

Mindfulness Meditation as a Stress and Negative Emotion Management Tool: A Quasi-Experimental Study

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Abstract:

Meditation, as a spiritual practice that promotes introspection and prolonged personal reflection, is raising increasing interest in the field of positive psychology due to its potential benefits for negative emotion management and mental recalibration. This study aims to investigate the efficacy of mindfulness meditation in reducing anxiety and mitigating unpleasant emotions triggered by unexpected stress, particularly in individuals exposed to simulated testing conditions.

A quasi-experimental method was conducted, involving 32 participants exposed to an unexpected exam scenario. Anxiety levels were assessed using Spielberger's Anxiety-State Inventory, Form Y (STAI-Y), while emotions were measured using the PANAS (Positive and Negative Affect Schedule) scale. Pre- and post-meditation assessments were administered at a training center in Blida - Algeria.

The findings of this study revealed that a very high score of anxiety is associated with a set of negative emotions. However, the practice of mindfulness meditation has demonstrated its ability to help individuals regulate their emotions effectively in response to demanding and unexpected situations. Following the meditation session, participants exhibited a significant reduction in both anxiety and negative emotions.

These findings underscore the practical utility of mindfulness meditation as a valuable tool for emotional regulation and contribute to the expanding body of knowledge.

Keywords:

Mindfulness ; Emotions ; Affects ; state-anxiety ; quasi-experimental methodology.

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Introduction:

If we analyze the approach of CBTs, we will find that CBTs are centered on three primordial dimensions. The behavioral dimension (what I do, what I can't help doing...). The cognitive dimension conscious (thoughts), and unconscious (beliefs that influence his life). The emotional dimension (what I feel...). This evolved in three theoretically distinct waves. The first wave is behavioral, and it takes place in the years 1912 and 1980, and it is based on the experimental analysis of behaviors and their change. The second wave is cognitive, it is set in the 1970s and 1990s. This wave studies thoughts and belief systems, the possibility of awareness and modification of automatic thoughts related to painful emotions. The third wave is emotional, and it begins in the 1990s, it gives great importance to the awareness of emotions and cognitions and to an attitude of welcome. Each wave integrates the previous one, today we can speak of behavioral, cognitive and emotional therapies.

The appearance of positive psychology in 1998 at the annual meeting of the American Psychological Association by its then president, Martin E. P. Seligman marked a new trend in psychology; where mental health specialists are not only interested in mental and psychic disorders but also in health and well-being, in what makes humans resilient, happy, optimistic and successful. Now this approach brings a plus to psychology, and many PPT techniques (positive psychology therapies) are added to the CBT repertoire, including Mindfulness.

During the 1990s, the concept of mindfulness attracted the attention of many researchers and clinicians who aimed to develop a different and new angle of therapeutic management of illness and psychic disorders, emphasizing the notions of relationship and acceptance with thoughts and emotions. Stemming from the pioneering work of Jon Kabat-Zinn (1985-1990), the concept of mindfulness was first studied in the context of formal meditative practices coupled with Hatha Yoga techniques, aimed at reducing the stress felt in many chronic diseases (Kabat-Zinn, 1985). This research led to the creation of the MBSR (Mindfulness-based stress reduction) therapeutic approach developed by Kabat-Zinn 1982-1990, and subsequently, to the MBCT (Mindfulness-based cognitive therapy) therapy developed by Segal et al. (2006) emphasizing the cognitive aspect coupled with mindfulness in the treatment of depressive relapse.

Many benefits of mindfulness have been identified, including significant improvements in the evaluation of pain and more or less long-term psychological symptoms (Bondolfi, G., 2004), positive results (reduction in the level of stress) in patients suffering from serious illnesses such as cancer (Kabat-Zinn, J. 2003), psoriasis (Heeren, A., & Philippot, P. 2010) or multiple sclerosis (Bondolfi, G., & al, 2011). It can help in the treatment of conditions such as anxiety disorders, sleep disorders, eating disorders (Berghmans et al, 2008), diabetes-related stress (Berghmans et al, 2012), tinnitus (Kabat-Zinn, 2003), as well as to help people who want to quit smoking (Skanavi & al, 2011) or women facing perinatal stress (Bondolfi, G., & al, 2011). It can also be used as a complement to treatment for certain serious personality disorders characterized by self-harming behaviors (Heeren, A., & Philippot, P. 2010) or in the development of attitudes of acceptance and commitment, to prevent relapse into substance abuse or depressive relapses (Berghmans et al, 2010).

