MINDFULNESS: WHY IT MAY WORK AND WHY IT IS SURE TO SUCCEED

José Errasti-Pérez[1], Susana Al-Halabí[1], Emilio López-Navarro[2]
and Marino Pérez-Álvarez[1]
[1]University of Oviedo; [2]University of Islas Baleares (Spain)

Abstract

Mindfulness has gone beyond clinical applications and is beginning to be enthusiastically applied in schools, sport, and business settings. It seems to be a type of intervention that, while probably effective, has a small effect size, which calls for rigorous research. Understanding the psychological processes involved in mindfulness is essential in order to achieve a more realistic picture of its usefulness for some behavioral disorders. How can we explain the extraordinary success of mindfulness in western societies, both in academia and in popular culture? We present three behavioral principles and ideological reasons for applying mindfulness. Nowadays, mindfulness is framed not by mystical existentialism or contextual behaviorism, but by positive psychology and its neoliberal agenda.

KEY WORDS: *mindfulness, self-as-content, self-as-process, self-as-context, the self, neoliberalism.*

Resumen

La atención plena (*mindfulness*) ha desbordado el ámbito clínico y comienza a aplicarse con entusiasmo en la escuela, el deporte o la empresa. La sospecha de que estamos ante una intervención que, aunque probablemente eficaz, tenga un tamaño de efecto pequeño, lo que obliga a realizar investigaciones con gran rigor. Así, solo conociendo los procesos psicológicos implicados en la atención plena podremos tener una visión más realista de su utilidad ante los diferentes problemas. Ante esto, ¿cómo explicar el extraordinario éxito que está obteniendo en Occidente la atención plena, tanto a nivel académico como mundano? Se presentan tres principios conductuales que se practican durante el entrenamiento en atención plena y se denuncia su uso ideológico, que aparece enmarcado, no en la mística existencial ni en el conductismo contextual, sino en la psicología positiva y su agenda neoliberal.

PALABRAS CLAVE: *atención plena, proceso, contenido, contexto, el yo, neoliberalismo*.

Correspondence: José M. Errasti Pérez, Faculty of Psicología, University of Oviedo, Plaza Feijoo, s/n, 33003 Oviedo (Spain). E-mail: errasti@uniovi.es

Introduction

The most common standard definition of mindfulness states that it is a type of awareness or mental state that appears when we (1) purposely pay attention to (2) the flow of our thoughts (3) as they are in the here and now, (4) without making any kind of value judgements about them and trying to minimize any affective reaction (Baer, 2003; Kabat-Zinn, 1994). Contemplation of the flow of one's thoughts needs indifference, detachment, or disengagement—depending on the tradition. Thoughts can appear and disappear, which highlights the fluid, transient nature of the psyche.

This definition of mindfulness does not include any objectives or processes it may theoretically activate—as a technique of personal development, self-awareness, or acceptance. Nor will we address mindfulness initially as a technique, for various theoretical and conceptual reasons: It is an action, a specific and material action (Karunamuni & Weerasekera, 2019). The final part of the definition is that mindfulness is presented as training, and as with any activity or practice, it will only bear fruit through constant, continued practice (Kabat-Zinn, 2013; Spijkerman et al., 2016).

In mindfulness, the practitioner does not explain what must be done, perhaps because there is nothing to be done, or perhaps because what must be done is nothing. These paradoxes (do/do not do, be/do not be) appear in all of the mystic traditions and are very common in the practice and reasoning of mindfulness. Because phrases such as *do nothing* or *let your attention float free* are somewhat oxymoronic, people are advised to concentrate on their breathing or to perform body scans (Fischer et al., 2017; Simón, 2011).

The arrival and expansion of mindfulness in the west

The origins of mindfulness practice are usually traced back to eastern spirituality, especially Buddhist meditation and particularly to a form of meditation called *vipassana* (Nisbet, 2017). It was popularized in the United States by John Kabat-Zinn, who in the 1970s and 80s produced an eight-session protocol for stress reduction (*mindfulness-based stress reduction*, MBSR). This intervention produced very promising results for problems of chronic pain (Kabat-Zinn, 1982; Kabat-Zinn, Lipworth & Burney, 1985). Following that, at the University of Massachusetts, Kabat-Zinn presented the technique according to scientific standards, shorn of any traces of its Buddhist origins. It was no longer necessary to believe in, or even to be aware of, the four noble truths or the noble eightfold path (as we will detail below). From that point on there was a boom in mindfulness.

Subsequent research seemed to indicate the efficacy of mindfulness for a wide range of mental disorders (Fonseca-Pedrero et al., 2021)—psychosis, stress, anxiety and depression, substance abuse, insomnia, sexual problems, ADHD, etc.—and for all kinds of populations—children, adults, the elderly—all over the world (Creswell, 2017; Dawson et al., 2020; Donald et al., 2020; Goldeberg et al., 2018, 2020; Hartley et al., 2019; Hofmann et al., 2010; Kraemer et al., 2020; López-Navarro & Al-Halabí, 2021; López-Navarro, Fonseca-Pedrero, et al., 2022; Martínez-Escribano

