



ORIGINAL

How Ukrainians Perceive Emotions and Colours: An Analysis of Specific Features

Cómo perciben los ucranianos las emociones y los colores: un análisis de sus particularidades

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ABSTRACT

The study presents research results on the associative connection between emotions and colours among Ukrainian-speaking and non-Ukrainian-speaking Ukrainians. It aims to confirm or refute the constancy of associations between the ten differential emotions identified by C. Izard and different colours, as well as the specificity of the relationship of these associations for the Ukrainian-speaking audience compared to the non-Ukrainian-speaking one. The survey questionnaire comprised a socio-demographic section, which incorporated a query regarding the language that the respondents learned to speak initially. The methodology was based on the free association method, where the stimulus material consisted of the names of ten specified emotions, and the respondents were expected to provide the colours that came to mind first. The study involved 127 participants aged between 18 and 60, of whom 109 were female and 18 were male. The study showed a constant associative relationship ratio between emotions and colours. In contrast, this ratio's specificity in the Ukrainian sample was not supported compared to the non-Ukrainian sample. This finding highlights the need for further research into the influence of language, culture, and individuality on colour perception in modern conditions. The second result shows that some emotions have more associative colours than others, indicating the existence of emotion colour attributes. It allows for the analysis of the uniqueness of each individual's experience of different emotions.

Keywords: Emotions; Colour Psychology; Language; Perception; Associations.

RESUMEN

El estudio presenta los resultados de una investigación sobre la conexión asociativa entre las emociones y los colores entre los ucranianos de habla ucraniana y los que no lo son. Su objetivo es confirmar o refutar la constancia de las asociaciones entre las diez emociones diferenciales identificadas por C. Izard y los diferentes colores, así como la especificidad de la relación de estas asociaciones para la audiencia de habla ucraniana en comparación con la de habla no ucraniana. El cuestionario de la encuesta comprendía una sección sociodemográfica, que incorporaba una pregunta sobre el idioma que los encuestados aprendieron a hablar inicialmente. La metodología se basó en el método de asociación libre, donde el material de estímulo consistía en los nombres de diez emociones específicas, y se esperaba que los encuestados proporcionaran los colores que les vinieran primero a la mente. El estudio involucró a 127 participantes de entre 18 y 60 años, de los cuales 109 eran mujeres y 18 hombres. El estudio mostró una relación asociativa constante entre las emociones y los colores. Por el contrario, la especificidad de esta relación en la muestra ucraniana no se mantuvo en comparación con la muestra no ucraniana. Este hallazgo pone de relieve la necesidad de seguir investigando la influencia del lenguaje, la cultura y la individualidad en la percepción del color en las

condiciones modernas. El segundo resultado muestra que algunas emociones tienen colores más asociativos que otras, lo que indica la existencia de atributos de color de la emoción.

Palabras clave: Emociones; Psicología del Color; Lenguaje; Percepción; Asociaciones.

INTRODUCTION

The understanding of emotions in psychology has evolved significantly, with critical conceptualisation and methodology shifts. In the late 19th and early 20th centuries, influential figures such as Charles Darwin, Sigmund Freud, and William James emphasised biological and physiological aspects of emotions. During the mid-20th century, the behaviourist movement focused on observable behaviour, leading to a decreased emphasis on emotions that were not visible to the human eye.⁽¹⁾

However, in the latter half of the century, the cognitive revolution integrated emotions with cognitive processes such as appraisal, judgement, and perception of reality.⁽²⁾

The study of emotions has extended beyond psychology, leading to interdisciplinary research such as the history of emotions, which considers them historical and cultural artefacts.⁽²⁾

As a result, the understanding of emotions in psychology has progressed from focusing on biological and physiological aspects to a more comprehensive perspective that encompasses cognitive, social, and cultural dimensions. Research on colour perception involves interdisciplinary efforts to understand how people encode, perceive, talk about, and use colour.⁽³⁾

It includes attempts to understand associations between emotions, colours, and language and colours. This research has the potential to identify specific associations and deepen our understanding of the experience of emotions, their influence on a person's worldview, and the role of language in this structure.

This study aims to confirm or refute the consistency of associations between the ten differential emotions identified by C. Izard and different colours and the specificity of the correlation between these associations for the Ukrainian-speaking audience compared to the foreign-speaking audience.

