



Research article

POSITIVE AND NEGATIVE PERSONALITY EXPECTATIONS AND INDIVIDUAL EVALUATION OF COLOR CONTEXT

Bilyana Yordanova, Associate Professor, Ph.D.

***Department of Psychology, SWU "Neofit Rilski", Blagoevgrad, Bulgaria.**

Email: b_iordanova@swu.bg

***Abstract:** Many interesting and provocative questions about individual aesthetic preferences related to the limits of conceptual development of both the psychology of art and the psychology of personality have not yet been explored in psychology. Of greatest interest, however, are the variables that could affect preferences, such as personal, demographic, and social differences, because they are a source of understanding of how individual groups approach such an important area of modern life. These are important questions that continue to be studied by personality psychologists and those interested in art. Therefore, the current study examines individual aesthetic preferences in the context of key personality dimensions positive and negative expectations in order to answer the aforementioned questions.*

***Key words:** positive and negative expectations, individual differences, color preference*

Product design and aesthetics have long been recognized as key determinants of marketing and sales success (Miller & Adler, 2003). Consumers always value product quality and competitive prices, but aesthetics is a particularly important criterion by which consumers differentiate products and make purchase decisions (Jordan, Thomas, & McClelland, 1996; Postrel, 2003).

Most researches in psychology, marketing, and even philosophy focus on what is or is not aesthetically pleasing and identifying the characteristics of objects that appear more attractive or beautiful to the individual (Bloch, 1995; Veryzer & Hutchinson, 1998). It is relatively well established that moderately complex aesthetic stimuli are preferred over those that are very simple or very complex (Berlyne, 1971; Yordanova, 2019).

The individual often bases personal choice on comparing his aesthetic preferences against the functional values of the object (Yordanova, 2016). Product color elicits an emotional response, while product quality is based on cognitive evaluation (Page & Herr, 2002). Norman, (2004) suggests that product design can evoke a stimulated affect (mood) as a result of its shape or as a result of the overall aesthetic effect.

Aesthetics are everywhere, and the meaning of aesthetics no longer applies only to art. Much research in psychology has focused on advertising and product design, particularly for product categories where aesthetics have traditionally served as the primary product characteristic. Aesthetic

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preferences have been studied for offices (Bitner, 1992), homes, and even museums (Joy & Sherry, 2003).

In recent decades, a new scientific field has emerged that seeks to establish aesthetic preferences in visual art. The term “preferences” refers to behavior revealing liking or disliking for artistic works of art or a set of aesthetic stimuli (Bezruczko & Schroeder, 1996). The theoretical and empirical consideration of the nature of the preference for visual stimuli is important because there is an inextricable connection between preferences and personality characteristics in the direction of personality development, its traits, its social behavior and its creative capacity (Bezruczko & Schroeder, 1996).

Lark-Horowitz (1937) argued for the presence of compromising variables in preference studies because, although works of art provoke an aesthetic response, when these responses are analyzed, it is inevitably the tangible rather than the aesthetic component, such as line or color.

2. Research design

Main objective of current research is to find specific preferences towards color characteristics of computer-generated images among persons with general positive or negative expectations.

Probably both positive - negative dimensions of personality demonstrate specific preferences for color variations.

Scale Optimism and negative expectations of Radoslavova and Velichkov (2005) was used for establishing this personality construct.

3. Results

A mandatory condition for observing good research practices is the presence of detailed arguments in the construction of experimental designs based on the research objectives and the statistical model chosen by the researchers for the particular study. Therefore, the present study describes the creation of controlled stimuli and follows the principles of conjoint analysis, which allows systematic discrimination of stimuli. Using conjoint analysis to determine the relative importance of different aesthetic dimensions and their combinations allows researchers to determine the differential influence of combinations of colors on personal preferences.

