The concept of happiness from
the basic design workshop

El concepto de felicidad desde el taller de diseño básico

Adriana Judith Cardoso Villegas
Conceptualization - Formal analysis
Research - Visualization and Writing
adriana.cardoso@correo.buap.mx
Meritorious Autonomous University of Puebla
Puebla, Puebla, Mexico
ORCID: 0000-0003-0465-3001

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Abstract

The evaluation of 18 two-dimensional compositions that conceptualized the theme of happiness, carried out in the basic design workshop in the autumn 2021 period in the Graphic Design degree of the Meritorious Autonomous University of Puebla (BUAP) is presented. The choice of topic arose from the lack of enthusiasm and happiness that students experienced due to the COVID-19 pandemic; then, the basic design workshop was promulgated as a space in which students sought satisfaction, interest and happiness with their processes and results.

The theoretical bases included the conceptualization of happiness; also of shape, color and composition from the theory of basic design, as well as the models of evaluation and categorization of emotions by Watson, Tellegen and Browne (cited in Díaz and Flores, 2001) and the one proposed by Díaz and Flores (2001).

The approach was mixed with the qualitative phase in the visual construction of the concept of happiness and obtaining 18 two-dimensional compositions. The quantitative phase used the survey with a convenience sample of 215 respondents who assessed the concepts of satisfaction, joy and well-being using the Likert scale. When evaluating the visual preference and greater association of the concepts in the visual proposals, it turned out that one of the 18 compositions obtained the greatest association in the three concepts: satisfaction, joy and well-being, establishing visual syntax relationships in the use of form, color and composition, as well as in the own conceptualization of happiness by the respondents and the Graphic Design students.

Keywords: visual composition, conceptualization, basic design, happiness

Resumen

Se presenta la valoración de 18 composiciones bidimensionales que conceptualizaron el tema de felicidad, realizadas en el taller de diseño básico en el periodo de otoño 2021 en la licenciatura de Diseño Gráfico de la Benemérita Universidad Autónoma de Puebla (BUAP). La elección del tema surgió por la falta de entusiasmo y felicidad que los estudiantes experimentaron a causa de la pandemia por COVID-19; entonces, el taller de diseño básico se promulgó como un espacio en el cual los estudiantes buscaran satisfacción, interés y felicidad con sus procesos y resultados.

Las bases teóricas incluyeron la conceptualización de felicidad; también de forma, color y composición desde la teoría del diseño básico, así como los modelos de evaluación y categorización de las emociones de Watson, Tellegen y Browne (citados en Díaz y Flores, 2001) y el propuesto por Díaz y Flores (2001).

El enfoque fue mixto con la fase cualitativa en la construcción visual del concepto de felicidad y la obtención de 18 composiciones bidimensionales. La fase cuantitativa empleó la encuesta con un muestreo por conveniencia a 215 respondientes que valoraron los conceptos de satisfacción, alegría y bienestar mediante la escala Likert. Al evaluar la preferencia visual y mayor asociación de los conceptos en las propuestas visuales, resultó que una de las 18 composiciones obtuvo la mayor asociación en los tres conceptos: satisfacción, alegría y bienestar, estableciendo relaciones de sintaxis visual en el uso de la forma, el color y la composición, así como en la propia conceptualización de felicidad por parte de los respondientes y de los estudiantes de Diseño Gráfico.

Palabras clave: composición visual, conceptualización, diseño básico, felicidad

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The United Nations Organization (UN) decreed March 20th as the International Day of Happiness with the intention of recognizing the relevance it has in human beings as an aspirational element that can be included within government policies with a more inclusive and balanced approach in search of the well-being of people in different places. In 2022, the 10 years of the annual world happiness report were commemorated, in which a quantitative measurement of different aspects that contribute in their entirety to measure the impact that happiness has on human beings and its contribution to the human rights and the environmental, economic and health impact, among others.

According to the Dictionary of the Real Academia Española (2022), the term happiness is a "state of pleasant spiritual and physical satisfaction", sometimes highly associated with satisfaction and success. In this way, it is defined by Alarcón (quoted in Barraquín, 2013) as "a state of satisfaction, more or less lasting, that the individual experiences subjectively in possession of a desired good" (p 10); however, there is a difference between the state of happiness, which is described as ephemeral, and that of satisfaction, which is a long-term feeling, according to Trujillo (quoted in Fundación UNAM, 2019, par 5). In the operational part, for the measurement of happiness, categories such as well-being, subjective well-being, psychological well-being and satisfaction with life have been grouped in this work, which have been reported in different studies, among which the report issued annually by the UN (Helliwell, Layard, Sachs, De Neve, Aknin and Wang, 2021) stands out.