To analyse scientific research on colour perception in different cultures. To identify the peculiarities of associations between colours and emotions in Ukrainians.

There are three main approaches to studying emotions: the appraisal tradition, psychological constructionism, and the tradition of basic emotions.⁽⁵⁾ The appraisal tradition in understanding emotions is based on the idea that they result from cognitive evaluations of events or stimuli in terms of their significance for personal well-being and goals. The subjective interpretation of the event, rather than the event itself, determines the emotional reaction, as different people may feel different emotions in response to the same event. The evaluation process is dynamic and can change over time as new information becomes available or the person's goals or environment change.

It is believed that evaluation processes affect various components of emotions, including physiological reactions, expressive behaviour, and subjective feelings. The appraisal tradition has influenced the understanding of the complexity of emotional experiences and provided a basis for investigating how people interpret and react to the surrounding world.⁽⁶⁾

According to the psychological constructionism tradition, emotions are not innate or biologically determined states but are constructed from more basic psychological components. The core effect refers to the neurophysiological state that is consciously experienced as a simple feeling of whether a person feels good or bad. The conceptual act model proposes that emotions are constructed in real-time based on this effect and the categorisation of the affective state using concepts from one's cultural environment. Additionally, executive functions such as working memory, control, and selection of more rational actions (inhibitory control) and cognitive flexibility play a role in this process. Social and cultural contexts influence emotions, but personal experience and conceptual knowledge can also contribute to variability. Psychological constructionism highlights the interplay between bodily changes and cognitive processes in experiencing emotions, rejecting the notion of specific neural circuits for particular emotions.⁽⁷⁾ Accordingly, this tradition studies emotions as dynamic processes formed by numerous interacting psychological components rather than discrete entities.

The theory of basic emotions posits that universal emotions exist, are innate and inherent to all individuals, irrespective of their culture, and can be identified by universal facial expressions. This theory has significantly impacted the development of emotion theory and research, providing a basis for comprehending the biological and evolutionary aspects of emotional life.⁽⁸⁾

Carroll Izard contributed to the tradition of basic emotions with his differential emotions theory (DET). He proposed ten fundamental emotions, each with its own set of facial expressions, subjective experiences, and biological processes. Interest is the feeling of being intrigued and stimulated by something new or complex. Joy is an emotion of pleasure, feelings of delight and fulfilment. Surprise is a brief emotional state triggered by an

unexpected event. Sadness is a feeling of loss or adversity, often accompanied by a desire to withdraw. Anger is an emotional response to perceived injustice or threat, often leading to a readiness to act. Disgust involves reacting to unpleasant or offensive stimuli, including physical, moral, or interpersonal elements. Contempt is a feeling of disdain or mockery towards something considered inferior or unworthy. Fear is the response to a perceived danger or threat, leading to a 'fight or flight' response. Fear, shame, and guilt are complex emotions that different situations can trigger. Shame involves feelings of exposure, embarrassment, and a desire to hide or disappear. Guilt is felt when someone believes they have violated a moral norm or harmed another person.⁽⁹⁾

Research into colour perception has a complex and lengthy history. The study of colour perception in psychology has been ongoing for several centuries, with significant contributions from disciplines such as philosophy, physiology, and psychophysics. Currently, colour perception in psychology is examined from multiple perspectives.⁽³⁾ The study investigates the stability of associations between different colours and specific emotions. For instance, data suggests that the perception of colour temperature, warm and cool shades, can mediate associations between colour and emotions. Warm colours are often associated with high-energy emotions, while cool colours are associated with low-energy emotions. Cultural traditions and personal experiences also influence secondary associations. For example, white is often associated with purity and blue with sadness.⁽¹⁰⁾ High-energy emotions like happiness and anger are commonly associated with primary colours like blue, red, and yellow.

In contrast, low-energy emotions like sadness and fear are linked to neutral colours like black, white, and grey.⁽¹¹⁾ Cultural differences can significantly impact the associations between colour and emotions. Certain colours have strong associations with specific emotions in certain cultures. For example, in Thai culture, red represents anger.⁽¹²⁾

Also, the context in which colour is presented, such as in facial expressions, can influence the perceived emotion.⁽¹²⁾ A complex interplay of physiological reactions, cultural norms, personal experience, and contextual presentation of colour influences the stability of associations between colour and emotions. Therefore, it is essential to consider these factors when examining the relationship between colour and emotions.