et al., 2017; Moreno-Jiménez et al., 2021; Oberoi et al., 2020; Odgers et al., 2020; Reangsing et al., 2021; Romero et al., 2020; Sala et al., 2020; Schmidt et al., 2021; Shires et al., 2020; Valiente-Barroso et al., 2021). Problems of a more physiological nature—such as hypertension and chronic pain—also seemed to benefit from this practice (Creswell et al., 2019; Scott-Sheldon et al., 2020). Mindfulness made the jump from the clinical setting and began to be applied, with good results, in schools, in sport, in the military, in business, and in prisons (Chmielewski et al., 2021; Goilean et al., 2020; Hsu et al., 2021; López-Navarro et al., 2020; Moix et al., 2021; Shonin et al., 2013). Although its proponents do warn that it is not a panacea, they themselves continue to act as though it were. The following example is illustrative: on the *Amazon* website, there are more than 100,000 products—mostly books, but also products for the home, CDs, and toys, etc.— in the mindfulness category, and large stores such as *Primark*, have created lines of 'mindfulness' clothes, while in more mundane terms, there is sexual 'mindfulness', 'mindfulness' for pets, etc.

The growth of mindfulness in academia is also unarguable. Science Direct lists more than 50,000 scientific articles in the last 20 years with the word mindfulness in the title, the rate of growth is accelerating (300 in 1999, 6800 in 2020) and has probably not yet reached its peak. Once academia appropriated mindfulness, it was subject to the logic and format of the academic approach. Psychologists, for example, began to produce models of the functioning and processes of mindfulness: those of a more dualist or cognitive bent attempted to ascertain what might be happening in people's minds, whereas those more focused on learning proposed reconstructing the practice of mindfulness from behavioral categories. Neurology— nowadays posited as the definitive science, the science of sciences, via the label 'neurosciences' (Pérez Álvarez, 2011, 2019)—applauded the arrival of mindfulness and deployed its colorful pictures of the brain and other neuroimaging techniques.

Why was mindfulness so successful in the West?

However, the data from studies and meta-analyses do not seem to support this euphoria. Meta-analyses published over the last five years have consistently indicated that mindfulness is far from the panacea it is often suggested to be. Some studies have found positive results (Kuyken et al., 2016; López-Navarro et al., 2015), others have demonstrated much smaller effects for interventions (Goldberg et al., 2020; Goyal et al., 2014; Schell et al., 2019; Seshadri et al., 2020; Shires et al., 2020; Turgon et al., 2019), and some have found no differences from placebo or even control groups (Liu et al., 2018; Theadom et al., 2015). Despite the clinical interest and the proven efficacy in some populations, there seems to be something of a consensus about the need for more detailed study which separates the overall practice of mindfulness into active components and spurious elements (Kwon, 2020), along with more attention to the possible personal variables involved (López-Navarro, Al-Halabí, et al., 2022). The suspicion that this is an intervention that, while probably efficacious, has a small effect size, means that studies need large sample sizes and rigor in measurement and management of variables, not characteristics that are usually exhibited by studies on the efficacy of mindfulness. Only by

understanding the psychological processes involved in mindfulness will we be able to have a more realistic picture of how useful it is for various problems.

Given that, how do we explain the extraordinary success of mindfulness in the West, both at an academic level and at the more everyday level? One might suggest that mindfulness, an ancient sacred practice from far-off lands, fits perfectly well with one of the basic ideological components of modern urban individuals and their conceptual map of the world, which we call "the myth of nature" (Errasti, 2002). This is the idea that modern urban life is "less natural" for a person, it is dehumanizing and robs people of a supposed essential part of human nature. This would be the source of all the ills of the modern world, of that basic dissatisfaction we all feel to a greater or lesser degree, such that the answer is a return to the purity and authenticity of nature, where there is harmony, balance, peace, and a fulfilment that used to exist, but no longer does. This is a false view of nature, belonging to rich societies in which nature has been so defanged that people can spend their whole lives without ever being exposed to its hostility. There are examples of the myth of nature everywhere, but for now, the important thing is to highlight that the modern individual's view of "nature" includes physical aspects, such as forests and wild animals, as well as cultural aspects, which are seen as being purer due to their exoticness and foreignness. So through this myth of nature, Buddhist monasteries, for example, are seen as having a certain authenticity, something which does not apply to Catholic monasteries.

Mindfulness is a clear example of a practice that is associated with the dream of recovering contact with a lost purity. Although Kabat-Zinn initially highlighted his commitment to a "scientific", de-mystified view of mindfulness, his work managed to maintain a careful ambiguity, including western-positivist sympathies alongside eastern exoticism. All cultural traditions, not only eastern ones, incorporate contemplative mysticism that encourages one to disengage from the self and submerge oneself in a broader, non-verbal, framework whether it be the universe, God, or wisdom. Even so, it would be hard to imagine the success of mindfulness if, rather than evoking Buddha and the Dalai Lama, it evoked the mysticism of Teresa of Ávila and St. John of the Cross or the contemplation of Ignatius of Loyola. Even the progenitors of the main branches of modern psychology are not immune from this. On the one hand, Freudian psychoanalysis, with its emphasis on free association, the shifting attention of the therapist and patient, and judgement-free verbalization of the flow of thoughts, has a clear touch of mindfulness besides Freud's own doctrine. On the other hand, the founder of North American psychology, William James, gave a definition of introspection that is clearly reminiscent of the concept of mindfulness—a distanced attitude and observation of one's own thoughts (Stanley, 2012). In any case, mindfulness can be seen in Epicurean *ataraxia* and in stoic indifference. This snobbishness linked to the myth of nature has played an important role in the current popular success of mindfulness and its success in clinical trials, and neither the man in the street nor those in the ivory tower of academia are free from it.

