

La Meditazione Orientata alla Mindfulness nella ricerca psicologica e in ambito educativo

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Il termine **Mindfulness** si riferisce all'esperienza di uno stato mentale: «la consapevolezza che emerge attraverso il prestare attenzione in un particolare modo: intenzionalmente, nel momento presente e in modo non giudicante» (Kabat-Zinn, 1994)



Mind the Hype: A Critical Evaluation and Prescriptive Agenda for Research on Mindfulness and Meditation

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Perspectives on Psychological Science
1–26

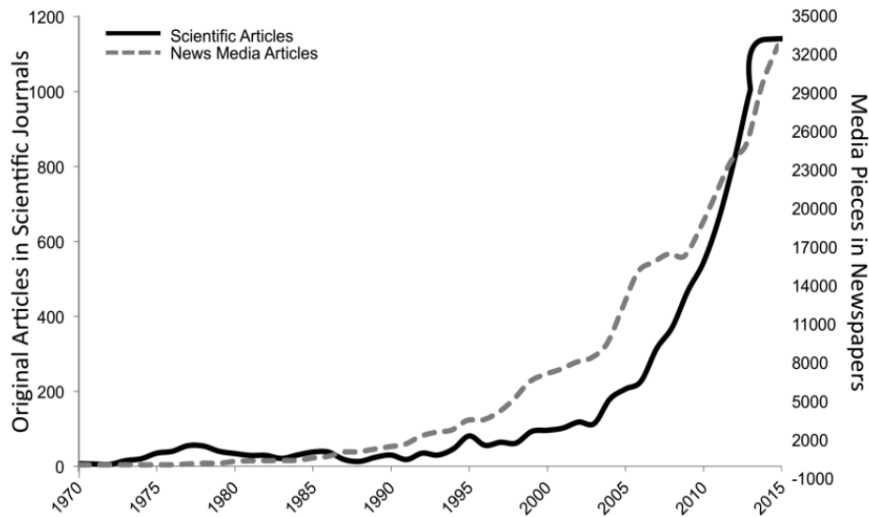
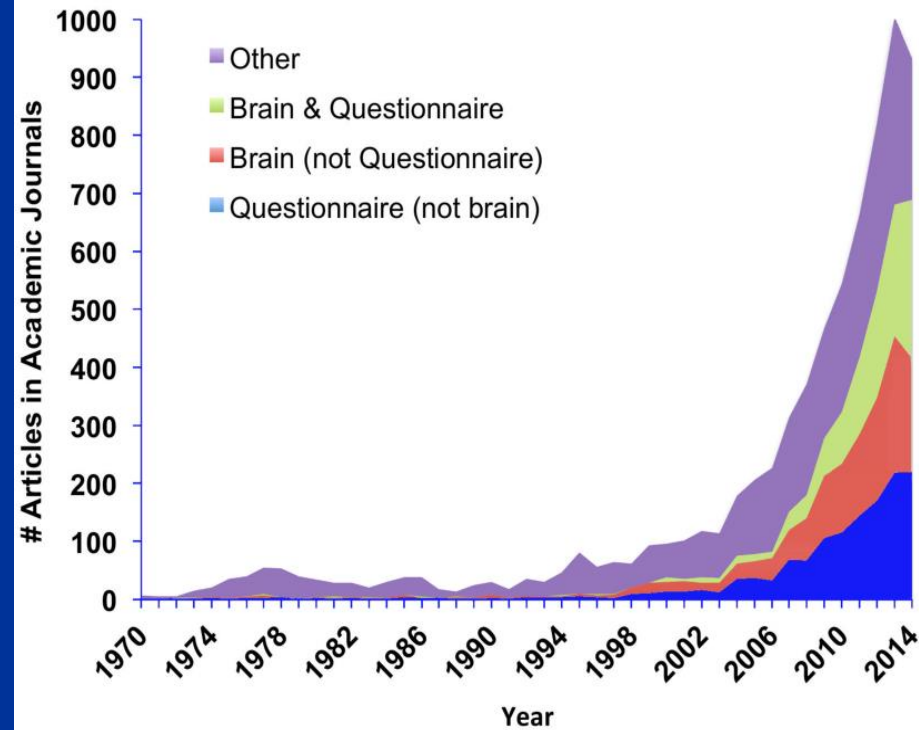


Fig. 1. Scientific and news media articles on mindfulness and/or meditation by year from 1970 to 2015. Empirical scientific articles (black line) with the term *mindfulness* or *meditation* in the abstract, title, or keywords, published between 1970 and 2015 were searched using Scopus. Media pieces (dashed gray line) with the term *mindfulness* or *meditation*, published in newspapers, using a similarity filter to minimize double-counting, published between 1970 and 2015 were searched using LexisNexis.



Mindfulness = Sati

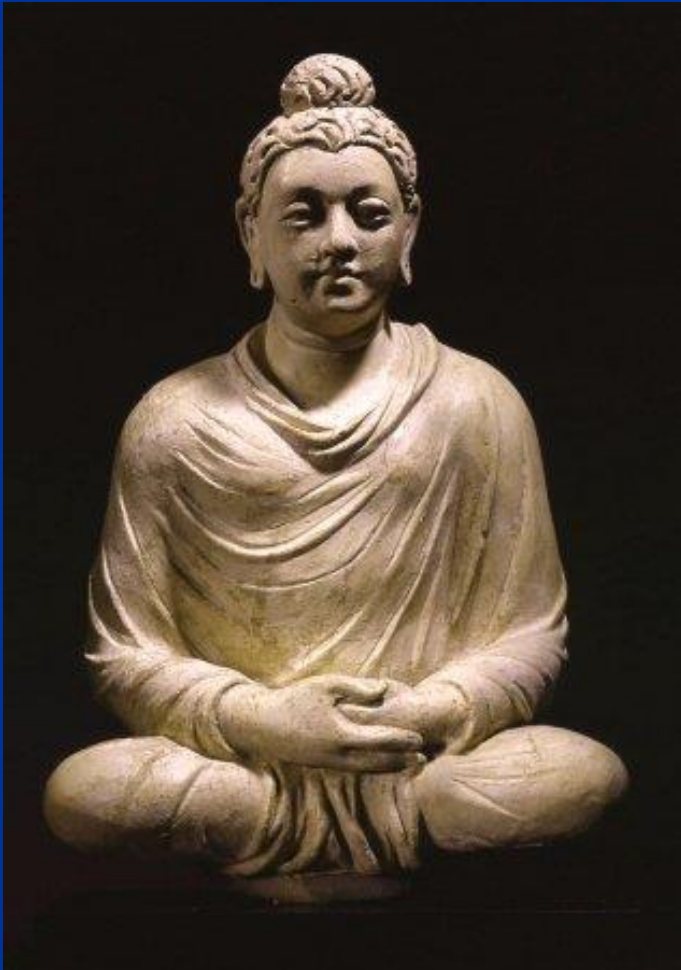
Si riferisce alla pedagogia della liberazione insegnata del Buddha, che si articola:

Quattro nobili verità:

- I) Esistenza del malessere (*dukkha*)
- II) Origine del malessere
- III) Cessazione del malessere
- IV) Ottuplice sentiero per la liberazione

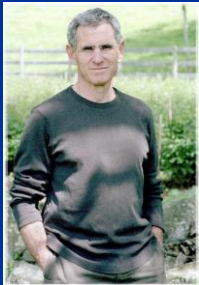
Ottuplice sentiero:

- 1) *Samma ditti* (precisa comprensione)
- 2) *Samma sankappo* (precisa intenzione)
- 3) *Samma vacco* (preciso pensiero)
- 4) *Samma kammanto* (precisa azione)
- 5) *Samma ajivo* (precisi mezzi di sussistenza)
- 6) *Samma vayano* (preciso sforzo)
- 7) **SAMMA SATI** (precisa presenza mentale)
- 8) *Samma samadhi* (preciso assorbimento)



