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## Promoting mindfulness in training psychotherapists in a university setting: A pilot study



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### ABSTRACT

To respond to external and internal demands during a therapeutic session, psychotherapists must monitor their attention. Research shows that mindfulness practice is beneficial in promoting this ability and acts as a protective agent against adverse states. However, its implementation in psychotherapist training has been limited. The aim of this pilot study was to explore the influence of mindfulness training on stress, anxiety, depression, and the mindfulness construct in trainee psychotherapists, and to examine its feasibility as part of their training. Fifty-one university students participated in the study and were divided into experimental and control groups. Pre- and post-training measures of mindfulness were considered. Both groups completed a battery of questionnaires related to adverse states and mindfulness before the training. Subsequently, the experimental group underwent nine weeks of mindfulness training. After the training, both groups completed the questionnaire battery again. The results showed that the group that underwent mindfulness training exhibited a decrease in adverse symptoms and an increase in mindfulness scores compared with the control group. These findings highlight not only the viability of incorporating mindfulness practice into the academic training of future therapists, but also its utility as a tool for personal development and the necessary skills to effectively face and develop their professional practice.

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### Promoción del mindfulness en la formación de psicoterapeutas a nivel universitario: un estudio piloto

#### RESUMEN

Para responder a las demandas externas e internas de una sesión terapéutica, los psicoterapeutas deben llevar a cabo un monitoreo de su atención. Las investigaciones muestran que la práctica en mindfulness resulta beneficiosa para promover esta capacidad, así como actuar de agente protector ante los estados adversos. Sin embargo, es escasa su práctica en la formación de psicoterapeutas. El objetivo del presente estudio piloto es explorar la influencia de un entrenamiento en mindfulness sobre el estrés, la ansiedad y la depresión, y en el constructo mindfulness de psicoterapeutas en formación. Analizando además su viabilidad como enseñanza dentro de la formación de estos profesionales. Cincuenta y un estudiantes universitarios han participado en este estudio piloto, divididos en grupo experimental y grupo control. Para el estudio se ha tenido en cuenta una medida pre-entrenamiento y post-entrenamiento en mindfulness. Ambos grupos, previo al entrenamiento, han contestado a una batería de cuestionarios relacionados con estados adversos y mindfulness. Posteriormente, el grupo experimental ha realizado entrenamiento en mindfulness a lo largo de nueve semanas. Finalmente, ambos grupos han respondido nuevamente a la batería de cuestionarios. Los resultados muestran que, el grupo que realizó el entrenamiento en

#### Palabras clave:

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mindfulness ha disminuido la sintomatología adversa y ha aumentado las puntuaciones en mindfulness en comparación con el grupo control. Estos hallazgos ponen de manifiesto, no sólo que la práctica del mindfulness es viable dentro de la formación académica de los futuros terapeutas, sino que es una herramienta útil que permite el desarrollo intrapersonal, así como las habilidades necesarias para afrontar y desarrollar la práctica profesional manera óptima.

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## Introduction

During therapeutic sessions, therapists engage in a vigilant process of monitoring attentional capacity. This imperative arises from the intricate nature of the therapeutic process, which demands, on one hand, a profound understanding of the explicit spoken discourse of the client/patient, as emphasized by [Rice and Greenberg \(1984\)](#) when introducing intensive analysis of the psychotherapeutic process. On the other hand, it necessitates simultaneously awareness of non-verbal expressions, gestures, or movements that may contradict, deny, or qualify what is expressed linguistically ([Bruce et al., 2010](#); [Baer, 2003](#)). Furthermore, therapists are expected to actively observe and reflect on their own reactions to the patient's discourse ([Sternberg, 2000](#)). Therefore, the process of maintaining awareness of where attention is directed moment-by-moment becomes indispensable in therapeutic work ([Kabat-Zinn, 1990](#)). These critical aspects have been acknowledged by [Geller and Greenberg \(2012\)](#), who introduced the concept of “therapeutic presence” as the central element that the therapist brings to the session. This presence is defined as the state of being fully engaged with oneself in the encounter with the client on multiple levels: physical, emotional, cognitive, and spiritual.

To cultivate this attentional capacity, therapists are advised to engage in mindfulness practices. According to [Lutz et al. \(2008\)](#), such practices are instrumental in developing three essential attentional regulation skills: the ability to vigilantly monitor attention, ensuring its sustained focus on a chosen object; the capacity to disengage from distractions without emotional reactions; and the skill to redirect attention and return to the chosen object. As training progresses and attentional monitor advances, the meditation goal evolves from concentrating on specific objects to maintaining a state of open monitoring, remaining receptive to the unfolding experience moment by moment. [Lutz et al. \(2008\)](#) term this advanced form of practice open monitoring. Consequently, mindfulness emerges as a deliberate method for regulating attention in the present moment, fostering an attitude of acceptance and unbiased curiosity toward one's own experiences ([Bishop et al., 2004](#)). In the context of this pilot study, we aim to explore two main aspects: (a) the feasibility of incorporating mindfulness-based training within the Master's in Health Psychology course at the University of La Laguna, and (b) its effects on mindfulness and the reduction of stress, anxiety, and depression. Traditionally, psychotherapists training occurred within hospital settings, integrated into the curriculum for Clinical Psychologists and Resident Psychiatrists ([Jones & Simpson, 1960](#); [Kane & Harper, 1992](#); [Melcop et al., 2019](#)). However, in recent years, universities have responded to the growing demand for psychotherapy training by undertaking the challenge of incorporating such training into postgraduate or “professionalizing” master's programs, as investigated in this study.

