

MANDALA DRAWING AS AN EVALUATION INSTRUMENT OF DEPRESSIVE SYMPTOMATOLOGY AMONG BRAZILIAN UNIVERSITY STUDENTS

Irene Gaeta^{1 2}, Orcid: <https://orcid.org/0000-0001-8844-7138>

ABSTRACT. This exploratory research seeks to investigate the use of Mandalas Drawing as a clinical assessment tool for depressive symptoms (Gaeta, 2017). The studied sample consisted of 67 Brazilian university students, male and female, aged between 19 and 23 years. Participants answered the Beck Depression Inventory (BDI), an instrument that aims to measure the intensity of depression. In addition, each volunteer received a sheet of canson paper containing only a drawing of a circle (Mandala), for which they were asked to draw inside this circle, freehand and in an unstructured way, using crayon. Afterwards, the participants were asked to give a title to the drawing made. Not knowing the participants' depression indices, gender or age, 15 independent judges analyzed the Mandala Drawings, following the categories regarding the graphic representations determined by the proposed protocol. The analysis performed showed significant differences in the expressions of participants with and without depression. The graphic aspects analyzed allowed us to observe greater concreteness and rigidity in depressed volunteers, in contrast to the greater capacity for abstraction and fluidity of participants without depression. Thus, it is noted that the groups of depressive and non-depressed participants had their own characteristics, so that noticing them is essential for the systematization of this instrument. In this sense, as there is an analogy between the psyche and the Mandala drawing (Jung, 2013), its use as a diagnostic and/or clinical tool can contribute to the assessment of depressive symptoms.

Keywords: Mandala; diagnosis; depression.

DESENHO DE MANDALAS COMO INSTRUMENTO AVALIATIVO DE SINTOMATOLOGIA DEPRESSIVA ENTRE UNIVERSITÁRIOS BRASILEIROS

RESUMO. Esta pesquisa exploratória busca investigar o uso do Desenho de Mandalas como instrumento de avaliação clínica para sintomatologia depressiva (Gaeta, 2017). A amostra estudada foi composta por 67 estudantes universitários brasileiros, dos gêneros feminino e masculino, na faixa etária de 19 a 23 anos. Os participantes responderam ao Inventário de Depressão de Beck (BDI), instrumento que tem como objetivo medir a intensidade da depressão. Além disso, cada voluntário recebeu uma folha de papel canson, contendo apenas o desenho de um círculo (Mandala), de modo que foi solicitado a eles que fizessem um desenho dentro desse círculo, à mão livre e de forma não estruturada, utilizando giz de cera. Posteriormente, foi solicitado aos participantes que dessem um título ao desenho feito. Desconhecendo os índices de depressão dos participantes, gênero ou idade, 15 juízes independentes analisaram os Desenhos de Mandala, seguindo as categorias acerca das representações gráficas determinadas pelo protocolo proposto. A análise realizada permitiu constatar diferenças significativas nas expressões de

¹ Pontifícia Universidade Católica de São Paulo (PUC-SP), São Paulo-SP, Brazil.

² E-mail: estudosjunguianos.irenegaeta@gmail.com



participantes com e sem depressão. Os aspectos gráficos analisados permitiram observar maior concretude e rigidez em voluntários depressivos, em contraposição à maior capacidade de abstração e fluidez dos participantes sem depressão. Assim, nota-se que os grupos de participantes depressivos e não depressivos apresentavam características próprias, de modo que notá-las é fundamental para a sistematização desse instrumento. Nesse sentido, na medida em que existe uma analogia entre psique e desenho da Mandala (Jung, 2013), seu uso como instrumento diagnóstico e/ou clínico pode contribuir para avaliação da sintomatologia depressiva.

Palavras-chave: Mandala; diagnóstico; depressão.