Siddharta Gotama il Buddha (566-486 aC)

Protocolli Terapeutici basati sulla mindfulness



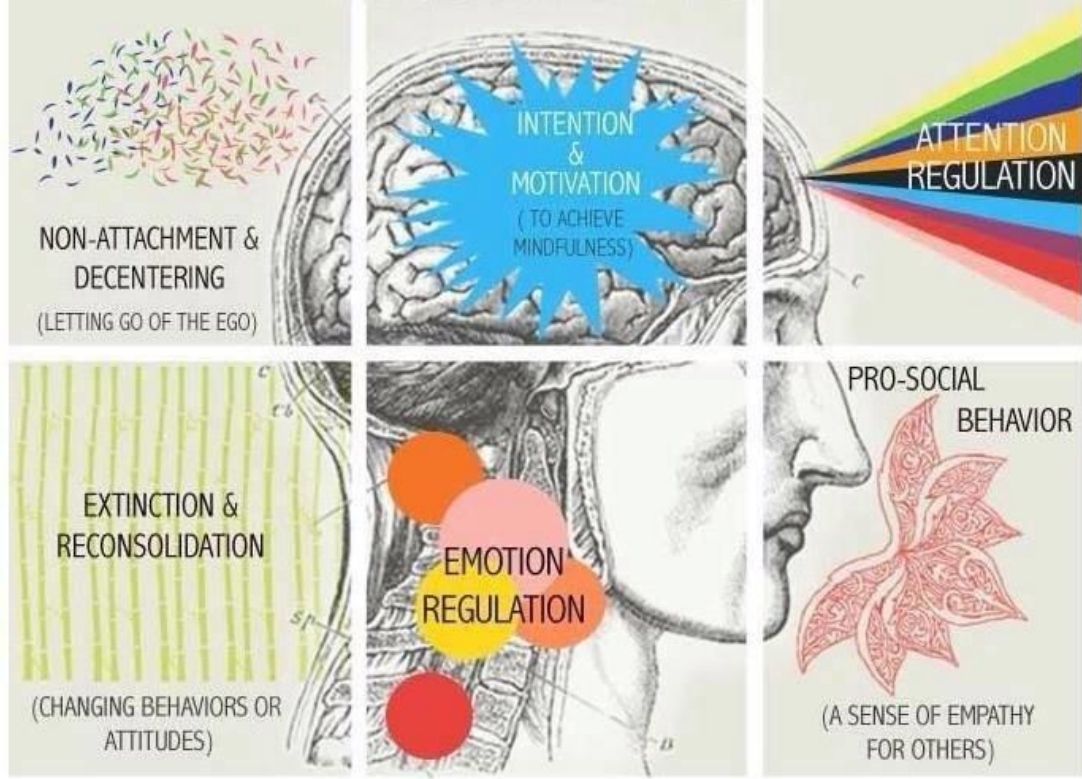
- Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990)
- Mindfulness-Based Cognitive Therapy (Segal, Williams, Teasdale, 2001)
- Dialectical Behavior Therapy - DBT (Linehan, 1993)
- Acceptance and Commitment Therapy - ACT (Hayes, 1994)
- Compassion Focused Therapy (Gilbert, 2009)
- Mindfulness Based Relapse Prevention (substance abuse) – MBRP (Marlatt & Gordon, 1985)
- Mindfulness-Based CBT for OCD and Anxiety (Hershfield & Corboy, 2013; Didonna, 2014)
- Mindfulness Oriented Meditation (MOM; Fabbro e Muratori, 2012; Fabbro e Crescentini, 2014; Crescentini et al., 2014, 2015, 2016, 2017)

Applicazioni cliniche dei protocolli mindfulness

- **Depressione Maggiore** (Teasdale, Williams, Segal, 1995)
- **Disturbi d'Ansia (GAD, Panico, Fobia Sociale)** (Kabat-Zinn, 1992; Borkovec e Sharpless, 2004; Miller et al., 1995; Roemer & Orsillo, 2002)
- **Disturbo da Stress Post-traumatico e Trauma** (Follette et al., 2008; Foa et al. 2000)
- **Disturbo Borderline di Personalità** (Linehan, 1993)
- **Disturbi Alimentari** (Baer et al., 2007; Kristeller et al., 1999; Telch, Agras, & Linehan, 2001; Quillian-Wolever, 2008)
- **Disturbo da Deficit di Attenzione con Iperattività** (Smalley et. al., 2007; Zilowska et al., 2008)
- **Disturbo Ossessivo-Compulsivo** (Schwartz,1997; Gorbis, 2004; Didonna, 2008)
- **Abuso di Sostanze- Dipendenze** (Marlatt et al., 2004, Breslin et al., 2002; Bien, 2008)
- **Psicosi** (Chadwick, 2005, Pinto, 2008)
- **Terapia di coppia** (Christensen et al., 2004; Jacobson et al., 2000)
- **Dolore Cronico** (Kabat-Zinn et al., 1982, 1986, 1987; Randolph et al., 1999)
- **Cancro** (Carlson et al., 2008; Speca et al., 2000)
- **Fibromialgia** (Kaplan et al., 1993; Goldemberg et al., 1994)
- **Psoriasi** (Kabat-Zinn et al., 1998)
- **Riduzione dello Stress** (Carceri, Ospedali, personale infermieristico, etc)

HOW IT WORKS: THE SCIENCE OF MEDITATION

MINDFULNESS INVOLVES SIX NEUROPSYCHOLOGICAL PROCESSES THAT LEAD TO A PERSON'S MEDITATIVE STATE OF SELF-AWARENESS.

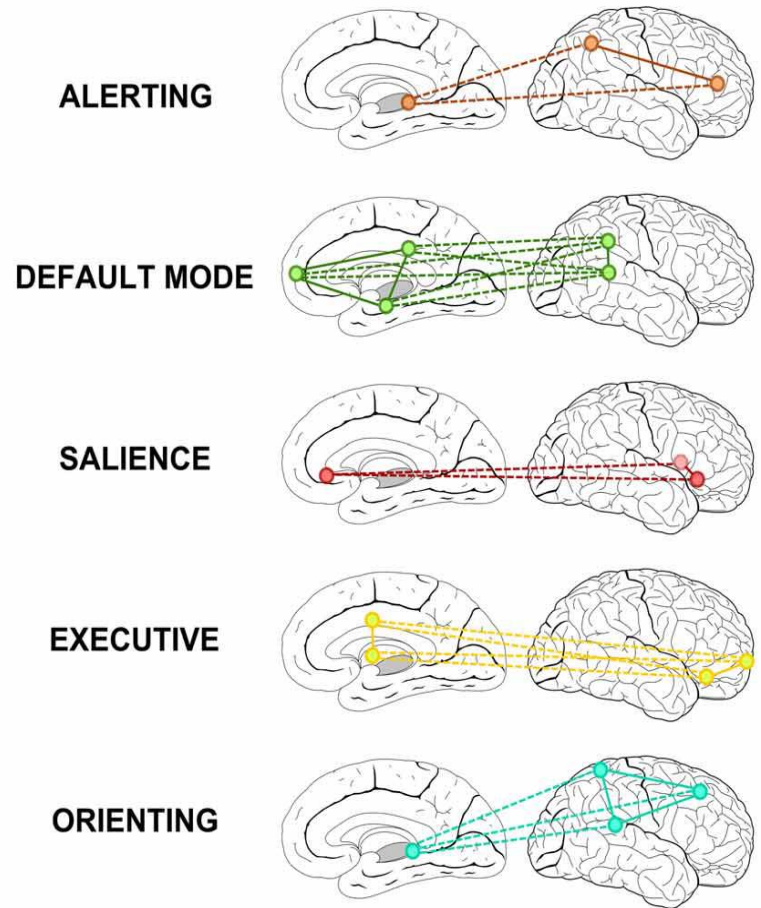


La scienza della meditazione di consapevolezza mindfulness mostra che il cervello cambia in maniera positiva con la pratica!