[Grepmaier, Mitterlehner, Loew, Bachler et al. \(2007\)](#) conducted a compelling demonstration of the potential impact of mindfulness in psychotherapist training within a hospital-based setting for resident psychiatrists. In their study, a protocol was designed where trainee therapists were divided into two groups: one practicing a Zen version of mindfulness, and another abstaining from formal

practice. Both groups were tasked with treating patients as part of their training, and the patients, in turn, provided self-assessment measures after nine weeks of intervention. These measures were collected through questionnaires addressing aspects such as clarification of experience, perspective-taking, problem-solving, etc. Additionally, a standardized symptom checklist (SCL/90) was employed. The results revealed that patients treated by the group of psychotherapists practicing mindfulness exhibited a greater reduction in symptoms compared to those treated by therapists who did not formally train their attention. Consequently, this study concluded that promoting mindfulness into the training of therapists could positively influence the course and outcomes of treatment. While these results were replicated in a follow-up study, it is worth noting that the findings may have limited generalizability due to the intensive nature of hospital-based training ([Grepmaier et al., 2007](#)).

The notion that mindfulness training positively impacts therapists in training is well-supported both empirically and conceptually. Extensive research on the effectiveness of psychotherapy consistently underscores that a robust therapeutic relationship is the variable most strongly associated with therapeutic success ([Norcross & Lambert, 2011, 2019](#)). Mindfulness, in this context, plays a pivotal role in fostering a positive therapeutic relationship by enhancing attunement with oneself and others ([Bruce et al., 2010](#)). [Siegel \(2007\)](#) posits that empathic attunement, a fundamental quality of secure attachment in childhood, can be extended to one's own experience through mindfulness practice, forming of a secure attachment relationship with oneself. This conceptualization of mindfulness is interesting, especially when considering the links between secure attachment and health. [Fauth et al. \(2007\)](#) emphasized that mindfulness assists therapists in maintaining a non-judgmental focus on the immediate experience and reactions of the patient during sessions. In a study conducted by [Ivanovic et al. \(2015\)](#) involving therapists in training, significant changes in mindfulness as a state were reported after a brief standardized training program (five sessions). However, patients treated by therapists in this study did not differentiate between the practicing and non-practicing groups in terms of therapeutic presence or session effectiveness. It is conceivable that such a brief training period may be sufficient for university students to familiarize themselves with the terminology, as evidenced by mindfulness questionnaires, but it might not be adequate to bring about detectable changes in attitudes during therapeutic sessions.

Beyond its potential impact on therapeutic outcomes, mindfulness practice has been examined for its role in promoting personal well-being among psychotherapists. Numerous quantitative and qualitative studies consistently highlight that mindfulness is associated with increased job satisfaction, enhanced social connections, heightened compassion, improved health, and overall well-being. Additionally, mindfulness practice has shown promise in reducing burnout, stress, anxiety, depression, and negative affect ([Aggs & Bambling, 2010](#); [Keane, 2014](#); [Shapiro et al., 2007](#)). Studies have also reported improvements in attentional variables, as measured through both performance tests and self-reports during therapeutic sessions ([Aggs & Bambling, 2010](#)).

**Table 1**  
Descriptive statistics of the sample by group

	Experimental group (n = 24)		Control group (n = 27)		Total (N = 51)	
	M	SD	M	SD	M	SD
Age	27.25	7.07	21.33	1.44	24.1	5.74
	n	%	n	%	n	%
Sex						
Masculine	2	8.33	2	7.40	4	7.84
Femenine	22	91.67	25	92.60	47	92.16
Mother Tongue						
Spanish	23	95.83	26	96.30	49	96
Other	1	4.17	1	3.70	2	4
Bilingualism	2	8.33	7	25.92	9	17.65

Examining mindfulness training in psychotherapist education is intriguing, as it enriches our comprehension of real-time attentional processes in therapeutic work and cultivates a robust therapeutic relationship. This perspective goes beyond specific psychological treatment models, emphasizing shared principles across all models rather than focusing on individual techniques. In fact, some have proposed that mindfulness could serve as a common factor in psychological treatments (Miró, 2017). The aim of this pilot study was to investigate the feasibility and evaluate the impact of a 9-week mindfulness training program on stress, anxiety, depression, and mindfulness among students enrolled in a Master's program in General Health Psychology.

## Method

### Participants

A total sample of 51 university students were recruited from both the undergraduate Psychology program and the Master's in General Health Psychology at the University of La Laguna. The experimental group consisted of 24 master's students ( $M=27.25$ ,  $SD=7.07$ ), with 91.67% being female. The control group comprised the remaining 27 undergraduate students ( $M=21.33$ ,  $SD=1.44$ ), and 92.60% of the sample were female participants. Participant characteristics are summarized in Table 1. Importantly, none of the participants had prior experience in mindfulness practice.

