

## EMOTIONAL COMPONENT IN THE CLOTHING DESIGN WITH SEMANTIC DIFFERENTIAL

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Kansei engineering (KE) develops methods of translating and embedding perceptual and emotional qualities in garments features. In design garment emotion plays an important role in encouraging an aesthetic garment quality [1]. Found that one of the main directions in improving the aesthetic garment quality is to develop clothes that harmonize with the consumer appearance [2].

This paper aims to evaluate the emotional component of the garment by semantic differential. The process of evaluating consumer emotional experience with the semantic differential method means classifying the Kansei attributes of the clothes as key issues for the concept of recognition in images, and particularly emotions.

Semantic differential (SD) method scales by Osgood [3] could be applied for categorizing the impressions of the garments.

Sequence of actions is presented on example of women's dresses:

1. Collect the clothes photos.
2. Place the photo-dress on consumer's photo.
3. Choose the ranking scales of semantic differential.
4. Use experts' opinion for evaluation an impression of the images of the clothes on the consumer's figure, and analyze the components of impression.

Fashion mega portal «first VIEW» [4] was used to carry out this study. This portal allows us to work with digital photos of the collection shows. Modern European women's dress (seasons "spring-summer" 2016) was selected as object for the study. At the first stage of this research, in the set of 66 photos of dresses designs were chosen those that the consumer likes the most. These models were located in a united modular grid (fig. 1). At the next step of research placing of the dresses photos on consumer's photo was performed. These visual series are the basis for further research. We have taken into account the symmetry of the human figure, color, sewing lines, decorative details etc. (fig. 2).



**Fig. 1 – Examples of the digital photos (trapezium shaped dresses)**



**Fig. 2 – Examples of dresses photos on the consumer's photos**

Psycho-physiological comfort is usually achieved as a result of harmonization an outfit's colors, shapes, fabrics and proportions with the consumer appearance.

Table 1 shows an example of Kansei words (KW) for the image of consumer clothes. These KW were recognized in order to obtain an objective assessment of consumer' feeling and impressions from a dress. The SD technique is used in order to act as the antonyms words towards the three final Kansei words. They are combined with Kansei words as pair words in the SD scale. The weighted scale of seven is used for the preference of final product design by the respondents.

Table 1 – Summary results for the SD of the impressions from a dress

Pair code	Kansei word	SD words	Meaning	Synonyms and antonyms	
				Positively correlated to KW	Negatively correlated to KW
UC	Comfortable	Uncomfortable – Comfortable	Practical and comfortable clothes	Functional Practical Rational	Miserable Boring Unpleasant
SS	Stylish	Simple – Stylish	Having style, smart, fashionable	Actual Modern Fashionable	Simple Common Outdated
NH	Harmonious with consumer appearance	Not harmonious – Harmonious	Clothes which harmonize with the particular consumer appearance	Charming Colorful Exclusive	Dull Colorless Gloomy

The example of SD scale according to a questionnaire survey is represented in the table 2.

Table 2 – SD scale of Kansei words

	1	2	3	4	5	6	7	
<b>NEGATIVE</b>	-3	-2	-1	0	+1	+2	+3	<b>POSITIVE</b>
Uncomfortable								Comfortable
Simple								Stylish
Not harmonious with the consumer appearance								Harmonious with the consumer appearance

Analysis of the responses that based on the SD method through the factor analysis, will contribute to the clothes clusterization that will be based on consumers perception and their emotional needs.

### References:

1. Nagamachi M. Kansei / Affective Engineering / M. Nagamachi. – Taylor & Francis Group, 2011. – 311 p.
2. Kuleshova S.G. Evaluation of the level of harmonisation of clothes / A.L. Slavinska, O.V. Zakharkevich // International Conference on Research in Education and Science. Proceeding book. – 2016. – P. 1544 – 1552.
3. Osgood C. E. Method and Theory in Experimental Psychology / C. E. Osgood. (German) Hardcover – Import, 1968. – 800 p. Режим доступа: <https://www.amazon.com/Method-Theory-Experimental-Psychology-Osgood/dp/B0000CINB9>
4. First VIEW. [Электронный ресурс] / Режим доступа: <http://www.firstview.com/>