The interaction between language and cognition in colour perception is also studied. Research has shown that language can influence grapheme-colour synesthesia. Specifically, linguistic properties such as phonetic similarity, colour names, and semantic associations can influence the specific associations between letters and colours.⁽¹³⁾ Similarly, research has shown that language affects categorical colour perception. It is easier to distinguish colours from different linguistic categories than those from the same category, suggesting a connection between language and visual perception.⁽¹⁴⁾ Proficiency in linguistic colour categories is closely linked to non-linguistic colour categories, which can improve colour recognition and influence perceptual judgments.⁽¹⁵⁾

Furthermore, using colour-related vocabulary can enhance the categorical nature of colour perception, leading to improved accuracy in colour discrimination. It indicates that language can expand colour concepts, thereby influencing the accuracy of colour discrimination.⁽¹⁶⁾ Thus, language may not cause significant and lasting changes in colour perception. However, it does interact with cognitive processes, affecting colour processing, particularly in post-perceptual decision-making and immediate object differentiation tasks.

The Luscher Colour Test, developed in the 1940s, is an example of colour used in psychology. This test assesses personality and psychological state based on an individual's colour preferences, which are subjective but stable indicators of psychological functioning. However, the Luscher test has not gained widespread use in modern psychological practice for several reasons. Critics have argued that the theoretical foundations of the test lack empirical evidence, and many psychologists question its validity and reliability. Besides, the test has been criticised for oversimplifying complex psychological traits and states, reducing them to a simple choice of colour without considering the multifaceted nature of human psychology.

Additionally, it is essential to note that colour associations can vary significantly across different cultures, which may limit the applicability and generalizability of the Luscher Colour Test. As a result of these limitations, the test is not considered a primary tool for psychological assessment and is more commonly used in non-clinical or informal settings.⁽¹⁷⁾ Therefore, using colours in psychology, particularly for understanding their relationship with emotions, should be based on diverse empirical data considering their perception's complexity. Contemporary research is mainly applied in nature, studying colour perception in the online space,⁽¹⁸⁾ product selection,⁽¹⁹⁾ and facial recognition.⁽²⁰⁾

METHOD

The data was collected in a single stage using the 'snowball' method and the Google Forms platform. The survey was presented in Ukrainian and consisted of two blocks. The first block was a socio-demographic questionnaire that included questions about the respondent's age, gender, and first language. The second block employed the free association method, and respondents were given the following instructions: Next, you will be given ten open questions in which you will be asked to indicate which colours are associated with specific

emotions. Please answer the questions objectively without including any subjective evaluations. There are no right or wrong answers. The stimulus material was created based on the theory of differential emotions.⁽⁴⁾

Respondents had to be at least 18 years old to be included in the sample, and the criterion was met. Each participant was allowed to review the informed consent form before agreeing to participate in the study. The form clearly stated that the research also involves the study of linguistic features, and participants who feel uncomfortable answering questions about their 'first' language may choose not to participate. The Ethics Committee of the Faculty of Psychology approved the study under protocol No. 01-24/23.

RESULTS

Demographic data and characteristics of the respondents (total N=127) were analyzed. Table 1 provides an overview of socio-demographic statistics.

		N	%
Gender	Female	109	85,8
	Male	18	14,2
Age	18-20 years old	12	9,4
	21-25 years old	31	24,4
	26-40 years old	39	30,7
	40-60 years old	45	35,4
Native language	Russian	81	63,8
	Ukrainian	46	36,2

Notes: N - number of respondents, %.

We conducted a frequency analysis of respondents' answers to open questions about colour associations with emotions to answer the first research question. Specifically, we analysed the emotions of interest, joy, surprise, anger, sorrow, disgust, contempt, fear, shame, and guilt. To standardise the obtained responses and reduce the number of categories studied, we grouped some specific colours into more general ones. For example, we classified khaki shades as green, reddish as red, and light pink as pink. Incorrect answers were excluded from the analysis. The analysis included only those colours that received more than 10 % of respondents' answers for each emotion.

