Mindfulness can be understood as consciousness, encompassing both attention and awareness; it is paying reflexive attention to the present moment. It is an attempt to actively focus on the present, but non-judgmentally, and without interfering with the sensations and perceptions experienced moment to moment. As a therapeutic procedure, it seeks acceptance and the full experience of emotional aspects or any other kind of non-verbal processes, without avoiding or attempting to control them.

Control of uncontrollable events that are being automatically processed requires mere experience and natural exposure, with the least possible interference. Although mindfulness has become somewhat notorious, especially in the USA, in relation to eastern meditation values, it refers to some aspects that are well-known in psychology: exposure and self-regulation based on biofeedback techniques or the use of hypnosis, where perceptive and sensory phenomena are revealed as they really are. Its chief usefulness, beyond the specific techniques it provides, may be to contrast with a psychology that proposes control, wellbeing, the elimination of stress, anxiety, etc., by means of procedures that, unless they are naturally experienced, may contribute to their perpetuation.

Key words: mindfulness, acceptance, exposure, behavior therapy

Mindfulness can be understood as consciousness, encompassing both attention and awareness; it is paying reflexive attention to the present moment. It is an attempt to actively focus on the present, but non-judgmentally, and without interfering with the sensations and perceptions experienced moment to moment. As a therapeutic procedure, it seeks acceptance and the full experience of emotional aspects or any other kind of non-verbal processes, without avoiding or attempting to control them. Mindfulness cannot be understood generically, but instead it refers to a specific temporal moment (the present).

To complete the definition of the concept, if only preliminarily, we must add that such attention, awareness, and reflection are of a non-judgmental nature. It is a merely contemplative experience, observing without judging, accepting the experience as it emerges. It is an open and naive observation, lacking criticism and valence. One could say it is a way of being in the world without any prejudice: open to sensory experience, attentive to it and without judging or rejecting, actively and restrictively, the experience.

The above-described phenomenon is obviously of interest to psychology. It poses in positive terms how to direct attention and activity, openly matching each situation, and it implicitly reveals the problems that can derive from not focusing on the present moment in these conditions. Thus, for Linehan (1993), mindfulness training
involves instructing patients to observe and describe their bodies, without judging, and focusing on the present.

Mindfulness is considered from diverse perspectives as an end in itself, as a life philosophy, or a way to behave in life. In this viewpoint, mindfulness is considered a kind of meditation inserted in eastern culture, and in Buddhism in particular (Gremer, 2005), the Zen ideal of life of living the present moment. From a psychological point of view, it has also been considered a personality construct. Psychology has attempted to measure how much mindfulness a person “has” and how that may affect various psychological dimensions, as well as specific processes.

Lastly, mindfulness is also considered a technique and a component of the therapies developed in the framework of radical and contextual behaviorism: therapy of acceptance and commitment, therapy of dialectic behavior, or analytical functional psychotherapy.

Novel Aspects of the Technique
As mentioned, mindfulness can be understood as a way of becoming involved in various habitual activities, whether or not they are problematic. Therefore, it can be considered a skill that allows not just a different point of view but instead it refers to concrete behaviors.

To be accurate, it cannot be said that its proposals are novel. However, let us look at its essential elements and their degree of innovation.

Focusing on the present: This has been the defining characteristic of functional analysis of behavior and, consequently, of behavior therapy. However, in mindfulness, focusing on the present has a different meaning. It means focusing and feeling things just the way they happen, without trying to control them. It is not focusing on a thought in order to change it to a positive one. It focuses on a thought or activity, or whatever one intends, without wanting to control it. What use is this? Accepting experiences and sensations just as they are. One could say that, like in exposure techniques, we ask the person to remain in a certain situation, feeling whatever happens in this situation. This attitude allows whatever is going to happen or to be felt, to occur fully. To live whatever is happening at that moment means to let each experience be lived in its present moment. It means not missing out on the present experience by substituting it with what should happen or what happened and was experienced in the past.