DISEÑO DE MANDALAS COMO INSTRUMENTO DE EVALUACIÓN DE SINTOMATOLOGÍA DEPRESIVA EN ESTUDIANTES UNIVERSITARIOS BRASILEÑOS

RESUMEN. Esta investigación exploratoria busca investigar el uso del diseño de Mandalas como herramienta de evaluación clínica para síntomas depresivos (Gaeta, 2017). La muestra estudiada estuvo constituida por 67 estudiantes universitarios brasileños, hombres y mujeres, con edades comprendidas entre los 19 y los 23 años. Los participantes respondieron el Inventario de Depresión de Beck (BDI), un instrumento que tiene como objetivo medir la intensidad de la depresión. Además, cada voluntario recibió una hoja de papel canson que contenía solo un dibujo de un círculo (Mandala), por lo que se les pidió que dibujaran un dibujo dentro de este círculo, a mano alzada y de forma desestructurada, utilizando tiza. Posteriormente, se pidió a los participantes que dieran título al dibujo realizado. Sin conocer los índices de depresión, sexo o edad de los participantes, 15 jueces independientes analizaron los Dibujos de Mandala, siguiendo las categorías en cuanto a las representaciones gráficas determinadas por el protocolo propuesto. El análisis realizado mostró diferencias significativas en las expresiones de los participantes con y sin depresión. Los aspectos gráficos analizados permitieron observar una mayor concreción y rigidez en los voluntarios deprimidos, en contraste con la mayor capacidad de abstracción y fluidez de los participantes sin depresión. Así, se observa que los grupos de participantes depresivos y no deprimidos tenían características propias, por lo que advertirlos es fundamental para la sistematización de este instrumento. En este sentido, al existir una analogía entre la psique y el diseño del Mandala (Jung, 2013), su uso como herramienta diagnóstica y/o clínica puede contribuir a la evaluación de los síntomas depresivos.

Palabras clave: Mandala; diagnóstico; depresión.

Introduction

This study is an exploratory research that analyzes the effectiveness of using mandala drawing as a clinical tool to assess depressive symptoms in Brazilian university students, comparing it with the Beck Depression Inventory (BDI), in order to seek progress in the systematization of this instrument.

Gaeta (2017) studied mandala drawing as an assessment instrument, pointing out that its use offers possibilities to understand the psychological reality of people suffering from depression. In this sense, it was understood that this technique could contribute to the expansion of knowledge in the field of psychodiagnostics as well as to the search for appropriate intervention strategies in the psychotherapeutic care of the depressed

population. Thus, this research was initiated to continue the investigation of the use of mandala drawings as an assessment tool.

In his clinical work, Carl Gustav Jung (1875-1961) observed the spontaneous emergence of mandala drawings and began studying the subject. He points out that the word mandala – which means ‘circle’ – refers to “[...] circular images that are drawn, painted, plastically configured or danced” (Jung, 2014, p. 393).

In the field of psychology, it has been noted that mandalas represent nature’s attempt at self-healing, which, according to Jung, arises from an instinctive impulse and represents a fundamental archetypal scheme, as described:

A fundamental scheme, an archetype, is used, which, so to speak, occurs everywhere and does not owe its existence solely to tradition, in the same way that instincts do not depend on a transmission of this type. They are given to every newborn individual and belong to an inalienable collection of qualities that characterize a species. Psychology calls an archetype a certain common formal aspect of instinct and, like it, is given a priori. Consequently, we find in mandalas a fundamental conformity, despite all external differences, regardless of their temporal and spatial origin (Jung, 2014, p. 394).

Jung (2014) points to the quadrature of the circle as an archetypal theme, whose meaning – ‘quaternity is a unity’ – allows us to consider it as an archetype of totality. In addition to this consideration, the author also emphasizes that the mandala, as a circular figure, represents a center from which everything starts or converges, just like the psyche, which also presents a center – the self. In view of these aspects, Jung proposes an analogy between the mandala and the psyche: he believes that the mandala expresses the totality of the universe and the human soul radiating from a center – the core of the psyche, the space of God, and the self (Jung, 2013, 2014).

The author also described clinical situations in which he observed the spontaneous emergence of mandala images and pointed out the following:

As a psychological phenomenon, they appear spontaneously in dreams, in certain states of conflict, and in schizophrenia [...] Their spontaneous appearance in individuals today allows psychological research to conduct a more in-depth study of their functional meaning. In general, mandalas appear in states of psychic dissociation or disorientation (Jung, 2014, p. 393).

With this in mind, it has been found that mandalas allow a dialogue between the ego and the unconscious through symbols that emerge during their production. Symbols contain both conscious and unconscious elements so that they can be understood as a meeting of seemingly irreconcilable opposites. In this sense, symbols represent the best possible way to integrate unconscious content into consciousness (Jung, 2013). Mandalas can be understood as important sources for the objectification of unconscious images, as described by Jung (2014, p. 356, emphasis added):

They are, as it were, portraits of the changes vaguely felt within, which are perceived by the “inner eye” and made visible with pencil and brush, just as they present themselves, misunderstood, and enigmatic. Paintings are ideograms of unconscious content [...] we can paint complex pictures whose true content is completely unknown to us. As we paint, the picture develops on its own, often even against our conscious intention.

In Brazil, psychiatrist Nise da Silveira (1905-1999) followed Jung’s footsteps and pioneered work with mandalas for patients with schizophrenia. This Brazilian psychiatrist did not understand schizophrenia as a disease that does not require drug treatment (Silveira, 2015). In her view, the patient struggles to build an emotional bridge with the world, a fact proven in her artistic works. Silveira pointed out that it is up to the psychiatrist to focus on

the patient's metalanguage, trying to understand the meaning of their symbols at a non-verbal level.