The results showed that for the emotion of interest, the predominant colours were yellow (27,6 %), green (21,3 %), purple (11,8 %), and blue (11 %), as demonstrated in figure 1.

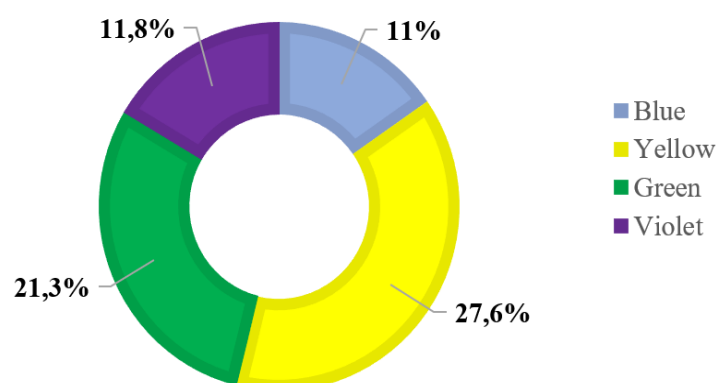


Figure 1. Colours associated with the emotion «Interest»

Note: The diagram shows only the permanent colours

Regarding the emotion of joy, the most significant associations were with the colour yellow (33,1 %), followed by red (15,7 %), pink (14,2 %), and green (12,6 %) as reported by 42, 20, 18, and 16 respondents respectively see figure 2.

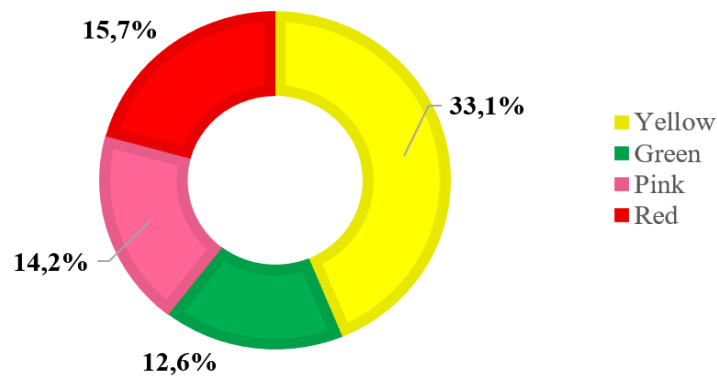


Figure 2. Colours associated with the emotion «Joy»
Note: The diagram shows only the permanent colours

In regards to the emotion of surprise, the colours that were most frequently chosen were purple (16,5 %), yellow and green (14,2 % each), blue (13,4 %), and dark blue (11,0 %) refer to figure 3.

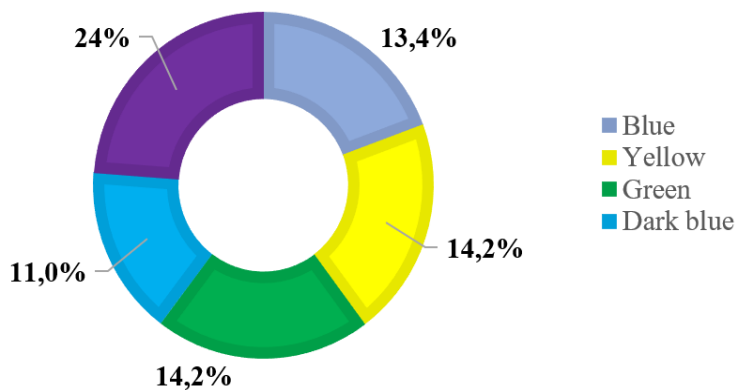


Figure 3. Colours associated with the emotion «Surprise»
Note: The diagram shows only the permanent colours

The study revealed that anger was most commonly linked to the colours red (56,3 %), black (15,1 %), and grey (10,3 %), as shown in figure 4.

