MINDFULNESS AND THEORY U FOR THE PROFESSIONAL SENSE OF PURPOSE

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ABSTRACT

Purpose: To validate if mindfulness practices contribute to increase the perception of clarity of the own professional sense of purpose.

Originality/value: The research shows synergy of mindfulness practices with metacognitive reflections based on Otto Scharmer's Theory U attention modes, increasing the perception of authenticity in the statements defining the own professional sense of purpose.

Design/methodology/approach: This is an exploratory, prospective intervention study, with pre and post-intervention data collection. Data collection was carried out with organizational professionals who voluntarily participated in the proposed course in the cities of São Paulo and Ribeirão Preto, in Brazil.

Findings: The proposed educational program improved the perception in relation to the "meaning in life at work", "greater purpose in the work", "meaning in life" in general, the "satisfactory purpose in life" and the "level of mindfulness". We also concluded that mindfulness practices are synergistic with metacognitive reflections based on Theory U attention modes, providing a greater perception of clarity, focus and authenticity regarding the sense of purpose statements.

KEYWORDS

Mindfulness. Theory U. Sense of purpose. Meaning in life at work. Metacognition.

1. INTRODUCTION

Academic journals in organizational sciences, such as the *Journal of Management* and the *Academy of Management Review*, have published research on mindfulness (Good et al., 2016; Kudesia, in press). In addition, business organizations, such as Google, SAP, and Intel, regularly offer mindfulness courses to their employees (Gelles, 2015).

But what is mindfulness? Mindfulness is a state of mind focused on the present moment (Kabat-Zinn, 2003) or the capacity for self-regulation of attention (Cebolla & Demarzo, 2016) toward the present moment. Mindfulness can also be understood as a set of techniques, including some meditative practices for the development of attention (Cebolla & Demarzo, 2016) that have been validated by thousands of academic publications of rigorous scientific research on their effects on brain activity, release of stress hormones and even on the molecules responsible for the expression of genetic information (Kabat-Zinn, 2003; Alda et al., 2016). Mindfulness has been the regular practice of organizational leaders such as Steve Jobs, entrepreneur of the Apple Company (Gelles, 2015). Mindfulness is an inheritance of Buddhist millennial techniques, yet adapted to Western culture and disconnected from explicit attachments to any religious mindset (Kabat-Zinn, 2003), and on the other hand, has also become a business industry, worth around one billion dollars a year, according to *Fortune* magazine (Wieczner, 2016).

A milestone in the development of mindfulness in organizations occurred when engineer Chade-Meng Tan developed the Google Company's corporate mindfulness program called Search Inside Yourself. In the book of the same name, Tan (2012) teaches basic meditations and meditative practices applied to professional life so that the readers can improve their empathy, resilience, ability to resolve conflicts and clarity about their own sense of professional purpose.

Otto Scharmer, professor at the Massachusetts Institute of Technology (MIT), has developed an organizational management method for multidisciplinary groups of professionals to develop qualitative levels of attention conducive to creating innovation with a systemic vision. This management method, called Theory U, argues that people create social life from four different types of attention with increasing degrees of sense of presence for the organizational system as a whole (Scharmer, 2010).

Based on the above, the main objective of this investigation was to verify the effectiveness of mindfulness for organizational professionals, in order to

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increase the sense of purpose clarity. The secondary objective was to assess whether these mindfulness practices have synergy with meta-cognitive reflections created by the first author based on Otto Scharmer's Theory U levels of attention.

The initial hypotheses were: 1. organizational professionals have greater clarity about their own sense of purpose after training in mindfulness; and 2. mindfulness practices for the sense of professional purpose can be enhanced if they are practiced synergistically with meta-cognitive reflections arising from a management methodology based on levels of attention.

2. BIBLIOGRAPHIC REVIEW

2.1. What is mindfulness?

The term mindfulness refers to the ability to be intentionally aware of the experience of the present moment (Cebolla & Demarzo, 2016). Therefore, mindfulness is the ability to regulate attention autonomously and to open up to the raw and unfiltered experience in the here and now (Bishop et al., 2004). For this to be feasible, mental activity in mindfulness monitors the very thoughts, emotions and mental patterns that prevent us from observing the phenomena around us. With this, mindfulness also means having a high capacity for metacognition (Hayes-Skelton & Graham, 2013).

The implications of these definitions for professional life are significant. When the individual is not in a mindfulness state of mind, he will be acting on "automatic", with a low awareness of what is occurring factually at the present moment (Bishop et al., 2004). Acting from the mindfulness state of mind means having access to more relevant information, which increases the likelihood of taking effective actions in practical life (Cebolla & Demarzo, 2016).

The way mindfulness meditation works is simple. For a few minutes, the individual undertakes to keep his attention on a single focus, called the "anchor" of attention, such as the sensations of natural breathing. As the human mind in general is quite dispersed, the individual constantly loses the focus of attention. The spontaneous appearance of the dispersions is predictable and is part of meditation. At the moment when it is perceived that the dispersion occurred, self-regulation of attention is activated and attention can be returned to the anchor as often as necessary (Cebolla & Demarzo, 2016; Tan, 2012).

The efficacy of meditation is confirmed by evidence generated in scientific research using rigorous methodologies (controlled and randomized trials, meta-analyses, among others) with data obtained from human brain imaging, molecular analyses, quantification of stress hormones levels, measurements of the immune system response speed and the measurement of gene expression (Davidson et al., 2003; Kabat-Zinn, 2003; Good et al, 2016; Cebolla & Demarzo, 2016; Alda et al., 2016).

Regular and intense practice of mindfulness changes the brain prefrontal cortex structure. These data suggest that meditation may help to slow the wear of brain mass throughout the natural aging process (Lazar et al., 2005).