As Silveira sought alternatives for working with patients with schizophrenia, the present study sought to investigate the contributions of the mandala drawing technique as a diagnostic tool for another clinical condition: depression. According to the Pan American Health Organization (PAHO), depression is a common disorder caused by a combination of genetic, biological, environmental, and psychological factors and is considered the leading cause of disability worldwide, affecting the emotional, social, and occupational roles of individuals suffering from the disease.

The IBGE National Health Survey, conducted in 2019, showed that, in Brazil, 16.3 million people over the age of 18 years suffer from the disease, an increase of 34.2% between 2013 and 2019 (Gigliotti, 2020). In the context of the COVID-19 pandemic, the situation is even worse, as shown by a study by Filgueiras (Universidade do Estado do Rio de Janeiro [UERJ], 2020). The survey involved the participation of 1,460 people in 23 states and all regions of the country, who answered an online questionnaire with more than 200 questions at two specific times: from March 20 to 25 and April 15 to 20. Between the first and second collections, Filgueiras highlighted that the number related to depression increased from 4.2% to 8.0%. It is understandable that depression cases have already been increasing over time, but in the face of the pandemic scenario, there has been an even greater increase (UERJ, 2020).

Recent studies have highlighted the relevance of using the mandala as a tool in the care of patients with depression (Gaeta, 2017; Garros & Machado, 2019; Roquet & Sas, 2021; Valladares-Torres, 2017). In addition, mandalas have been used in therapeutic work (Mello & Vieira, 2019) developed in different populations, such as psychiatric patients (Kim et al., 2017), attention deficit hyperactivity disorder (Michas, 2020), autism spectrum disorders (Kim, 2018), and anxiety (Christy, 2020; Munpansa, 2020; Valladares-Torres, 2017).

The use of mandala drawing as a tool in the treatment of depression has become interesting because it allows dialogue between consciousness and unconsciousness through the organized approximation of the symbol (Gaeta, 2010). It is understood that the drawing can act as a clinical diagnostic tool for depressive symptoms, since the mandala allows the expression of the individual's inner processes, as emphasized by Jung (2014, p. 395):

Individual mandalas use an infinite number of themes and symbolic allusions, which simply indicate an attempt to express that the totality of the individual in his or her inner or outer worldview wants to be the essential point of reference for the same. Its object is the Self, as opposed to the ego, which is only the reference point for consciousness, while the Self includes the totality of the psyche in general, that is, the conscious and unconscious.

In a brief bibliographic review, looking for articles from the last five years (2017-2022), with the terms 'mandala + depression', the results found show that research in this field mostly highlights the mandala as a therapeutic work tool, as it allows psychic organization. In this sense, this research aims to broaden the view on the use of mandala drawings. In addition to being a therapeutic tool, it can also act as a resource allied to psychodiagnostics.

The literature review on the terms 'mandala + psychodiagnostics' did not reveal specific results in the field of psychological diagnosis, but it was possible to learn about the study conducted by Fonseca et al. (2021), which related mandalas to the psychopedagogical context. The researchers carried out a preliminary validation study of the Chromatic Mandalas Psychopedagogic Test, a playful instrument for projective and

pedagogical assessments. The topographic production measures of the Mandala Test were correlated with learning styles, the behavioral scale (EACI-P), intelligence measures (WISC-III), and the Pfister Pyramid Test. The results obtained indicated convergent discriminant validity between elements of the topographic distribution of colors in the mandala test and the performance IQ test, the level of functioning in the EACI-P, and some syndromes in the Pfister, thus demonstrating the behavioral, cognitive, and emotional sensitivity of the test.

This study explored the use of mandala drawings as a psychological assessment tool. As a drawing technique, it is understood that, unlike oral language, there is less interference from conscious control and, in this sense, the expression of the unconscious can emerge more freely (Gaeta, 2017). Thus, the nonverbal language of mandala drawings can provide resources for the assessment of depressive symptoms; that is, the free expression of the psyche at a given moment, without egoic control of consciousness, can allow the perception of the nuances of the individual's unique typology.

Method

Data were collected in two phases: administration of the Beck Depression Inventory (BDI) and mandala drawing. The administration was done collectively, and the order was counterbalanced, i.e., for half of the sample, the BDI was administered before the mandala drawing, and for the other half, the BDI was administered after the mandala drawing. The research participants were 67 male and female university students aged between 19 and 23. All participants signed an informed consent form required by the ethics committee to which this research was submitted.

The Beck Depression Inventory is a 21-item instrument designed to measure the intensity of depression from the age of 13 years to old age. The test can be administered individually or collectively; therefore, this collection was performed as follows. The results obtained from the application of the Beck Depression Inventory (BDI) allowed participants to be divided into four groups according to their level of depression: minimal, mild, moderate, and severe. Of the 28 students in the minimal group, seven had a score of zero, that is, no signs of depression. Therefore, mandalas of the population were divided according to the same classification.