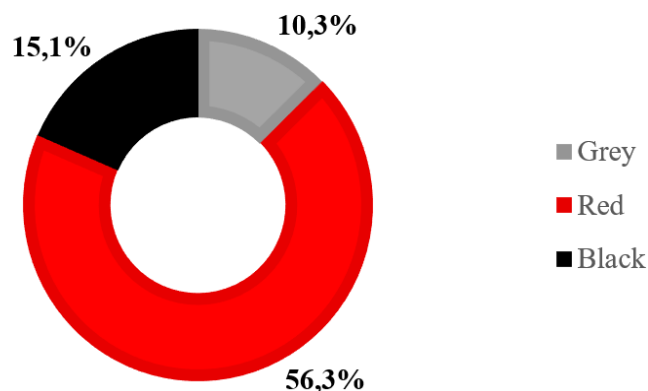


Figure 4. Colours associated with the emotion «Anger»
Note: The diagram shows only the permanent colours

As shown in figure 5, the analysis of sorrowful emotion was dominated by black (54 %), grey (19,0 %), and dark blue (11,9 %).

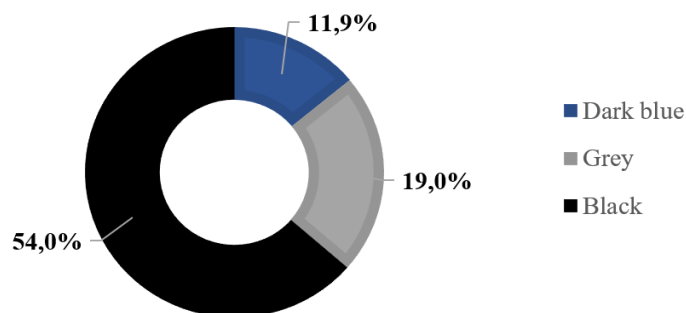


Figure 5. Colours associated with the emotion «Sorrow»
Note: The diagram shows only the permanent colours

As shown in figure 6, disgust was most commonly associated with the colours green (30,7 %), brown (28,3 %), and grey (11,0 %).

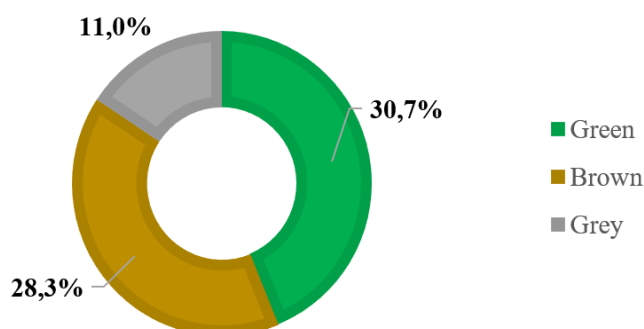


Figure 6. Colours associated with the emotion «Disgust»
Note: The diagram shows only the permanent colours

The study on contempt revealed that grey (24,6 %) - 31 respondents and brown (17,5 %) - 22 respondents - are the most strongly associated colours refer to figure 7.

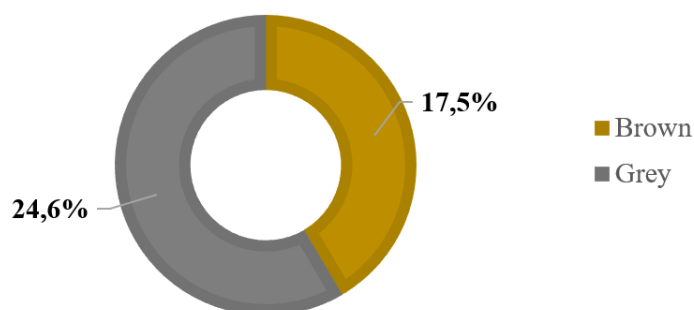


Figure 7. Colours associated with the emotion «Contempt»
Note: The diagram shows only the permanent colours

According to figure 8, fear was most commonly associated with black (24,6 %), followed by dark blue (16,7 %), grey (15,9 %), and red (13,5 %).

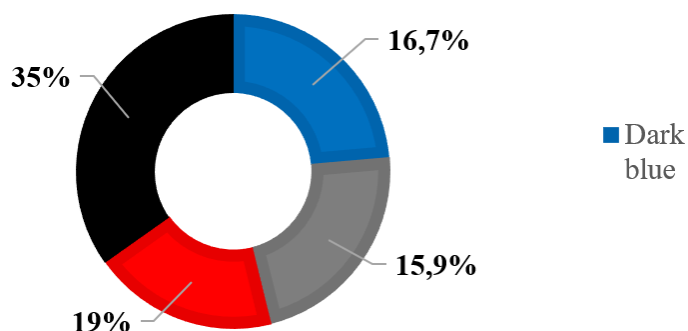


Figure 8. Colours associated with the emotion «Fear»
Note: The diagram shows only the permanent colours

The survey results showed that 29 respondents (22,8 %) associated feelings of shame with the colour pink, 27 respondents (21,3 %) with red, and 13 respondents (10,2 %) with grey (refer to figure 9).