Openness to experience and facts: Focusing on what is happening and on what one is feeling at that moment allows one to center on the emotional and stimulator aspects instead of on one’s interpretation of them. The power of language, or thought, to filter and dress up what one sees and feels is evident. This influence is such that frequently, the verbal substitutes reality, homogenizing, uniforming, and conforming open experience to predefined and stereotyped frames. This implies, above all, a falsification of experience and losing the richness of the variability of perceptive and emotional phenomena. The person who contemplates a painting is only capable of perceiving (feeling) to the extent that he is capable of remaining open to the things that the painting suggests. This observation should be mainly guided by itself, letting some sensations naturally lead to others. Verbal interference (prejudices) or “being somewhere else” only help to adulterate the experience.

Radical acceptance: The essential element of mindfulness consists of radical, non-judgmental acceptance of experience. This means focusing on the present moment without making any kind of judgment and accepting the experience as such. This has an element of originality compared to the habitual procedure in psychology. The positive and the negative, the perfect and the imperfect in their various degrees are accepted as natural, normal experiences. Obviously, it is pleasanter to experience something positive, but experiencing unpleasant events is just as natural. As mentioned, this means accepting experiences, and one’s reactions to them, as natural and normal. The effort not to judge them and to accept them allows one not to reject them: the discomfort, anger, and frustration are not something from which one should flee, but rather they comprise part of the human experience that must be undergone. To a great extent, this contradicts certain types of socially transmitted messages, even coming from the professional practice of psychology: discomfort is negative, anxiety should be reduced, control stress, get rid of negative thoughts, etc.

Choice of experiences: One might think that mindfulness consists of living with attention, reflectively, non-judgmentally, and accepting whatever happens in a rather determinist way. This is not the case. People actively choose what they engage in, what things to take action about, to look at, or to focus on. Each person’s goals, projects and values determine what that person will pay attention to,
spend time and interest on. In short, for a situation to be experienced and characterized as mindful does not mean that it is not chosen. It means that once a situation is chosen, it should be lived and experienced just as it is, actively, and accepting everything that happens.

Control: Acceptance means renouncing direct control. It is not an attempt to get the person to control his reactions, feelings, or emotions, but rather for him to experience them just as they occur. Naturally, this does not mean that the elements of emotional, physiological, and behavioral regulation do not occur but that they are not directly sought. It does not involve an attempt to reduce (control) discomfort, fear, anger, or sadness, but to experience them as such; in any case, the effect of this stance on these emotions would be indirect. This aspect contrasts notably with contemporary psychological procedures that attempt to reduce activation, control anxiety, eliminate negative thoughts, etc.

To recapitulate, these are some of the key elements of mindfulness according to Germer (2004): (1) non-conceptual, that is, pay attention and be aware without focusing on the thought processes involved; (2) focused on the present: mindfulness always occurs in and around the present moment; (3) non-judgmental, one cannot fully experience something that one wishes were different; (4) intentional, there is always a direct intention to focus on something and to go back to it if, for some reason, one has left; (5) participatory observation, this is not detached observation, it should deeply involve the mind and body; (6) non-verbal, the mindfulness experience has no verbal referent, but instead an emotional and sensory one; (7) exploratory, open to sensory and perceptive experimentation; and (8) liberating, each instant of fully lived experience is an experience of freedom.

THE SPECIFIC TECHNIQUES
Once the singularities and advantages of mindfulness have been described, how can we find it or apply it in practical terms? Is it positive for a person to be mindful the whole day? There are currently no empirical data that allow us to offer clear answers to these questions. In the future, we will be able to assess more specifically in which cases mindfulness is more suitable. Meanwhile, how can one achieve mindfulness? In general, a type of training has been applied to allow people to practice mindfulness skills. The procedure most frequently employed includes cognitive elements (meditation) along with certain kinds of relaxation, or exercises focusing on body sensations. To a great extent, it reminds one of progressive relaxation training, and also autogenous training (a self-hypnosis procedure), and even hypnosis.