Regarding the mandala drawings, each student was given a sheet of Canson paper containing only a drawing of a circle, and was asked to draw a free-hand, unstructured drawing inside the circle using school crayons. The participants were then asked to give their drawings titles. It is worth noting that, in the present study, mandalas were understood to be drawings inside the circle made by the participants.

In view of the objectives of this study and the difficulties in analyzing the visual and symbolic images of mandala drawings, we analyzed and compared the mandalas made by the extreme groups: the group with a severe depressive index and the group without depression. The protocol proposed an analysis of the graphic aspects of the mandala drawing based on the following categories:

- (1) Title: whether the content of the drawing is clearly stated, and whether it is inside or outside the circle.
- (2) Borders: whether there are extrapolations of the border and whether the borders are highlighted.
- (3) Content: whether the drawing is abstract or figurative, and what content is expressed in the drawing (judges may indicate more than one option from the following: human, religious, nature, abstraction, geometric shapes, or other).

(4) Colors: which color palette predominates, and how many colors are used in the drawing.

(5) Graphic stroke: whether the stroke is rounded or angular, whether the gestures are regular or irregular, whether the tone of the painting is strong or weak, and whether there is a relationship between the parts of the drawing.

(6) Position in space: whether there is symmetry in the drawing or not, whether there are empty spaces within the circle, whether there is a greater concentration of drawings in some area of the circle, and whether the space is fully utilized.

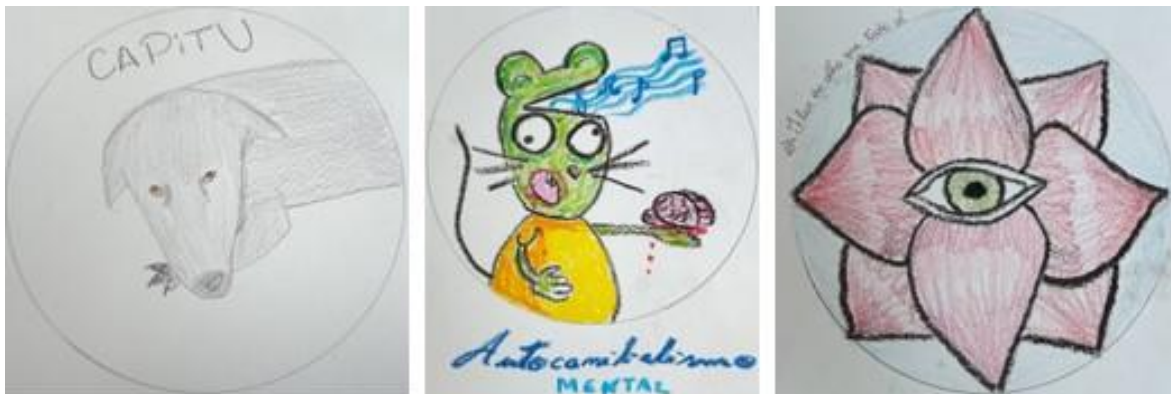
(7) Overall synthesis: judges should point out a type of mandala that synthesizes what was represented in the participant's drawing (abstract, spiral, geometric, nature, religious, or figurative).

In order to understand the categories, images were provided as examples for each category to standardize raters' understanding of the indicated items. Using the Google Forms platform, 15 independent judges rated the mandala drawings without knowing the participants' level of depression, gender, or age. This evaluation allowed us to observe some differences between mandalas with and without depression.

Results and discussion

Regarding the title, participants with severe depression tended to title their mandalas in a way that clearly announced the drawing they had produced, thus establishing a direct and objective relationship (Figure 4).

Figure 4 Mandalas of participants with depression



Examples of mandalas made by participants with depression. Titles: Capitu (left); Mental self-cannibalism (center); The Flower of the AllSeeing Eye (right).

Source: The author.

By contrast, most volunteers without depression gave titles that did not clearly announce their drawings to establish a more subjective relationship (Figure 5).