Psychological processes involved in the practice of mindfulness

While it might not be a panacea, the data indicate that mindfulness does incorporate some principles that are beneficial to people's mental functioning (Creswell, 2017; Duarte et al., 2019; Kwon, 2020). Nowadays, mindfulness practice is part of the therapeutic arsenal of what are called contextual therapies or third-wave behavioral therapies (Pérez Álvarez, 2014). From this perspective, there are three main behavioral principles that are possibly practiced during mindfulness training, whether the therapist is aware of that or not. Each principle is linked to some aspect of the definition of mindfulness.

1. *Without value judgements or affective reactions: Systematic Desensitization (SD)*. This is one of the first therapeutic techniques formally included in clinical psychology in the 1950s with the work by Joseph Wolpe (1958). It was originally based on the "principle of reciprocal inhibition", by which an anxiety response to a stimulus could be neutralized if one conditioned another response to that stimulus that is incompatible with anxiety. Responses such as sexual arousal or eating have been used, but the most widely used response was relaxation. Subjects in SD are gradually presented with either imagined or direct versions of stimuli that cause them anxiety in relaxed situations. In a certain sense, mindfulness is a form of SD, although it is not planned and the presentation of stimuli is not organized or subject to a protocol, but instead the stimuli appear spontaneously in the individual's awareness. This means a less systematic approach, but there are gains in ecological validity. The key is for the individual to be open to indifferently accepting any content arising in their awareness, without seeking it out and without trying to avoid it.

Considering that many mental problems are related to the blockages produced when a person tries to experientially avoid certain emotions, thoughts, situations, etc., the instruction to accept them with indifference changes their experiential meaning for the person—in this way neutralizing experiential avoidance, a process that contextual psychology has occasionally posited as an excellent transdiagnostic element. Problematic content would be expected to appear more often in people who are actually struggling to avoid it. Hence the contextual nature of the intervention, as it does not aim for the disappearance of thoughts and emotions that are depressive, anxious, obsessive, etc., but instead, they are no longer the enemy to be fought. There is simply no battlefield any more. Changing the verbal context surrounding them changes their meaning and the suffering they cause the person. This change in meaning is incompatible with anxiety. Many psychological interventions from various approaches have played with this paradox, prescribing the explicit appearance of the problem that, through that prescription, then plays a completely different role in the person's life. In mindfulness, the mental elements that are usually avoided begin to be accepted. Rather than classical SD, mindfulness can be understood as a type of third-wave SD.

2. *Intentional awareness to our thoughts and consciousness: Stimulus-control and chains of thought*. Another classic activity in behavioral therapy is intervention in stimulus-control, the relationship between certain stimuli and certain responses, including stimuli resulting from self-stimulation that every prior response include (Saunders & Williams, 1998). In most mental problems there are multiple

associations of emotions and thoughts that occur in a chain, making a person jump, phenomenologically, from the beginning of the chain to the end. For example, "I failed the civil service exam → everyone else passed except *me* → I feel ashamed → I don't want to see anyone → I don't feel like being with my partner", or "I feel a little dizzy → it must be something serious → I'm going to lose control → there's something broken in me → I don't deserve to be loved". Intentional awareness to the flow of thoughts allows the recovery of the full chains of associations and verbal relationships, which lets one distance oneself from them automatically and recover control over each of the elements. This means that one is able to alter the stimulus-control by, for example, showing how irrational some of the associations are.

This effect of promoting awareness is nothing new in psychotherapy. It is on similar lines and calls for similar processes to those found in the practice of self-distancing, also part of contextual therapies, particularly in Acceptance and Commitment Therapy. Although it might seem paradoxical, it is exactly the full attention to the flow of thoughts that allows one to stop being overwhelmed by them and transcend them through distancing oneself from one's experience which, as we will see in the next point, is directly covered by third-wave therapies.

3. *As we are in the here and now: The self as context*. As noted above, the most important connection between mindfulness and behavioral therapy is related to the development of contextual therapies, Relational Frame Theory (RFT), and its three levels of verbal construction of the self. For RFT, the psyche is basically verbal in nature, such that all acts—thoughts, feelings, movements, and emotions—are performed according to the principles of the networked relationships that make up verbal behavior (Hayes et al., 2001). This makes it possible to distinguish three functionally different types of self:

i) The self as content: as soon as human beings become self-aware, we begin to interpret, explain, evaluate, and predict our behavior in a narrative rationalization that aims for consistency and stability over time about ourselves ("I am a very nervous person", "I cannot bear untidiness", "I sleep terribly before exams", "I am so boring that I spent the whole weekend in bed"). In the self as content, the self in the present evaluates the past and future, and making use of the full power of language, fuses experientially with such content, substituting it for reality. The content of the self has a notable self-perpetuating effect, managing to hijack the self, and can play a crucial role in perpetuating dysfunctional patterns of behavior.