### Instruments

Materials for data collection comprised three standardized instruments and a weekly self-report to gather information on the home practice of the experimental group. The standardized instruments used were the *Depression Anxiety Stress Scales* (DASS-21), *Five Facet Mindfulness Questionnaire* (FFMQ), and *State Mindfulness Scale* (SMS).

The *Depression Anxiety Stress Scales* (DASS-21) is a 21-item questionnaire designed to assess *depression*, *anxiety*, and *stress* constructs. These constructs were evaluated through three scales, each consisting of seven items (Lovibond & Lovibond, 1995; Spanish version by Ruiz et al., 2017). Participants reflected on their mental state in the week before questionnaire administration, rating each item on a four-point Likert scale, indicating the frequency of each presented statement (ranging from 0 = did not happen to me to 3 = happened to me a lot or most of the time). The total scores across items serves as a general indicator of the emotional symptoms, with a higher score indicating a greater degree of symptomatology.

The *Five Facet Mindfulness Questionnaire* (FFMQ) is a dispositional test designed to assess five facets of mindfulness, including *observing* (attending to internal and external experiences), *describing* (labeling internal experiences with words), *acting*

*with awareness* (attending to one's own activation in the present moment), *non-judging* (adopting a non-evaluative stance toward internal thoughts and feelings), and *non-reactivity* (allowing internal thoughts and feelings to come and go without getting caught up in or carried away by them) (Baer et al., 2006). In this study, the reduced Spanish version (Cebolla et al., 2012), comprising 20 items derived from the original 39 while retaining the five facets, was utilized. Participants rated specific mental states described in the items (e.g., "I tell myself that I shouldn't think the way I do, I observe my feelings without getting lost in them", etc.) on a five-point Likert scale based on the frequency of occurrence (from 1 = never or very rarely true to 5 = very often or always true). The overall score on the scale served as an indicator of participants' mindfulness level.

The *State Mindfulness Scale* (SMS) is a measure designed to assess current mental and bodily states (Tanay & Bernstein, 2013; Spanish version by Ullrich-French et al., 2017). Comprising 23 items, the scale evaluates mindfulness as a state across two subdimensions: *state mindfulness of mind* and *state mindfulness of body*. Participants generated a sentence about their activities in the last 15 minutes and then rated each item on a five-point Likert scale (from 1 = not at all to 5 = very much). A higher total score indicates a higher level of "Mindfulness State". Cross-sectional studies have demonstrated that the scale's convergent evidence, discrimination, and incremental convergent validity compared to other mindfulness measurement instruments.

### Design and procedure

The current study employed a quasi-experimental pre-test and post-test design incorporating mindfulness training. Participants were not randomly assigned; instead, the groups were formed based on convenience.

The study comprised two separate experimental sessions. In the initial session, prior to mindfulness training for the experimental group, all participants provided informed consent. Following this, personal data (age, gender, degree, native language, and other languages spoken) was collected. Participants were then directed to complete an online battery of standardized questionnaires (DASS-21, FFMQ, and SMS), presented in the same order for all study participants. The questionnaires were administered using the Qualtrics platform.

Following the initial session, mindfulness training commenced, with the experimental group undergoing the intervention as part of the "*Intervention in Health Psychology: Mental Disorders*" course within the Master's in General Health Psychology. This course, primarily focused on cognitive-behavioral approaches for anxiety and depression treatment, incorporated mindfulness training. The sessions, inspired by an integrated approach combining mindfulness with cognitive-behavioral therapy (Cayoun et al., 2019), spanned four hours each. The first two hours covered theoretical content,

**Table 2**  
Therapeutic sessions

Sessions	Title
Session 1	General Orientation to Training and Therapeutic Contract
Session 2	Progressive muscle relaxation
Session 3	Mindfulness in the breath
Session 4	Inhabiting the Body
Session 5	Inhabiting the Bilateral Body
Session 6	Mindfulness of Sound
Session 7	Mindfulness of Mental Contents
Session 8	Mindfulness of interpersonal feelings

while the remaining two were dedicated to mindfulness training. Classes were conducted in a well-ventilated classroom with appropriate lighting and acoustics.

These sessions, led by the course instructor, an expert in mindfulness, occurred weekly. Subsequently, recordings of the sessions were provided to students, allowing them to continue independent training at home throughout the week, with a recommended frequency of two times per day. Additionally, students were required to maintain a daily written record of their training, including the time of day (morning and/or evening), session duration, and a subjective assessment of the effectiveness and difficulty. Each practice was rated on a scale from 1 = not at all to 10 = always, indicating the challenge of ignoring distractions and focusing attention on the present. The content of each session is outlined in Table 2 (see the supplementary material for more detailed information on each session).

The training program was initially designed to include eight sessions, totaling 16 in-person hours. However, an additional session (nine in total) was conducted due to the need to repeat session 5 caused by recording failures. Following the nine-week training period for the experimental group and the same interval for the control group, during which no training or supplementary activities occurred, all participants completed the online questionnaire battery once again, marking the conclusion of the data collection. As the sample for pilot study consisted of university students involved in an academic course, precautions were taken to prevent result contamination. The pre- and post-mindfulness training measures were conducted in the first semester, specifically before the holiday periods and exams. This study received approval from the Ethics Committee of the University of La Laguna (CEIBA2023-3315).