In the *Journal of Management*, a review article was published (Good et al., 2016) which presents the cause and effect relationships between mindfulness and its benefits to professional life. Mindfulness is the development of a differentiated quality of attention. This differentiated attention enhances the person's cognitive, emotional, physiological functioning, which results in better work performance, better ability to maintain interpersonal relationships at work, and greater well-being at work (Good et al, 2016).

Mindfulness is also related to greater job satisfaction (Hülsheger, Alberts, Feinholdt, & Lang, 2013) and a greater propensity to create organizational innovation by increasing motivation for self-directed learning (Ho, 2011). Moreover, mindfulness improves investment decision-making by overcoming the influence of past dysfunctional references and enabling the person to make better use of his rational thinking here and now (Hafenbrack, Kinias, & Barsade, 2014.)

2.2. Mindfulness, professional sense of purpose and meaning in life at work

In *Search inside yourself*, Tan (2012) does not cite academic sources that scientifically substantiate the mindfulness practices specifically used in Chapter 6 to give practitioners greater clarity about their own sense of purpose.

We find only a few articles in academic literature focusing on the relationship between mindfulness, sense of purpose in general, and meaning of life in general, but we have not found empirical research on the relationship of mindfulness to the professional sense of purpose and meaning in life at work.

Garland, Farb, Goldin, & Fredrickson (2015) proposed the Mindfulness to Meaning Theory, theoretically suggesting the mechanisms and ways in

which mindfulness provides meaningful life through cognitive reevaluation (reappraisal) and the ability to better appreciate the positive aspects of phenomena (savoring). In positive cognitive reevaluation, one remembers past stress-generating events, in order to assign new meanings to them and to consider them benignly and meaningfully. For the authors, mindfulness provides flexibility in how the individual generates autobiographical meaning. Mindfulness also allows a decentralization of thoughts and automatic emotions and permits a broader view of the context, favoring the emergence of new insights to the situation.

Allan, Bott, and Suh (2015) conducted empirical research with mathematical modeling to identify how the relationship between mindfulness and meaning in life is established. In this study, there was no mindfulness training, but the level of mindfulness of a sample of 305 graduate students was measured. The authors have identified that mindfulness is positively related to self-awareness and that the increase of this ability positively impacts the meaning in life perception.

Jacobs et al. (2011) conducted an investigation with a sample of 30 individuals who participated in a three-month meditation retreat. The researchers found that intense meditative practice (about six hours daily for three months) improves the perception of purposefulness, the level of mindfulness, and improves the levels of biological markers related to stress reduction. To measure participants' sense of purpose, the authors used a subscale on Purpose in Life from the Ryff (1989) well-being scale.

Ivtzan et al. (2016), created an online program that integrates mindfulness and positive psychology, including the subscale Presence of Meaning derived from the psychometric variable meaning in life (Steger, Frazier, Oishi, & Kaler, 2006), which also evaluates sense of purpose. The authors validated the online program in a randomized, controlled intervention study with a sample of 160 participants from an adult, non-clinical population. The sample included people from three categories: educators, meditators and office workers. During the online course, participants practiced mindfulness in combination with validated positive psychology exercises to improve the perception of meaning and purpose: 1. the written exercise The Best Legacy (Seligman, Rashid, & Parks, 2006); and 2. the exercise The Best Possible Self (King, 2001) to define the vision of oneself's future. Comparing the data from intervention group participants before and after the course with the data from the control group, the authors found a statistically significant improvement in the subscale Presence of Meaning in life (Steger et al., 2006). Unfortunately, the authors did not

analyze the data for the sample portion of office workers alone, so we cannot be sure that this online course of mindfulness improves organizational professionals meaning in life.

The above studies contribute with greater clarity to the relationship between mindfulness, sense of purpose and meaning in life in general, but do not inform us about the possibility of mindfulness providing greater insight into one's own professional sense of purpose or about meaning in life at work.

Steger and Ekman (2016) theorized on the relationship between mindfulness and Meaning in Life at Work conceptually, but did not lead to empirical proof.

2.3. The attention levels of Theory U

Otto Scharmer (2010), professor at the Massachusetts Institute of Technology (MIT), developed an awareness-based management approach, the Theory U, which considers four types of attention used by organizations to make decisions. One of Theory U's main inspirational sources, according to Scharmer (2010), was the creative processes described by Rudolf Steiner in the book *Philosophy of freedom* (Steiner, 1999).

Downloading attention counts on the least sense of presence. The person simply retrieves archived opinions in memory to confirm or refute the current experience. Therefore, the focus of attention is not on current experience, but on the archived opinions themselves (Scharmer, 2010).

"Seeing" is an attention mode which observes the objective facts here and now and seeks to learn new knowledge from these facts, even if the learning contradicts personal opinions. It is the mental posture, for example, of the scientist or the detective who objectively observes the phenomena around him. *Seeing* attention is generated by the attitude of keeping an open mind (Scharmer, 2010).

"Sensing" attention mode is the attention with high sensitivity to the organizational system as a whole. This mode of attention is empathic, compassionate and recognizes the human experience of other people in different roles and functions. By understanding the human experience of people with different mental models and roles, it is possible to see the facts occurring in the organizational system from their point of view. This provides a greater number of perspectives from which to look at problems and opportunities in a more comprehensive and realistic way. With this, one obtains a realistic vision of the current intersubjective social system as a

whole. *Sensing* attention is generated by the attitude of keeping an open heart (Scharmer, 2010).

Finally, the "presencing" attention mode is a sense of presence sensitive to the potentially emerging future development of the organizational system. Scharmer (2010) considers that the sense of identity and the individual and collective will for realization become sensitive to direct the focus of attention to the emerging potential future realization. *Presencing* attention is generated by the attitude of keeping an open will.