ii) The self as process: in this case, the self acts as the subject of the current mental activity, in relation to the elements that might subsequently construct the self as content ("I'm very nervous", "I'm very angry about how untidy my office is", "I'm going to fail the exam tomorrow because I can't sleep", "I'm going to finish off the cake"). Spanish has two verbs to express the English verb 'to be', *ser* (which is usually used for states which are relatively unchanging, e.g., "I'm a cheerful person" [generally]) and *estar* (which is usually used for states that may change or be more active; e.g., "I'm happy" [right now]). The self as process would be more like the verb *estar*, changeable and active. The self as process is the agent of the individual's activity.

iii) The self as context: this is the self which is most closely related to mindfulness and the prevention of mental problems (McHugh et al., 2019). This self

is an observer of the agent mentioned above, the invariant element of all of the formulations and functions of the self, which exercises judgements but is not the object of any of them, the only content of which is the here and now ("I realize that I'm nervous", "I see that I'm angry at the untidiness of the office", "I see that I keep thinking that I'm going to fail tomorrow's exam because I can't sleep tonight", "I realize that I've thought about my ex-husband again"). If we return to the distinction between *ser* and *estar*, the self as context would be more like the verb *ser* because of its unchangingness and continuity and would be a reference point from which to address all of the activity and narrative of the self. This is a transcendental self, because although it is a product of verbal processes, it can never be experienced as an object from a higher level of self.

If I notice that I feel anxious, it is clear that *I* am not the anxiety, as *I* cannot be the observer and the observed. If I realize that I always talk about myself in negative terms, who am *I*? The one who talks—self as content—or the one who is aware of speaking from a higher level—self as context? This core character of the unsurpassable hierarchical perspective of the self as context is what gives it certain spiritual, transcendental connotations. The observed self's judgements, their transitory and circumstantial nature, and positive or negative passions cannot be asserted from the observing self. Their linguistic nature is weakened, almost dissolved. The observer can view things from outside, from indifference, from silence, from pain.

Stoic indifference, Epicurean *ataraxia*, Buddhist *nirvana*, catholic contemplation, and contextualistic diffusion are all different approaches to this self as context, like the board on which the game of life is played, clearly differentiated from the pieces used to play the game. Many studies have demonstrated the beneficial effect of experiential strengthening of the self as context and attenuation of the self as content in mental problems (McHugh & Stewart, 2012); moving from "I am a bad person" to "I see how I am angered by what you said to me". Mindfulness is a practice of this type, attempting to train a contemplative self, with greater perspective and more distance than the selves motivated by impulsiveness and thoughtlessness.

That said, if this is the case, mindfulness is therefore not a technique for stress or back pain, but rather a compassionate, restrained, calm, mature attitude from which one deals with the inevitable suffering in life. Mindfulness is an essential attitude in the face of suffering, not a way of getting rid of it. This has nothing to do with commercial, exotic mindfulness that promises therapeutic results to clinical standards, and which has led the huge boom in mindfulness in the rich world. That commercial mindfulness has become the spirituality of the new capitalist societies owing to the ease with which it can lead to feeling-centeredness, individualism, immaturity, and the submission of people to the objective life conditions imposed on them by the business world.

McMindfulness and positive psychology

This brings us to the need to condemn the ideological use of mindfulness in what Purser (2019) called *McMindfulness*. McMindfulness is mindfulness that

appears framed, not in existential mysticism or contextual behaviorism, but rather in positive psychology and its associated *happyocracy* (Pérez Álvarez et al., 2018). While both may use the term mindfulness, a compassionate, contemplative attitude that is necessarily critical of a neoliberal consumerist society awash with excessive desire has little to do with a supposedly scientifically supported technique that promises to alleviate the damaging effects of consumerist capitalism on the individual while taking it as a given and not questioning it. We will briefly introduce positive psychology and *happyocracy* in order to then condemn its hidden neoliberal agenda. It will be easy to see the connection with McMindfulness.

Positive psychology is an extraordinarily successful trend in current academic psychology that aims to scientifically study happiness. This trend predicts that happiness—positivity, optimism, unconditional self-esteem—will improve our health, help us succeed at work, help us make more money, be more socially successful, and improve our life expectancy, among other things. As many other authors have said (Cábanas & Sánchez González, 2012; Pérez Álvarez, 2012, 2013; Pérez Álvarez et al., 2018), this new school is no more than an ideological fraud, behind which hides a certain social conservatism that aims to subjectivize emotional wellbeing, removing the emphasis on the micro- and macro-social elements a person deals with, and placing it on the way the individual perceives those elements.

The myth of happiness that positive psychology tries to sell comes from four false ideas, which are: (1) happiness is an eternal, ahistorical, human universal (hence we can liken Aristotle's *eudaimonia* to influencers' happiness), (2) all human beings seek it above all else, as the key meaning to their lives, and want to achieve it fully, (3) once we free it from philosophy, we can study happiness scientifically like any other natural phenomenon, and (4) happiness is within everyone's reach, as it does not depend so much on objective conditions, but rather how we take them, and we can all view any condition—being fired or having cancer—through happiness glasses. We can all be happy, can will happiness just by invoking it, and because any life circumstance can be seen as an occasion for happiness, the only true happiness is within ourselves (Pérez Álvarez et al., 2018).