A Meditation Process



B Brain Networks



Spontaneous eye movements during focused-attention mindfulness meditation

Alessio Matiz^{1*}, Cristiano Crescentini², Anastasia Fabbro^{3,4}, Riccardo Budai⁵, Massimo Bergamasco¹, Franco Fabbro^{1,4}

Abstract

Oculometric measures have been proven to be useful markers of mind-wandering during visual tasks such as reading. However, little is known about ocular activity during mindfulness meditation, a mental practice naturally involving mind-wandering episodes. In order to explore this issue, we extracted closed-eyes ocular movement measurements via a covert technique (EEG recordings) from expert meditators during two repetitions of a 7-minute mindfulness meditation session, focusing on the breath, and two repetitions of a 7-minute instructed mind-wandering task. Power spectral density was estimated on both the vertical and horizontal components of eye movements. The results show a significantly smaller average amplitude of eye movements in the delta band (1–4 Hz) during mindfulness meditation than instructed mind-wandering. Moreover, participants' meditation expertise correlated significantly with this average amplitude during both tasks, with more experienced meditators generally moving their eyes less than less experienced meditators. These findings suggest the potential use of this measure to detect mind-wandering episodes during mindfulness meditation and to assess meditation performance.

Citation: Matiz A, Crescentini C, Fabbro A, Budai R, Bergamasco M, Fabbro F (2019) Spontaneous eye movements during focused-attention mindfulness meditation. PLoS ONE 14(1): e0210862. <https://doi.org/10.1371/journal.pone.0210862>

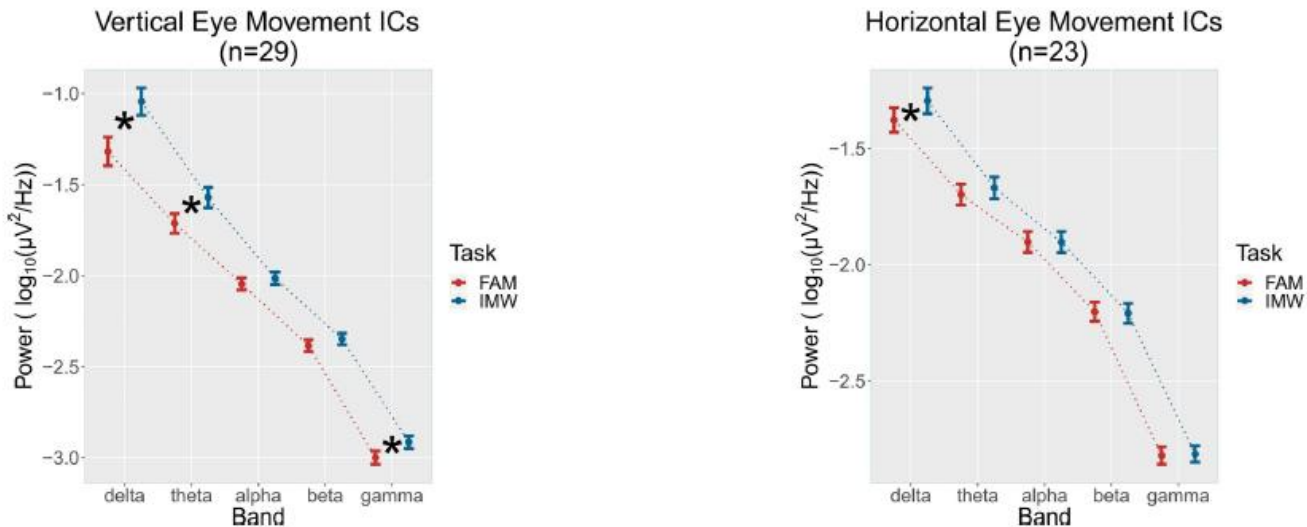


Fig 4. Power in band of eye movements ICs during the two tasks. Power in band relative to the two tasks (FAM = Focused Attention Meditation on the breath; IMW = Instructed Mind-Wandering) for the ICs that record activity of eye movements in the vertical (left panel) and horizontal axis (right panel). Circles represent average power across subjects, with vertical error bars for standard error of the mean. * indicates a significant difference between means for the corresponding band.

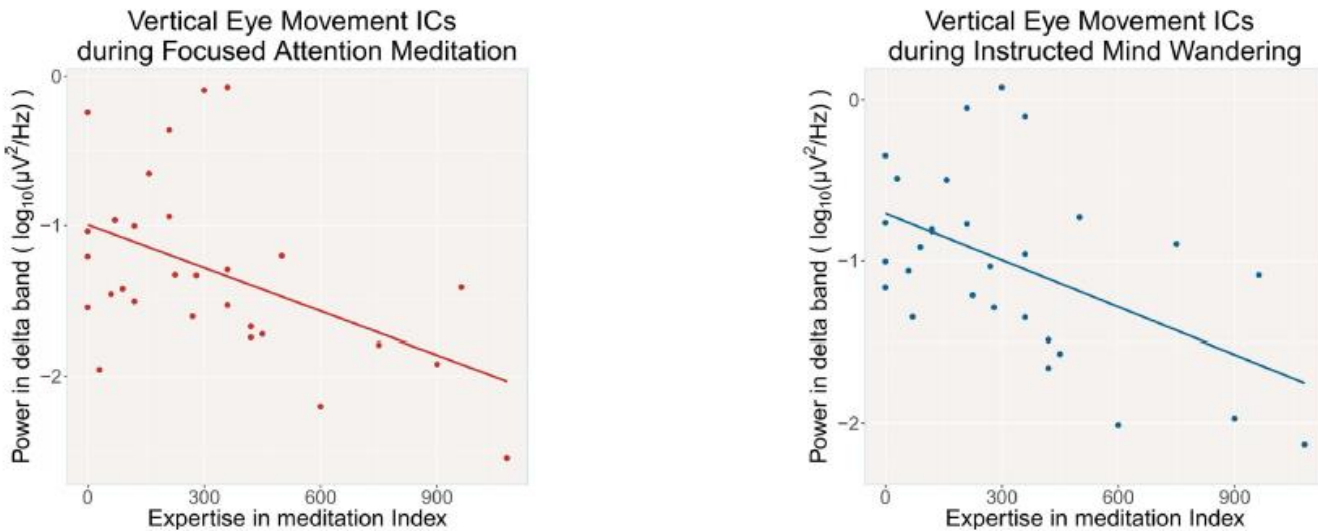


Fig 5. Participants' Vertical Eye Movement ICs delta power as a function of their expertise in meditation. Power in delta band (1–4 Hz) of individuals' Vertical Eye Movement Independent Component during the two tasks (FAM = Focused Attention Meditation on the breath; IMW = Instructed Mind-Wandering) as a function of individuals' meditation expertise. Expertise in meditation Index was calculated for each subject as the product between amount of weekly meditation practice (in minutes) and time spent since attendance of the Mindfulness-Oriented Meditation course (in years).