Although work is still needed to confirm all of these effects, most have been validated in several psychopathological conditions, with mindfulness acting mainly on cognitive, behavioral and emotional elements.

Accordingly, this study will attempt to test whether mindfulness will decrease negative emotions related to a stressful situation in a population in an unplanned examination situation, and we assume, according to the null hypothesis, that mindfulness will not decrease anxiety and negative emotions related to the stressful situation.

1. The conceptual framework :

To achieve this objective mentioned, three concepts constituting the main variables of the study must be highlighted.

1.1 Mindfulness:

This concept has been taken up by medical and psychological research in order to be studied from a scientific and therapeutic angle allowing its adaptation within medical care. Kabat-Zinne defined mindfulness as paying attention to the path to the goal in the present moment, in a state of non-judgment. It is very important to point out that, to date, there is no single definition of mindfulness, due to the evolution of this concept and the angle from which it can be studied. We can retain three definitional approaches which have the merit of presenting its evolution since the 1980s (Kabat-Zinn, 1982). Safran and Segal (1990) view mindfulness as adopting a decentered perspective about thoughts, feelings, and emotions so that these can be experienced in their subjectivity and transitory nature. For Hays and Wilson (2003), mindfulness is a set of techniques designed to deliberately encourage contact with events happening in the here and now, in a non-evaluative way. According to Hayes (2005), when an internal event is considered dangerous for the individual, mental processes will intervene in order to avoid it. It is this dominance of cognitive activity that is targeted in mindfulness-type techniques, with the aim of reducing it, and giving way to a more experiential and non-evaluative awareness. Finally, for Cardaciotto and al. (2005) define mindfulness as a tendency to be deeply aware of our internal and external experiences in a context of acceptance and a position of non-judgment. It has two essential components: mindfulness and acceptance. Putting the concept into practice, mindfulness is a mindful meditation technique characterized by present-moment awareness and acceptance (Martin-Krumm, C. 2011).

1.2 Affects:

Affect is a general term that includes emotions, moods and dispositions (Gray and Watson, 2001). It applies both to specified states, triggered by specific situations or objects, and to vague, indeterminate states. It is not limited to intense states such as emotion, but also includes emotional tones of the pleasant or unpleasant type, for example (Garcia, A., & Herrbach, O., 2006).

When they propose to define the field of study of emotions, psychologists often take care to compare it to that of different affective states such as mood, affective tendencies, temperament, emotional disorders.

For Bernard Rimé (2005), mood designates affective states perceived as positive or negative and which can last from a few moments to several months without the person knowing what triggered or interrupted them. Comparatively, the emotion appears as a particularly salient, intense and short-lived episode. Seen from the outside, it is signaled by rather sudden changes (facial, vocal, postural and behavioral expression). Internally, the person experiences powerful subjective changes and specific motivational impulses. Temperament corresponds to the very stable affective traits of people such as neuroticism (disposition to experience negative affects such as anxiety, sadness, resentment, pessimism, dissatisfaction, etc.) or extraversion (disposition to feel positive affects such as cheerfulness, enthusiasm, optimism, etc.). Emotional disorders, pathological syndromes, such as depression (dominance of negative affects), mania (exacerbation of positive affects) or anxiety disorders (phobia, obsessive disorder, panic attack, etc.) are of very variable duration and invade the person unquestionably longer than an emotional episode does. Finally, it is possible to feel emotional manifestations (hope, joyful excitement, exaltation, discouragement, anxiety, gloom, etc.) qualified as affects (Piolat, A., & Bannour, R., 2008).

It is very important to also emphasize that the positive or negative emotion remains a relative judgment, these two types of emotions are relatively independent: high positive emotions do not mean the absence of negative emotions and vice versa. Seen from the outside, an

emotional response of the sad type in a situation requiring this (e.g. loss of a loved one) cannot be perceived as an inappropriate and therefore negative emotion (Bouredji C. A., 2016); therefore, any researcher must take into consideration that the positive or negative qualification of an emotion requires an explanatory model on which one relies to qualify the emotion and interpret the results. In our study, we will follow the model of Watson & Tellegen (1988) subsequently adopted in positive psychology by Seligman (2004).