3. METHODOLOGY

3.1. Study type, participants and field of study

This is a prospective intervention study, with pre and post-intervention data collection, exploratory and without control group.

Data collection was carried out with organizational professionals who voluntarily participated in the proposed course in the cities of São Paulo (SP) and Ribeirão Preto (SP), Brazil.

As inclusion criterion, participants had to be persons with active professional experience in public and private organizations. Volunteers with a history of acute medical conditions that contraindicated participation in mindfulness practices were excluded.

The course was publicized through a lecture and through a video posted on the social media and website page of the mindfulness research group called Mente Aberta (Open Mind) of the Escola Paulista de Medicina (EPM [Paulista Medical School]) at Universidade Federal de São Paulo (Unifesp).

Those interested signed up online and filled in an online questionnaire for the response and control variables.

3.2. Instruments and variables

The response variables studied were:

- **Work and Meaning Inventory:** Psychometric scale created by Michael Steger, Professor at Colorado State University in USA (Steger, Dik, & Duffy, 2012) and validated in Brazil (Damásio & Freitas, 2016). Research participants are given the following instruction: work can mean a lot of different things to different people. The following items ask about how

you see the role of work in your own life. Please honestly indicate how true each statement is for you and your work. The participant then answers ten questions about sentences such as "I have discovered work that has a satisfying purpose", "The work I do serves a greater purpose" and "I understand how my work contributes to my life's meaning". For each sentence, the respondent chooses the degree of agreement on a seven-option Likert scale: Absolutely Untrue (1 point); Mostly Untrue (2 points); Somewhat Untrue (3 points); Neither True nor Untrue (4 points); Somewhat True (5 points); Mostly True (6 points); and Absolutely True (7 points).

- **Meaning in Life:** scale also created by Steger et al. (2006) and validated in Brazil (Damásio & Koller, 2015). The instructions to respondents are: please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below. This instrument has ten other questions and is evaluated by the same Likert scale of seven options for agreement degree with statements such as "I have discovered a satisfying life purpose", "I understand my life's meaning" and "I have a good sense of what makes my life meaningful".

- **Mindful Attention Awareness Scale (MAAS):** created by Kirk Warren Brown and Richard Ryan (2003) of the University of Rochester, and validated in Brazil (Barros, Kozasa, Souza, & Ronzani, 2015). This instrument is composed of 15 questions containing sentences such as "I find it difficult to stay focused on what's happening in the present", "I break or spill things because of carelessness, not paying attention, or thinking of something else" and "It seems I am 'running on automatic', without much awareness of what I'm doing". Participants receive the following instructions: below is a collection of statements about your everyday experience. Using the 1–6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item. For each statement, there are six Likert scale response options: Almost Always (1 point); Very Frequently (2 points); Somewhat Frequently (3 points); Somewhat Infrequently (4 points); Very Frequently (5 points); and Almost Never (6 points).

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The control variables were:

- Having practiced mindfulness or other meditation modality before.
- Having carried out some type of systematic reflection on sense of professional purpose, through a specific course, coaching or specialist book.

3.3. Procedures

The proposed educational program occurred in October and November 2017 and consisted of four weekly classes of two hours each, totaling eight hours of course. In the city of Ribeirão Preto, the course took place on October 16, 23 and 30 and November 6, 2017 and in the city of São Paulo, occurred on October 18 and 25 and November 1 and 8, 2017.

On the first day of the course, participants signed a Free and Informed Consent Form of participation in the research. This form explained the objectives of the research, the duration and content of the course, which techniques of mindfulness would be practiced, the qualification of mindfulness instructors and the type of information that would be requested of each participant throughout the course, through questionnaires. In addition, the consent form emphasized the researchers' commitment to the confidentiality of each participant's personal data and explained that participation in the course is voluntary and that the participant could leave the course at any time. The consent form also made it clear that the risks of practicing mindfulness are of low probability for this target audience and that they consist of potential triggering of psychological processes that could generate some kind of discomfort to the participant.

On the first and second day of the course, mindfulness instructors certified by the Mente Aberta Center of the EPM at Unifesp taught what mindfulness is and taught classic practices of mindfulness such as meditation with focus of attention on breathing, body scan, the three minutes exercise (which directs attention first to the immediate environment, then to thoughts and feelings, then to breathing and then again to the environment) and the control of thoughts exercise. Participants were recommended to practice meditative exercises daily at home.

On the third day, participants first had a brief expository lesson with definitions about what a sense of purpose is, what core values are and what envisioning is, and then they made the first version of a personal text with statements of purpose, values and vision (first version: without mindfulness and without Theory U).

This text with statements of purpose, values and vision was rewritten twice more during the course. The second version of the text was made with the support of mindfulness practices (version: with mindfulness and without theory U) and the third version of the text was carried out with the support of mindfulness and also of meta-cognitive reflections based on Theory U attention modes (version: with mindfulness and with Theory U).

Also during the third day of the course, participants had an expositive lecture on chapter six of the book *Search inside yourself* (Tan, 2012) regarding mindfulness and sense of purpose and performed the following exercises: meditation with focus of attention on breathing and meditative writing (journaling) to re-compose the personal text with declarations of purpose, values and vision (second version: with mindfulness and without Theory U). Afterwards, the participants practiced a meditative conversation in pairs to verbally express their purpose, values and vision and, after the meditative conversation, had a few moments to complement the second version of the text with the new insights that had emerged during the meditative conversation.

In meditative writing, the anchor of attention is the act of writing. When attention shifts from focus, meta-attention ability perceives and the person retains the full focus of attention in the effort to express her or his purpose in writing (Tan, 2012).