**Data analysis**

The reliability and internal consistency of each scale were assessed using various indices, including Cronbach's alpha coefficient, McDonald's Omega coefficient, composite reliability (with reference values set at > .70 considered acceptable, > .80 good, and

> .90 excellent), and average variance extracted (values >= 50% considered acceptable). To analyze the effects of the intervention on the evaluated constructs, repeated measures analysis of variance (ANOVA) was conducted. Group (control versus intervention) served as the between-subjects factor, and assessment time (pre versus post) as the within-subjects factor. Prior the ANOVA, assumptions of residual normality and homogeneity of variances (Levene's test) were checked. Normality of distributions was verified using Shapiro-Wilk tests and visual inspection of Q-Q plots of residuals for each measure based on group and assessment time. In cases where assumptions were violated, ANOVA was performed using robust methods, and results from both analyses were reported. Effect sizes  $\eta_p^2$  exceeding .06 were considered medium, and those surpassing .15 were deemed large (Cohen, 1988; Richardson, 2011). The significance level was set at  $\alpha = .05$  was adopted. All analyses were conducted using the R software (R Core Team, 2020).

**Results**

Table 3 displays the internal consistency indices for the measurement instruments and their subscales. Overall, internal consistency ranged from good to excellent across all scales, indicated by the Cronbach's alpha and McDonald's Omega values. Factor loadings of the items (composite reliability) generally achieved values from acceptable to excellent, except for the pre-intervention measurement using the FFMQ. Convergent validity, assessed through average variance extracted, demonstrated acceptable levels in most subscales (equal to or greater than 50%), with some exceptions at certain measurement points (with a minimum value of 38%).

Repeated measures analysis of variance (ANOVA) was conducted to statistically analyze the data from the assessed constructs. The group (experimental vs. control) served as the between-participants factor, while the test time (pre-training vs. post-training) served as the within-participants factor. Table 4 presents the means and standard deviations of both groups across various subscales at different training intervals.

**DASS-21**

The analysis of the anxiety construct revealed differences based on the test time  $F(1, 46) = 3.80, MSE = 0.12, p = .057, \eta_p^2 = .076; F_{robust} = 1.57, p = .22$ . Regarding the group variable (control vs. experimental), a marginal effect was identified  $F(1, 46) = 3.68, MSE = 0.51, p = .06, \eta_p^2 = .074; F_{robust} = 8.13, p < .01$ , with the experimental group ( $M = 3.2$ ) exhibiting lower anxiety compared to the control ( $M = 5.16$ ). However, this interaction was not significant ( $F < 1, F_{robust} < 1$ ). The stress construct exhibited significant dif-

**Table 3**  
Cronbach's alpha ( $\alpha$ ), McDonald's Omega ( $\omega$ ), composite reliability (CR) and mean variance extracted (AVE) from the scales and subscales at the two evaluation times

	$\alpha$		$\omega$		CR		BIRD	
	PRE	POST	PRE	POST	PRE	POST	PRE	POST
<b>DASS-21</b>	.92	.92	.93	.93	.92	.93	39%	40%
Anxiety	.85	.87	.86	.87	.86	.87	47%	50%
Stress	.79	.84	.81	.85	.82	.84	41%	46%
Depression	.88	.79	.89	.80	.89	.80	53%	38%
<b>FFMQ</b>	.80	.85	.70	.84	.45	.77	21%	24%
Observing	.74	.87	.76	.87	.76	.87	46%	63%
Describing	.73	.71	.79	.74	.74	.75	55%	43%
Acting with Awareness	.88	.87	.89	.87	.89	.86	67%	63%
Non-judging	.80	.87	.82	.87	.82	.88	54%	64%
Non-reactivity	.74	.61	.75	.68	.75	.70	44%	39%
<b>SMS</b>	.96	.92	.96	.93	.96	.93	53%	40%
State of Mind	.95	.90	.95	.90	.95	.91	56%	41%
State of Body	.88	.74	.90	.78	.90	.80	60%	41%

**Table 4**  
Descriptive statistics according to training time

	Experimental group				Control group			
	Pre-training		Post-training		Pre-training		Post-training	
	M	SD	M	SD	M	SD	M	SD
<b>DASS-21</b>								
Anxiety	3.58	3.88	2.83	3.00	5.75	4.19	4.58	4.46
Stress	8.08	3.56	6.54	3.56	8.62	4.29	7.37	4.50
Depression	2.54	2.64	2.08	2.33	5.17	4.53	3.83	2.88
<b>FFMQ</b>								
Observing	13.08	3.10	14.54	2.59	13.46	4.43	13.67	4.90
Describing	11.33	2.18	11.21	2.02	11.79	1.67	12.04	1.92
Acting with Awareness	13.50	3.99	14.50	3.50	14.08	3.92	13.21	3.44
Non-judging	14.13	3.93	9.50	3.50	13.54	3.81	10.79	3.44
Non-reactivity	11.67	2.53	9.96	2.61	11.25	3.15	11.04	2.39
<b>SMS</b>								
State of Mind	45.08	14.27	57.83	12.25	53.00	16.61	52.67	15.19
State of Body	16.13	5.53	22.08	4.22	17.83	6.92	18.71	7.05