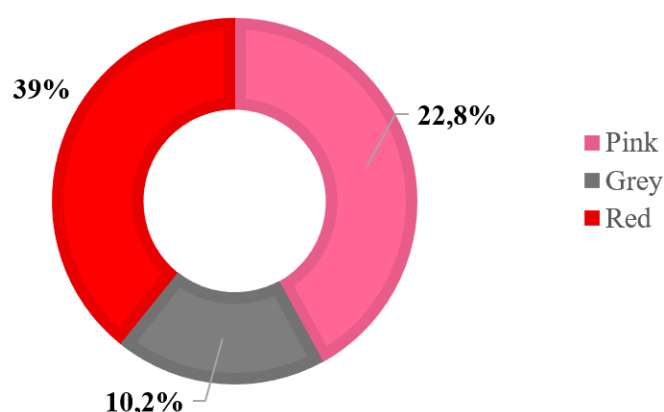


Figure 9. Colours associated with the emotion «Shame»

Note: The diagram shows only the permanent colours

The final emotion analysed was guilt. The most prevalent colours associated with guilt were dark blue (17,1 %), grey (13,8 %), and purple (10,6 %), as reported by 21, 17, and 13 respondents respectively refer to figure 10.

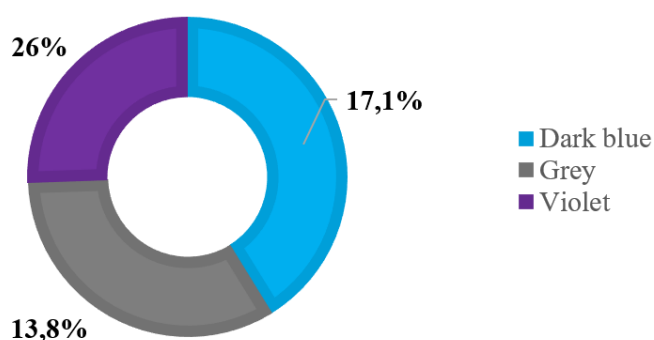


Figure 10. Colours associated with the emotion «Guilt»

Note: The diagram shows only the permanent colours

We applied the Pearson chi-square distribution criterion and contingency tables to address whether the association patterns for the Ukrainian-speaking audience differ from those of non-native speakers. Our analysis found no statistically significant differences between Ukrainian-speaking and Russian-speaking Ukrainians regarding associative links between emotions and colours.

DISCUSSION

The research results show the colours most frequently associated with corresponding emotions. Yellow was the most prevalent colour for the emotion of interest (27,6 %). It can be explained by the fact that this colour easily attracts attention and is generally associated with more positive emotions due to its brightness and warmth. However, it is less dynamic and active than red. Both colours capture attention and can increase physiological arousal in the viewer due to evolutionary mechanisms, as attentional focus generally involves such physiological changes.⁽²¹⁾ Green was the next most prevalent colour (21,3 %). Its association with interest may lie in the fact that interest in something is a primary driver of human development. The conclusion is based on the perception that green is commonly associated with growth and vitality.⁽²²⁾

Purple followed as the second most chosen colour (11,8 %). It can evoke feelings of mystery and magic, as it is less commonly found in nature than other colours and is often associated with spirituality and creativity due to its positioning between the calming blue and energetic red.⁽¹⁵⁾ According to this interpretation, those who chose this colour associate interest not with a sense of activity or development but with experiencing something mysterious and inexplicable. Dark blue was the third most popular colour (11 %). It is often associated with openness and freshness, and due to its association with the sky and water, blue can also evoke feelings of freedom and clarity.⁽¹¹⁾ Therefore, for those who select this colour, the focus on the feeling of interest is not on the process or object but on the outcome - gaining knowledge that offers a sense of comprehension and lucidity.