Meditative conversation in pairs works in a similar way. For a few minutes, one participant speaks a brief monologue about his or her sense of purpose, values and vision, and the other colleague only listens with full attention on the other's speech (Tan, 2012). Therefore, in this case, the meditative anchor for the listener is the content of their colleague's speech, facial expressions and speech gestures, and tone of voice. And the anchor of attention for those who speak the brief monologue is the act of trying to express their purpose in words.

The effort to express one's own sense of purpose in written and oral words can help us to understand our own sense of purpose in a more tangible and clearer way (Tan, 2012).

After completing the second version of the text of purpose statement with mindfulness practices, the participants evaluated, through an online questionnaire, this second version in relation to the first version. In this questionnaire, the perception of clarity, focus and authenticity of the version with mindfulness and without Theory U was evaluated in relation to the version without mindfulness and without Theory U.

At the end of the third day, participants had an expository lecture on the four modes of socially relevant attention according to Theory U and were

encouraged to remember in detail three moments of their biography in which they performed an action by the *sensing* attention mode (attention with sensitivity to the current social system as a whole) or an action by the *presencing* attention mode (attention by the sense of presence with sensitivity to the future social system that is emerging).

On the fourth and last day, the participants had a more in-depth lecture on Theory U and then performed a contemplative metacognitive exercise (developed by the first author of this article) focusing on the memories of the three biographical moments they performed action by *sensing* or *presencing* attention mode. Participants meditatively contemplated each of these actions in isolation and then contemplated the creative pattern common to all three actions. Next, the participants metacognitively reflected on what the core values and personal goals were that actually materialized in these three actions and on the core values and current sense of purpose of each, here and now.

After this metacognitive exercise based on Theory U, participants rehearsed the sequence of exercises from the third day of the course: meditation with focus of attention on breathing, meditative writing and meditative conversation. In this way, the participants wrote the third and final version of the personal text of statements of purpose, essential values and vision (version: with mindfulness and with Theory U).

Finally, the participants evaluated this third version with mindfulness and with Theory U online in relation to the two previous versions (the version with mindfulness and without Theory U, and the version without mindfulness and without Theory U). This evaluation was also carried out in terms of the perception of clarity, focus and authenticity of the personal text of statements of purpose, essential values and vision.

In the following days, after the end of the course, participants again answered the same online questionnaires they had answered before the course to evaluate the response variables: Meaning in life at work, Meaning in life (in general) and Level of mindfulness.

We obtained valid (before and after) paired answers to the questionnaires in the moments that preceded and succeeded the proposed educational program from 21 participants. Thus, sample size in this exploratory study was 21 individuals.

3.4. Plan of analyses

We used the non-parametric statistical method called "sign test for medians" (Triola, 2005) to evaluate the effectiveness of the proposed

educational program of mindfulness, Theory U and sense of purpose in terms of the response variables Meaning in Life at Work, Meaning in Life (in general) and Level of Mindfulness.

The sign test for medians is used for paired data. For example, for the variable Meaning in Life at Work we have the total score of the questionnaire of each participant at the time before and at the time after the course. If the value after the course subtracted from the value before the course is a positive number for the participant 1, for example, this means that the participant had the perception that his Meaning in Life at Work increased during the course.

If the course had no effect, it would be expected that the numbers of positive values and negative values of the scale differences (after course minus before course) for all sample participants would be approximately equivalent. In this scenario, the median of the differences (after course minus before course) would be zero. But if the course is effective, then the number of positive values of the scale differences (after course minus before course) would be expected to significantly exceed the number of negative values. This is the operational logic of the nonparametric sign test for medians (Triola, 2005).

The comparative analyses of the three versions of the personal texts with the statements of purpose, essential values and vision were made by means of descriptive statistics and also by the non-parametric statistical test "sign test for medians" (Triola, 2005).

The nonparametric Mann-Whitney test (Triola, 2005) was used to analyze the impact of control variables (if one previously practiced mindfulness or another type of meditation and some systematic reflection on sense of purpose before our course).

The statistical analyses were calculated using MINITAB software.

4. RESULTS

4.1. Meaning in life at work and purpose at work

The non-parametric test "sign test for medians" (Triola, 2005) was used to test the following hypothesis about the contribution of the proposed educational program:

H_1: the median of the differences in participants' responses to the Meaning in Life at Work scale ("after" minus "before") is greater than zero.

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The quantitative results are shown in Figure 4.1.1.

(Figure 4.1.1)

RESULTS FOR "MEANING IN LIFE AT WORK"

	Median of the difference	P-value	Significant?
Full "Meaning in Life at Work" scale	7	0.013	Yes for p < 0.05
"Positive Meaning" subscale	3	0.032	Yes for p < 0.05
"Meaning-Making through Work" subscale	2	0.006	Yes for p < 0.01
"Greater Good Motivations" subscale	1	0.058	No

Source: Elaborated by the authors.

The sign tests for medians above indicate evidence that the median of the differences ("after" minus "before") of the responses of the 21 participants is, in fact, greater than zero for the full "Meaning in Life at Work" scale for two of the three subscales: the subscale "Positive Meaning" and the subscale "Meaning-Making through Work". Figure 4.1.2 shows the boxplot diagram of the differences "after" minus "before". It is visually detectable that participants' perception of Meaning in Life at Work increased and the perception of the subscales "Positive Meaning" and "Meaning-Making through Work" increased.

Among the ten questions on the "Meaning in Life at Work" scale, two of them specifically refer to the sense of purpose in work life: namely the questions on the phrases "I have discovered work that has a satisfying purpose" and "The work I do serves a greater purpose".

