. This new experiment assumed that the concept of product personality is valid. The classical Briggs-Myers model was abandoned and a new model is used. The new model was based on 17 separate unnamed dimensions. Each dimension was described by a pair of antagonist values. The model’s values are indicated in Table 2.

Table 2

The “Jordan” Model of Personality [2]

Values	
Kind	Unkind
Honest	Dishonest
Serious-minded	Light-hearted
Bright	Dim
Stable	Unstable
Narcissistic	Humble
Flexible	Inflexible
Authoritarian	Liberal
Value-driven	Non-value-driven
Extrovert	Introvert
Naive	Cynical
Excessive	Moderate
Conformist	Rebel
Energetic	Unenergetic
Violent	Gentle
Complex	Simple
Pessimistic	Optimistic

Jordan evaluated a series of products using the new model. The analysed products were: 2 irons, 2 men’s shavers, 2 shaver bags, 2 epilators, 2 air cleaners, 2 hair dryers and 2 coffee makers.

The statistical analysis of the results of the Jordan's new experiment did not confirm the hypothesis that people prefer products that match their own perceived personalities.

Two years later, Pascalle Govers and Ruth Mugge designed and ran an experiment based on the concept of product personality. They considered that the concept of product personality is very useful for designers and designers are able to translate the personality features in product design in a way consumers could understand. Actually, they verified the theory of congruence of user personality to product personality. They applied the theory on toasters' design. [3]

At an in-depth analysis of experiments, it can be observed that the experiments are based on the idea that the concept is valid. But, there were no experiments to validate the concept of product personality.

The author of the present paper did not assume that the concept was true or that was false from the very beginning. The author was convinced only that the concept should be verified.

2. Experiment design

The first phase in verifying the concept of product personality was to establish a comprehensible list of personality dimensions and to determine their values. The "Jordan" model of personality was considered a reliable source for this action. A group of author's colleagues assessed the personality dimensions from "Jordan" model in terms of efficiency and precision. They assigned names to dimensions and also proposed new dimensions. The new model is presented in Table 3.

Table 3

The "New" Model of Personality

Dimension	Values	
Sense of self-worth	Vain	Modest
Brilliance	Brilliant	Dim
Complexity	Complex	Simple
Energy	Energetic	Passive
Sensitivity	Sensitive	Insensitive
Kindness	Violent	Gentle
Flexibility	Flexible	Inflexible
Politeness	Polite	Impertinent
Maturity	Mature	Childish
Openness	Open	Closed
Generosity	Generous	Selfish
Honesty	Honest	Dishonest
Seriousness	Serious	Light-hearted
Stability	Stable	Unstable
Tolerance	Authoritarian	Liberal

Dimension	Values	
Morality	Principled	Opportunistic
Attitude towards reality	Naive	Cynical
Attitude towards rules	Conformist	Rebel
Attitude towards results	Pessimistic	Optimistic
Closeness to subject	Warm	Aloof

The second phase was the selection of products used in experiment. It was decided that the set of analysed products will be constituted from pairs of products. Also, it was decided that some products will possess a powerful personality and other will not. Finally, there were selected 2 automobiles, 2 coffee makers, 2 lamps and 2 stools. These products are indicated in Table 4.

Table 4
The Products Used in Experiment

	
Product 1: Chrysler Cruiser	Product 2: Mini Cooper
	
Product 3: Retro Coffee Maker	Product 4: Coffee Maker by Aldo Rossi



The third phase was the establishment of experiment methodology. The methodology consisted from the following steps:

1. The concept of product personality was presented to subjects.
2. The 20 dimensions of personality (from the “new” model) were explained to subjects. (*Note:* The values of personality were not indicated to subjects.)
3. The subjects were asked to point out which were the most important 5 personality dimensions from their point of view. They were informed that the order of the 5 dimensions is not relevant for experiment.
4. The subjects were shown the images of the 8 selected products. The images were displayed on computer screens. The images were coloured and of good quality. Special measures were taken for an identical appearance of products on all computer screens used in experiment.
5. Subjects evaluated the personality intensity for all the 20 considered dimensions of personality for all the eight products. The evaluation was performed using marks from the scale presented below.
6. Subjects noted the marks on a special form distributed at the beginning of experiment.
7. All the special forms were collected for statistical analysis.