Jon Kabat-Zinn (1994) developed and put into practice a program in which he trains people in the acquisition of mindfulness skills. Like relaxation, through training and practice, some skills are acquired that can be generalized and may have positive effects on one’s everyday functioning.

For example, in the case of relaxation, from the perspective of mindfulness, any of the procedures could be suitable once the necessary elements are modified. That is, the person does not control, but rather observes his physiological responses; the person accepts any change, sensation or, for example, movement that is produced; the person is actively involved in the task, attempting to experience and feel everything that happens in it; this active interest does not mean fighting or controlling other competitive activities (for example, if, while attending body sensations, one’s thoughts go astray, when becoming aware of this digression, one should not get angry or feel frustrated, but should accept the diversion and simply go back to attending the body sensations and the tasks in which one was engaged). Within this context, the procedure called body scan (Kabat-Zinn, 2002) can be used. It consists of a mere experience of the body sensations associated with an active review of one’s body. Another procedure frequently used is breathing. The person focuses on breathing and freely experiences all the sensations that occur within his own respiratory rhythm, insisting at all times that no attempt is made to exercise any control over the body activity. Nor is relaxation sought as something positive in itself or as a coping strategy, but as a way of practicing and experiencing mindfulness.

The specific procedures and exercises may be very diverse. Some of them have been developed with specific goals, such as the program for prevention of depression of Segal, Williams, and Teasdale (2002). In this text can be consulted a detailed program of exercises aimed at the practice of mindfulness during most of the day as a way of preventing relapses in depression.

UTILITY OF MINDFULNESS
The techniques designed so the patient will have experiences of mindfulness seek, above all, for the person to let himself flow with the sensations he perceives. This
implies promoting, as a fundamental reference point, sensations and emotions, letting them act naturally. This helps the person to let certain activities (emotions, physiological changes, etc.) that function autonomously (ANS) be regulated by their natural self-regulation systems. The lack of sensory information, either active (the use of techniques to control, distract, etc.) or passive (not attending such information intentionally), prevents the organism from receiving precise and crucial information so that natural forms of learning take place. Take, for example, sexual behavior. Masters and Johnson (1970) insisted on defining as spectating the behavior of those who voluntarily withdraw (by thinking about something else, worrying about other topics, etc.) during a sexual interaction. Supposing that one can control sexual arousal by not attending stimuli that could provoke it, exactly the opposite effect is obtained: it is only possible to “control” sexual arousal when the person receives the sensory information that occurs during such an experience. Learning without performance-related information is not possible. In fact, the more information one has, the more efficient learning will be.

The attempt to block out discomfort, emotions, and stress, contravenes and modifies—either physically (medicines) or psychologically (distraction, restructuring, etc.)—the organism’s natural feedback mechanisms that allow regulation. This was a characteristic element in the development of biofeedback techniques and the self-regulation models proposed to be developed (see Schwarzt, 1977). Like in the above-mentioned example of sexual activity, the only way that the organism’s servomechanisms (positive and negative feedback) can operate is when the sensory information channels receive and transmit the relevant information efficiently (see Corrigan, 2004).

This does not mean that employing medicines or psychological techniques, such as cognitive restructuring, reduction of physiological arousal, distraction, etc., is not suitable. They are useful and effective procedures with certain problems and at certain times. However, they should be employed with caution. When they prevent the person from really experiencing sensations and emotions related to a certain situation, they may be hindering the solution and worsening the problem instead of solving it. Rationalizing and contextualizing a problem is necessary but experiencing and accepting the sensations and emotions produced by it is essential. This is a well-known fact in an especially relevant area of psychological intervention: anxiety disorders. Exposure to situations that evoke anxiety and experiencing its effects is an essential element in their treatment.

THEORETICAL FOUNDATIONS

Mindfulness seems to have emerged from western interest in eastern traditions, and specifically, in Zen Buddhism. From this viewpoint, the impulse provided by Jon Kabat-Zinn has emphasized this aspect a great deal: meditation as a way of experiencing and achieving mindfulness experiences. However this aspect is more instrumental than basic. Meditation, or the use of cognitive or physiological (relaxation) procedures, comprises diverse techniques or procedures to achieve the desired effects. Traditionally, it has been considered that, in order to produce a response that is incompatible with anxiety, one can use several techniques, such as relaxation, meditation, assertive training, or the experience of positive situations (listening to music, etc.).