The nonparametric sign tests for medians generated evidence indicating that the median of the differences ("after" minus "before") is greater than zero for the question on the sentence "The work I do serves a greater purpose" (p-value = 0.018).

The boxplot diagram below indicates this result visually (Figure 4.1.3).

(Figure 4.1.2)

PERCEIVED INCREASE OF "MEANING IN LIFE AT WORK"

Increase of Meaning in Life at Work

Meaning in Life at Work   Positive Meaning   Meaning-Making through Work
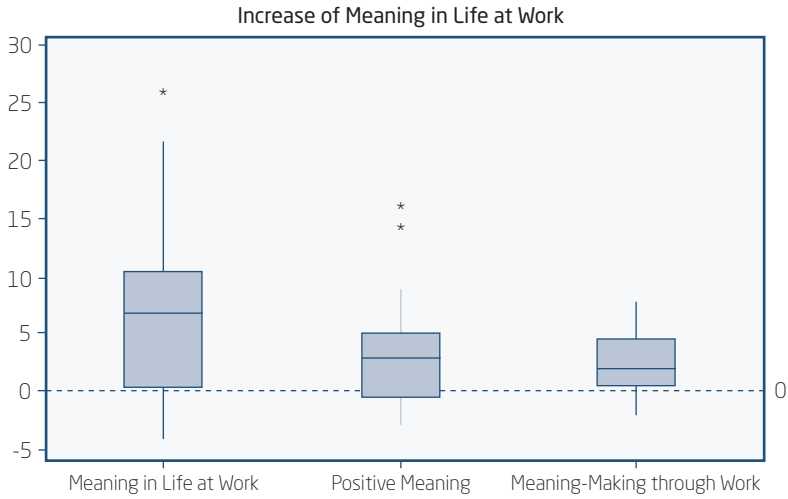
Source: Elaborated by the authors.

(Figure 4.1.3)

PERCEIVED INCREASE OF HIGHER PURPOSE AT WORK

Perceived Increase of Higher Purpose at Work

Source: Elaborated by the authors.

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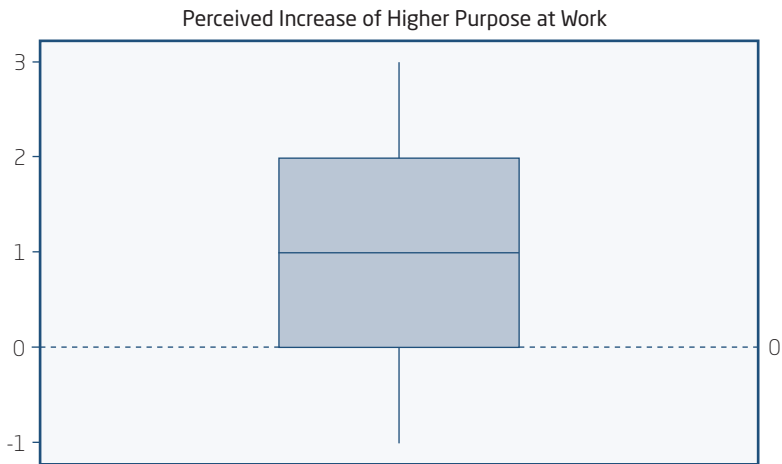
4.2. Meaning in Life (in general) and Purpose in Life

To evaluate the scale for "Meaning in Life" in general (and not only in relation to work), the non-parametric sign tests for medians was also used (Figure 4.2.1).

The hypothesis for this test is:

H_2: The median of the differences in participants' responses to the scale of meaning in life in general ("after" minus "before") is greater than zero.

(Figure 4.2.1)

RESULTS FOR "MEANING IN LIFE" (IN GENERAL)

	Median of the difference	P-value	Significant?
Full "Meaning in Life" scale	4	0.021	Yes for p < 0.05
"Presence of Meaning" subscale	4	0.004	Yes for p < 0.01
"Search for Meaning" subscale	0	0.788	No

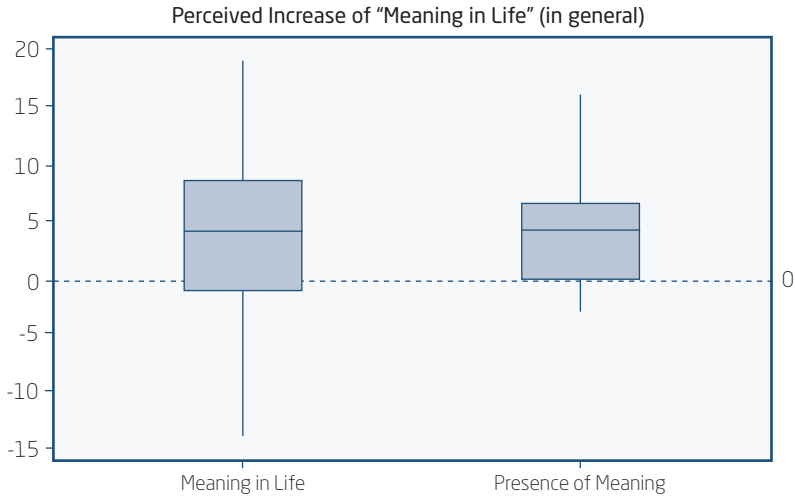Source: Elaborated by the authors.

The sign tests for medians above indicate evidence that the median of the differences ("after" minus "before") is greater than zero for the full "Meaning in Life" scale and for the subscale "Presence of Meaning". These differences indicate the increase in participants' perception for meaning of life in general and for the subscale of presence of meaning according to the boxplot below (Figure 4.2.2).