1.3 Anxiety:

Anxiety is an emotion that can be defined by a subjective feeling of threat, or fear, accompanied by specific physiological and behavioral changes. From a cognitive point of view, anxiety can be defined by the tendency to perceive threatening stimuli as dangerous and to respond to them by developing a set of specific attentional, pre-attentional and interpretative behaviors (Bardel, M. H., & Colombel, F., 2009). Two distinct concepts have been presented in this field: anxiety as a state in front of a situation and anxiety as a character trait.

The concepts trait-anxiety and state-anxiety were introduced by Cattell and further developed by Spielberger. Trait anxiety refers to stable interindividual differences in anxiety propensity, that is, differences in the tendency to perceive aversive situations as dangerous or threatening and to respond to them with an elevation of anxiety. intensity of state anxiety reactions. The more accentuated a subject's anxiety trait, the more likely that subject is to experience an increase in state anxiety in a threatening situation. State anxiety, on the other hand, rises in the face of physical danger or psychological stress and decreases in response to relaxation (Langevin, V., & al, 2013).

In this study, it is the anxiety state that will interest us in order to be able to see the impact of mindfulness in this type of situation.

2. Method:

2.1 Methodology:

The quasi-experimental methodology is the most suitable for this study. This is an experimental design (marked by the absence of a random sample) aimed at verifying the effectiveness of the "mindfulness" technique in a stressful situation.

2.2 Participants:

The participants are psychologists and graduate students (Masters) in psychology. The total number of participants is 23, including 10 practitioners and 13 Master's students, including 9 in Master 2. Only 4 participants are male while the rest (19 participants) are women. The average age of our sample is 24.86 years, with a standard deviation of 3.15.

2.3 Tools:

2.3.1 PANAS scale:

This scale of positive affectivity and negative affectivity, developed in English by Watson, Clark and Tellegen in 1988, is a questionnaire designed to measure mood and feelings. It was translated into French by Caci and Bayle in 2007. The scale consists of a list of words that report certain emotions or feelings felt in a given situation (Caci, H., & Baylé, F., 2007).

It is used to better identify the current emotional state, to identify current concerns and those that have not yet been resolved, to determine the strengths (positive affects that are stable) and to build on them, to take the best measures or actions according to the affect (prevent), to better introspect oneself, to see one's tendencies in the medium and long term, to make known the emotional state and to know that of others: colleagues, family members, etc. It can also help to exchange and communicate with those around you about the states felt, the joys, the problems, etc... and to understand others, to make yourself better understood by others.

The results can be seen by separately counting the number of points for each of the two poles of affect: positive affect (P) and negative affect (N). Two distinct results therefore, ranging from 10 to 50 can be obtained. It is a positive affect if the score is greater than or equal to 30

on the P scale (positive affect), while the negative affect must also be a score greater than or equal to 30 on the N scale (affect negative) (Seligman, M.E., 2004).

2.3.2 State Anxiety Inventory:

Anxiety is measured by the State Anxiety Inventory, Form Y (S.T.A.I.-Y) developed by Spielberger in 1983. More specifically, we used for our investigations the French version validated by Bruchon-Schweitzer and Paulhan (Spielberger, 1993). The anxiety-state scale, unidimensional, is composed of 20 items; it was used to investigate the situation of the examination and the effect of the manipulation to come. The instruction was as follows: "State your current feelings about the exam. To do this, tick for each proposal the box that best corresponds to what you feel at the moment, just at this moment.

Clinical interpretation of the data shows if the score is below 35, the level of anxiety is minimal, A score above 35 and less than or equal to 45 indicates a low level of anxiety. From 46 to 55 the level of anxiety is moderate. From 56 to 65, the level of anxiety is high while a score above 66 the level of anxiety is very high.

This version has an internal consistency (alpha cronbach) of 0.90 and a reliability ranging from 0.79 to 0.81. In addition, correlations between the items and the total score of the scale ranging from 0.92 to 0.95 are obtained (Bruchon-Schweitzer, & Paulhan, 1993).

2.3.3 The Mindfulness Technique:

Mindfulness meditation using the MBSR technique (Mindfulness-based stress reduction) is simple and can be adopted by everyone. It consists of doing exercises that range from a few seconds to about twenty minutes.