Focusing on more basic and conceptual aspects, the roots of mindfulness as a therapeutic technique are found in the development of the so-called new behavioral therapies. This type of therapies emerges when considering the context as the main element in the explanation and intervention. Hayes (2004) and Hayes, Luoma, Bond, Masuda, and Lillis (2006) called such therapies, which include processes of mindfulness and acceptance among their components, as well as processes of commitment and direct behavioral change, third wave therapies. This is where mindfulness merges with other therapeutic procedures, such as, for example, dialectic behavior therapy (Linehan, 1993a, 1993b), acceptance and commitment therapy (Hayes, Strosahl, & Wilson, 1999; Wilson & Luciano, 2002), or cognitive therapy originally focused on information processing models in relation to depression (Segal, Williams, & Teasdale, 2002).

The essential characteristic of this so-called third wave behavioral therapy (the first wave was characterized by its empirical and experimental nature and its focus on direct behavioral change; and the second wave by the contribution of the cognitive models) is, among others, that it adopts a more experiential perspective and chooses strategies of indirect change, rather than the more habitual direct change from the first and second waves. This means that it takes into account a broader area of change, not linked to concrete elements and aspects. The explanation of this change in the procedure is the relevance of the context and the functions of behavior.
rather than its form (topography in classic functional analysis). If what matters are the functions of behaviors and not how they are presented, then it is necessary to take action generically on these functions. This involves a broader and more indirect approach, because in order to influence concrete behaviors, one can take action on other behaviors having these same functions although they are not specifically involved in the problem under consideration. Mindfulness experience, the acceptance of sensations and events as they occur, means choosing to experience functionally different behaviors from those that may be generating the problem for which the person asked for help, in contrast to the attempt to flee from the experiences without having had the chance to experience them. A person concerned with controlling all the unpredictable events at work does not have to focus just on work situations but on any other situations that have to do with unpredictable events.

This broad and open viewpoint is more comprehensive and adaptive than the one focusing on the control of specific elements in a decontextualized way. Therefore, it is not surprising that this kind of third wave therapies have been shown to be more efficient in broader and less defined problems, such as personality disorders (Linehan, 1993a, 1993b). The goal is for the person to be capable of observing and naturally feeling (flowing with) his behavior (mindfulness as observation) and at the same time, committing himself to that activity (mindfulness as commitment). The aim is to be open to one’s own activity, an exploration that will allow one to obtain data for subsequent evaluation. Choosing experiences, activities, etc., is not at all incompatible with being willing, at the same time, to experience and feel things as they occur (Robins, Schmidt, & Linehan, 2004). Note that this way of behaving favors flexibility and variability of behavior, an essential characteristic of the adaptive capacity of behavior.

CLINICAL APPLICATIONS

The clinical applications of mindfulness were initially linked to its role as a procedure to achieve physiological-emotional control. Within this framework, the role of meditation and relaxation on diverse psychophysiological disorders is relevant. The works of Benson (1975) in this area, relating relaxation, meditation, and cardiovascular disorders, are paradigmatic (see Gremer, 2005).

However, Jon Kabat-Zinn popularized and lent force to the use of mindfulness meditation as a procedure for the treatment of psychophysiological and psychosomatic disorders. In 1979, he created the Mindfulness Center in the Medicine Faculty of the University of Massachusetts to treat clinical cases and problems that did not respond adequately to conventional medical treatment. From then on, the Center has applied the Mindfulness-Based Stress Reduction (MBSR) program to a large number of people. More than 15,000 patients have followed the program at this Center, in addition to many others who have applied it in other countries. This clinical activity has also provided results in diverse scientific investigations. In these investigations, for example, the program’s usefulness to modify certain physiological and immune functions has been reported (Davidson et al., 2003). Since its publication in 1982 of the first work on chronic pain (Kabat-Zin, 1982), there have been studies that indicate its usefulness, for example, in anxiety disorders (Kabat-Zin, Massion, Kristeller, Peterson, Fletcher, & Pbert, 1992) or in psoriasis (Kabat-Zin, Wheeler, Ligth, Skillings, Scharf, & Crapley, 1998).