Of the ten questions on the "meaning in life" in general scale, five refer to statements about sense of purpose: "I am always looking to find my life's purpose", "My life has a clear sense of purpose", "I have discovered a satisfying life purpose", "I am seeking a purpose or mission for my life", and "My life has no clear purpose".

These questions were analyzed one by one in isolation. The sign test for medians indicates evidence that the median of the differences ("after" minus "before") is greater than zero for the question about the statement "I have discovered a satisfying life purpose" (p-value = 0.003). This result is illustrated in the boxplot below (Figure 4.2.3).

Figure 4.2.2

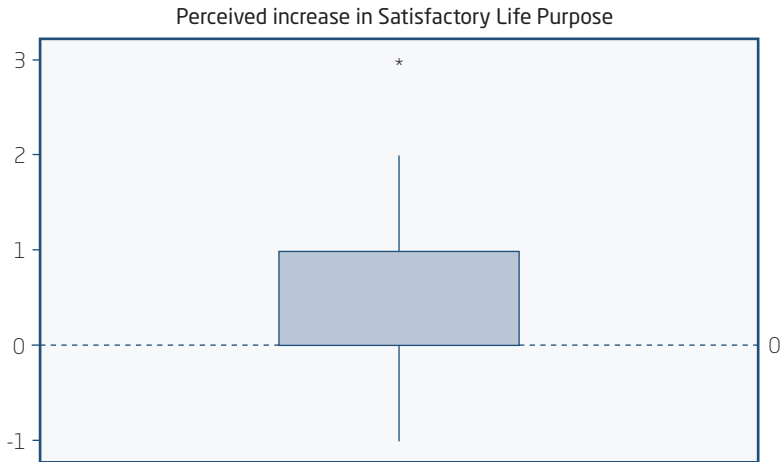## PERCEIVED INCREASE OF "MEANING IN LIFE" (IN GENERAL)

Perceived Increase of "Meaning in Life" (in general)

Source: Elaborated by the authors.

Figure 4.2.3

PERCEIVED INCREASE IN SATISFACTORY LIFE PURPOSE

Perceived increase in Satisfactory Life Purpose

Source: Elaborated by the authors.

4.3. Level of mindfulness scale

The non-parametric sign tests for medians were also used to verify whether there was a perception of increased mindfulness among participants according to the Mindful Attention Awareness Scale. The test indicated that there is evidence to consider that the median of the differences ("after" course minus "before" course) is greater than zero (p-value = 0.021) for this scale.

This increase in the perception of mindfulness after the course is represented visually in the boxplot below (Figure 4.3.1).

(Figure 4.3.1)

PERCEIVED INCREASE ON THE MINDFULNESS SCALE

Perceived Increase on the Mindfulness Scale (MAAS)
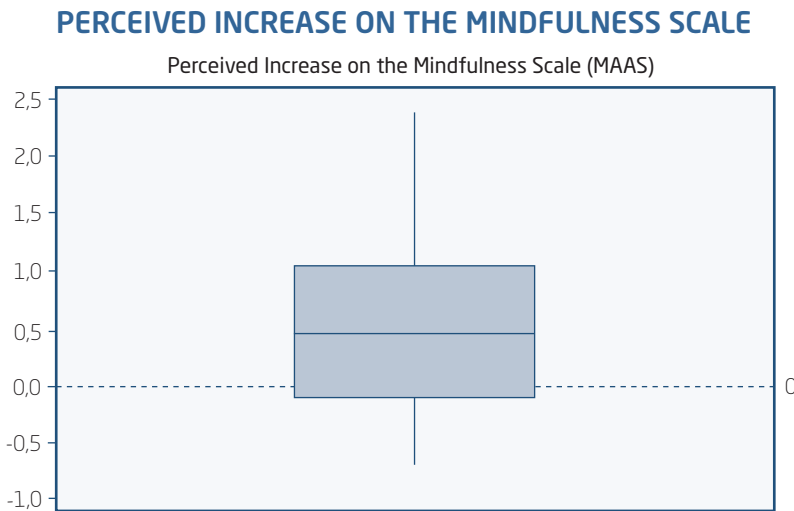
Source: Elaborated by the authors.

The implications of these analyses with the response variables above indicate that we have evidence that this proposed educational program on mindfulness and Theory U for the professional sense of purpose has increased the perception of sample participants as to greater purpose at work, meaning in life at work, meaning in life in general and level of mindfulness.

To analyze the impact of control variables on these response variables, the non-parametric Mann-Whitney test (Triola, 2005) was used. By means of these analyses, we did not find any statistically significant evidence in our sample that 1. previous mindfulness practice, 2. previous practice of other types of meditation, and 3. previous systematic reflection on sense of

purpose had an impact on the response variables meaning in life at work, meaning in life in general and level of mindfulness.

4.4. Comparative analysis of the personal texts versions of statements of purpose

Throughout the course, participants wrote three versions of the personal text of statements of purpose, core values, and vision. The first version was performed without practicing mindfulness or Theory U; the second version was performed with the practice of mindfulness, but without the reflection based on Theory U and the third version was performed with the practice of mindfulness and also with the reflection based on Theory U.

The first version of the purpose statement by the participants (without mindfulness and without Theory U) was made shortly after the researcher presented a brief theoretical presentation on academic definitions of what "purpose", "values" and "vision" are (Berg, 2015; Rokeach, 1973; Schwartz, 1992; Gouveia, 2003; Tan, 2012)

The second version of the purpose statement was written in the context of the following practices of mindfulness, according to Chade-Meng Tan's book *Search Inside Yourself*: 1. meditation focused on breathing; 2. meditative writing (journaling) to compose the personal statement of purpose, essential values and vision; and 3. meditative conversations in pairs. Shortly afterwards, participants were able to complement the personal text of this second version with the insights gained during the meditative conversation.