Full length article

Psychological and physiological responses to stressful situations in immersive virtual reality: Differences between users who practice mindfulness meditation and controls

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Effects of an 8-week meditation program on the implicit and explicit attitudes toward religious/spiritual self-representations

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IMPROVING PERSONALITY/CHARACTER TRAITS IN INDIVIDUALS WITH ALCOHOL DEPENDENCE: THE INFLUENCE OF MINDFULNESS-ORIENTED MEDITATION

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Mindfulness meditation and explicit and implicit indicators of personality and self-concept changes

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Mindfulness-Oriented Meditation for Primary School Children: Effects on Attention and Psychological Well-Being

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Mindfulness-oriented meditation improves self-related character scales in healthy individuals

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Full length article

Psychological and physiological responses to stressful situations in immersive virtual reality: Differences between users who practice mindfulness meditation and controls

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ABSTRACT

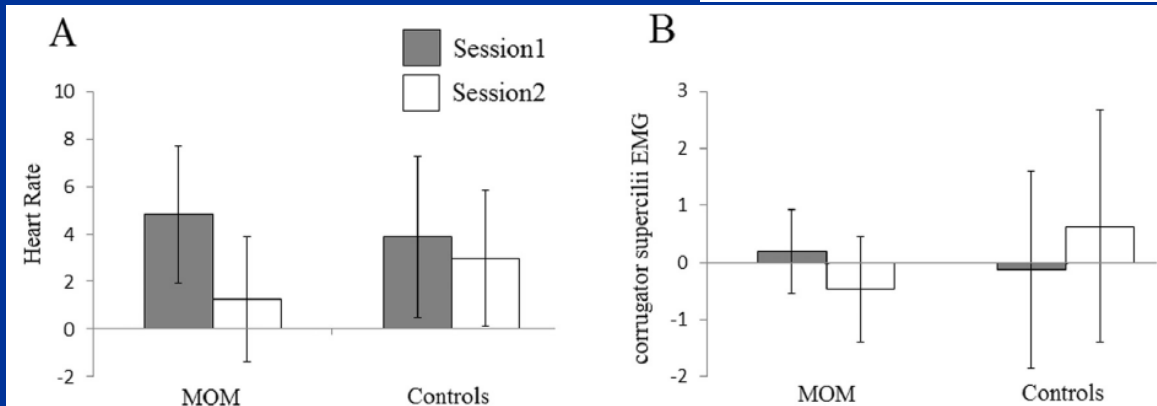
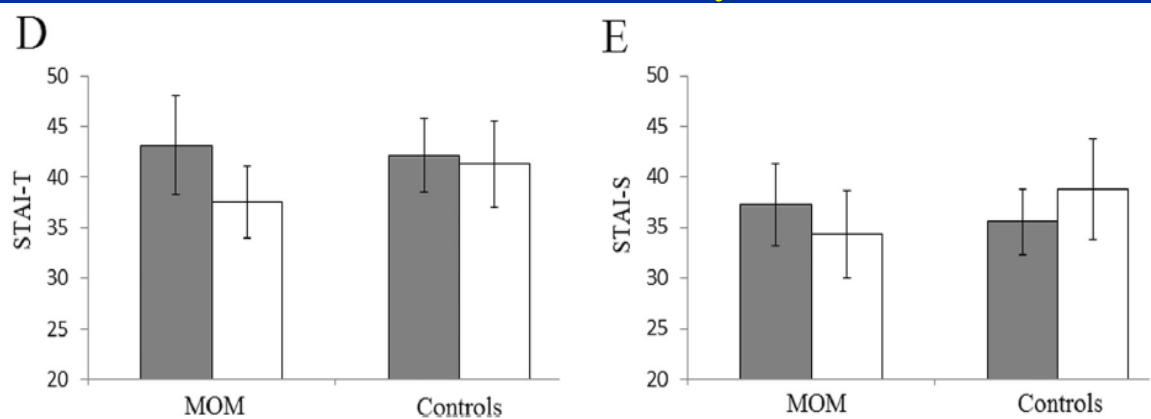
Several studies in the literature have shown positive psychophysical effects during or immediately after mindfulness meditation. However, the extent to which such positive effects are maintained in real-life, stressful contexts, remains unclear. This paper investigates the effects of an 8-week mindfulness-oriented meditation (MOM) program on the psychological and physiological responses evoked by immersive virtual environments (IVEs) that simulate emergency situations that may occur in life. Before and after the 8-week period, healthy MOM participants and a group of controls not involved in any meditation course were administered self-report measures of mindfulness and anxiety, and acted in the IVEs while a set of physiological parameters were recorded. Responses of MOM participants to the immersive virtual experiences were different from those of controls. MOM participants showed increased mindfulness and decreased anxiety levels. They also showed decreased heart rate and corrugator muscle activity while facing IVEs. We explain these results in terms of the awareness and acceptance components of mindfulness. More generally, the present experimental methods could also open up new lines of research that combine psychological and physiological indices with ecologically valid stimuli provided by IVEs in an effort to increase understanding of the impact of mindfulness meditation on realistic life situations.

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Results: Mindfulness and anxiety

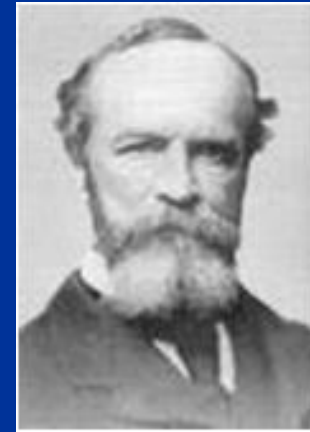
Results: Mindfulness and psychophysiological effects



Applicazioni della meditazione di consapevolezza in età evolutiva

"The faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgment, character, and will... An education which should improve this faculty would be the education par excellence"

-William James 1890




La facoltà di riportare costantemente indietro l'attenzione vagante, è la vera radice della saggezza, del carattere, della volontà....Un'educazione che favorisse lo sviluppo di questa facoltà sarebbe l'educazione per eccellenza. Ma è più facile definire questo ideale che fornire delle istruzioni pratiche per crearla


*-William James,
Principi di psicologia (1890)*

Mindfulness nel contesto educativo


La *mindfulness* è fondamentale per imparare a prestare attenzione al momento presente, a essere gentili, curiosi e non giudicanti verso di sé e gli altri



La *mindfulness* è fondamentale in adolescenza per l'importanza dell'apprendimento della capacità di regolazione emozionale e comportamentale



La capacità di autoregolazione attentiva ed emotiva correlano positivamente alle abilità socio-emotive e al rendimento scolastico



Il legame tra *mindfulness* ed educazione è fondamentale

Amy Saltzman (2012) sottolinea il paradosso del sistema educativo: nonostante agli studenti venga chiesto continuamente di prestare attenzione, nessuno insegna loro come farlo

Mindfulness-Based Approaches with Children and Adolescents: A Preliminary Review of Current Research in an Emergent Field

Christine A. Burke

Table 2 Mindfulness-based interventions with elementary school children

Study	N	Participant type	Age/grade	Intervention location	Research design	Treatment group	Control group	Random assignment	Dependent variables	Effect size/data reported
Ott (2002)	1	Clinical, outpatient, gastroesophageal reflux	9 years	Outpatient clinic	Single case study	Mindfulness meditation intervention	No	No	Reflux symptoms, medication, sleep quality	No data reported
Semple et al. (2005)	5	Clinical, anxiety symptoms	7–8 years	School	Within participant pre-post	MBCT-C, 6 wks, wkly	No	No	Anxiety, internalizing and externalizing behavior	Trends in results, clinical observation
Singh, et al. (2009)	2	Clinical, ADHD	10–12 years	Not stated	Multiple baseline across participants	Mindfulness training, 12 wks parent, 12 wks chd	No	No	Children's compliance	Percentage data reported
Napoli, et al. (2005)	228	Non-clinical school students	Grades 1–3	School	RCT between groups pre-post	AAP fortnightly 24 wks	Yes quiet activities/reading	Yes	Attention; social skills; behavior	Cohen's $d = .39-.60$
Saltzman and Goldin (2008)	74 (39 chn, 35 parents)	Non-clinical self referred	Grades 4–6	Community setting	Between groups pre-post, wait list control	Modified MBSR, 8 wks, wkly	Yes, waitlist	Not stated	Attention, self compassion, depression, anxiety, mindfulness	Data analysis incomplete
Lee et al. (2008)	25	Non-clinical reading class	9–12 years	Community based reading clinic	Pre-post intent to treat, 2 phase open trial	MBCT-C, 8 wks, wkly	No	No	Internalizing, externalizing behavior, anxiety, depression	Cohen's $d = .11-.40$

