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CREATIVITY, CRISIS OR OPTIMAL EXPERIENCE

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Introduction

What we are about to present in this study are only the preliminary results of a research project, which is in its beginning stage, and that analyzes the effect that two different artistic trends, the fine arts and the creative body movement, have in the representation that the individuals express, as necessary and satisfactory conditions, for a creative production.

We can observe that not all the individuals react in a similar way in the face of situations of tension, and consequently, the adopted strategies for its solution, are also different.

When one deals with the creation of a product of artistic nature, we come across with diverse personal stories, focusing the creative production as a result of negative emotional states as a way, while others of positive states as a way. Others, still, are being able to act in both emotional situations.

“The emotions lead the decisions”, affirms António Damásio (1995, 2004). We know, effectively, how much the emotions influence the behaviour response of the individuals. As far as creativity is concerned, the emotions can be inhibitors or impediment or, on the contrary, they can activate the potential and to cause a response of a highly creative degree. We do not know, however, what type of emotions, positive or negative ones, or whatever type of exterior conditions, act favourably in order to unchain the creative production, in artistic domain. We still find individuals, that pursuing a specific objective, follow a way, that even though, facing a difficult one, will bring them an enormous personal reward, for having been capable to excel and become aware of an auto-efficacy, unknown to them up to that moment. We refer to the state of flow, evoked by Csikzentmihalyi, (1990).

The recognizance of these different manifestations of response, has led us to undergo this study to understand better which inner and external conditions are involved, at the emergence of a creative production.

Objectives

To understand which are the inner and external conditions that are necessary and satisfactory and, that lead towards a creative production, observed in two different artistic trends; fine arts and creative body expression, analyzed through the emotional, procedural, space-time and of external stimulation dimensions.

Method

Constitution of the sample

The initial sample of this study is constituted of 116 people. They are students and professionals, of the fine arts field, and creative body movement. They are divided into 41 males and 75 females.

As our sample presents a greater number of individuals ranging from the 20 and 25 years of age, and also spans up to 53-year-old, we have decided to divide into two groups of 50% each, organized this way: group 1, related to the age span of 20/24-year-old, and group 2, in the age span of 25/53-year-old. Based on this division we were able to proceed the statistic operations, which has allowed us to observe effect related to the age over other variables, such as gender, profession and the artistic orientation as well as other variables to be explained further.

Scale of conditions of creative production

For this study we have created a work instrument that has allowed us to get some preliminary results. This instrument is the graduated scale of likert, which is structured according to four dimensions of six items each. One is related with the creation process, a dimension related to the inner emotional aspects, a dimension considering

Expressions (fine arts e creative body movement expression). However, we still took into account, the gender, the age, profession e preferential area of creation, in order to better evaluate what kind of influence the artistic orientations will have.

Towards its validation we have applied a factor analysis of main components, the ACP. This validation has allowed us, also, to be able to correct some aspects of this instrument, introducing new questions or removing others, for which we did not find significant relations. These alterations will enable us, eventually, to strengthen some of the results already obtained.

Results and discussion

Validation of the instrument: the factor analysis, measuring instrument.

Through the factor analysis, the ACP, we have found only 2 factors where the proper value age was high and items contained in them, presented a strong saturation with the factors.

Thus, factor 1 (eigenvalues: *total 3,80; %V 15,83; alpha.77*) grouped 9 items, being of bigger saturation with the factor, predominantly, of the emotional dimension of the scale E2; E18; e E14¹ -, this totally opposing one to the factor. This grouping relates inner emotional stability, the necessity of feeling happy so to produce creatively, and in opposition to the factor the aspect of not being able to produce when one is not feeling emotionally balanced. This item presented a positive saturation in factor 2. The items, S 20; S12², assigned as outer stimuli, the emotional support of the group, for creation e the music as creative facilitation factor. Due to the designated characteristics for these variables we named it "*emotional facilitation, for the creative production*".

Factor 2 (eigenvalues: *total 2,30; %V 9,56; alpha.63*) articulated, predominantly, the data related with the space-time dimension; T7;T3;T23³, and the items of the process, that also related time;P17, P5, P13⁴. For these results, the factor time, seemed to play a major role in the creative production. The item with higher saturation, correspondent to the process dimension, related time, in that it concerned «the period of time of stopping that occurs during the development of the creative process». Due to the characteristics of these variables, we named factor 2 "*space-time facilitation, for creative production*".

With this validation, we were able to start to perceive the relations established among the items of the various dimensions of the scale, and the way that they organized themselves within the factors. This fact, guided us towards the accomplishment of other statistical operations, which could allow us to confirm these relations or to find others, in criss-crossing among the results obtained in the factors and the independent variables considered in the study.