After concluding this second version of the sense of purpose statement, participants comparatively evaluated the perception of clarity, focus and authenticity of the second version (with mindfulness) over the first version (without mindfulness).

According to Figure 4.4.1, 77.4% of respondents indicated that they fully or partially agree that the second version of the text improved in terms of perception of clarity, 83.9% indicated an improvement in the perception of authenticity, and 90.3% indicated an improvement in perception of focus.

We also performed a non-parametric sign test for medians in the comparative analysis between the versions of the personal statements of purpose.

As explained above, the responses in these assessments had seven Likert-scale level of agreement options. Therefore, if there was no improvement in the perception of clarity, focus and authenticity, participants would have chosen the "do not agree or disagree" option for each of these

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three questions, which would result in a sum of twelve (three times the "I do not agree, or disagree" option that is worth four points).

(Figure 4.4.1)

VERSION "WITH MINDFULNESS" COMPARED TO VERSION "WITHOUT MINDFULNESS"

Version 2 compared to Version 1
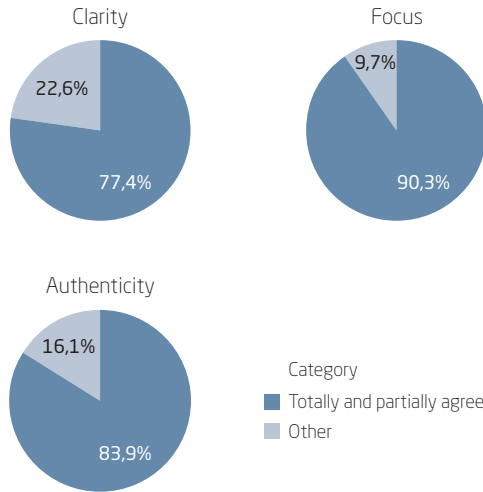
Source: Elaborated by the authors.

According to Figure 4.4.2, the median of the sum of perception obtained was equal to twenty and the p-value was equal to zero (p-value = 0.000), generating evidence that the participants considered that the sense of purpose personal statement with mindfulness accounts for greater awareness of clarity, focus and authenticity than the version of the personal statement performed without the practices of mindfulness.

(Figure 4.4.2)

RESULTS OF THE VERSION "WITH MINDFULNESS"

	Median of the Sum	P-value	Significant?
Version 2 compared to version 1	20	0.000	Yes, for p < 0.01

Source: Elaborated by the authors.

On the last day of the course, participants performed a meta-cognitive contemplation based on Theory U attention modes. Each participant prepared during the previous week three scenes from memory about situations from their own biography in which they took action based on "sensing" attention (attention with sensitivity to the current social system as a whole) or took action based on "presencing" attention (attention through the sense of presence with sensitivity to the social system emerging in the future).

During the fourth and final day of the course, participants recalled each of the three sensing or presencing actions in their personal biography and then reflected on the creative pattern common to the three actions and on the genuine sense of identity that manifests itself in these three actions. Subsequently, participants identified the personal and professional purposes and values that were in fact acting in these three actions. Finally, the participants reflected on the extent to which all this exercise on the basis of Theory U helps them to be clearer about current personal and professional purpose and values.

Shortly after these reflections based on Theory U, participants redid the mindfulness exercises they had practiced on the previous day of the course (meditation with a focus on breathing, meditative writing, and meditative conversation) and wrote version three of the personal statement of purpose.

Finally, participants evaluated the perception of improved clarity, focus and authenticity of this third and final version of the personal statement of purpose in relation to the first two versions.

According to Figure 4.4.3, participants considered that the text version with mindfulness and with Theory U provided a significant increase in the perception of clarity, focus and authenticity in relation to the version without mindfulness and without Theory U. 95.8% of the respondents indicated that they agree totally or partially that the third version of the text improved (in relation to the first version) the perception of clarity, 91.7% indicated improvement in the perception of authenticity and 91.7% indicated improvement in the perception of focus.

Figure 4.4.4 shows that the non-parametric sign tests for medians indicated that the median sum of the perception of increased clarity, focus and authenticity is greater than twelve, both in the evaluation of the third version of the personal statement of purpose (median = 21 and p-value = 0.000), and in the evaluation of the third version of the statement in relation to the second version (median = 19 and p-value = 0.000).

(Figure 4.4.3)

VERSION "WITH MINDFULNESS AND WITH THEORY U" COMPARED TO VERSION "WITHOUT MINDFULNESS AND WITHOUT THEORY U"

Version 3 compared to Version 1
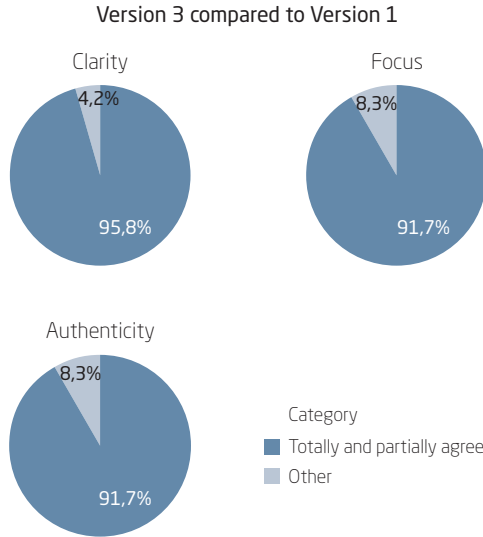
Source: Elaborated by the authors.

(Figure 4.4.4)

RESULTS OF THE VERSION "WITH MINDFULNESS AND WITH THEORY U"

	Median of the Sum	P-value	Significant?
Version 3 compared to version 1	21	0.000	Yes, for p < 0.01
Version 3 compared to version 2	19	0.000	Yes, for p < 0.01

Source: Elaborated by the authors.