There are many therapeutic programs based on mindfulness, among which is the MBSR program developed in 1985 by Kabat-Zinn. It is a structured program of eight weekly sessions intended for groups of 20 to 30 people. The sessions last between two and two and a half hours with the exception of the sixth session which consists of a full day of exercise. The sessions are composed of practical exercises alternating with comments and answers to questions from participants. The first exercise taught is the body scan: practice lying down, it consists of becoming aware of the points of contact with the ground, breathing, then directing your attention to different parts of the body to feel the bodily sensations that are manifested there. If attention is distracted by a thought, the distracting element is welcomed with acceptance and relevance: participants are invited to take note of it, then bring their attention back to the point of focus. An attitude of caring curiosity about any experience is encouraged. The following body exercises involve stretching and mindful walking. Meditation is approached gradually, first by observing one's bodily sensations and breathing, then one's thoughts and emotions. Towards the end of the program, difficult bodily situations (eg interpersonal conflict) are evoked in meditation by observing one's mental and bodily reactions. Between sessions, participants are asked to practice for at least 45 minutes six days out of seven the formal exercises taught in sessions, as well as informal exercises which consist in performing everyday activities in full awareness (Skanavi & al, 2011).

In our study, the experiment will be done in a single session. To do this in a very narrow space of time, we will base ourselves on the body scan (the first exercise of the MBSR program) in a seated position. This exercise consists of observing what is happening in the present moment, without passing judgment by focusing attention on the body and the breath.

Here are the outlines of the instruction:

Sit comfortably. Try to undo the clothes that are tight on you, put your hands preferably on your thighs or on your knees... (instructions on the correct posture)... Wear your eyes at mid-distance, take a series of long and deep breaths... etc... (emphasis on breathing)... you inhale through your nose and exhale through your mouth.... And with each breath you relax and let go... (we can introduce a sequence of music designed for this purpose)... inhale... exhale with this last breath you gently close your eyes... become aware of how your body

experiences breathing... what happens in your body when you breathe... what moves... what changes... what moves... etc... etc... (a series of questions helping awareness of the current moment)... You can feel the movement of your belly going up and down, your chest going up and down, your rib cage expanding and contracting... (emphasis focused on attention).. Now you can open your eyes slowly... use your eyes as if it is the first time you are seeing... try to observe what is happening in the present moment, without judgment and you do this by always focusing your attention on your breathing, your bodily sensations, your emotions or your thoughts or on any internal or external element or event... (focused on intention and acceptance, and in the same way the instruction continues with the rest of the organs of meaning).

2.4 Procedures:

To verify our hypothesis in the best possible conditions, we used the four-step experimental protocol:

The first step: is to create a scenario: 23 participants believe they are passing an important exam to be admitted to the next level, when they have come normally for a training course. The examination was not scheduled, however, many justifications were presented to rationalize the situation and contain the claims of the participants.

The second step: is to assess the change in affects in relation to the demands of the situation. This must seem rational and coherent for the future. To do this, we asked the complaining participants if they could express their emotions in writing. This is a scale made up of 20 affects, including 10 negative and 10 positive, plus 20 closed questions measuring state-anxiety.

The third stage: is the most important phase, in which the technique of mindfulness has been implicitly introduced. In fact, the technique is our pivot of experimentation, it is the independent variable and the manipulation that allows us to record its impact on the emotions. Participants at this time believe they are waiting for the exam paper being printed. In the meantime, we offer them the technique of mindfulness. Our reflection focuses on the fact that the participants are trained psychologists, the technique will interest them for its virtues in such a situation but much more to also satisfy the curiosity of psychologists to discover the technique and learn it. The idea was well received.

By following the protocol of the technique, we were able to perform the manipulation being the independent variable to then be able to record its impact on the dependent variable being the emotions related to the situation.

Finally, after finishing the previous step, you have to re-evaluate the emotions again to see the effect of the technique. This step is very sensitive because it must have meaning for the subjects. The subject is intelligent, we can't do anything to him, and if the subject becomes aware of the experience this can affect the results, because the consciousness of being the subject of an investigation in this kind of experimentation allows the adoption of strategies such as social desirability or acquiescence.

In this step, therefore, participants are asked to re-evaluate the technique subjectively on the same tools already used. This finally allows us to collect all the data necessary to verify our hypothesis.

3. Results and analysis:

Table 01: "Descriptive statistics"

variables		Anxiety					affects	
assessment		Absent	Low	Moderate	High	Very high	negative	positive
Number of participants	test	00	01	06	15	01	20	03
	retest	00	02	11	10	00	07	16

The first evaluation (test) overall shows high anxiety-state. This result can be seen through 16 anxious participants, one of whom is severely anxious. In percentage language 69.56% of

the participants are anxious (15 high anxiety and 1 very high anxiety), the rest 30.44% are moderately anxious or even weakly anxious (01 cases). As for affects, we note that 20 participants declare having had negative affects against 03 only in the lower limits of positive affect. This result of emotions in front of a scenario experienced as an unexpected exam situation turns out to be very appropriate.

