

# Proposal for Training Employees in an Assessment Tool Based on the Big Five Personality Factors in a Behavioral Profile Mapping Company

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**Abstract**—This work aimed to propose training for employees of a company specialized in behavioral profile mapping on an assessment tool based on the Big Five Personality Factors. The justification is guided by the understanding that knowledge, on the part of employees, about the products of the companies in which they work, increases safety, engagement and motivation as a whole and, as a consequence, can translate into new ideas, internal and external discourses more aligned and increased sales. On the other hand, the use of learning through active methodologies contributes to the engagement of employees, thus enhancing the learning cycles that are related to attention and memory. Based on this finding, a training protocol was proposed as an employee's learning journey through the pillars of Dehane (2020), the principles of Knowles adapted by Rios (2022), the attentional strategies proposed by Tieppo (apud Albuquerque, 2022), and of the six scientific evidences of Weinstein et. al. (2018), presented by Albuquerque (2022), in the discipline Neuroscience and Organizational Learning of the postgraduate course in Neuroscience and the Sustained Future of People and Organizations at Faculdade de Ciências Médicas da Santa Casa de Misericórdia de São Paulo.

**Keywords**—Andragogy, adult learning, corporate learning, training employees.

## I. INTRODUCTION

CLASSICAL definitions establish that pedagogy and andragogy are distinct concepts. While pedagogy is constituted in education aimed at children and adolescents and teacher-centered learning, andragogy is related to education aimed at adults and student-centered learning. Other points of divergence between the two systems are related to the way of conducting learning, with pedagogy focused on direction by the teacher, and, facilitated and reflective activity in

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andragogy. It is therefore of paramount importance to understand the profile of the public in order to adopt them appropriately to achieve the learning objectives [1].

Reference [2], presents the idea that the method to be addressed in the learning processes is closely related to the individual's degree of dependence, with the pedagogical processes best applied in childhood and adolescence and the andragogic processes in adult individuals. For him, better results in learning happen when individuals understand why they need the learning to which they will be exposed, manage to conduct the process through self-reflection and self-direction, have previous resources in their memories, put themselves in readiness to learn subjects that make sense for the moment of life in which they find themselves, establish points of contact between the problems and the new knowledge that will be acquired and find intrinsic values triggering motivational processes for learning. He develops these ideas through six basic principles: (1) need to learn, (2) learner self-concept, (3) learner experience, (4) readiness to learn, (5) orientation to learn, and (6) motivation to learn.

Reference [1], corroborates the learning model for results presented by [2], and adds to the six principles mentioned above a seventh principle, "taking care of emotions" because it understands that it is only possible to explore learning in its fullness once the emotional processes are in place positively regulated.

Reference [3], reports that several scientific evidences have supported a process in which the individual's learning is built and enhanced. The author quotes [4], who cites learning distributed over time to the detriment of concentrated learning, repetition and recall, the interleaving of new ideas and problems instead of insistence, elaboration through additions to the mental lexicon already established in memory, the exploration of concrete examples and double coding through the use of more than one type of language such as texts and pictures to signify concepts.

For Reference [5], meaningful learning occurs when the student engages with what he is experiencing, pays attention to the moment and feels safe in presenting hypotheses without fear of making mistakes. Curiosity and discovery learning are key points in this process since they are neurobiologically associated with activation of the nucleus accumbens and the

ventral tegmental area (VTA). Still in this context, the author proposes four pillars for meaningful learning namely: attention, affective involvement, error feedback and consolidation.

Attention is the ability to allocate nervous activity resources in the face of events that may be external or internal to the individual and is closely connected to Executive Functions (EFs). The EFs are processes that involve inhibitory control against distracting stimuli, cognitive flexibility and working memory. Tieppo, (*apud* Albuquerque, 2022) [6], suggests that attention can be enhanced through the emotional journey and involves estrangement, pain, aversion, tension break, excitement and affection, but that caution is needed in the use of these strategies since they can generate undesirable effects.

Consolidation, on the other hand, constitutes one of the stages of the mnemonic process and can only happen if, in some way, the attentional processes were previously put into action. For [6], memory consists of a process in three stages, namely: acquisition (related to obtaining new knowledge), consolidation (enhanced by sleep) and evocation (established through strong and lasting connections). At molecular levels it is established from the modification of certain synapses mainly modulated by glutamate and long term potentials (LTD) which is reinforced through repetitive stimulation.

## II. PROCEDURE

### A. Context

The company in which the training protocol will be implemented is a consultancy whose focus and mission is to support companies to enhance talent management, optimize resources, connect people to opportunities and conduct Profile Mapping and Development processes. Operating in the market for over 30 years, it serves several national and international companies and specializes in profile mapping tools and workforce development projects.

In 2020, the company was looking for alternatives to replace one of the personality and behavior tests that made up its portfolio and, based on this context, the research and methodology department began studies on the consolidated theory of the Big Five Personality Factors proposed by McCrae & Costa JR, [7].

After research and constant scientific analysis, the company developed its own tool aligned with the purposes of the work context and since then has been applying it to thousands of people.

The company, however, constantly receives new collaborators in its different departments and many of them start their journeys without any prior knowledge about the tool. Some of these employees work in person, at the headquarters where the company is based, but the vast majority work remotely in other cities and some even asynchronously in other countries.