It is possible to perceive happiness in the longer term if the five elements proposed by Tal Ben-Shahar (quoted in Villanueva, 2018) are developed from spiritual well-being, physical well-being, intellectual well-being, relational well-being and emotional well-being; perhaps that was why the students took well-being as a sub concept to define happiness, which will be presented later, together with the categories that qualify the concept of happiness in the relevance table.

The investigations and studies related to happiness indicate that everything depends on the approach that is given to its study. In addition
to being difficult to find a single definition. In fact, there are different ways of understanding the concept of happiness and conceptualizing it. Einstein himself, in 1922, tried to describe happiness in two notes: "A humble and calm life brings more happiness than the pursuit of success and the constant restlessness that it implies."”, as well as “Where there is a will, there is a way” (quoted in BBC News, 2017).

Happiness can be related to moods and emotions. For this reason, for its description it is possible to integrate information from studies that bring together elements such as color or shape and its link with other emotions that are included in its definition or conceptualization. In this sense, the models of evaluation and categorization of emotions proposed by Watson and Tellegen, in 1985, and that of Browne, of 1992 (cited in Díaz and Flores, 2001), are presented, as well as the chromatic model of the affective system proposed by Díaz and Flores (2001). These will allow information about a visual element such as color and its relationship in terms of an emotional typology; In the case of the form, there are concrete and abstract associations, from design theory, that can be integrated into the conceptual process for the designer and for the related associations by the user.

Color and emotion are relationships that have been presented in different fields, including painting and design disciplines. Goethe (1992), with the rose of temperaments, linked the colors with the temperaments of people, ordering them into 12 colors in which each one corresponded to a temperament. Kandinsky (quoted in Calvo, 2008), for his part, established a physical and psychological relationship between people when visualizing colors. Sharpe, in 1979 (quoted in Díaz and Flores, 2001), analyzed the association between color and emotion in a deeper way by establishing users' biological responses to the interaction of colors. In addition, in the study carried out by Eva Heller (2008), the associations that two thousand interviewees gave to the colors were established, highlighting their level of liking or disliking, the positive or negative connotations, as well as the subjective qualities, thus strengthening the psychology of color.

Watson, Tellegen and Browne (cited in Díaz and Flores, 2001) developed a chromatic model of the affective system called the wheel of emotions (see figure 1), which combines the ordering of colors in a chromatic circle along with emotions organized by polarity with a coordinate system where the 14 sections are located, in which two axes are located in the vertical and horizontal direction, where the vertical axis is specific for the pleasant-unpleasant tone, while the horizontal axis is for the relaxation-excitement tone (Díaz and Flores, 2001).
The circle is the first shape that children develop when they draw and that they can differentiate from others, which Arnheim (2006) calls the primordial circle. For Samara (2007), the circle has no end, it is continuous, organic, linked to life and movement; while the square is symmetrical, static, stable, analytical and artificial; and the triangle is less stable than the square, and because of its angles it is associated with movement and growth, it is directional and informal. Dondis (2014) mentioned that "meanings of clumsiness, honesty, rectitude and care are associated with the square; to the triangle, the action, the conflict and the tension; to the circle, infinity, warmth and protection" (p 44), which reveals that the forms have various associations and meanings, that will depend on the context they are applied in, as well as the rest of the syntactic elements with which they are applied to interact in the visual message.

It is not the purpose of this research to measure happiness; however, it was the topic addressed by the first semester students of the BUAP Graphic Design degree, specifically in the basic design workshop. The objective of such an approach was to use the relevance table as a tool to conceptualize during the design process phase of a project. In this context, the theme of happiness, being an abstract concept, raised the level of complexity at the time of its definition and materialization. In the social aspect, when living the confinement during the COVID-19 pandemic,
some of the students and teachers experienced depression and lack of motivation in the face of uncertainty and loss of close family members and friends; then, the workshop was promulgated as a space in which students sought satisfaction, interest and happiness during their creative processes and their results.

**General objective:**

Evaluate the association of the concept of happiness represented in two-dimensional visual compositions.

**Particular objectives:**

a) Conceptualize the theme of happiness in the design process of the students of the basic design workshop.

b) Design a two-dimensional visual composition that represents the concept of happiness, using the basic shapes (square, circle and/or triangle) and color in a free composition with a square format of 20 x 20 cm and similar techniques.

c) Evaluate the association of happiness in the visual compositions that meet the formal, compositional and production requirements.