ferences based on the test time  $F(1, 46) = 5.97, MSE = 0.16, p < .05, \eta_p^2 = .11$ . On average, the post-test stress ( $M = 6.95$ ) was lower than the pre-test stress ( $M = 8.35$ ). However, neither the group variable nor the interaction reached statistical significance ( $F < 1$ ). The depression construct showed significant differences in the group variable  $F(1, 46) = 7.90, MSE = 0.30, p = .007, \eta_p^2 = .15; F_{robust} = 9.14, p < .01$ , indicating higher depression scores observed in the control group ( $M = 3.43$ ) compared to the experimental group ( $M = 2.31$ ) ( $p = .007$ ). Neither the test time  $F(1, 46) = 3.16, MSE = 0.12, p = .082, \eta_p^2 = .06, F_{robust} < 1$  nor the interaction ( $F < 1, F_{robust} < 1$ ) was significant.

**FFMQ**

The analyses of the *observing* factor did not reveal significant differences in the test time or group variables ( $F < 1$ ). The interaction was not significant ( $F < 1$ ). No significant differences were observed in the *describing* factors for the test time or group variables ( $F < 1, F_{robust} < 1$ ). The interaction was not significant ( $F < 1$ ). For the *acting with awareness* factor, no significant differences were found in the main effects for test time or group variables ( $F < 1$ ). However, the interaction was significant  $F(1, 46) = 4.33, MSE = 0.31, p < .05, \eta_p^2 = .09$  (Figure 1).

Significant differences emerged in the non-judging factor for the test time variable  $F(1, 46) = 18.60, MSE = 0.24, p = .001, \eta_p^2 = .29$ . No significant differences were identified in the group variable ( $F < 1$ ). However, the group-by-test time interaction proved significant  $F(1, 46) = 8.26, MSE = 0.24, p = .001, \eta_p^2 = .15$ . Post hoc contrasts revealed disparities in the experimental group between pre-test ( $M = 14.13$ ) and post-test ( $M = 9.50$ ) ( $p = .001$ ), as well as variations in the post-test between the experimental group ( $M = 9.50$ ) and the control group ( $M = 10.79$ ) ( $p = .004$ ) (Figure 2).

For the *non-reactivity* to inner experience factor, significant differences were identified in the test time variable  $F(1, 46) = 6.87, MSE = 0.20, p < .05, \eta_p^2 = .13$ , indicating that the pre-training score ( $M = 11.46$ ) was higher than the post-training score ( $M = 10.50$ ) ( $p = .011$ ). Neither the group variable ( $F < 1$ ) nor its interaction ( $F < 1$ ) reached significance.

**SMS**

A notable difference was observed in the *State Mindfulness of Mind* factor regarding the test time variable  $F(1, 46) = 8.15, MSE = 0.43, p = .006, \eta_p^2 = .15$ . No significant differences were detected in the group variable ( $F < 1$ ). However, the interaction was significant  $F(1, 46) = 4.25, MSE = 0.43, p = .003, \eta_p^2 = .18$ . Post-hoc contrasts revealed distinctions in the experimental group between

the pre-test ( $M = 45.08$ ) and post-test measurements ( $M = 57.83$ ) ( $p = .001$ ) (Figure 3).

Significant differences emerged in the *state mindfulness of body* factor concerning the test time variable  $F(1, 46) = 12.91, MSE = 0.57, p = .001, \eta_p^2 = .22$ . No significant differences were observed in the group variables ( $F < 1$ ). However, the interaction between group and test time was significant  $F(1, 46) = 8.01, MSE = 0.57, p = .007, \eta_p^2 = .15$ . Post hoc comparisons revealed variations in the experimental group between the pre-test ( $M = 16.13$ ) and post-test ( $M = 22.08$ ) ( $p = .0001$ ), as well as differences in the post-test time between the control group ( $M = 18.71$ ) and the experimental group ( $M = 22.08$ ) ( $p = .04$ ) (Figure 4).

**Discussion**

This pilot study aimed to investigate the impact of mindfulness training on stress, anxiety, and depression symptoms, as well as various facets and states of mindfulness among Master’s students in General Health Psychology, who are prospective therapists. In relation to the DASS-21 constructs, the results revealed lower anxiety and depression levels in the experimental group compared to the control group, accompanied by a reduction in stress from the pre-test to the post-test. Moreover, the training of future therapists led to increased scores in the acting with awareness factor and the non-judging factor, indicating a propensity for adopting a non-evaluative stance toward thoughts and feelings, in contrast to the control group after mindfulness training. No significant differences were observed in the factors of observing, describing, or labeling internal experiences with words. Regarding the non-reactivity to inner experience factor, which involves allowing thoughts and feelings to flow, a decrease in scores was noted in the experimental group after mindfulness training. Concerning the two factors evaluated by the SMS scale—state mindfulness of mind, which emphasizes internal processes, and state mindfulness of body, focusing on the body—the experimental group exhibited an increase in scores compared to the control group following mindfulness practice sessions.