Happiness is the new criteria for success in life, the first in which there is real equality of opportunities thanks to the new democracy of emotions. Is it not strange that in surveys, everyone says that they are happy? Who is going to say, if they can choose to be a winner, that they prefer to be a loser? In this context, big businesses—such as Google and Amazon—encourage their employees to attend mindfulness workshops to combat stress under the name *Search Inside Yourself* in an attempt to privatize work-related stress; the workers become "entrepreneurs of the self", because "stress is something we impose on ourselves". This version of mindfulness tries to associate productivity and business profits with mental peace and self-fulfillment.

When one looks inside oneself, it is not to deal with economic or political issues. External conditions are what they are and mindfulness can increase my happiness without changing anything of the world I live in. In fact, judgement-free contemplation ends up encouraging an obliging attitude, presenting what is little more than social conformity as sophistication and self-development, and confusing

tameness for serenity. "Thou shalt not judge" seems to be the eleventh commandment.

This ethics-free, soulless McMindfulness, has been made into a mere technique for encouraging self-absorption and the submissiveness that goes along with it, valued only for its contribution to the obsessive individualism of modern capitalism and for its possible medical or psychological benefits. It is the opposite of a mindfulness that is present as an attitude in a deliberately purposeful life, given meaning in the only way possible, which is as part of the world, grounded in reality and healthy micro- and macro-social interpersonal relationships. We must be careful that mindfulness does not become mere soothing entertainment in the service of the neoliberal *happyocracy*, in which its origins are no longer recognized and it has been made over into a "scientific", "western" practice by scrubbing it clean of religious aspects that would supposedly drag it down.

Conclusion

The conclusion to this article is bittersweet. Freud reminded us occasionally that at the heart of a pearl is a grain of sand, and in effect, the implementation of mindful attitudes as the new spirituality of capitalism is not without cost, but is around a practice that probably includes components that may help us cope with the inescapable suffering of being human. It is, however, a paradox that those attitudes are perverted into the service of positive psychology, a way of understanding human nature linked to modern markets and neoliberalism which are the exact opposite of the ideas originally surrounding the contemplative, serene attitude characterizing mindfulness.

It would be interesting to ask how much of the help that mindfulness can offer is counteracted by it being presented under a logic that forms part of the problem of human suffering rather than part of the solution, or at least, how much more useful it would be in a society that did not see immediate gratification as the goal and reason for human existence, on the understanding that in the face of suffering, the only thing to do is to be as accurate as possible in order to eliminate it.

Will mindfulness retain its beneficial effects despite its undermining in the hands of the *happyocracy* (Cabanas & Illouz, 2019) or will it be added to the list of pseudo-technologies of the self that are offered as a hollowed-out, soothing diversion for the narcissistic enjoyment of the lovers of the 'natural' and the exotic?

References

Baer, R. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, *10*(2), 125-143. doi: 10.1093/clipsy.bpg015

Cabanas, E., & Illouz, E. (2019). *Happycracia: Cómo la ciencia y la industria de la felicidad controlan nuestras vidas* [Happycracy: How the science and industry of happiness control our lives]. Barcelona, Spain: Planeta.

Cábanas Díaz, E., & Sánchez González, J. C. (2012). Las raíces de la psicología positiva [The roots of positive psychology]. *Papeles del Psicólogo, 33*(3),172-182.

Chmielewski, J., Łoś, K., & Łuczyński, W. (2021). Mindfulness in healthcare professionals and medical education. *International Journal of Occupational Medicine and Environmental Health*, *34*(1), 1-14. doi: 10.13075/ijomeh.1896.01542

Creswell, J. D. (2017). Mindfulness interventions. *Annual Review of Psychology, 68*, 491-516. doi: 10.1146/annurev-psych-042716-051139

Creswell, J. D., Lindsay, E. K., Villalba, D. K., Chin, B. (2019). Mindfulness training and physical health. *Psychosomatic Medicine*, *81*(3), 224-232. doi: 10.1097/PSY.0000000000000675

Dawson, A. F., Brown, W. W., Anderson, J., Datta, B., Donald, J. N., Hong, K., Allan, S., Mole, T. B., Jones, P. B., & Galante, J. (2020). Mindfulness-based interventions for university students: A systematic review and meta-analysis of randomised controlled trials. *Applied psychology: Health and Well-being*, *12*(2), 384-410. doi: 10.1111/aphw.12188

Donald, J. N., Bradshaw, E. L., Ryan, R. M., Basarkod, G., Ciarrochi, J., Duineveld, J. J., Guo, J., & Sahdra, B. K. (2020). Mindfulness and its association with varied types of motivation: A systematic review and meta-analysis using self-determination theory. *Personality y Social Psychology Bulletin*, *46*(7), 1121-1138. doi: 10.1177/0146167219896136

Duarte, R., Lloyd, A., Kotas, E., Andronis, L., & White, R. (2019). Are acceptance and mindfulness-based interventions 'value for money'? Evidence from a systematic literature review. *The British Journal of Clinical Psychology*, *58*(2), 187-210. doi: 10.1111/bjc.12208

Errasti. J. (2002). *Introducción a la psicología de la personalidad [Introduction to the psychology of personality]*. Valencia, Spain: Promolibro.