The reassessment after the intervention focused on the introduction of mindfulness (retest) refers us to a different register: 10 participants out of 23 still have high anxiety, which makes a percentage of 43.47% against 56.63% qualified participants with moderate to low anxiety. (02 cases). Affectivity registers a change of category which can be significant; 07 negative affects against 16 positive affect.

According to the outcome displayed in the previous table, we see that the emotions (anxiety state and affects) underwent a change before and after the introduction of mindfulness. The next step, we want to know if this change is due to the effect of the technique or it is due to chance. To do this, a T test is necessary to verify our hypothesis. The data follow a natural distribution according to Smirnov's test.

Table 02: "Test-retest of negatives affects"

Evaluations	Number	Mean	Standar deviation	T-value	Significance level
Befor (test)	23	39.33	3.83	5.76	0.01
After (retest)	23	27.91	4.71		

The mean of the first evaluation (test) of negative affects (39.33) turns out to be above the threshold (30), with an average standard deviation of 3.83, which shaws that the values are centered around the mean. As for the re-evaluation (retest) of negatives affects after the manipulation carried out, the average decreases to 27.91, a score below 30. Nevertheless, it is the value of the T test (5.76) which corroborates this difference between the averages (before/after) at the 0.01 significance level. This result explains that there really is a statistically significant difference between the first and the second evaluation of negatives affects.

In simpler terms, the reduction of negative affects marked on the board does not come down to chance but to the technique of mindfulness.

Table 03: " Test-retest of positives affects"

Evaluations	Number	Mean	Standar deviation	T-value	Significance level
Befor (test)	23	23.19	4.17	6.10	0.01
After (retest)	23	31.28	6.06		

Positive affects before mindfulness are evaluated at (23.19), a score below 30 and therefore a low level with a low dispersion of values (4.17). After the manipulation, the positive affect score was 31.28, a score above the threshold (30) with a concentration close to the average (6.06). Coming back to the value of T test (6.10) the difference between the two readings (before and after) is statistically significant at the 0.01 level. The increase in negative affects marked on the board comes down to manipulation being the technique of mindfulness.

Table 04: " Test-retest of anxiety"

Evaluations	Number	Mean	Standar deviation	T-value	Significance level
Befor (test)	23	60.62	5.94	13.21	0.01
After (retest)	23	46.00	8.11		

The anxiety recorded in the participants before the intervention of the researcher (the technique in question) is 60.62 without having had extreme values (5.94), it is a very high score according to the interpretation of the manual. However, after this intervention anxiety fell to 46.00 with an average standard deviation of 8.11; a score that reveals moderate anxiety. The use of the T test value (13.21) shows that there is a statistically significant difference at the 0.01 level between the first and the second evaluation (before/after). This result points out that the decrease recorded in the level of anxiety is due to the effect of the mindfulness technique.

4. Discussion:

Faced with this scenario created on purpose to put the elements of our sample in a stressful situation, the participants score a high score for negative affects (39.33) against a low score for positive affects (23.19) and high anxiety (60.62). Once mindfulness is performed, a significant and statistically significant set of scores was recorded showing positive change in emotions: above-average positive affects (31.28) versus demonstrated reduction in negative affects (27.91) and rather moderate anxiety (46.00).

Remember, our hypothesis assumes that mindfulness will not decrease negative emotions related to the stressful situation. This is a null hypothesis designed to test the effectiveness of mindfulness in a single session and under stressful conditions.