Current research suggests that mindfulness serves not only as a means of alleviating negative states, such as stress, anxiety, or depression (Bruce et al., 2002; Rosenzweig et al., 2003; Shapiro et al., 1998), but also as a promoter of emotional regulation (Concoran et al., 2010; Hoffman et al., 2010), a reducer of reactive states (Chang et al., 2004; Ortner et al., 2007; Siegel, 2007), and an enhancer of cognitive flexibility (Moore & Malinowski, 2009; Siegel, 2007).

In the context of this pilot study involving Master’s students in General Health Psychology and aspiring therapists, a reduction in

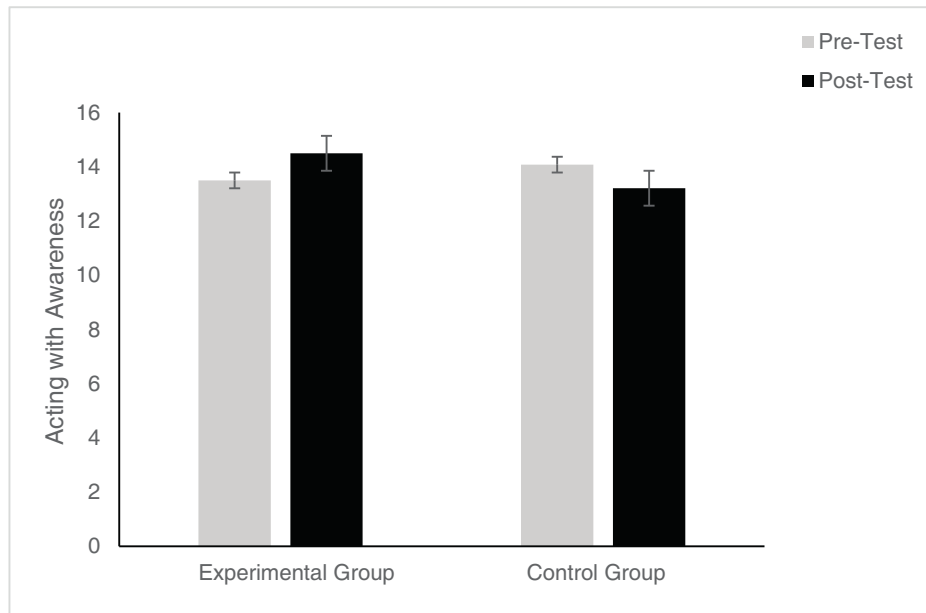


Figure 1. Average scores for the acting with awareness factor depended on the time of the test and the type of group.

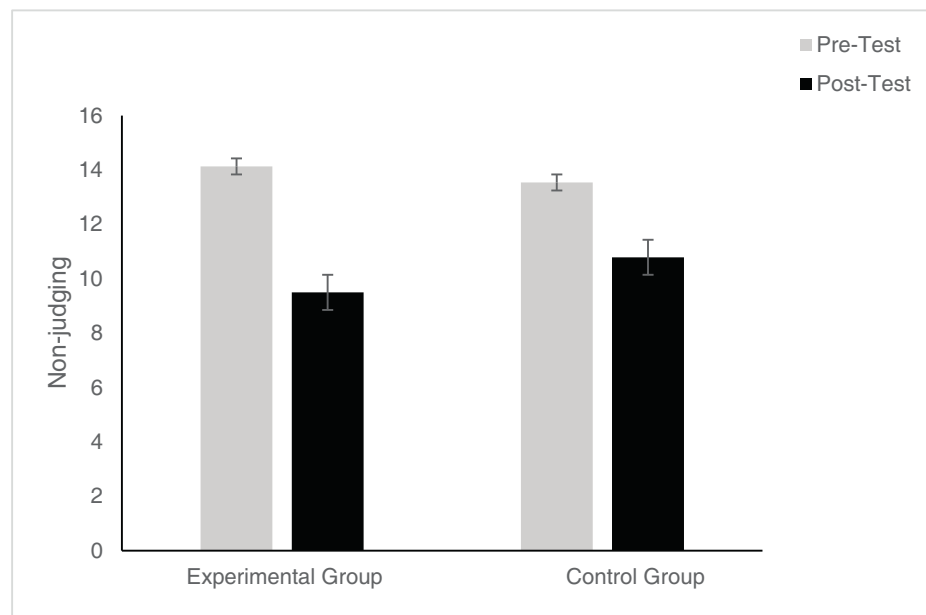
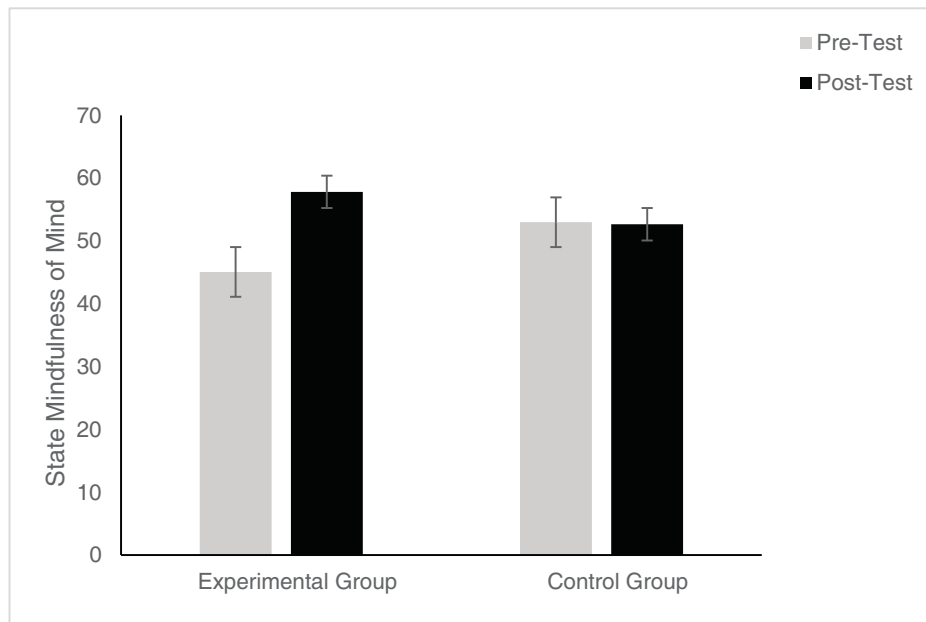