Figure 5 Mandalas of participants without depression

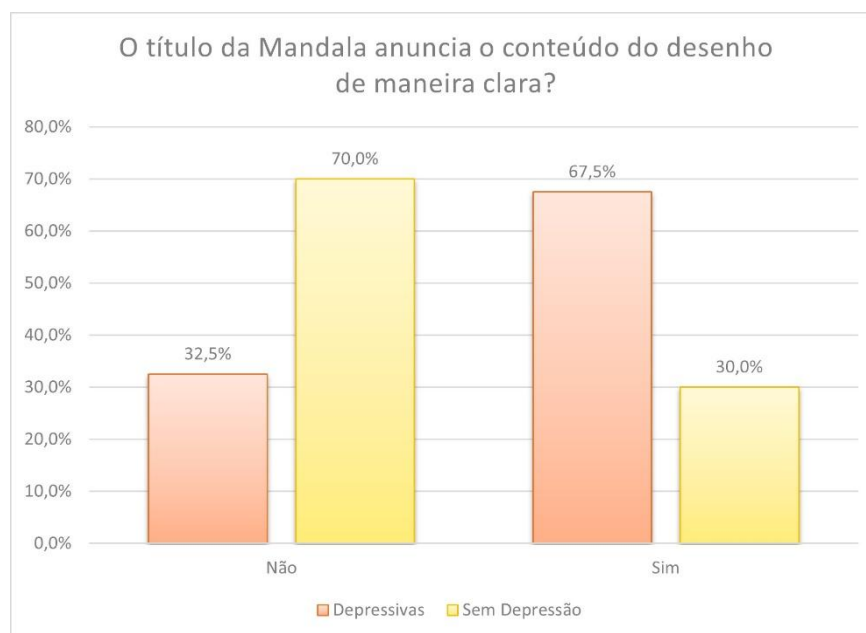


Examples of mandalas made by participants without depression. Titles: Colorful reverie (left); After-class (center); Salute to the beetroot (right).

Source: The author

This makes it possible to reflect on the objectivity and concreteness of the depressive process, which contrasts with the greater capacity for abstraction and subjectivation in participants without depression (Figure 1).

Figura 1 Gráfico de comparação entre títulos das mandalas



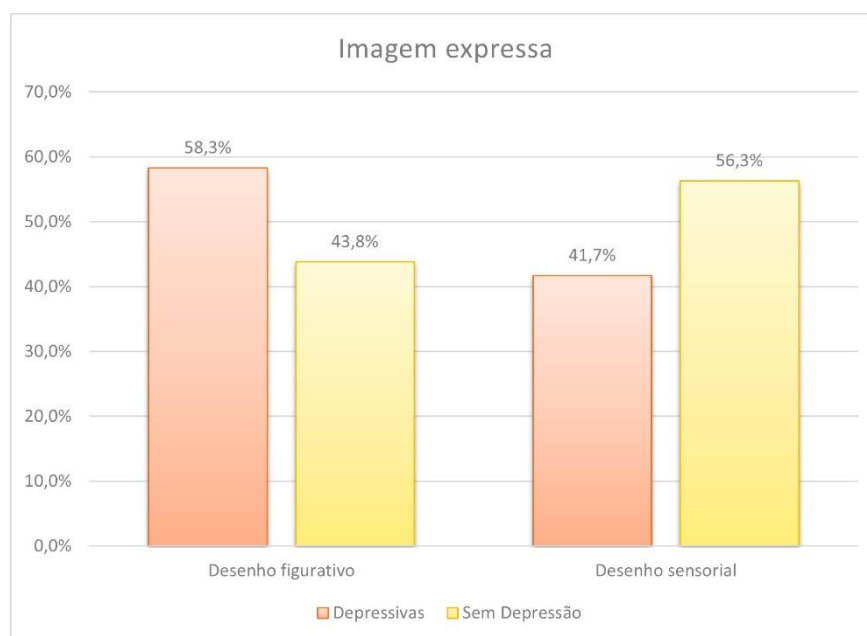
Comparação entre mandalas depressivas e não depressivas para o item O título da Mandala anuncia o conteúdo do desenho de maneira clara?

Fonte: O autor.

The relationship between depressed and non-depressed participants regarding the image expressed in the mandala drawing reinforces the hypothesis of concreteness in the depressive process. Most participants without depression tended to make sensory drawings that were abstract and subjective. In contrast, most depressed volunteers tended to make figurative representations with defined and easily identifiable shapes. Thus, it is possible to resume the hypothesis regarding concreteness in depression, understanding that figurative

drawing is permeated by objectivity and clarity in what one wants to demonstrate, similar to the relationship established with the title (Figure 2).