MBSR Mindfulness-based stress reduction, *MBCT-C* Mindfulness-based cognitive therapy-children, *AAP* Attention academy program, *ADHD* Attention deficit hyperactivity disorder, *chd* Child, *chn* Children, *wkly* Weekly, *wks* Weeks, *develop. disabilities* Developmental disabilities

Burke, 2010 (2)

Table 3 Mindfulness-based interventions with high school adolescents

Study	<i>N</i>	Participant type	Age/grade	Intervention location	Research design	Treatment group	Control group	Random assignment	Dependent variables	Effect size/data reported
Bootzin and Stevens (2005)	55	Clinical, adolescents substance use, sleep disorders	13–19 years	Clinic	Pre-post within participant	MBSR, 5/6 wks, 6 wk cog th, light th, educ., stimulus control inst.	No	No	Sleep data, substance use, mental health, worry	$p < .05$ for some sleep indices, $p > .05$ all other measures
Zylowska et al. (2007)	32; 8 adol, 24 adults	Clinical, ADHD or probable ADHD	Adol mean 15.6 years; adult mean 48.5 years	Not stated	Pre-post within participant	MAPs, 8 wks, wkly	No	No	Attention, anxiety, depression	Pooled results, $p < .01$ some attn meas., all others non-signif
Singh, et al. (2007)	3	Clinical, conduct disorder	13–14 years	Not stated	Multiple base line across participants	Mindfulness meditation, 4 wks, 3 × wkly, 25 wk mindfulness practice	No	No	Aggressive and non-compliant incidents	Percentage data reported
Singh et al. (2008)	1	Clinical, Prader-Willi syndrome	17 years	Home-based	Within participant multiple baseline-changing criterion design	Multiple components: mindfulness meditation × 24 months, exercise, food awareness program	No	No	Body weight	Weight change in lbs, BMI reported
Bogels et al. (2008)	14 adol and parents	Clinical, externalizing disorders, mixed	11–18 years	Community mental health clinic	Within participant pre-post, intent to treat, f/up	MBCT, 8 wks, wkly	Non-random waitlist	Not stated	Goals, behavior, happiness, mindfulness	Cohen's $d = -0.1-1.4$; f/up: $d = -.02-1.5$, (at 8 wks)
Biegel et al. (2009)	102	Clinical, psychiatric disorders, mixed	14–18 years	Outpatient psychiatric clinic	RCT, pre-post, f/up within group	MBSR, 8 wks, wkly and TAU	Yes, TAU, waitlist	Yes	Mental health, GAF, stress, psych symp, self-esteem	Cohen's $d = .14-1.11$ ($d = \text{pre-test}-f/up$)
Wall (2005)	Not reported	Non-clinical school students	11–13 years	School	Nil	Elements of MBSR and Tai Chi	No	No	Nil	Informal observation, comments
Beauchemin et al. (2008)	34	Non-clinical volunteers	13–18 years	School	Pre-post within participant	Mindfulness meditation	No	No	Anxiety, social skills, academic performance	All $ps < .05$

Mindfulness Interventions with Youth: A Meta-Analysis

Table 1 Effect sizes aggregated across all dependent variable types and study characteristics for included studies

Study	Outcome types	<i>del</i>	CI	<i>N</i>	Design type	Sample origin	Outside practice	Instructor experience	Tx length (wks)	Intervention type
Barnes et al. (2004)	Obj, Psych	0.20	[-0.17, 0.56]	73	RCT	Non-clinical	Yes	Trained	12	Part of MBSR
Barnes et al. (2008)	Obj	0.13	[-0.47, 0.72]	66	RCT	Non-clinical	Yes	Trained	12	Part of MBSR
Beauchemin et al. (2008)	Psych	0.62	[0.08, 1.16]	34	Tx only	Clinical	No	Trained	5	Other
Biegel et al. (2009)	Psych	0.56	[0.23, 0.89]	102	RCT	Clinical	Yes	Experienced	8	MBSR
Bogels et al. (2008)	Obj, Psych, Mind	0.24	[-0.57, 1.06]	14	Tx only	Clinical	Yes	Experienced	8	MBCT
Broderick and Metz (2009)	Psych	0.28	[-0.01, 0.56]	120	OCT	Non-clinical	No	Experienced	5	Other
Flook et al. (2010)	Mind	0.11	[-0.29, 0.51]	64	RCT	Non-clinical	No	Experienced	8	Other
Gregoski et al. (2010)	Obj	0.23	[-0.01, 0.47]	166	RCT	Non-clinical	Yes	Trained	12	Part of MBSR
Huppert and Johnson (2010)	Mind	0.00	[-0.29, 0.29]	155	RCT	Non-clinical	Yes	Experienced	4	MBSR
Joyce et al. (2010)	Psych	0.11	[-0.18, 0.41]	175	Tx only	Non-clinical	No	Trained	10	Other
Lee et al. (2008)	Psych	0.21	[-0.56, 0.99]	25	Tx only	Non-clinical	Yes	Experienced	12	MBCT
Liehr and Diaz (2010)	Psych	1.14	[0.20, 2.09]	18	RCT	Non-clinical	No	Experienced	2	Other
Mendelson et al. (2010)	Psych	0.22	[-0.13, 0.56]	97	RCT	Non-clinical	No	Experienced	12	Other
Napoli et al. (2005)	Obj, Psych, Mind	0.28	[0.05, 0.51]	228	RCT	Non-clinical	No	Experienced	24	Other
Schonert-Reichl et al. (2010)	Psych, Mind	0.21	[0.01, 0.41]	246	RCT	Non-clinical	Yes	Trained	10	Other
Semple et al. (2005)	Psych	0.16	[-0.58, 0.91]	4	Tx only	Clinical	Yes	Trained	6	Other
Semple et al. (2010) ^a	Psych, Mind	0.16	[-0.50, 0.81]	25	RCT	Non-clinical	Yes	Experienced	12	MBCT
Sibinga et al. (2011)	Psych	0.23	[-0.57, 1.03]	26	Tx only	Non-clinical	Yes	Experienced	9	MBSR
White (2011) ^a	Mind	0.01	[-0.39, 0.40]	155	RCT	Non-clinical	Yes	Experienced	8	Part of MBSR
Wright et al. (2011)	Obj, Psych	0.26	[-0.04, 0.56]	121	RCT	Non-clinical	Yes	Trained	12	Part of MBSR

Note: *Obj* = objective measures, *Psych* = measures of psychological symptoms, *Mind* = mindfulness-related measures (e.g., attention), *RCT* = randomized controlled trial, *OCT* = open-controlled trial (no randomization), *Tx* = treatment, *Tx only* = treatment only design, *del* = effect size (Becker 1988), *CI* = 95 % confidence interval, *N* = study sample size, *MBSR* = mindfulness-based stress reduction, *MBCT* = mindfulness-based cognitive therapy, *Tx length (wks)* = length of treatment in weeks; ^a = Included non-active control group, imputed control group *g* used in effect size computations



Mindfulness-based interventions in schools – a systematic review and meta-analysis

Charlotte Zenner, Solveig Hemleben-Kurz and Harald Walach *

Table 1 | Empirical studies on MBI's in a school-setting.