Figure 2. Mean scores on the non-judging factor based on the time of the test and type of group.

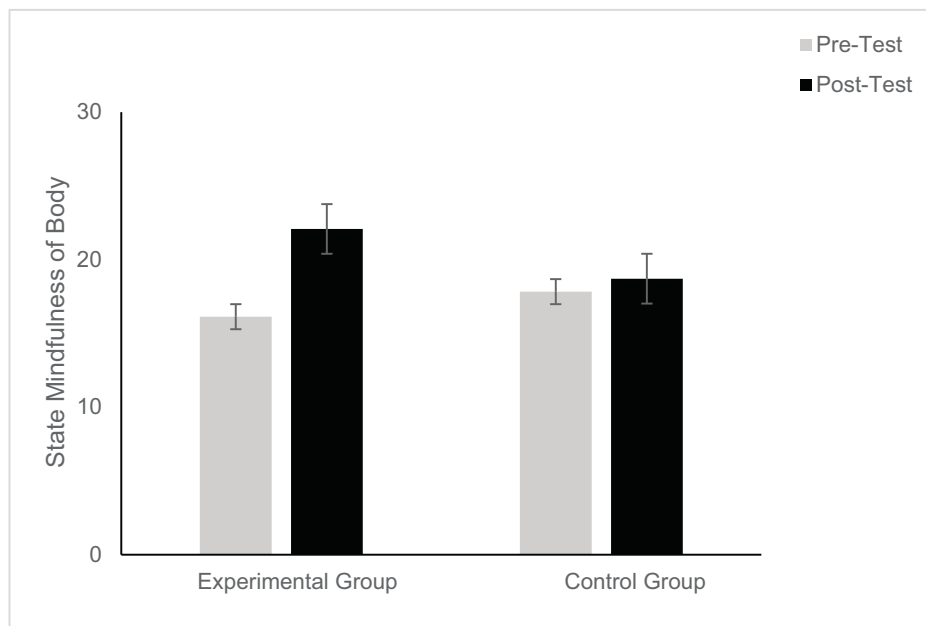
depression symptoms was noted, aligning with the observations of Shapiro et al. (2007). However, in contrast to the outcomes seen in medical students undergoing eight weeks of mindfulness training (Shapiro et al., 1998), a significant decrease in stress and anxiety symptoms was not observed. The absence of significant effects in this study can be attributed, to the variability in the practice hours of Master’s students, ranging from 3.7 to 42.97 total practice hours. Secondly, it could be associated with the adopted training approach. This pilot study utilized a general Mindfulness-Based Intervention (MBIs) approach (Regehr et al., 2013), emphasizing a broad strategy to familiarize trainee therapists with the practice without specifically targeting negative symptoms. In contrast, when mindfulness is integrated into psychological treatment,

interventions tend to be more specific, focusing on addressing particular negative states. For example, stress is targeted in Mindfulness-Based Stress Reduction (MBSR) (Kabat-Zinn, 2013), depression in Mindfulness-Based Cognitive Therapy for Depression (MBCT) (Segal et al., 2002, 2018), and anxiety disorders in Mindfulness and Acceptance-Based Treatments (Roemer et al., 2013). In all these cases, mindfulness training is accompanied by psychoeducation related to the targeted disorder. Regarding the increase in mindfulness scores, both measures used to assess the effectiveness of training exhibited changes between the pre-training and post-training phases.

Concerning the FFMQ, the factors of acting with awareness and non-judging exhibited significance, as well as the two constructs



**Figure 3.** Average scores in state mindfulness of mind depending on the time of the test and the type of group.



**Figure 4.** Average scores for *state mindfulness of the body* depending on the time of the test and the type of group.

of the SMS—state mindfulness of mind and state mindfulness of body—which underwent significant changes after training. These observed changes suggest a correlation between training and the capacity to act with awareness and without judgment, integral components of the mindfulness construct. Mindfulness, as a practice, centers on the present moment, with individuals intentionally directing their attention to the present and cultivating awareness without preconceived judgments of their experiences (Bishop et al., 2004). The FFMQ results indicate that individuals engaging in mindfulness can fully attend to both external environmental experiences and internal experiences, such as feelings and thoughts (acting with awareness), without engaging in analysis or passing judgment on these experiences (non-judging).