In the comparative analysis between the third version and the second version, 78.3% of respondents indicated that they fully or partially agree that the third version of the statement improved compared to the second version in terms of perception of clarity, 79.2% indicated improvement in perception of authenticity and 79.2% indicated improvement in the perception of focus (Figure 4.4.5).

VERSION "WITH MINDFULNESS AND WITH THEORY U" COMPARED TO VERSION "WITH MINDFULNESS AND WITHOUT THEORY U"

Version 3 compared to Version 2

Clarity

21,7%

78,3%

Focus

20,8%

79,2%

Authenticity

20,8%

79,2%

Category
■ Totally and partially agree
■ Other
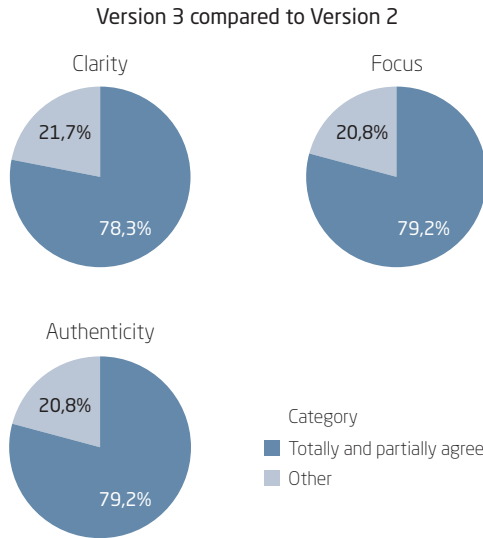
Source: Elaborated by the authors.

As an implication of these comparative analyses, we note that the data suggest a positive synergy between mindfulness and the metacognitive reflections based on Theory U for the emerging future sense of purpose in terms of perceived clarity, focus and authenticity.

5. FINDINGS AND DISCUSSION

This study empirically evaluated the impact of a training in mindfulness for the professional sense of purpose and for the meaning in life at work. We note that the results empirically confirmed Chad-Meng Tan's practical proposal at Google's headquarters that mindfulness practices would help individuals to have a clearer, more authentic view of their own professional sense of purpose (Tan, 2012).

The proposed educational program (of eight hours divided into four weekly meetings of two hours each) on mindfulness and sense of purpose improved the perception of the sample of 21 professionals working in the management of organizations in relation to the "meaning in life at work",

"greater purpose in the work", "meaning in life" in general, the "satisfactory purpose in life" and the level of mindfulness.

These findings confirm the general idea of the "Mindfulness to Meaning Theory" (Garland et al., 2015) and are consonant with the little empirical research on mindfulness and sense of purpose in general and meaning in life in general (Ivtzan et al, 2016; Jacobs et al., 2011; Allan et al., 2015). In addition, our research also confirms the specific relationship between mindfulness, professional sense of purpose, and meaning in life at work theorized by Steger and Ekman (2016). For this specific relationship, we have not been able to find empirical evidence in the academic literature until now.

We also conclude that mindfulness practices are synergistic with metacognitive reflections based on Theory U attention modes (Scharmer, 2010), providing a greater perception of clarity, focus and authenticity by the course participants in relation to the personal statement of professional purpose.

As a management conclusion, this initial explanatory research indicates that individuals joining companies, civil society organizations and higher education institutions may benefit from mindfulness training and metacognitive practices, in order to increase individual clarity towards his or her own sense of purpose.

These findings are the result of the collaborative multidisciplinary work between organizational science and medical science.

The mindfulness practices already count on decades of scientific publications in the area of health. With this research, we contribute with a small step in the promising path of developing the body of knowledge on the benefits of mindfulness practices for the professional life of individuals acting in the management of organizations.

This exploratory research main limitation is the modest sample size of 21 individuals. In order to increase the relevance of these initial research conclusions, it is necessary to conduct future research with increased sample sizes and with comparative analysis between randomized intervention and control groups.

MINDFULNESS E TEORIA U PARA O SENSO DE PROPÓSITO PROFISSIONAL

RESUMO

Objetivo: Validar se as práticas de *mindfulness* contribuem para aumentar percepção de clareza do próprio senso de propósito profissional.

Originalidade/relevância: A pesquisa mostra a sinergia de práticas de *mindfulness* com reflexões metacognitivas baseadas nos tipos de atenção organizacionais da Teoria U de Otto Scharmer para que os profissionais tenham maior percepção de autenticidade diante do próprio senso de propósito profissional.

Principais aspectos metodológicos: Foi realizado um estudo de intervenção, prospectivo, com coleta de dados pré e pós intervenção e exploratório. A intervenção consistiu na realização de um curso de quatro encontros semanais de duas horas cada, o qual foi validado estatisticamente com uma amostra de 21 profissionais organizacionais nas cidades de Ribeirão Preto e São Paulo, no Brasil.

Síntese dos principais resultados: O programa educacional proposto sobre *mindfulness* e senso de propósito melhorou a percepção em relação ao "sentido de vida no trabalho", o "propósito maior no trabalho", o "sentido de vida" em geral, o "propósito de vida satisfatório" e o nível de *mindfulness*. Constatamos também que as práticas de *mindfulness* têm atuação sinérgica com as reflexões metacognitivas baseadas nos níveis de atenção da Teoria U, proporcionando maior percepção de clareza, foco e autenticidade em relação às declarações de senso de propósito.

PALAVRAS-CHAVE

Mindfulness. Teoria U. Senso de propósito. Sentido de vida no trabalho. Metacognição.

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