Study	N	Age range, mean (SD), grade and gender	School/ participant description (country)	Study design	Measures and domain		<i>g</i> Hedges Baseline equivalence	<i>g</i> Hedges Within-group	<i>g</i> Hedge Differences in change scores	Reported findings according to authors
RANDOMIZED CONTROLLED TRIALS										
1. Desmond and Hanich, 2010	40	11–12, 6th grade 41% female	Urban, public middle school, low income (USA)	M-group (<i>n</i> = 15) vs. C (<i>n</i> = 25)	BRIEF (teacher)	T	0.26	0.04	0.31	MANOVAs: No sig. time by group interaction (all <i>ps</i> > 0.05). Multiple regression analysis: Sig. interaction between pre-test score and group membership for predicting differences in one of eight subscales, indicating that M-group showed greater improvement in ability to shift (<i>p</i> < 0.05). In general, M-group maintained or improved executive function skills, while C shows a decline.
2. Flook et al., 2010	64	7–9 8.23 (0.66) 2nd + 3rd grade 55% female	On-campus university elementary school, diverse ethical backgrounds (USA)	M-group (<i>n</i> = 32) vs. C (<i>n</i> = 32)	BRIEF (teacher) BRIEF (parent)	T T	0.31 0.27	0.20 0.39	0.08 0.12	MANCOVAs with post-test scores as outcome variables: No sig. group main effect, indicating no group differences for pre- to post-test (<i>p</i> < 0.05). Sig. interaction between baseline levels and group in teacher report (<i>p</i> = 0.005) as well as in parent report (<i>p</i> = 0.020). In M-group, children with poorer initial executive function showed greater improvement at Time 2 compared to C.
3. Franco Justo, 2009	60	15–18 17.3 1st + 2nd year high school 72% female	3 public secondary schools (Spain)	M-group (<i>n</i> = 30) vs. waitlist c (<i>n</i> = 30), follow-up after 3 months	TTCT (verbal) -Fluency -Flexibility -Originality	C	-0.11 0.05 -0.05	1.50 1.53 1.61	1.48 1.87 1.67	Independent and dependent <i>t</i> -Tests: Sig. improvement from pre- to post-test in M-group in all subscales (Fluency, Flexibility, Originality; all <i>ps</i> < 0.01) and no improvement in C (all <i>ps</i> > 0.05). At post-test M-group shows significantly higher scores in all subscales compared to C (all <i>ps</i> < 0.01). Effects sustained at follow up compared to pre-test (all <i>ps</i> = 0.001), but not compared to post-test (all <i>ps</i> > 0.05).
4. Franco Justo et al., 2011a	61	16–18 16.75 (0.83) 1st year high school 48% female	3 compulsory secondary schools, public (Spain)	M-group (<i>n</i> = 31) vs. waitlist c (<i>n</i> = 30) Schools were allocated at random	Grades Self-concept STAI	C R E	-0.27 0.59 0.35	1.52 1.55 0.62	1.43 1.84 0.11	Dependent and independent <i>t</i> -Tests: Sig. improvement from pre- to post-test in M-group in all measures (all <i>ps</i> = 0.001) and no improvement in C (all <i>ps</i> > 0.05). Sig. difference between groups in post-tests (all <i>ps</i> > 0.01). Detailed analysis: students with middle range academic performance show the most improvement in Grades (Cohen's <i>d</i> = 3.05), Students with low self-concept show most improvement in self-concept (<i>d</i> = 5.12), students with high state anxiety benefited the most on state anxiety (<i>d</i> = 1.95) and students with medium trait anxiety benefited the most on trait anxiety (<i>d</i> = 1.44).

(Continued)

The Effectiveness of Mindfulness-Based Therapies for ADHD: A Meta-Analytic Review

Journal of Attention Disorders
1–17

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Molly Cairncross¹ and Carlin J. Miller¹

Abstract

Objective: Mindfulness-based therapies (MBTs) have been shown to be efficacious in treating internally focused psychological disorders (e.g., depression); however, it is still unclear whether MBTs provide improved functioning and symptom relief for individuals with externalizing disorders, including ADHD. To clarify the literature on the effectiveness of MBTs in treating ADHD and to guide future research, an effect-size analysis was conducted. **Method:** A systematic review of studies published in PsycINFO, PubMed, and Google Scholar was completed from the earliest available date until December 2014. **Results:** A total of 10 studies were included in the analysis of inattention and the overall effect size was $d = -.66$. A total of nine studies were included in the analysis of hyperactivity/impulsivity and the overall effect was calculated at $d = -.53$. **Conclusion:** Results of this study highlight the possible benefits of MBTs in reducing symptoms of ADHD. (*J. of Att. Dis.* XXXX; XX(X) XX-XX)

REVIEW ARTICLE

Autism and Mind–Body Therapies: A Systematic Review

Sarah Hourston, ND, MS^{1,2} and Rachel Atchley, PhD¹

Abstract

Background: Mind–body therapies are often used by people with autism spectrum disorders (ASD). However, there has been little examination into which types of mind–body therapies have been investigated for people with ASD and for what purposes. A systematic review was conducted to evaluate the existing evidence for mind–body therapies for people with ASD, particularly to determine the types of mind–body therapies used and the outcomes that are targeted.

Methods: PubMed, PsychInfo, and Scopus were searched using terms for ASD and mind–body therapies. Sixteen studies were selected for review; these studies tested interventions using mindfulness, meditation, yoga, Nei Yang Gong, and acceptance commitment therapy. Most study outcomes targeted behavior, psychological symptoms, and quality of life for children and adults with ASD as well as their parents.

Results: There was little overlap between studies on the types of mind–body therapies used and associated outcomes, and only three of the studies were randomized controlled trials. Most studies were small and uncontrolled. Some studies modified the mind–body therapies to increase accessibility for people with ASD.

Conclusion: The evidence for mind–body therapies for people with ASD is limited and would benefit from larger randomized controlled trials.

Keywords: autism, Asperger syndrome, mind-body, yoga, mindfulness



Mindfulness-Oriented Meditation for Primary School Children: Effects on Attention and Psychological Well-Being

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Mindfulness-based interventions are increasingly being used as methods to promote psychological well-being of clinical and non-clinical adult populations. Much less is known, however, on the feasibility of these forms of mental training on healthy primary school students. Here, we tested the effects of a mindfulness-meditation training on a group of 16 healthy children within 7–8 years of age from an Italian primary school. An active control condition focused on emotion awareness was employed on a group of 15 age-matched healthy children from the same school. Both programs were delivered by the same instructors three times per week, for 8 total weeks. The same main teacher of the two classes did not participate in the trainings but she completed questionnaires aimed at giving comprehensive pre-post training evaluations of behavior, social, emotion, and attention regulation skills in the children. A children's self-report measure of mood and depressive symptoms was also used. From the teacher's reports we found a specific positive effect of the mindfulness-meditation training in reducing attention problems and also positive effects of both trainings in reducing children's internalizing problems. However, subjectively, no child in either group reported less depressive symptoms after the trainings. The findings were interpreted as suggestive of a positive effect of mindfulness-meditation on several children's psychological well-being dimensions and were also discussed in light of the discrepancy between teacher and children's reports. More generally, the results were held to speak in favor of the effectiveness of mindfulness-based interventions for healthy primary school children.

Keywords: primary school children, mindfulness-meditation, teachers' report, attention, psychological well-being

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TABLE 3 | Mean T-scores and standard deviations (in parentheses) obtained by children in the MOM and control groups in the two testing sessions (i.e., before and after the trainings).