Yellow was the most commonly associated colour with the emotion of 'joy' (33,1 %). This association is

prevalent across many cultures⁽²²⁾ due to its brightness, which attracts attention and stimulates the brain⁽²¹⁾ as well as its connection to the sun, a symbol of life and energy.⁽¹¹⁾ It is often associated with intensity, passion, and dynamism. Like yellow, red attracts attention and can influence human physiological indicators.⁽²¹⁾ The fact that this colour is associated with joy but not with interest may indicate a more significant activity and intensity of the former emotion. Red was the second most prevalent, accounting for 15,7 % of responses. Pink was the third most prevalent response associated with joy, accounting for 14,2 %. Pink is often associated with femininity, romance, charm, playfulness, tenderness, and comfort. This association is due to the influence of 20th-century marketing companies that sought to increase sales by differentiating gender roles.⁽²³⁾ The least prevalent colour was green (12,6 %), which may be associated with joy due to its connection with health, growth, and nature.⁽²²⁾

The study found that the emotion of surprise is associated with a wide range of colours. These results are consistent with previous research, which suggests that the importance of a colour is not just in the colour itself but also in its novelty and distinctiveness from other colours.⁽²⁴⁾ The most commonly chosen colour among participants was purple (16,5 %), which can evoke feelings of mystery, magic, spirituality, and creativity.⁽¹¹⁾ Following that, yellow accounted for 14,2 % of the impressions, which may be attributed to its brightness. Green also accounted for 14,2 % of the impressions, which could indicate surprise in anticipation of an individual's growth. However, green can also be associated with disgust, such as dirt or food poisoning.⁽²²⁾ The next most frequently mentioned colour was blue (13,4 %). In the context of surprise, it can be interpreted as an unexpected discovery that brings clarity to understanding a particular issue. The second most frequently mentioned shade of dark blue (11,0 %) is darker than blue. It is, therefore, more often associated with melancholy due to its association with darkness and coldness.⁽¹⁶⁾

Dark blue is likely associated with surprise because of its association with the darker part of the day when something unexpected might occur and surprise a person. According to studies by Shirai M et al.⁽²¹⁾ dark blue is primarily associated with sadness. Unlike interest, which is associated with yellow in 27,6 % of cases, surprise has a broader range of associations, including five colours, with purple being the most common. However, none of them reached 25 % of matches. This phenomenon can be explained by the fact that, unlike interest, which has a positive connotation, surprise can be elicited by both positive and adverse events. 56,3 % of respondents associated the emotion of anger with the colour red. Red is a dynamic and active colour that can raise blood pressure and heart rate, which are physiological manifestations of anger. Additionally, red is often associated with danger due to its association with blood, fire, and some toxic creatures.⁽²²⁾

Furthermore, from an evolutionary perspective, red, such as facial flushing, can indicate aggression or dominance, which is linked to anger (Kaya & Epps, 2004). Another colour that was observed was black, accounting for 15,1 %. This colour is often associated with negative emotions and concepts such as death, evil, and the unknown, which can evoke or symbolise anger.⁽²²⁾ Black is often used in fashion and subcultures as a symbol of defiance or rebellion.⁽¹¹⁾ It is also the darkest and most intense colour, associated with anger's depth and strength.

Furthermore, black can convey a sense of protection, which individuals may seek during anger to conceal vulnerability or intimidate.⁽¹²⁾ Grey accounted for 10,3 % of associations with anger. The colour grey is sometimes associated with depressive states, melancholy, and loneliness, which may include elements of anger or irritability. Furthermore, overcast skies, often grey, can affect mood and lead to gloominess or anger due to a lack of sunlight and the psychological consequences of reduced light exposure.⁽²¹⁾

Sorrow mainly was associated with the colour black (54,0 %). As previously stated, the colour mentioned is intense and absorbing, conveying a sense of protection and a desire to hide, which corresponds to the characteristics of grief. Grey (19,0 %) is also associated with this emotion, conveying a sense of melancholy and gloominess. However, more importantly, it is often described as lethargy, lack of energy, or vitality - other states characteristic of experiencing grief. Dark blue (11,9 %) had the most minor associations. It is possible that respondents who mentioned dark blue do not associate it with calmness but rather with the melancholic atmosphere of twilight.