Against all expectations, mindfulness drawn from the MBSR (Mindfulness-based stress reduction) method developed by Kabat-Zinn (1982-1990) has proven effective in this type of situation despite the fact that it is a single session. . Generally, mindfulness requires frequent practice (eg: Crane et al., 2006; Hölzel BK, Ott U., Gard T., Hempel H., Weygandt M., Morgen K., Vaitl D., 2008; Christopher et al ., 2010; Holzel BK, Carmody J., Vangel M., Congleton C., Yerramsetti SM, Gard T., Lazar SW, 2011) often spread over a considerable period of time: around 8 sessions for the MBSR stress reduction program (Kabat-zinn et al, 1985), around 11 sessions for DBT behavioral and dialectical therapy program (linehan et al, 1990), 16 session at least in ACT commitment and acceptance therapy for anxiety disorders depression (Hayes et al, 1999), 8 sessions for MBCT, a cognitive anti-relapse program based on mindfulness (Segal et al, 2000), several sessions for a relapse prevention program based on mindfulness (Marlat et al , 2002) and 10 consecutive sessions in Vipassana meditation (Goenka 1965-2003). So that's a minimum of 11 hours of cumulative practice,, distributed over a span of about 8 weeks for the structural changes in the brain to take effect. It is at this stage that mindfulness brings about the necessary structural changes in the brain allowing an increase in the density of gray matter involved in learning and memory, emotion regulation, self-analysis and the ability to put things into perspective (Holzel et al. 2010).

On the other hand, our study shows that mindfulness quickly reacted on the psyche of the participants, a result that could be explained based on the work of Brown and Ryan (2003). These researchers distinguish between what is called mindfulness state and mindfulness trait, and assessed their effects on autonomy and emotional well-being. The results of this study show that state mindfulness and trait mindfulness are conceptually and statistically independent.

The mindfulness trait refers to stable interindividual differences in the propensity to pay attention and bring awareness to the present moment. The mindfulness state concerns systematic fluctuations around the average level of mindfulness. According to Brown and Ryan (2003), individuals differ in their propensity or disposition to be aware and sustainably maintain their attention to what is happening in the present. This ability therefore varies among people depending on certain factors that facilitate or, on the contrary, prevent its appearance. In this same study, the mindfulness measure predicted more autonomy, positive affect, and less negative affect. When individuals are more attentive to the activities in which they are engaged, they are also likely to experience these activities as self-directed ($t = 10.71$,

$p < 0.0001$) and to experience higher degrees of positive emotions (Csillik, A., & Tafticht, N., 2012).

Seen from this angle, the participants of our study are trained psychologists who were present in a training center for learning reasons. They are predisposed to be curious and more attentive to the mindfulness exercise for which they are engaged.

Mindfulness would lead to a decrease in the automatic capture of attentional focus by general and abstract thoughts, in favor of experiential and adaptive thoughts (Teasdale and al, 1995). As well as the participants of our study experience similar cognitive work. Heeren and Philippot have highlighted the essential role played by the level of abstraction of thoughts in the general psychological symptomatology of the subject and the reduction of mental ruminations. For Borders, Earleywine and Jajodia (2010), this reduction in mental ruminations would also make it possible to reduce the frequency of aggressive behavior, both verbally and non-verbally an improvement in recall in autobiographical memory, associated with an improvement in the ability to resolution of interpersonal problems, were also noted. In connection with these various cognitive and behavioral improvements, the practice of mindfulness induces an improvement in essential executive functions such as flexibility or inhibition. It is important to understand that, overall, Mindfulness allows us to modify the way we enter into a relationship with our emotions, our thoughts, to then modify our interpretation and adapt our behavior as well as possible (Heeren, A., & Philippot, P., 2010). Many studies have focused on the cognitive processes underlying the effectiveness of mindfulness practice. According to Watkins (2004) one of the particularities of mindfulness is the change it would allow to operate on the mental ruminations maintaining negative affectivity (Heeren, A., & Philippot, P., 2010). Another controlled study by Astin (1997) evaluates the effects on health and more specifically on psychological distress and its mode of coping, of a mindfulness meditation program with a population of students. The author highlights a significant reduction in these symptoms. He concludes that this form of meditation may prove to be an effective coping strategy in terms of transforming patterns of response to life events, and have potential for preventing relapse in affective disorders. He also underlines the interest of this meditation technique by its action on the reduction of emotional distress and the increase of the sense of control (Berghmans, C., Tarquinio, C., & Strub, L., 2010).

Conclusion:

It is very important to point out that mindfulness is not a therapy in its own right and it is not sufficient as a sole therapy for the treatment of emotional disorders. However, it has a positive impact on health and is an additional therapeutic asset. The fact of coupling psychotherapy at the beginning of the course with an MBSR practice deserves to be studied more finely because it proves to be relevant and brings a result in terms of adaptation, improvement of emotions and perceived control in the group. On the other hand, it is imperative to emphasize that the openness of the participants to the experience probably plays a role in the meditative process.

Mindfulness is still a very promising field of research and mindfulness research is still in its infancy.

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