Fischer, D., Messner, M., & Pollatos, O. (2017). Improvement of interoceptive processes after an 8-week body scan intervention. *Frontiers in Human Neuroscience*, *11*, 452. doi: 10.3389/fnhum.2017.00452

Fonseca Pedrero, E., Pérez-Álvarez, M., Al-Halabí, S., Inchausti, F., Muñiz, J., López-Navarro, E., Pérez de Albéniz, A., Lucas Molina, B., Debbané, M., Bobes-Bascarán, M. T., Gimeno-Peón, A., Prado-Abril, J., Fernández-Álvarez, J., Rodríguez-Testal, J. F., González Pando, D., Díez-Gómez, A., García Montes, J. M., García-Cerdán, L., Osma, J., Peris Baquero, Ó… Marrero, R. J. (2021). Tratamientos psicológicos empíricamente apoyados para adultos: Una revisión selectiva [Evidence-based psychological treatments for adults: A selective review]. *Psicothema*, *33*(2), 188-197. doi: 10.7334/psicothema2020.426

Goilean, C., Gracia, F.J., Tomás, I., & Subirats, M. (2020). Mindfulness en el ámbito del trabajo y de las organizaciones. *Papeles del Psicólogo, 41*(2), 139-146. doi: 10.23923/pap.psicol2020.2929

Goldberg, S. B., Riordan, K. M., Sun, S., Kearney, D. J., & Simpson, T. L. (2020). Efficacy and acceptability of mindfulness-based interventions for military veterans: A systematic review and meta-analysis. *Journal of Psychosomatic Research*, *138*, 110232. doi: 10.1016/j.jpsychores.2020.110232

Goldberg, S. B., Tucker, R. P., Greene, P. A., Davidson, R. J., Wampold, B. E., Kearney, D. J., & Simpson, T. L. (2018). Mindfulness-based interventions for psychiatric disorders: A systematic review and meta-analysis. *Clinical Psychology Review*, *59*, 52-60. doi: 10.1016/j.cpr.2017.10.011

Goyal, M., Singh, S., Sibinga, E. M. S., Gould, N.F., Rowland-Seymour, A., Sharma, R, Berger, Z., Sleicher, D., Maron, D. D., Shihab, H. M., Ranasinghe, P. D., Linn, S., Saha, S., Bass, E. B., & Haythornthwaite, J. A. (2014). Meditation programs for psychological stress and well-being: A systematic review and meta-analysis. *JAMA Internal Medicine*, *174*(3), 357-68. doi: 10.1001/jamainternmed.2013.13018

Hartley, M., Dorstyn, D., & Due, C. (2019). Mindfulness for children and adults with autism spectrum disorder and their caregivers: A meta-analysis. *Journal of Autism and Developmental Disorders*, *49*(10), 4306-4319. doi: 10.1007/s10803-019-04145-3

Hayes, S.C., Barnes-Holmes, D., & Roche, B. (2001). *relational frame theory: A post-skinnerian account of human language and cognition*. New York, NY: Springer.

Hofmann, S.G., Sawyer, A.T., Witt, A.A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *78*(2), 169-83. doi: 10.1037/a0018555

Hsu, T., & Forestell, C. A. (2021). Mindfulness, depression, and emotional eating: The moderating role of nonjudging of inner experience. *Appetite*, *160*, 105089. doi: 10.1016/j.appet.2020.105089

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry*, *4*(1), 33-47. doi: 10.1016/0163-8343(82)90026-3

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life.* New York, NY: Hyperion.

Kabat-Zinn, J. (2013). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Bantam Dell.

Kabat-Zinn, J., Lipworth, L., & Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of Behavioral Medicine*, *8*(2), 163-90. doi: 10.1007/BF00845519

Karunamuni, N., & Weerasekera, R. (2019). Theoretical foundations to guide mindfulness meditation: A path to wisdom. *Current Psychology, 38*(3), 627-646. doi: 10.1007/s12144-017-9631-7

Kraemer, K. M., Luberto, C. M., Hall, D. L., Ngo, L. H., & Yeh, G. Y. (2020). A systematic review and meta-analysis of mindfulness- and acceptance-based interventions for affect intolerance/sensitivity. *Behaviour Research and Therapy*, *135*, 103746. doi: 10.1016/j.brat.2020.103746

Kuyken, W., Warren, F. C., Taylor, R. S., Whalley, B., Crane, C., Bondolfi, G., Hayes, R., Huijbers, M., Ma, H., Schweizer, S., Segal, Z., Speckens, A., Teasdale, J. D., Van Heeringen, K., Williams, M., Byford, S., Byng, R., & Dalgleish, T. (2016). Efficacy of mindfulness-based cognitive therapy in prevention of depressive relapse: An individual patient data meta-analysis from randomized trials. *JAMA Psychiatry*, *73*(6), 565-574. doi: 10.1001/jamapsychiatry.2016.0076

Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S., & Huppert, F. (2013). Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study. *The British Journal of Psychiatry*, *203*(2), 126-31. doi: 10.1192/bjp.bp.113.126649

Kwon, C. Y., Lee, B., Chung, S. Y., & Kim, J. W. (2020). Do Cochrane reviews reflect the latest evidence on meditation and mindfulness-based interventions? A snapshot of the current evidence. *Explore,* S1550-8307(20)30202-0. doi: 10.1016/j.explore.2020.05.016