**Methodology**

The investigative practice approach was mixed, with a nested design; that is to say, that there was a qualitative intention to demonstrate the importance of a stage in the design process, based on the relevance of the relevance table; however, within said qualitative intention another quantitative intention was nested, when evaluating the proposals generated by students of a group that studied Basic Design. So, there was a search and collection of information in different groups. The first of them made design proposals, while the second participated as a user, that is, the students acted as the participants to whom the proposals were directed. In both cases, different processes were used, which are specified below:

1) A group of thirty-six students was asked to make a relevance chart to break down the guiding concept of happiness into three sub concepts, and associate each of these with the basic shapes and with color, to later make a free composition in a square format of 20 x 20 centimeters.

2) Each one of the students achieved a composition, the result of their design process.

3) A selection of 18 compositions was made that obtained a score of 9 to 10, fulfilling the categories indicated in terms of completion.
time, respect for the format, technique and the exclusive use of basic shapes and colors within a free composition that was consistent with the information contained in its relevance table.

With the results of the previous stage, as a research technique, the online survey was applied through Google forms, with a convenience sample of 215 participants from a population with the following conditions: that they were residents of the Puebla state, with ages from 12 to 75 years, female and male gender and with different occupations. The questionnaire was applied during the months of October and November 2021 and consisted of 19 questions, the first five responded to sociodemographic information; while from question six to nine, information was requested on the contextual situation of the COVID-19 pandemic, on suffering from the disease, the time spent in confinement and the use of electronic devices. From questions 10 to 18, the concepts of satisfaction, joy and well-being were evaluated in order of six compositions in three series, and in the last question it was requested to describe the concept of happiness in an open question. The instrument presents the evaluation of the 18 compositions divided into three series of six images, randomly formed, evaluated through a survey that qualifies each of the images by category and under the Likert scale from 1 to 5, which corresponds to 1 (strongly disagree), 2 (disagree), 3 (neither one nor the other), 4 (agree) and 5 (strongly agree).

The results that will be shown below allowed us to identify the associations that the design students had in common to understand the concept that they should project visually, in addition to indicating the visual preferences in the respondents, based on the design elements used in the free and abstract compositions, and the linking of said preferences with the psychology of shape and color.

Results

The age that prevailed in the study was in the range of 18 to 28 years, with a lower response from older adults with the range of more than 60 years. Mostly women responded with 62.1% above men. The occupation of the respondents was varied, students predominated, followed by housewives and teachers. Regarding cohabitation, most of the respondents mentioned being single and living with their family.

In order to identify whether there are variations between the mood states of the respondents, they were asked for information related to COVID-19. It was recorded that 50% of them had lost family members during the pandemic. As for the impact on physical health, 60% have suffered from minor illnesses such as colds, stomach infections, allergies, and 40% were infected with the coronavirus.

As for following the safety conditions to avoid contracting the virus, more than a third of the respondents were isolated in their homes for more than
12 months, and followed by less than a third who remained in isolation for six to twelve months. This means that almost two thirds of those who remained isolated did so for at least a year, which also brought with it the use, to a greater extent, of electronic devices, mainly cell phones, followed by computers.

The sub concepts with which the students developed the theme of happiness were categorized (see figure 2), obtaining the following categories: satisfaction, well-being and joy. The answers obtained by the participants were also categorized (see Figure 3).

**Conceptualization of happiness**

![Figure 2. Sub concepts of the students in the conceptualization of happiness. Source: self-made.](image)

**Description of joy**

![Figure 3. Associations with which the respondents described the concept of happiness. Source: self-made.](image)
The associations given by the respondents described emotions and feelings with which they defined the concept of happiness, according to their experience. In order to integrate the concepts that had the lowest number of responses and give an order to the categories, the model of the affective system proposed by Díaz and Flores (2001) was used, which proposes 14 pairs of emotions in polarity and each pair integrates a series of emotions and feelings that belong to that pair. Table 1 shows the seven couples detected, which included the associations described by the participants.

Table 1. Associations integrated to the pairs of the emotions model of Díaz and Flores (2001).