To remedy this problem, a short-term training (four hours) on the tool was proposed, which will take place at each onboarding, online so that new employees can come into contact with the tool. This training takes place with a

minimum of six participants and can be repeated every 12 months to remember the contents and keep up to date on the tool.

The course will then be prepared by researchers from the company's research and methodology department, the senior researcher, who has a doctorate in the area, and other researchers in the sector. Both jointly developed tool adaptations.

### B. Method

Based on the concepts presented by Rios [1], Knowles, Holton & Swanson [2], Albuquerque [3], Dehane [5], and Tieppo [6], training will consist of a journey understood as a continuous cycle so that the employee will be offered the possibility of not only participating in the short class (4 hours) but also receiving monthly updates on the subject (by email) and being able to repeat the course every twelve months (figure 2). This journey is composed of eight steps, being Excitation Tieppo [6], as an attentional reinforcer and composed of steps one, two and three, and Dehane [5], Consolidation, as a mnemonic consolidator and composed of steps four to eight.

The first step is to receive an invitation one month before the event, which explains the theme, training objectives, date and time. The invitation will also inform the employee that he will receive a prior material one week before the course. This step is important because it relates to the principles of Knowles, Holton & Swanson [2], (1) need to learn, (4) readiness to learn, (5) orientation to learn and (6) motivation to learn.

The second step consists of receiving the previous material. This material will consist of a folder in digital format prepared by the company's research and methodology team and access link to a 3-minute video available on the YouTube platform. These two elements will bring basic and complementary information about the Big Five Personality Factors. At this point, we seek to reinforce the principles of Knowles, Holton & Swanson [2], presented above, in addition to reinforcing the (2) learner's self-concept and starting the process of (3) learner experience. This action also seeks to instigate the curiosity explained by Dehane [5]. Still regarding the format of the materials sent, they will explore the double codification listed by Albuquerque [3], through texts, sounds and images and will rely on active microlearning methodologies.

As a third step, the training itself will take place. This will happen through the Teams platform and with details previously informed as described in step one. The duration will be four hours and a thirty-minute break starting at 1:30 pm and ending at 6:00 pm (summary in table 1).

Throughout the training, resources will be explored through attention, curiosity and affective involvement, since the personality theme is something that usually arouses interest and because it is shared by all, it is a highly motivating subject. Strategies to enhance these elements will be given through active methodologies (opening question, reflective activity in pairs, use of examples through films, profile discovery activity based on the report) in addition to the

presentation of content permeating these activities.

For error feedback, students will be encouraged from the beginning not to feel pressured to expose their hypotheses since scientific knowledge is something dynamic and constantly changing, therefore likely to receive more than one answer. On the other hand, questions that are presented to students will always be followed by presentation of concepts consolidated in the literature.

Regarding consolidation, three strategies are envisaged through reinforcement and repetition. The first, still in class through the rescue of concepts after the break and at the end of the class, the second will be through update posts produced by the research and methodology department sent to all employees monthly and the third through the opportunity to repeat the training whenever necessary as it will occur every six months.

#### **First period (total duration of two hours)**

10 minutes: introduce the tutors, objectives and structure of the course.

15 minutes Question "Which word defines personality for you?" through the site Menti.com to format word clouds and small debate to introduce the theme and concepts.

60 minutes: Definition of concepts, origins, theory premises, general personality structure. This material will be presented in power point and video format.

20 minutes: Reflective activity in pairs with the proposition: "List visible traits of behavior that you identify in your pair".

15 minutes: Debate and reflections with the class on the answers found and closing of the first block of classes.

#### **Interval**

30 minutes (not included in the 4 hours of training)

#### **Second period (total duration of two hours)**

5 minutes: Brief review of previous concepts to continue the content.

45 minutes: Detailing of each of the Big Five Personality Factors through a power point presentation (figures 2 and 3).

15 minutes: General and playful activity with the class. Through an image from a popular movie with its characters (figures 4 and 5). Ask the question: "Which trait is most prominent in each one?" This activity is based on a book called "Star Wars Big Five: Personality Profiles for Han Solo, Darth Vader, Obi-Wan Kenobi, Palpatine, Boba Fett" by Arild, Gergensen and Smith.

20 minutes: Presentation of the methodology used by the company (psychometric properties) and details of the report generated from the test.

20 minutes: Final activity with the class. In this activity, the tutors present a paragraph of a respondent from the report generated by the tool, and the students, collectively, identify the score of traits. If the progress of the class allows, the activity is repeated with a new report (this second action allows the tutor flexibility since different classes have differences in response times and more or less intraclass discussions).

15 minutes: Opening for general questions, thanks and contact for further questions

### III. CONCLUSION

This work sought to develop training for employees of a behavioral profile mapping company based on methodologies and concepts seen in the discipline Memory and Organizational Learning. The bibliographic review allowed creating a journey composed of 8 steps that develops in a continuous cycle and is supported by the principles of Knowles, Holton & Swanson [2], and Rios [1], This cycle involves periods of Excitement that are established as attentional reinforcers Tieppo [6], and Consolidation as a mnemonic reinforcer Dehane [5]. In this context, the development of the schedule and the divisions of periods sought to be based on the neurobiological processes seen throughout the discipline.

As future recommendations, the stages of training evaluation and program measurement by Knowles, Holton & Swanson [2], and climate management proposed by Rios [1], could be implemented in order to identify possibilities for improvements to training and gains evidenced by this for the company.

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