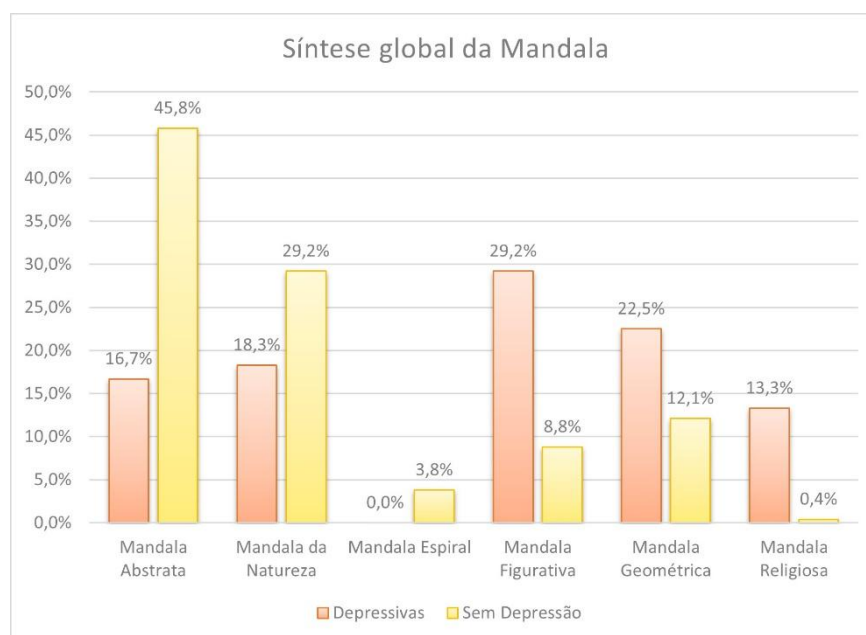
Figura 2 Gráfico de comparação entre imagens expressas



Comparação entre mandalas depressivas e não depressivas para o item imagem expressa.
Fonte: O autor.

The analysis of the relationship between parts of the drawing converged with the hypotheses raised. The comparison between the two groups showed that depressed participants more often produced mandalas whose parts of the drawing were consistent to create a logical, objective, and clear relationship. Dissonance and dissolution were more common in participants without depression, raising the hypothesis that abstraction and subjectivity in these volunteers allow for other possibilities (Figure 3).

In addition, it was interesting to observe the relationship with the edges of the mandalas: the highest frequency of extrapolation of the circle's limits occurred in depressed participants. Although this did not occur in the majority of this group, it is important to note that it represents a difference from the group without depression, whose percentage of extrapolation of edges was lower. Thus, it was hypothesized that in depressed participants, this extrapolation of edges may be symbolic of emotional overflow. Regarding the emphasis given to the edges, it was interesting to note that, while in the participants without depression there was a balance between highlighting or not highlighting the edges of the mandala, in the depressed volunteers, it was more frequent for this highlight not to be there. Given this, one can hypothesize an analogy to the lack of clarity of contours experienced in the emotional sphere during the depressive process. Confirming the previously described extrapolation of the edges, it is clear that in the depressive process, the limits are not evident; therefore, this is reflected in the production of the mandala, both because there is an extrapolation of the contours and because they are not highlighted.

Figura 3 Gráfico de comparação entre sínteses das mandalas

Comparação entre mandalas depressivas e não depressivas para o item síntese global da mandala.
 Fonte: O autor.

It was also possible to detect differences in the repertoires of the two groups through analysis of colors and strokes. It is possible to notice that the participants without depression used more mixtures of tones, compared to the depressed group, as well as more types of strokes (angular and rounded) compared to the depressed group. It is possible to consider the narrowing of the repertoire experienced throughout the depressive process, which may be related to the concreteness previously discussed.

The precision of the gestures also differed between the two groups. Participants without depression were observed to make irregular gestures more often, whereas depressed volunteers were observed to make more regular gestures. Regarding movement, a relationship can be observed that corroborates the analysis of the gesture: rigid movements are more frequent in depressed participants, while flexible movements are more frequent in volunteers without depression. In view of this, it is possible to resume the proposed relationship about the narrowing of repertoire in the depressive process, since concreteness may culminate in a less broad view of possibilities. This is reflected not only in the colors and lines but also in the gestures. Regular gestures and rigid movements converge with the idea of a smaller repertoire so that creativity is not manifested through fluidity.

Conversely, participants without depression presented more irregular gestures and fluid movements, demonstrating greater openness to possibilities and a broader repertoire. This is reflected in the way spatial exploration occurs, and it is possible to assume that the fluidity of the gesture is analogous to the fluidity of the gaze of volunteers without depression, since they are more receptive to the world, ideas, creations, and possibilities.

Finally, the overall synthesis of mandalas showed a striking difference between the two groups. While the group without depression tended to produce more abstract mandalas, depressed participants produced more figurative mandalas. This synthesis reinforces the

hypothesis raised regarding the concreteness and objectivity of the depressive process, in contrast to the greater capacity for abstraction and fluidity in volunteers without depression.

It is noted that, among the particularities in the form of representation, concreteness in the mandalas of depressed participants stands out, as opposed to a greater abstraction in the mandalas of participants without depression. In light of this, a symbolic interpretation was proposed to hypothesize the differences in the symbolization process between participants with and without depression. The symbolic perspective understands normal depression as a structuring function of the psyche insofar as it participates in the process of structuring the ego, as described by Byington (2007, p. 5):

The structuring function of normal depression structures the Ego with the characteristics of the Life and Death Archetype, centered on discouragement and inherent to transformations. Thus, depression or sadness, and joy or euphoria are a common and habitual part of the developmental process.