Table No. 1. Color preferences of persons with positive expectations

factor	factorial level	utility estimates	standard error	relative importance
background	black	1.389	0.155	
	grey	-3.497	0.155	44.683
	white	4.886	0.142	
accent	red	2.663	0.142	
	yellow	1.668	0.155	19.498
	pink	-0.995	0.155	
detail	blue	4.703	0.142	
	purple	2.686	0.155	35.819
	orange	-2.017	0.155	
	constant	6.702	0.168	
coefficient of correlation		value	significance level	
	Pearson's R	0.894		0.001
	Kendall's tau	0.903		0.002
	Kendall's tau Holdouts	1.000		0.018

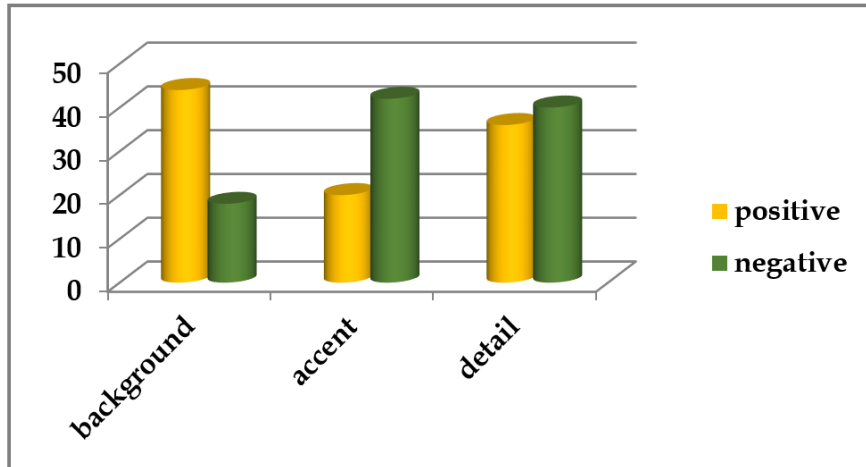
Results of the conjoint analysis to determine the preferences for color in individuals with positive expectations found clear preferences. According to the background color, the most preferred color is white, followed by black. The gray background color is the least preferred. The relative importance of the factor "background color" is 44.683. Depending on the accent color, red is the most preferred color, followed by yellow. The least preferred accent color is pink. The relative importance of the "accent color" factor is 19.498. Regarding the color of the detail, blue is the most preferred color, followed by purple. The least preferred is the orange color of the detail. The relative importance of the factor "color of detail" is 35.819.

Table No. 2. Color preferences in persons with negative expectations

factor	factorial level	utility estimates	standard error	relative importance
background	black	1.802	0.162	18.273
	grey	2.804	0.131	
	white	-1.002	0.162	
accent	red	3.887	0.131	41.605
	yellow	-0.902	0.162	
	pink	4.779	0.162	
detail	blue	4.625	0.131	40.122
	purple	3.732	0.162	
	orange	-0.893	0.162	
	constant	6.364	0.180	
coefficient of correlation		value	significance level	
	Pearson's R	0.970	0.003	
	Kendall's tau	0.881	0.002	
	Kendall's tau Holdouts	1.000	0.015	

Results of the conjoint analysis to determine the preferences for color in individuals with a negative expectations found clear preferences. According to the background color, gray is the most preferred color, followed by black. The least preferred is the white background color. The relative importance of the factor "background color" is 18.273. Depending on the accent color, pink is the most preferred color, followed by yellow. Red accent color is the least preferred. The relative importance of the "accent color" factor is 41.605. Regarding the color of the detail, blue is the most preferred color, followed by purple. The least preferred is the orange color of the detail. The relative importance of the factor "color of detail" is 40.122.

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Graph No. 1. Percentage distribution of factor importance by subgroups

Regarding the significance of the "background color" factor, it is found that it is higher in persons with positive expectations 44%, compared to that in persons with negative expectations 18%. The significance of the "accent color" factor is higher in persons with negative expectations 42%, compared to that in individuals with positive expectations 20%. The significance of the third factor "color of the detail" is higher in persons with negative expectations 40%, compared to that in individuals with positive expectations 36%.