CTRS – R	Pre-training MOM group M T-score (SD)	Post-training MOM group M T-score (SD)	Pre-training control group M T-score (SD)	Post-training control group M T-score (SD)
Oppositional	49 (6.76)	48.81 (7.12)	49.46 (5.99)	48.8 (5.11)
Cognitive Problems/Inattention*	49.81 (8.63)	47.75 (5.49)	45.73 (3.01)	45.6 (2.84)
Hyperactivity	48.37 (6.84)	47.87 (6.39)	47.2 (5.33)	47.13 (5.71)
Anxious-Shy	48.56 (9.23)	47.12 (8.13)	44.06 (4.23)	43.26 (3.89)
Perfectionism	45.81 (7.79)	45.12 (7.01)	44.26 (5.67)	43.46 (4.47)
Social Problems	53.12 (9.72)	52 (8.54)	51.06 (5.75)	50 (6.30)
ADHD Index*	48.06 (6.60)	46.37 (4.93)	46.33 (5.15)	46.46 (5.22)
DSM-IV: Inattention**	50.68 (10.16)	48.75 (6.64)	46.73 (5.02)	46.53 (5.04)
DSM-IV: Hyperactivity	47.50 (4.85)	47.31 (4.46)	46.93 (5.25)	47 (5.81)
CGI: Restless-Impulsive*	48.25 (6.90)	46.62 (6.14)	45.86 (5.26)	45.73 (5.11)
CGI: Emotional Lability	49.87 (7.75)	48.06 (6.58)	46.13 (5.19)	46 (5.19)
CGI: Total	48.5 (7.08)	46.81 (6.36)	45.66 (5.17)	45.46 (4.88)

CTRS-R stands for Conners Teacher Rating Scale-Revised; ADHD stands for Attention deficit/hyperactivity disorder; CGI stands for Conners Global Index; DSM-IV stands for Diagnostic and Statistical Manual of Mental Disorders 4th Edition. * Indicates the scales for which significant effects were found in the MANOVA analysis after the application of a Bonferroni correction for multiple comparisons; ** Indicates the scales for which marginally significant effects were found in the MANOVA analysis after the application of the Bonferroni correction (see main text for further details). The anxious-shy, perfectionism, social problems, CGI: Emotional Lability, and CGI: Total scores were not individually analyzed but the data are still reported in the table.

MOM vs CNT



MOM

3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS
3' breath	4' breath	5' breath	6' breath	7' breath	8' breath	9' breath	10' breath
3' body	4' body	5' body	6' body	7' body	8' body	9' body	10' body
3' thoughts	4' thoughts	5' thoughts	6' thoughts	7' thoughts	8' thoughts	9' thoughts	10' thoughts

CNT

3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS	3 DAYS
4' reading	6' reading	7' reading	9' reading	10' reading	12' reading	13' reading	14' reading
5' comments	6' comments	8' comments	9' comments	11' comments	12' comments	14' comments	16' comments

30 min

45 min

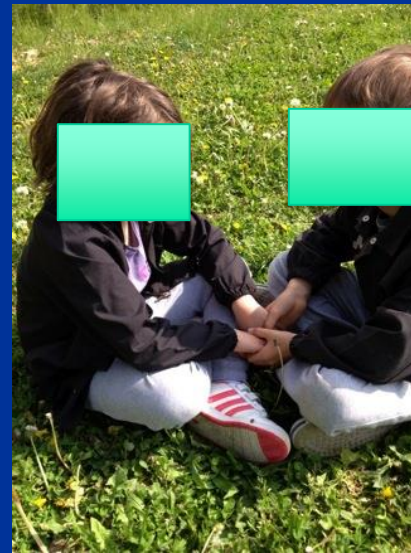
1 h

1 h e 30 min

Aspetti del training MOM

Componenti chiave:

1. Calmare la mente e focalizzare l'attenzione sul respiro
2. Essere presenti alle sensazioni provenienti dal corpo
3. Osservazione dei pensieri e emozioni
4. Gentilezza verso se stessi e gli altri



Cristiano Crescentini e Deny Menghini
(a cura di)

La mindfulness per l'ADHD e i disturbi del neurosviluppo

*Applicazione clinica della Meditazione
Orientata alla Mindfulness – MOM*

Neuropsicologia in età evolutiva

Teorie, modelli, strumenti di diagnosi e intervento

Direttore *Stefano Vicari*

Erickson

Visioni e atteggiamenti verso la Mindfulness in ambito educativo

Atteggiamenti che conducono al fallimento

1. Diffidenza aprioristica
2. Fiducia totale

Aperto scetticismo e disponibilità a sperimentare

Due possibili visioni della scuola

PALESTRA DI VITA

Normale che ci siano
alti livelli di Stress

Scuola disfunzionale
che "fa male" e luogo
di sofferenza...



LUOGO EDUCATIVO

Promuovere attività e
usare strumenti che
riducano il livello di
disagio nella scuola



Scuola Apprendimento Stress

Studio quadriennale dell'OMS su comportamenti collegati alla salute in età scolare in Italia (Cavallo 2016)

Molto o abbastanza stressati dalla scuola

11 anni

47% maschi 37% femmine

13 anni

51% maschi 57% femmine

15 anni

52% maschi 68% femmine

Temperament and character effects on late adolescents' well-being and emotional-behavioural difficulties

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ABSTRACT

Background. Research on adults points to personality as a crucial determinant of well-being. The present study investigates the question of personality's relation to well-being and psychosocial adjustment in adolescence.

Methods. We assessed the role of temperament and character (Temperament and Character Inventory, TCI-125), on psychological well-being (PWB; Psychological Well-Being scales), subjective well-being (SWB; Positive and Negative Affect, PA and NA, respectively), and psychosocial adjustment (emotional-behavioural problems measured by the Strengths and Difficulties Questionnaire for Adolescents, SDQ-A), in 72 Italian late adolescents (aged 17.5 ± 0.75). Multiple regressions were conducted to predict PWB, SWB, and SDQ-A scores using TCI-125 scales as predictors.

Results. Character maturity, and in particular Self-Directedness, had a widespread protective effect on well-being and psychosocial adjustment, while different strengths and emotional-behavioural difficulties were associated to specific temperamental and character traits. For example, Harm-Avoidance and Novelty-Seeking positively predicted internalized and externalized problems, respectively.

Discussion. The present results suggest the usefulness of continuing to evaluate temperament and, in particular, character dimensions in investigations focused on adolescents' well-being and psychosocial functioning, especially in the contexts of potential interventions aimed at enhancing development of adolescents' character dimensions at the intrapersonal, interpersonal, and transpersonal levels.

Subjects Cognitive Disorders, Psychiatry and Psychology

Keywords Adolescents, Temperament and character inventory, Psychological well-being, Personality, Strengths and Difficulties Questionnaire, Subjective well-being

Le dimensioni osservate:

1. Self-Directedness
2. Cooperativeness
3. Self-Trascendences

CONCLUSIONS

In conclusion, despite its limitations, the current study shows the importance of continuing to assess personality's relation to well-being and psychosocial functioning in adolescence. We found that temperament and character dimensions are significantly associated with different aspects of well-being and psychosocial adjustment in adolescents. In particular, Self-Directedness, a crucial aspect of character maturity, had a widespread protective effect on well-being and emotional-behavioural problems. Combining Self-Directedness and Cooperativeness, we also showed a marked association between immaturity of character and low psychological well-being and psychosocial adjustment. More generally, the present results suggest the usefulness of continuing to evaluate (TCI) character dimensions in investigations focused on adolescents' well-being and psychosocial functioning, especially in the contexts of potential interventions aimed at enhancing development of adolescents' character dimensions at the intrapersonal, interpersonal, and transpersonal levels.

Modelli educativi attuali

Formati all'interno dell'impalcatura della nostra attuale
società

e...

...si tendeva ad accettarli senza troppe obiezioni

Bisogno di nuovi modelli

- "Ricercatori scientifici"
- Esperienza diretta
- Includere l'errore come parte della ricerca
- Indagare dentro e fuori

Necessario imparare a prestare **ATTENZIONE**

VISIONI DELLA MINDFULNESS

1. Pratica per migliorare il rapporto con sé e altri
2. Pratica Transpersonale
3. Pratica per affermazione di sé



Mindfulness Soft e Hard

SOFT: non spirituale – fornisce soluzioni a problemi in ambito educativo (attenzione, bullismo, adhd) ma non considera gli aspetti morali ma solo il livello "didattico".