Paul Grossman directs the Institute of Mindfulness Research of the University of Freiburg in Germany, which also focuses on mindfulness as a program to control stress. He has recently published a meta-analysis (Grossman et al., 2004) about the use of these programs in which he reports that, although the number of studies is still small, the results show the usefulness of the procedure both in clinical samples and in normal people. In addition to the works presented in the meta-analysis, there are other more recent contributions that reveal the usefulness of the program in cancer (Galantino, 2003; Tacón, Caldera, & Ronaghan, 2004) and in organ transplants (Gross et al., 2004).

Beyond the use of mindfulness meditation as a stress-reduction procedure, mindfulness has been integrated into three clinical procedures of great interest and that, in addition, have contributed empirical evidence of their usefulness. The first one is dialectic behavior therapy. Marsha Linehan (Linehan, 1993) developed a treatment based on mindfulness and acceptance to address border personality disorder. The results obtained have empirically validated it as a treatment (Crits-Christoph, 1998). The second one is cognitive treatment for depression, more specifically, mindfulness-based cognitive therapy of depression (see Scherer-Dickson, 2004). This was developed when the elements involved in relapse in patients treated for depression were taken into account (Teasdale et al., 2000; Teasdale, Segal & Williams, 1995) and this approach has been shown to be useful (Ramel, Goldin, Carmona, & McQuaid, 2004; Teasdale et al., 2002). The detailed step-by-step application of the program has been...
published (see Segal et al., 2002). Lastly, mindfulness has also been integrated into the procedure of acceptance and commitment therapy, mentioned in this work, and which is a part of the clinical procedures of the third wave behavior therapies.

Another research area is the one concerning mindfulness as a construct that is susceptible to being operationalized, assessed, and used as a criterion to relate to other clinical measures. Thus, the Freiburg Mindfulness Inventory (Buchheld, Grossman, & Walach, 2002), which has been studied in relation to the consumption of tobacco and alcohol (Leigh, Bown, & Marlatt, 2005), was developed. A scale for cancer patients has also been elaborated (Carlson & Brown, 2005).

CONCLUSIONS
Mindfulness is a complementary viewpoint to conventional clinical resources. Attention and active involvement in the present moment is congruent with the way that cognitive behavioral therapy is carried out. However, there may be some contradiction in the concern of accepting the sensations and elements experienced versus controlling them. This is especially relevant in the case of emotional responses and in problems derived from psychophysiological dysfunctions. It is particularly evident that some functions are not under verbal control, and therefore, only by truly experiencing them can one learn something about them and this is only possible if there is an adequate experiencing, that is, a proper mindfulness observation.

The voluntary attempt to control breathing will very likely produce dyspnea. If a person has a panic attack or an uncontrollable desire to smoke and tries to control it voluntarily, he will probably achieve the opposite effect. There is only one way to “control” these involuntary and undesired activities: letting them be, letting them occur, observing them with the least possible interference, allowing the biological servomechanisms that are responsible for their activity to perform their task.

There are many possibilities of integrating this technique and this procedure and they are applicable to very diverse disorders. Germer, Siegel, and Fulton (2005) have edited a book specifically dedicated to this topic, in which one can see how to behave and the resources available in diverse intervention areas. Lastly, I would like to remind readers that mindfulness, like dialectic behavior therapy, acceptance and commitment therapy, behavioral activation therapy, and functional analytic psychotherapy, among others, harvest the evolution of behavior therapy. This implies the cumulative recognition of the contributions over the years and also of criticism and new proposals—perhaps not so new, but in any case renewed—in the search of the solution to recurrent problems that may adopt different shapes although they have similar effects.

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