The colours most associated with disgust were green (30,7 %) and brown (28,3 %). These colours can be associated with spoiled food, mould, and decay, which are natural signals of potential contamination and illness. Disgust is an evolutionary protective mechanism that helps to avoid harmful substances, and these colours may signal that something could be dangerous for consumption.⁽²²⁾

The colour least associated with disgust was grey (11,0 %). Additionally, gloominess and lifelessness can evoke disgust and are associated with contamination, including polluted air in industrial and urban environments.⁽²²⁾

Contempt is often associated with grey (24,6 %) and brown (17,5 %). The association with grey can be explained by one's attitude toward the object as lifeless, indistinct, and uninteresting, as grey does not attract attention. The same applies to brown, which is often perceived as dull and unremarkable and sometimes associated with dirt.

Fear was found to be associated with the colours black (24,6 %), dark blue (16,7 %), grey (15,9 %), and red (13,5 %). Black can conceal not only the person from danger but also something potentially dangerous from

them, as it is often associated with darkness. The intensity and high degree of light absorption of black can be attributed to the person perceiving this colour and the surrounding world. In many cultures, the colour black is associated with death, the supernatural, and evil, which can evoke fear.⁽¹¹⁾ Besides, black can symbolise the end or absence of something, which can be a source of fear, particularly the fear of loss or non-existence.⁽¹²⁾ Dark blue is also associated with shadows, similar to black with darkness, which can induce fear due to the possibility of hidden threats. Grey is often associated with fear due to its connection with storm clouds⁽²²⁾, as well as uncertainty, being intermediate between white (good, correct, beneficial) and black (evil, wrong, harmful).⁽¹¹⁾ Furthermore, this colour can induce fear in people who fear a dull and gloomy life. Similarly, red can evoke anger and fear that the anger will be directed towards the person perceiving this colour.

Shame was found to be associated with the colours pink (22,8 %), red (21,3 %), and grey (10,2 %). The association between the colour pink and certain emotions may be explained by various factors. These include blushing due to experiencing shame⁽²²⁾ the categorisation of pink as a 'feminine' attribute in environments where feminine qualities are considered either shameful or mandatory components of a woman's personality if she does not conform to these characteristics⁽¹¹⁾ and the vulnerability felt by an individual who is experiencing shame.⁽²¹⁾ Red can also be associated with shame, as it can cause the skin to redden. It can also be linked to intense self-aggression when experiencing disgrace. Grey is often associated with shame as individuals may desire to become unremarkable and unnoticed to hide their shameful qualities or actions.⁽²²⁾

According to Kaur (2020), guilt was most commonly associated with the colours dark blue (17,1 %), grey (13,8 %), and purple (10,6 %). The association between dark blue and guilt may be due to feelings of coldness and melancholy and the burden of conscience when a person feels guilty. Grey's ambiguity can be interpreted as symbolising a person's moral conflict. It is important to note that grey, like guilt, has a negative connotation.

It should be noted that the assumptions regarding the correspondence between colour-association meanings and attitudes or characteristics of experiencing a particular emotion are subjective. Further research is required to establish causal relationships and understand the reasons behind associating specific colours with particular emotions.

The absence of statistically significant differences between the associations of Ukrainian-speaking and Russian-speaking Ukrainians suggests that language does not significantly influence the associative link between colours and emotions. Instead, shared cultural and individual factors may have a more significant impact. Further research is required to establish the factors influencing the associative links between colours and emotions.

CONCLUSIONS

The study used the free association method and demonstrated a consistent link between emotions and colours. However, the stability of these associations varies depending on the emotion. For instance, surprise was associated with five primary colours, each with almost equal proportions, while contempt was only associated with two primary colours. These data indicate that individuality influences the perception and interpretation of colours and affects the experience and understanding of emotions. For instance, the conditionally neutral emotion of interest can be emphasised differently, such as the object, the process, or the result.

The lack of statistically significant differences between the associations of Ukrainian-speaking and Russian-speaking Ukrainians highlights that language does not play a primary role in forming the connection between colour and emotion. Therefore, it is possible that other components of culture are the primary factor unifying the cultural space of Ukrainian-speaking and Russian-speaking Ukrainians or that individuality is more important than the cultural environment, in which case the mentioned uniformity is called into question. Alternatively, globalisation may affect the associations of representatives of different cultures, replacing 'native' connections with global ones.

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CONFLICT OF INTEREST

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