In the process of normal and structuring depression, the Life and Death Archetype has the function of selecting which symbols should remain in the psyche and which symbols should be discarded. To this end, the two poles must be articulated creatively to establish an appropriate complementary relationship (Byington, 2019). In contrast, pathological depression occurs when fixations of the Life and Death Archetype occur, so that “[...] what must die and be reborn during normal symbolic elaboration remains as the living dead, tormenting the Self through the compulsion of repetition, as pathological complexes, true ghosts, or tortured souls of mental illness” (Byington, 2007, p. 5).

It is understood that, in the process of pathological depression, there is a fixation of symbols in the psyche, to the extent that the fixation of the Life and Death Archetype makes their elaboration impossible. Byington (2007, p. 5) points out that if fixed symbols are not rescued:

If this rescue is not successful [...] pathological depression sets in, characterized by unproductive, compulsive-repetitive discouragement, accompanied by catastrophism and self-destructive ideation. Symbols that were unable to die and transform in normal elaboration are now threatened by the fixed and defensive Life and Death Archetype.

The symbolic view of the depressive process makes it possible to establish relationships with the aspects observed in this study, among which concreteness stands out, a striking characteristic of depressed participants, that is, those experiencing a pathological depressive process. It can be hypothesized that this particularity is due to fixation and limited symbolic elaboration inherent to the pathological depressive process. Faced with this lack of resources, the subject's creativity atrophies, driving them into more concrete forms of expression and representation. In contrast, individuals who are not in a pathological depressive process do not experience fixation and have preserved the capacity for symbolic elaboration, so their creative process involves abstractions and symbolizations.

Final considerations

The COVID-19 pandemic, which began in 2020, was characterized by high rates of depression; therefore, studies are being conducted on this condition and its incidence in different contexts, such as among health professionals (Ávila et al., 2021; Santos et al., 2021) and students (Castro et al., 2020; Maia & Dias, 2020). Considering the numerous consequences of the pandemic in different areas, depression should be highlighted as one of them. Given this scenario, competent professionals must be prepared to deal with this demand from both the psychotherapeutic and psychodiagnostic perspectives.

Considering the context presented, it is possible to think that this study took place at a time when demand was high, and therefore, it has shown its practical usefulness. Furthermore, it should be emphasized that the creation and systematization of the diagnostic instrument proposed by this research is relevant, as it is supported by the Jungian therapeutic proposal, which advocates understanding the subject in its entirety, transcending the psychiatric evaluation centered only on nosological categories.

Given the results presented, it is possible to understand that there is an analogy between the psyche and the mandala drawing, as proposed by Jung (2013, 2014). The groups of depressed and non-depressed patients presented their own characteristics; therefore, it is essential to note them for the systematization of this instrument. It is worth noting, however, that it is also necessary to consider the unique style of each subject in their artistic expression, so this study does not propose to generalize expressive capacities but to take them into account in the process of diagnosis and referral to a therapeutic project congruent with the singularity of the subject in question.

The aim was to continue the research previously conducted (Gaeta, 2010, 2017) and to advance the systematization of the instrument. The reformulation of the protocol allowed the observation of new characteristics and aspects related to mandala drawings in participants experiencing the depressive process. In this way, it was possible to learn about new possibilities of the proposed instrument to expand the aspects to be observed in the diagnostic elaboration through drawing. This process attempts to be sensitive and takes into account the uniqueness of the individual, but at the same time, it is objective and aims to serve the function of correct guidance, which aims to reduce psychological suffering.

Jung believed that behind great emotions, there are images that can be understood, so that painting them brings relaxation and fluidity. In this sense, it is possible to reach the healing layer by reaching the deepest layer of the unconscious. However, pure expression is not enough; it is necessary to have the gaze of someone who recognizes it, and the therapist acts as a witness, as a kind of conscience. This observation acts as a resonant catalyst because it is in the interaction between the gaze and psyche that reality manifests itself.

Thus, the use of mandala drawing as a diagnostic and/or clinical tool, when done in series, can demonstrate the subject's self-healing process and tell about their self-regulation, whether they are healthy or not. This research allowed us to observe striking aspects in the production of drawings by depressed participants, such as the experience of concreteness, lack of contours, and clarity regarding some emotions, and narrowing of the repertoire. Although this study represents a significant advance in the systematization of the instrument, it is worth highlighting the need for new research that applies the instrument to new populations, to improve it, and to understand new aspects to be observed in this proposed diagnostic assessment.