Relative general data to items, to the initial dimensions and the factors

We started to verify, through an average comparison of, the significant differences among the several items present in the scale and in the four dimensions included in it. From this analysis we were able to observe, as far as the items are concerned, that these were ordered, according to weight, as the following way: Firstly, the items related to the process, respectively, P9, P5, P17⁵, followed by the items related to the outer stimuli dimensions, especially the space-time,

¹ E = items corresponding to the inner emotional dimension, in the scale of conditions towards production.

² S = items corresponding to the outer stimuli dimension, in the scale of conditions towards production

³ T = items corresponding to the space-time dimension, in the scale of conditions towards production

⁴ P = items corresponding to the process dimension, in the scale of conditions towards production

⁵ P9 = I do not feel time pass when I work with a high degree of concentration. Average: 4,39

P5 = I transform the initial idea as I develop the work. Average: 4,07

P17 = From the time that an idea comes up, until I consider it finished, I stop several times and rework that same idea. Average: 3,93.

respectively, S4, T15, S16⁶ In our opinion these results disclosed that all those from the sample, had attributed enough importance to the aspects imbued in the process, as well as to the time factor since it is evoked in some items cited out of the process. The outer stimuli evoked, also became related with the process, since they denounced the necessity of outer stimuli, in order to induce creative production.

As for the comparison of average among the four dimensions of the scale of the sample, one can verify a more significant weight attributed to the dimension of the process, (average 21, 93), followed by the emotional dimension, (average, 18, 65), the outer stimuli dimension, (average, 19, 51), and lastly, the space-time dimension, (average, 17, 27).

Comparisons according to artistic orientation: fine arts and creative body movement expression

When applying the same operation of average comparison, this time, however, according to artistic orientation, both to the groups of those involved in the fine art field, and to the group creative body movement, as well as by applying the dimensions of the scales, we find precisely the same order. We noticed that the variation of differences among the averages were very small.

Within the group of individuals related to the fine art field, the average in the process is 21, 32, for the emotional dimension, 17, 68, for the outer stimuli dimension, 19, 01 and in space-time dimension 17, 47.

For those related to the creative body activity, as far as process is concerned, the average is 23, 00, the emotional dimension, presents an average of 20, 36. As for the outer stimuli dimension the average is 20, 38 and the space-time dimension, the average is 16, 90.

We can then infer that two artistic expressions had attributed the same order of value, to the dimensions evoked for the creative production. However, the group of the creative body movement expression attributed more weight both in the process and in the emotional aspects.

In the comparison among the four dimensions and the two artistic expressions, we found meaningful differences only in the two first dimensions, for the group of creative body activity. Process <.005 and emotional dimension, p<.002, not presenting significant differences among the other dimensions. From this analysis, we seem to conclude that, the creative body expression attributes greater importance to emotional aspects and to the process, being the space-time conditions of less value.

We proceeded to a new average comparison among items of higher saturation in the two factors and the two artistic expressions. We got, thus, a significant difference p<001, in items «emotional stability» in the body activity, «necessary expression of isolation» in the fine art activity, «music facilitates the creative production», «to be happy», «necessity of busy environment for production» for those related to the body activity and, still, p<.05 «necessity of enough time», for those in the fine art field. This comparison, with the factors, has shown highly significant, p<.001, with factor 1 «*emotional facilitation*», in the creative body expression and of lesser meaning, p<.08, in factor 2 «*space-time facilitation*» with higher incidence in the group of fine art activity.

Factor 1 discloses the importance of emotional positive items, especially, «emotional stability» and «to be happy». The item «I can create when I do not feel well» appears in opposition to factor 1, negatively and is considered positively in factor 2. This fact takes us to conclude it that the space-time conditions are facilitators that allow the individual produce creatively, when he/she is not feeling well emotionally.

In the correlation analysis among the dimensions of the scale and factors, we verified that all the dimensions are found strongly correlated with the factors, the p<.001, where there is a close

⁶ S4 - during the accomplishment there are outer stimuli that allow me to modify the thought line and, therefore, the final result foreseen Average:.3,92

T15 - I have to feel physically comfortable. Average:3,85

S16 - I need an outer stimulus when I do not have ideas. Average:3,82

correlation between the emotional dimension and outer stimuli, in the factor 1, whereas a correlation between the process dimension in the two factors, and the time-space one, respectively, This one more correlated with factor 2. These results have come to confirm the obtained results in the factor analysis, through the grouping of items, presented in the two factors.