<table>
<thead>
<tr>
<th>Calm-tension</th>
<th>like-dislike</th>
<th>Happiness-sadness</th>
<th>Vigor-exhaustion</th>
<th>Satisfaction-frustration</th>
<th>Love-hate</th>
<th>Enthusiasm-apaty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tranquility</td>
<td>16</td>
<td>Wellbeing</td>
<td>87</td>
<td>Life</td>
<td>Completeness</td>
<td>Family</td>
</tr>
<tr>
<td>Harmony</td>
<td>13</td>
<td>Enthusiasm</td>
<td>Energy</td>
<td>Success</td>
<td>Acnowledgement</td>
<td>Feeling</td>
</tr>
<tr>
<td>Peace</td>
<td>20</td>
<td>Joy</td>
<td>Health</td>
<td>Satisfaction</td>
<td></td>
<td>Freedom</td>
</tr>
<tr>
<td>Comfort</td>
<td>1</td>
<td>Happiness</td>
<td>11</td>
<td>Satisfaction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The responses in Table 1 were integrated into seven pairs: a) calm-tension; b) like-dislike; c) joy-sadness; d) vigor-exhaustion; e) satisfaction-frustration; f) love-hate; g) enthusiasm-apaty. The joy-sadness axis and the satisfaction-frustration axis stood out, where the greatest number of responses accumulated, followed by the calm-tension axis. This made it possible to relate the three sub concepts given by the students (satisfaction, joy and well-being) with the associations of the respondents in the axes of joy and satisfaction; thus, it was possible to conceptualize happiness in common associations for the designer and the participant.

Of the 18 visual compositions, those that obtained a greater association in the three sub concepts evaluated were grouped together in Table 2 and, in the same way, the compositions with the least association with each sub concept were integrated in Table 3.
Table 2. Evaluated compositions with greater association to the sub concepts by the respondents.

<table>
<thead>
<tr>
<th>Sub concept satisfaction</th>
<th>Serie 1-image 5</th>
<th>Serie 2-image 12</th>
<th>Serie 3-image 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub concept happiness</td>
<td>Serie 1-image 5</td>
<td>Serie 2-image 9</td>
<td>Serie 3-image 18</td>
</tr>
<tr>
<td>Sub concept wellbeing</td>
<td>Serie 1-image 4</td>
<td>Serie 2-image 11</td>
<td>Serie 3-image 18</td>
</tr>
</tbody>
</table>

Source: self-made.

Table 3. Evaluated compositions with less association to the sub concepts by the respondents.

<table>
<thead>
<tr>
<th>Sub concept satisfaction</th>
<th>Serie 1-image 1</th>
<th>Serie 2-image 7</th>
<th>Serie 3-image 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub concept happiness</td>
<td>Serie 1-image 1</td>
<td>Serie 2-image 8</td>
<td>Serie 3-image 13</td>
</tr>
<tr>
<td>Sub concept wellbeing</td>
<td>Serie 1-image 2</td>
<td>Serie 2-image 7</td>
<td>Serie 3-image 13</td>
</tr>
</tbody>
</table>

Source: self-made.
Regarding the visual compositions with the greatest association to the concepts that qualify happiness, the image with number 18 of series 3 was chosen in the concepts of satisfaction, joy and well-being; image 5 of series 1 was repeated in the concepts of satisfaction and joy (see Table 2). On the contrary, image 13 was the least associated with the three concepts (satisfaction, well-being, and joy), followed by image 1, which was the least associated with the concepts of satisfaction and joy (see Table 3).

Conclusions

The composition with the greatest preference and association with the conceptualization of happiness (see Figure 4), since it is associated with satisfaction, joy and well-being, is a symmetrical composition, with greater use of straight geometric figures, through the use of the triangle in different sizes, angles and colors. Considering that the triangle is associated with movement and growth (Samara, 2007), it is less stable than the square, but, in the case of the equilateral triangle, it is balanced (López and Herrera, 2008), which is related to the aspirational emotion of completeness and satisfaction. Regarding the use of color, the image balances warm and cold colors using a type of contrast by quantity balanced between the brightest and least bright colors that were used. When comparing it with the chromatic range of the wheel of emotions by Watson, Tellegen and Browne (in Díaz and Flores, 2001), it is possible to find relationships between the colors: calm blue; green of love, pleasure, and pleasure; yellow for joy and orange for satisfaction. It is interesting that, despite using the violet magenta color, which is on the anger axis, it shares the axes towards the pole of liking in greater numbers. The student who made this composition only used the psychology of color formulated in Heller (2008) and the theory of the chromatic circle in the relevance table; he did not address the emotion wheel theory; however, its use of colors is closely related, as well as the choice of preference and association to the concepts of satisfaction, well-being and joy, and to the associations by the respondents, which were integrated into the axes of calm, love, pleasure, joy, satisfaction and pleasure. Thus, the composition fulfills in chromatic range six of the seven axes in liking (see Figure 4).
Figure 4. Preferred composition and with greater association to the concept of happiness compared to the Watson, Tellegen and Browne model.
Source: Self elaborated with information from Díaz and Flores, 2001.