Liu, Z., Sun, Y. Y., & Zhong, B. L. (2018). Mindfulness-based stress reduction for family carers of people with dementia. *The Cochrane Database of Systematic Reviews*, *8*(8), CD012791. doi: 10.1002/14651858.CD012791.pub2

López-Navarro, E., & Al-Halabí (2021). Effects of mindfulness on psychotic symptoms: Insights from a randomized clinical trial. *Psychosis, 14*(1), 93-98. doi: 10.1080/17522439.2021.1889649

López-Navarro, E., Al-Halabí, S., Errasti, J., & Munar, E. (2022). Does mindfulness improve emotion regulation? A study addressing prior methodological issues and the influence of dispositional variables. *Mindfulness*.

López-Navarro, E., Fonseca-Pedrero, E., García-Montes, J. M., Errasti, J., & Al-Halabí, S. (2022). Mindfulness improves theory of mind in people experiencing psychosis: A pilot randomized clinical trial. *Psychiatry Research, 310*, 114440. doi: 10.1016/j.psychres.2022.114440

López-Navarro, E., Del Canto, C., Belber, M., Mayol, A., Fernández-Alonso, O., Lluis, J., Munar, E., & Chadwick, P. (2015). Mindfulness improves psychological quality of life in community-based patients with severe mental health problems: A pilot randomized clinical trial. *Schizophrenia Research*, *168*(1-2), 530-536. doi: 10.1016/j.schres.2015.08.016

López-Navarro, E., Giorgetti, D., Errasti, J., & Al-Halabí, S. (2020). Does dispositional mindfulness mediate the relationship between anxiety and exam performance? *Revista de Investigación en Educación, 18*(3), 324-331. doi: 10.35869/reined.

Martínez-Escribano, L., Piqueras, J. A. y Salvador, C. (2017). Eficacia de las intervenciones basadas en la atención plena (mindfulness) para el tratamiento de la ansiedad en niños y adolescentes: Una revisión sistemática [Effectiveness of mindfulness-based interventions for the treatment of anxiety in children and adolescents: A systematic review]. *Behavioral Psychology/Psicología Conductual, 25*(3), 445-463

McHugh, L., & Stewart, I. (2012). *The self and perspective-taking: Theory and research from contextual behavioral science and applied approaches*. Oakland, CA: New Harbinger.

McHugh, L., Stewart, I., & Almada, P. (2019). *A contextual behavioral guide to the self: Theory and practice*. Oakland, CA: New Harbinger.

Moix, J., Cladellas, M., Gayete, S., Guarch, M., Heredia, I., Parpal, G., Toledo, A., Torrent, D., & Trujillo, A. (2021). Effects of a mindfulness program for university students. *Clínica y Salud, 32*(1), 23-28. doi: 10.5093/clysa2020a24

Moreno-Jiménez, J. E., Rodríguez-Carvajal, R., García-Rubio, C., Castillo-Gualda, R., & Montero, I. (2021). Long-term effectiveness of a mindfulness based intervention (MBI) program for stuttering: A case study. *Clínica y Salud, 32*(2), 55–63. doi: 10.5093/clysa2021a1

Nisbet, M. (2017). The mindfulness movement: How a Buddhist practice evolved into a scientific approach to life. *Skeptical Inquirer*, *41*(3), 24-26.

Oberoi, S., Yang, J., Woodgate, R. L., Niraula, S., Banerji, S., Israels, S. J., Altman, G., Beattie, S., Rabbani, R., Askin, N., Gupta, A., Sung, L., Abou-Setta, A. M., & Zarychanski, R. (2020). Association of mindfulness-based interventions with anxiety severity in adults with cancer: A systematic review and meta-analysis. *JAMA Network Open*, *3*(8), e2012598. doi: 10.1001/jamanetworkopen.2020.12598

Odgers, K., Dargue, N., Creswell, C., Jones, M. P., & Hudson, J. L. (2020). The limited effect of mindfulness-based interventions on anxiety in children and adolescents: A meta-analysis. *Clinical Child and Family Psychology Review*, *23*(3), 407-426. doi: 10.1007/s10567-020-00319-z

Pérez Álvarez, M. (2011). *El mito del cerebro creador* [*The myth of the maker brain*]. Madrid, Spain: Alianza.

Pérez Álvarez, M. (2012). La psicología positiva: Magia simpática [Positive psychology: sympathetic magic]. *Papeles del Psicólogo, 33*(3), 183-201.

Pérez Álvarez, M. (2013). La psicología positiva y sus amigos: En evidencia [Positive psychology and its friends: Revealed]. *Papeles del Psicólogo, 34*(3), 208-226.

Pérez Álvarez, M. (2014). *Las terapias de tercera generación como terapias contextuales* [*Third generation therapies as contextual therapies*]. Madrid, Spain: Síntesis.

Pérez Álvarez, M., Sánchez, J.C., & Cábanas, E. (2018). *La vida real en tiempos de la felicidad: Crítica de la psicología (y de la ideología) positiva [Real life in times of happiness: Critique of positive psychology (and ideology)*]. Madrid, Spain: Alianza.