The evaluation scale had 5 levels:

- 1 - The product does not have the considered personality dimension.
- 2 - The product has the considered personality dimension at a low level.
- 3 - The product has the considered personality dimension at a medium level.
- 4 - The product has the considered personality dimension at a high level.
- 5 - The product has the considered personality dimension at the highest level.

It should be noted that the subjects evaluated the adequacy of personality dimensions to selected products. They did not assign personality values to each product. (Practically, the subjects did not know the values for each personality dimension.)

3. Experiment results

The experiment was performed using 68 subjects. All subjects were young (22-24 years old). The gender distribution was: 41 female and 27 male. All experiment sessions were supervised by the author of the present paper.

The evaluation of results started with the ordering of personality dimensions according to the perception of subjects. After counting the first five options of each subject, the findings are presented in Table 5.

Table 5

Order of Personality Dimensions			
Dimension	Female	Male	Total
Complexity	25	11	36
Flexibility	20	14	34
Stability	19	11	30
Attitude towards reality	18	9	27
Seriousness	16	9	25
Brilliance	15	9	24
Energy	12	11	23
Maturity	10	6	16
Sense of self-worth	6	9	15
Closeness to subject	11	4	15
Honesty	7	7	14
Openness	5	7	12
Generosity	7	5	12
Morality	6	6	12
Attitude towards rules	4	6	10
Attitude towards results	6	2	8
Sensitivity	6	1	7
Kindness	5	2	7
Tolerance	3	4	7
Politeness	4	2	6

It can be easily noted that is a gap between *Energy* and *Maturity*. This gap marks the difference between important dimensions and less important dimensions. So, the most important dimensions are: *Complexity*, *Flexibility*, *Stability*, *Attitude towards reality*, *Seriousness*, *Brilliance* and *Energy*. Another observation is that dimensions that relate to “kind” values are at the bottom of the table. The young subjects considered them as unimportant.

The statistical analysis indicated the mean and the standard deviation of personality for each product. The values of mean and standard deviation are presented in Table 6.

Mean and Standard Deviation of Product Personality for Each Product

Product	Mean	Standard Deviation
Product 1: Chrysler Cruiser	2.971	1.229
Product 2: Mini Cooper	3.182	1.248
Product 3: Retro Coffee Maker	2.604	1.217
Product 4: Coffee Maker by Aldo Rossi	2.757	1.234
Product 5: Lamp from 1939	2.668	1.296
Product 6: Spider Lamp by Joe Colombo	2.874	1.201
Product 7: Butterfly Stool by Sori Yanagi	2.854	1.249
Product 8: Wooden Stool	2.720	1.187

If the concept of product personality was a mistaken concept, all the values of mean would have been between 1 and 1.5. If the concept of product personality was a powerful concept, all the values of mean would have been between 4.5 and 5. Because the values of mean were between 2.668 and 3.182, it can be assumed that the concept of product personality is valid, but it is not a powerful concept. The values of standard deviation show a certain convergence for all products.

But the overall mean may be not a relevant indicator. Maybe some of the considered personality dimensions scored poor and they influenced negatively the overall result. Because of this, it should be verified the mean values of each personality dimension, considering all products. The scores of each personality dimension are indicated in Table 7.

Mean of Each Personality Dimension for All Products

Dimension	Mean
Stability	3.395
Brilliance	3.254
Complexity	3.226
Closeness to subject	3.176

Dimension	Mean
Attitude towards results	3.129
Sense of self-worth	3.053
Attitude towards reality	2.991
Energy	2.952
Flexibility	2.949
Openness	2.868
Attitude towards rules	2.847
Seriousness	2.835
Maturity	2.667
Tolerance	2.64
Morality	2.599
Generosity	2.496
Sensitivity	2.458
Honesty	2.369
Kindness	2.353
Politeness	2.318

It can be observed that no personality dimension scored very poor as to considerably change the overall results. There are certain similarities between the order in Table 5 and the order in Table 7. And again, the personality dimensions with “kind” values scored poor. So, the results from Table 7 confirm the tendency observed in Table 5 for both top and bottom dimensions.

4. Conclusions

An experiment was designed to test the concept of product personality. The aim of the experiment was to validate/invalidate the concept and not to evaluate the personality of the products used in experiment.

The experiment validated the concept of product personality. Even it was proved not to be a powerful concept; it is surely a valid concept, which can be used in the activity of conception of industrial design.

All the proposed personality dimensions were confirmed to be valid. Not all the personality dimensions had the same degree of significance. Some of them were demonstrated to be more powerful than the rest.

R E F E R E N C E S

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