The second composition (see Figure 5) that was presented with greater preference in two concepts (satisfaction and joy) was from series number 5, which uses a free composition and does not have a formal structure or distribution in which a pattern of order can be found presents the basic shape of the circle in different sizes with the use of primary colors and, to a lesser extent, the combination of secondary colors. The circle is organic, curved, which is why it tends to be feminine and is associated with continuous and cyclical movement. The colors generate a contrast because they are primary, with intensity saturation. It stands out that, despite the fact that the colors chosen are associated with children, the majority of the respondents were in the range of 18 to 28 years, with a predominance of the female gender. According to Heller (2000), the color blue is preferred by men and women and, while the latter place red in second place and yellow in third, men rank third and fourth with red and yellow, respectively. This in an age range ranging from 26 to 49 years. Considering the above, it is understandable that in the choice of this composition the color preference of those surveyed by age is imposed. Compared to the composition with the highest
preference and association, this selection only integrates the joy axis of the wheel of emotions.

![Figure 5](image_url)

Figure 5. Second preferred composition and with greater association in the concepts of satisfaction and joy.
Source: self-made.

The composition with the least preference and associations has a formal structure and rhythm, uses the square as the main basic shape in three sizes, and uses colors in harmony with the warm family. The square as a shape is associated with stability, as well as a lack of movement and flexibility (when using right angles), which is what the majority of the young population, that is, those surveyed between the ages of 18 and 28 years, deal with. In this image, the selection of colors within the wheel of emotions is found in the axes of satisfaction and enthusiasm; which means that the lack of contrast and the predominance of the symmetrical and static straight shape did not generate in the respondents the association to the concept of happiness nor was it reflected in the evaluation of the three concepts (satisfaction, joy or well-being).

![Figure 6](image_url)

Figure 6. Composition with less preference and association to the concept of happiness.
Source: self-made.
Considering that Graphic Design is a discipline that, by its nature, can allow various solutions to the same problem to be found, the conceptual development of students is important so that they are able to approach a topic or problem with the greatest possible understanding, adding to this the knowledge about the user and his experience, since said user will have precise or imprecise associations of the subject or problem depending on how it is exposed.

The students presented 18 alternatives to address the issue of happiness with limitations such as technique and digital appreciation. In this regard, it is important to consider that users had a visual preference (and that they will always have it in visual solutions) for those images related to their age, gender, visual experience and frames of reference, so it is the job of designers to treat to have as much information as possible from the user regarding their visual preferences, in addition to the fact that it is possible and recommended that they review theories from other disciplines that strengthen possible visual solutions.

Now, from the most preferred composition and associations to the concept of happiness, it is possible to find guidelines in the use of composition, shape and color that affect graphic design applications, in case the theme of happiness is one of the visual messages that you want to position in the minds of users.

On the other hand, it is important to point out that Graphic Design, through the use of visual elements, can be used to communicate the theme of happiness in users and address the emotions that they will experience. In addition, it enables the students of the BUAP basic design workshop to become interested, investigate, experiment and reflect during their creative processes, which allow them, in turn, to feel happy and satisfied during their design process until they reach the final results.

**References**


Calvo, I. (2008). *Proyectacolor: Recursos de apoyo a la manera tradicional de estudiar y enseñar el color para el diseño [tesis de pregrado]*. Chile: Universidad
de Chile. Recovered on July the 15th, 2022 from https://repositorio.uchile.cl/handle/2250/112961


About the author

Adriana Judith Cardoso Villegas

Graduated from the Faculty of Architecture of the BUAP with a degree in Graphic Design in 1998. She completed a Master’s degree in Design from FABUAP and obtained her degree in 2005. She graduated in 2015 with honors from the doctorate in Design Development and Teaching from the UMAD. In 2020 he graduated with a master’s degree in Advertising Design and Brand Innovation from the Superior School of Design in Barcelona and the University of Valencia.
She is a full-time tenured professor-researcher at BUAP, where she began in 2000 as a professor of the subjects: Sign Design, Packaging, Creativity, Basic Design and Conceptual Process. He has directed theses related to the theoretical and methodological training of graphic design at various universities in Puebla. He is currently a Prodep profile (2022-2025); SNI candidate (2023-2026) and leader of the academic body of Strategic Design and Innovation for Visual Communication. She is also an editorial consultant for the digital magazine Insigne Visual and a member of the EGEL Ceneval Technical Committee.