Pérez Álvarez, M. (2019). La psicoterapia como ciencia humana, más que tecnología [Psychotherapy as a human science, more than technological one]. *Papeles del Psicólogo, 40*(1), 1-14. doi: 10.23923/pap.psicol2019.2877

Purser, R. (2019). *McMindfulness. How mindfulness became the new capitalist spirituality*. London: Repeater Books.

Reangsing, C., Rittiwong, T., & Schneider, J. K. (2021). Effects of mindfulness meditation interventions on depression in older adults: A meta-analysis. *Aging y Mental Health*, *25*(7), 1181-1190. doi: 10.1080/13607863.2020.1793901

Romero, R., Penas, R., García-Conde, A., Llombart, P., Pérez, S., & Marco, J. H. (2020). Mindfulness-based cognitive therapy for Spanish oncology patients: The Bartley protocol. *Psicothema*, *32*(4), 508-515. doi: 10.7334/psicothema2019.320

Saunders, K. J., & Williams, D. C. (1998). Stimulus-Control Procedures. In K. A. Lattal, & M. Perone (Eds.), *Handbook of research methods in human operant behavior. Applied clinical psychology* (pp. 196-228). New York, NY: Springer.

Sala, M., Shankar Ram, S., Vanzhula, I. A., & Levinson, C. A. (2020). Mindfulness and eating disorder psychopathology: A meta-analysis. *The International Journal of Eating Disorders*, *53*(6), 834-851. doi: 10.1002/eat.23247

Schell, L. K., Monsef, I., Wöckel, A., & Skoetz, N. (2019). Mindfulness-based stress reduction for women diagnosed with breast cancer. *The Cochrane Database of Systematic Reviews*, *3*(3), CD011518. doi: 10.1002/14651858.CD011518.pub2

Schmidt, C., Soler, J., Carmona I Farrés, C., Elices, M., Domínguez-Clavé, E., Vega, D., & Pascual, J. C. (2021). Mindfulness in borderline personality disorder: Decentering mediates the effectiveness. *Psicothema*, *33*(3), 407-414. doi: 10.7334/psicothema2020.437

Scott-Sheldon, L. A. J., Gathright, E. C., Donahue, M. L., Balletto, B., Feulner, M. M., DeCosta, J., Cruess, D. G., Wing, R. R., Carey, M. P., & Salmoirago-Blotcher, E. (2020). Mindfulness-based interventions for adults with cardiovascular disease: A systematic review and meta-analysis. *Annals of Behavioral Medicine*, *54*(1), 67-73. doi: 10.1093/abm/kaz020

Seshadri, A., Orth, S. S., Adaji, A., Singh, B., Clark, M. M., Frye, M. A., McGillivray, J., & Fuller-Tyszkiewicz, M. (2020). Mindfulness-based cognitive therapy, acceptance and commitment therapy, and positive psychotherapy for major depression. *American Journal of Psychotherapy*, *74*(1), 4-12. doi: 10.1176/appi.psychotherapy.20200006

Shires, A., Sharpe, L., Davies, J. N., & Newton-John, T. (2020). The efficacy of mindfulness-based interventions in acute pain: A systematic review and meta-analysis. *Pain*, *161*(8), 1698-1707. doi: 10.1097/j.pain.0000000000001877

Shonin, E., Van Gordon, W., Slade, K., & Griffiths, M. D. (2013). Mindfulness and other Buddhist-derived interventions in correctional settings: A systematic review. *Aggression and Violent Behavior*, *18*(3), 365-72.

Simón, V. (2011). *Aprender a practicar mindfulness* [*Learn to practice mindfulness*]. Barcelona: Sello Editorial.

Spijkerman, M. P., Pots, W. T., & Bohlmeijer, E. T. (2016). Effectiveness of online mindfulness-based interventions in improving mental health: A review and meta-analysis of randomised controlled trials. *Clinical Psychology Review, 45*, 102-114. doi: 10.1016/j.cpr.2016.03.009

Stanley, S. (2012). Intimate distances: William James' introspection, Buddhist mindfulness, and experiential inquiry. *New Ideas in Psychology, 30*(2), 201–211. doi: 10.1016/j.newideapsych.2011.10.001

Theadom, A., Cropley, M., Smith, H. E., Feigin, V. L., & McPherson, K. (2015). Mind and body therapy for fibromyalgia. *The Cochrane Database of Systematic Reviews, 4*, CD001980. doi: 10.1002/14651858.CD001980.pub3

Turgon, R., Ruffault, A., Juneau, C., Blatier, C., & Shankland, R. (2019). Eating disorder treatment: A systematic review and meta-analysis of the efficacy of mindfulness-based programs. *Mindfulness, 10*, 2225-2244. doi: 10.1007/s12671-019-01216-5

Valiente-Barroso, C., Sáiz-Obeso, J. y Martínez-Vicente, M. (2021). Satisfacción vital y sintomatología prefrontal como predictores de la atención plena disposicional en la mujer rural [Life satisfaction and prefrontal symptomatology as predictors of dispositional mindfulness in rural women]. *Behavioral Psychology/Psicología Conductual, 29*(2), 489-503. doi: 10.51668/bp.8321215s

Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition*. Redwood city, CA: Standford University Press.