The influences of gender and age on the comparison analysis

In the comparison of average between gender and the artistic expressions, there were meaningful differences, especially in terms of the female population related to the fine art field, concerning the item «I need an adverse environment», $p < .001$, followed by the item «I need to be happy», $p < .005$, and also a significant difference, $p < .004$, with factor 1. Even with less meaningful differences, we verified some significance, also among the women in the group related with creative body activity, concerning the items «I feel tension up to the end of the production», $p < .07$, «necessity of enough time», $p < .07$, and with factor 1, $p < .06$. We were able to infer from these results that the women, whatever is the artistic expression, where if they are integrated, that feel more the influence of the outer factors, for the creative production, and eventually, that reflect more on the process of creation itself. Thus, they reaffirm that it is through the outer stimuli that they overcome the difficulties of emotional stability

The same operation of comparison of average, among the dimensions of the scale, gender and the artistic orientation, has disclosed, a significant difference in the female population of the fine art activity in space-time dimension, $p < .03$ and in the process dimension, $p < .10$. In respect to the creative body movement activity, the significant differences were shown also among the women, related to the space-time dimensions, $p < .04$ and in the emotional dimension, $p < .10$.

Analyzing the influence of age (two groups 20/24 and 25/53) on items of the factors, we have observed one significant difference, $p < .04$, in the youngest group, the item «Emotional stability», the $p < .01$ in the «necessity of isolation», in the older group and $p < .05$, in the youngest group as for «being content». We can infer that the younger ones need a higher emotional stability for the creative production and that the necessity of isolation increases with the age.

The same analysis comparing the influence of the age, applied only to the artistic expressions, have disclosed «a greater necessity of isolation» $p < .001$, and of «more physical comfort», $p < .06$, in the older group, of those involved with the fine art activity. It can be confirmed, therefore, the necessity of isolation, in this group with the increase of the age and also it seems to us that with increase of the age the necessity of more physical comfort, as one of the conditions for production. In the group of creative body expression, the differences that were mostly significantly registered within the youngest group, respected «outer stimuli that modify the thought line» $p < .05$, and with factor 2, «space-time facilitation» $p < .05$. In our opinion these results seem to disclose that, for the creative production, the youngest ones need more outer stimulation and that the space-time conditions have an excellent role in the induction of the production.

CONCLUSIONS

The preliminary obtained results for this study, as we take into consideration only the scale of conditions for the creative production, that were applied to the two distinct artistic expressions, the fine art population sample and those related to the creative body movement expression, have shown us some interesting data that have allowed us its discussion.

Both artistic expressions have attributed the same order of priorities to the necessary, inherent conditions to evoked dimensions: in the first place, they have considered the process, followed by the emotional dimension, then, the outer stimuli and lastly the space-time conditions.

As for the emotional dimension, the conditions that were more referred were, for the creative production, the necessity of emotional stability, and to be happy. The capacity to create, when there is not emotional stability seems to be overcome through the space-time conditions. However, the necessity of these conditions is more inherent to the youngest group of the creative body activity.

The outer stimuli are related as a necessary condition, for some individuals, especially within the creative body activity group, for the induction of the creative production, when they feel a lack of inner stimuli that allow them to create.

In the group of individuals related to the fine art activity, there have been related as necessary conditions, a lesser necessity of emotional stability, but on the other hand, a higher necessity of isolation, for creation. This factor increases in direct relation with age, as one gets older, as well as the necessity of better physical comfort. This condition is also related with the increase of age.

The time condition evoked both in the process dimension and in the space-time dimension, has also been shown as a necessity felt, especially for those involved with creative body movement activity, more time for production, and necessity of interruptions, during the production.

We have tried to demonstrate in this study, the importance attributed to the emotional dimension, by grouping positive items, a factor that it takes us to conclude that to create, the most necessary condition is one of «emotional stability» and «to be happy» or «to be content». On the other hand, we have verified that the space-time factors, act as facilitators, allowing the individual, to overcome crisis and to produce creatively, when they do not feel themselves emotionally balanced. Also, in terms of emotional conditions, when they are not available towards creative production, induced by an intrinsic motivation, we have verified that the outer stimuli, as for example, music, turn out to be the facilitators of flowing of the creative process, restituting the balance evoked as necessary.

Furthermore, we were able to infer, from these results that the women are, whichever is the artistic orientation, which they feel, with more incidence, the influence of the outer stimuli, as facilitator conditions. Also, the female sample may be those who feel more necessity to find strategies to thwart the creative crisis, also denoting a greater reflection, on some aspects, such as the emotional, the outer ones, as well as those related to time. All of them are implied in the creative process.

The aspects related with the «state of flow» have not been shown significantly in any of the artistic expressions, a fact that is an interesting one and that will be further analyzed, through the use of to other instruments of analyzes, personal narratives related to the creative process, which will be applied in the future as this study develops.

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