Moreover, these findings align with the outcomes observed in the two facets assessed by the SMS. The mindfulness state of the body factor gauges an individual’s proficiency in attending to and identifying sensations occurring in their body. The training outcomes depicted that individuals practicing mindfulness could discern and sustain awareness of sensations arising in the present moment and location. In contrast, the mindfulness state of the mind factor evaluates a person’s ability to observe and become aware of their mental activities in the present moment. Essentially, those who have undergone training were able to recognize the thoughts that emerged in their minds in the present moment. These outcomes are in line with prior literature highlighting the positive effects of mindfulness (Brown & Ryan, 2003; Shapiro et al., 2006).

It is crucial to recognize therapy sessions as intimate, emotionally charged spaces where bonds are formed, and both interpersonal and intrapersonal conflicts may arise. In navigating these sessions, psychotherapists must vigilantly supervise their attention to optimally respond to demands of therapy. Research has observed that this demanding work significantly induces psychological fatigue in a notable percentage of mental health professionals (Coster & Schwebel, 1997; Guy et al., 1989). The elevated levels of stress they encounter can lead to a range of adverse effects, encompassing depression, emotional fatigue, and anxiety (Radeke & Mahoney, 2000), as well as job dissatisfaction (Blegen, 1993) and reduced professional efficacy (Klein, 1996; Renjilian et al., 1998). This impact is particularly pronounced in young or novice therapists (Skovholt & Ronnestad, 2003; Vander-Kolk, 1982; Vredenburg et al., 1999). Therefore, the promising results from this pilot study underscore the viability and practicality of mindfulness training in the preparation of future psychotherapists, highlighting its potential to instigate significant positive changes.

Incorporating mindfulness education into the training of young mental health professionals is vital for equipping them to effectively manage emotional stress and anxiety. Research indicates that professionals who cultivate heightened mindfulness traits through training can navigate overwhelming contexts with reduced reactivity, enabling them to respond constructively and consciously (Barnes et al., 2007; Davis & Hayes, 2011; Dekeyser et al., 2008; Hafenbrack et al., 2020; Wachs & Cordova, 2007). This not only contributes to a decrease in adverse states (stress, anxiety, and depression) (Shapiro et al., 2007) but also enhances fundamental therapy skills, including empathy (Anderson, 2005; Lesh, 1970; Shapiro et al., 1998; Wang, 2007), heightened compassion (Shapiro et al., 2005, 2007), and, particularly in the field of psychotherapy, improved counselling proficiency (Newsome et al., 2006). Additionally, it fosters a general sense of well-being within the profession (Birnbaum, 2008).

The primary objective of this pilot study was to showcase the feasibility of integrating mindfulness practice into psychotherapists training. Numerous studies have highlighted the benefits of mindfulness not only in educational settings (Dunning et al., 2019; Jalón et al., 2022; Jansen et al., 2016; Martínez-Rubio et al., 2022; Villalba et al., 2022) but also in various health-related professions (see Cohen-Katz et al., 2005; Grepmaier et al., 2007; Rosenzweig et al., 2003). Therefore, the incorporation of mindfulness training into psychotherapy education emerges as a logical progression. Notably, existing research has predominantly focused on mindfulness interventions and training programs designed to alleviate adverse symptoms in professionals once they are affected. However, there is a notable gap in preventive-focused studies (Shapiro et al., 2007) that equip professionals, such as psychotherapists in training, with proactive tools to address the common adverse states in their demanding profession.

While this study offers valuable insights into integrating mindfulness practice into psychotherapist training, it is essential to recognize its inherent limitations. Mindfulness, for its benefits, necessitates time for internalization and habit formation. The training in this study was conducted within the academic course schedule, limiting the collection of pre-test and post-test measures to teaching weeks. This timeframe constraint impedes long-term follow-up and a thorough examination of training internalization. Another constraint relates to the observed effect sizes, which are moderate in some cases, but might show larger magnitudes with a larger sample. Despite these limitations, this study underscores the feasibility of mindfulness practice for psychotherapist training. Therefore, other researchers are encouraged

to replicate these results with a larger participant pool and delve deeper into the feasibility and application of mindfulness teachings by incorporating new measures, both temporal and assessing the impact of mindfulness training on therapeutic performance.

In light of the rising demand for psychotherapists and the prevalent negative states within the profession, particularly affecting novice therapists, the finding of this pilot study strongly advocate for the inclusion of mindfulness practice in psychotherapist training curricula. This study underscores the diverse benefits of mindfulness practice, showcasing its practical viability in the training of psychotherapist. These insights suggest that mindfulness can serve as a valuable tool, fostering not only intrapersonal development but also equipping therapists with essential skills for professional practice.

### Conflict of interest

The authors declare no conflicts of interest.

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