References

- Ávila, A., Goulart, M., Góes, F., Silva A., Duarte, F. & Oliveira, C. (2021). Sintomas de depressão em profissionais de enfermagem durante a pandemia de Covid-19. *Cogitare Enfermagem*, 26. <https://doi.org/10.5380/ce.v26i0.76442>
- Byington, C. (2007). A depressão normal e o futuro da civilização: um estudo da função estruturante da depressão pela psicologia simbólica junguiana. *Revista Junguiana*, 25, 7-17.

- Byington, C. (2019). O arquétipo da vida e da morte: um estudo da psicologia simbólica. *Revista Junguiana*, 37(1), 175-200.
- Castro, C. J., Junqueira, S. M., & Cicuto, C. A. (2020). Anxiety, depression and stress in times of pandemic: a study with high school students. *Research, Society and Development*, 9(10), e8649109349. <https://doi.org/10.33448/rsd-v9i10.9349>
- Christy, S. (2020). *Filling the empty space: lowering anxiety levels in young adults by coloring mandalas as an intervention* [Master thesis]. Notre Dame de Namur University.
- Fonseca, M. F., Muszkat, M., & Cardoso, T. S. (2021). Teste psicopedagógico das Mandalas Cromáticas: estudo preliminar de validação. *Brazilian Journal of Development*, 7(3), 23725-23742. <https://doi.org/10.34117/bjdv7n3-198>
- Gaeta, I. (2010). *Psicoterapia junguiana: novos caminhos na clínica: o uso do desenho de mandalas e calatonia*. Vetor.
- Gaeta, I. P. (2017). O uso do desenho de mandalas como instrumento de avaliação de sintomatologia depressiva entre estudantes universitários. *Revista Hermes*, 22, 41-61.
- Garros, D. S., & Machado L. S. (2019). A pintura de mandalas como meio de intervenção no tratamento terapêutico ocupacional para idosos com sintomas depressivos. *Revisbrato*, 3(2), 209-218. <https://doi.org/10.47222/2526-3544.rbto18212>
- Gigliotti, A. (2020, 24 nov.). IBGE: crescimento da depressão é realidade no Brasil. *Veja Rio*. <https://vejario.abril.com.br/blog/manual-de-sobrevivencia-no-seculo-21/ibge-crescimento-depressao-brasil/>
- Jung, C. G. (2013). *A natureza da psique* (10a ed.). Vozes.
- Jung, C. G. (2014). *Os arquétipos e o inconsciente coletivo* (11a ed.). Vozes.
- Kim, H., Kim, S., Choe, K., & Kim, J. S. (2017). Effects of mandala art therapy on subjective well-being, resilience, and hope in psychiatric inpatients. *Archives of Psychiatric Nursing*, 32(2), 167-173.
- Kim, T. H. (2018). *Usage of mandala art therapy toward social interaction skills of children with autism spectrum disorder* [Masters thesis]. University of Malaya.
- Maia, B. R., & Dias, P. C. (2020). Ansiedade, depressão e estresse em estudantes universitários: o impacto da COVID-19. *Estudos de Psicologia (Campinas)*, 37. <https://doi.org/10.1590/1982-0275202037e200067>
- Mello, A. P., & Vieira, A.G. (2019). A experiência com terapias expressivas na ótica dos profissionais. *Revista Ciência e Conhecimento*, 13(2).
- Michas, S. J. (2020). *The experience of creating mandalas by mandala artists: a qualitative generic thematic analysis* [Doctoral thesis]. Capella University.
- Munpansa, N. (2020). O efeito de colorir mandalas na ansiedade e na concentração de atenção: um estudo de caso de alunos calouros de graduação em uma universidade nacional. *The Journal of Prapokkiao Hospital Clinical Medical Education Center*, 37(2).
- Roquet, C. D., & Sas, C. A. (2021). A Mindfulness-based brain-computer interface to augment mandala coloring for depression: protocol for a single-case experimental design. *JMIR Research Protocols*, 10(1), e20819. 10.2196/20819

- Santos, K., Galvão, M., Gomes, S., Souza, T., Medeiros, A., & Barbosa, I. (2021). Depressão e ansiedade em profissionais de enfermagem durante a pandemia da Covid-19. *Escola Anna Nery*, 25. <https://doi.org/10.1590/2177-9465-EAN-2020-0370>
- Silveira, N. (2015). *Imagens do inconsciente*. Vozes.
- Universidade do Estado do Rio de Janeiro [UERJ]. (2020). *Pesquisa da Uerj indica aumento de casos de depressão entre brasileiros durante a quarentena*. <https://www.uerj.br/noticia/11028/>
- Valladares-Torres, A. C. (2017). A contribuição da Arteterapia na remissão de sintomas depressivos e ansiosos nas toxicomanias. *Revista Científica Arteterapia Cores da Vida*, 24(2), 36-35.

Received: Jul. 07, 2021
Approved: Sep. 01, 2022