Table No. 3. Summarized results of utility evaluations

factor	factorial level	utility estimates	standard error	relative importance
background	black	4.872	0.140	31.478
	grey	-1.359	0.156	
	white	3.513	0.156	
	red	3.601	0.140	
accent	yellow	1.154	0.156	30.552
	pink	-2.447	0.156	
	blue	4.812	0.140	
detail	purple	2.108	0.156	37.971
	orange	-2.704	0.156	
	constant	6.503	0.129	
coefficient of correlation		value	significance level	
Pearson's R		0.932	0.001	
Kendall's tau		0.892	0.004	
Kendall's tau Holdouts		1.000	0.016	

Summarized results from analysis for determining the preferences for color, in the context of the optimism-pessimism dimension, establish clear preferences. According to the background color, the most preferred color is black, followed by white. The gray background color is the least preferred. The relative importance of the factor "background color" is 31.478. Depending on the accent color, red is the

most preferred color, followed by yellow. The least preferred accent color is pink. The relative importance of the "accent color" factor is 30.552. Regarding the color of the detail, blue is the most preferred color, followed by purple. The least preferred is the orange color of the detail. The relative importance of the factor "color of detail" is 37.971.

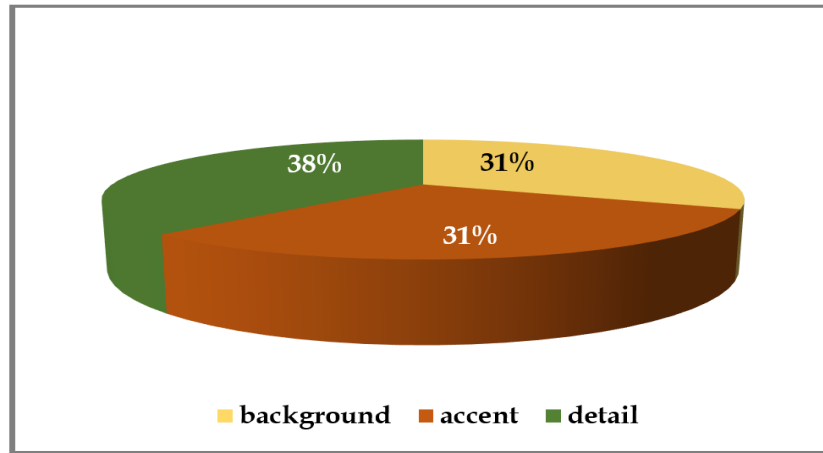


Chart No. 2. Percentage distribution of the overall factor significance

Total distribution of the aggregated significance scores of the factors along the positive-negative dimension illustrates the following features. The most significant is the "detail" factor 38%, followed by the "background" 31% and "accent" 31% factors, which equally determine personal color preferences.

4. Conclusion

There are two main axes along which preference research has developed. The first involves using a task that involves the assessment of aesthetic preferences. Most preference research has focused specifically on the ranking of several reproductions of works of art, where participants are required to rank the stimuli. Others apply a set of stimuli or a set of pairs to be compared. Unfortunately, the majority of contemporary studies did not consider psychometric personality characteristics, jeopardizing the significance of the results. In fact, most studies of aesthetic preferences use idiosyncratic assessment instruments. The instrument was entirely developed to fit a specific purpose, not as an assessment tool that has standard instructions and has high reliability and validity. The continued use of such instruments limits the results, while at the same time compromising the scientific hypothesis and the interpretation of the results of such research. The second axis involves a concentration on identifying variables that can influence preferences. It is possible that one of these previously uncontrolled variables is contained within individual elements. Thus, preference is more a function of content. The most frequently cited factor when children are participants in such research is content or subject matter.

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