HARD: parte da una prospettiva psicopedagogica e fornisce indicazioni etiche orientate a diminuire la sofferenza nella nostra vita.

- Aumento della consapevolezza di sé e modo differente di affrontare i problemi.
- Arricchimento delle "competenze di cittadinanza" per promuovere l'impegno vs se stessi e gli altri.

(A.Vigilante 2017)

Applicazioni pratiche in ambito educativo

(bambini – adolescenti – insegnanti)

Mindfulness nel contesto educativo

- Pochi studi (...difficoltà a realizzarli).
- Campioni piccoli, studi clinici (ADHD): riduzione ansia, stress o disordini della condotta.
- Solo di recente: studi anche su carattere, funzioni cognitive, attenzione.



Benefici osservabili negli adolescenti

- Sviluppo di competenze sociali ed emotive (fondamentale in questa fase di passaggio e formazione dell'identità).
- Miglioramento di comportamenti antisociali, riduzione aggressività, disturbi della condotta, del disturbo ossessivo compulsivo e ADHD.
- Autoregolazione dell'attenzione e miglioramento della reattività allo stress.
- Riduzione ansia e prevenzione della depressione.
- Miglioramento di disturbi psicosomatici.

Mindfulness per insegnanti

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Mindfulness for teachers: A pilot study to assess effects on stress, burnout and teaching efficacy

Lisa Flook*, Simon B. Goldberg, Laura Pinger, Katherine Bonus, and Richard J. Davidson
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Journal of Educational Psychology

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Mindfulness Training and Reductions in Teacher Stress and Burnout: Results From Two Randomized, Waitlist-Control Field Trials

Robert W. Roeser
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University of British Columbia

J Child Fam Stud (2010) 19:184–189

DOI 10.1007/s10826-009-9344-0

ORIGINAL PAPER

Mindfulness-Based Stress Reduction (MBSR) for Primary School Teachers

Eluned Gold · Alistair Smith · Ieuan Hopper ·
David Herne · Glenis Tansey · Christine Hulland

Mindfulness

DOI 10.1007/s12671-012-0094-5

REVIEW

Integrating Mindfulness Training into K-12 Education: Fostering the Resilience of Teachers and Students

John Meiklejohn · Catherine Phillips ·
M. Lee Freedman · Mary Lee Griffin · Gina Biegel ·
Andy Roach · Jenny Frank · Christine Burke ·
Laura Pinger · Geoff Soloway · Roberta Isberg ·
Erica Sibinga · Laurie Grossman · Amy Saltzman

Mindfulness Training and Reductions in Teacher Stress and Burnout: Results From Two Randomized, Waitlist-Control Field Trials

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Portland State University

The effects of randomization to mindfulness training (MT) or to a waitlist-control condition on psychological and physiological indicators of teachers' occupational stress and burnout were examined in 2 field trials. The sample included 113 elementary and secondary school teachers (89% female) from Canada and the United States. Measures were collected at baseline, post-program, and 3-month follow-up; teachers were randomly assigned to condition after baseline assessment. Results showed that 87% of teachers completed the program and found it beneficial. Teachers randomized to MT showed greater mindfulness, focused attention and working memory capacity, and occupational self-compassion, as well as lower levels of occupational stress and burnout at post-program and follow-up, than did those in the control condition. No statistically significant differences due to MT were found for physiological measures of stress. Mediation analyses showed that group differences in mindfulness and self-compassion at post-program mediated reductions in stress and burnout as well as symptoms of anxiety and depression at follow-up. Implications for teaching and learning are discussed.

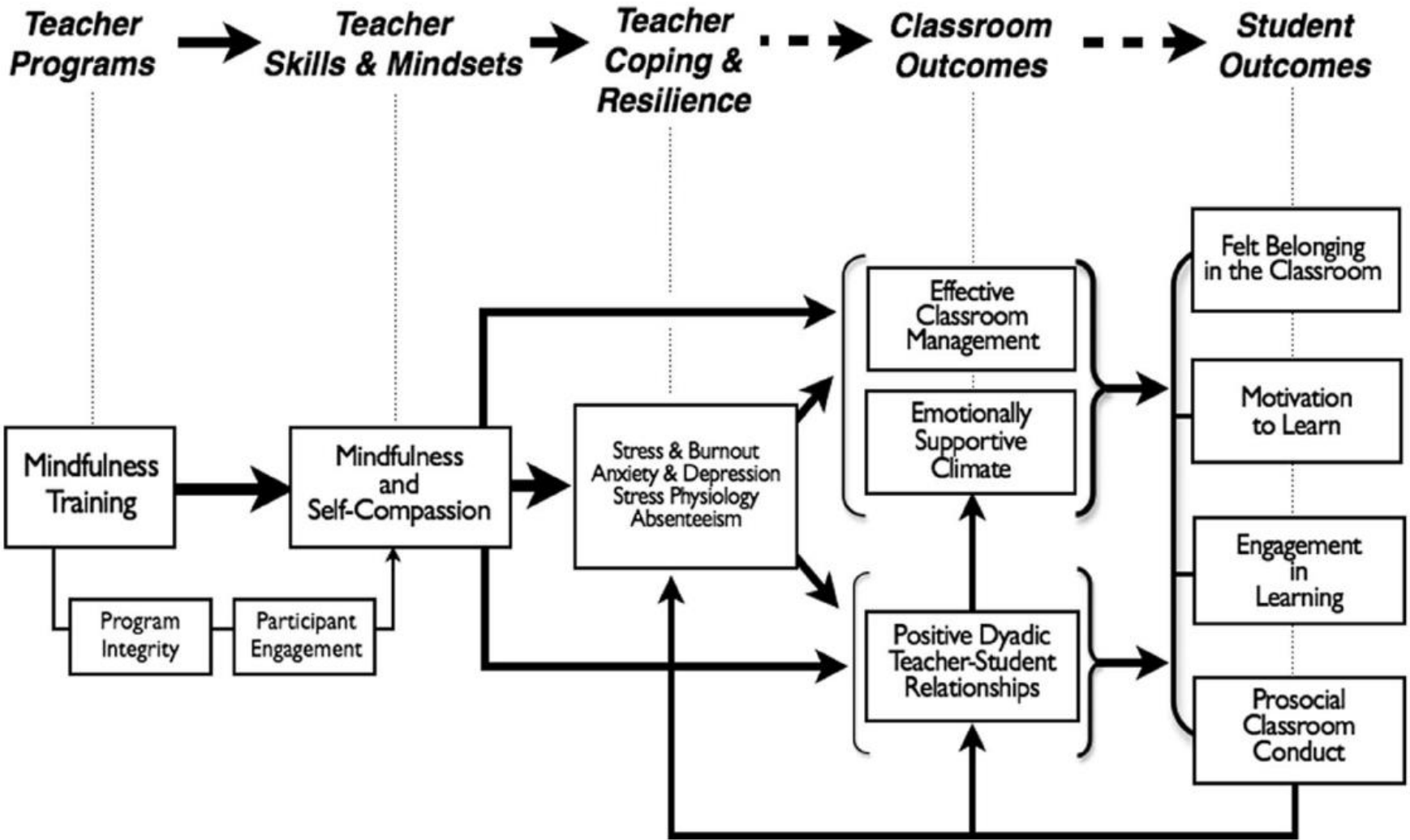


Figure 1. Teacher mindfulness training logic model and theory of change.

Effetti della mindfulness su insegnanti

- Riduzione di ansia di stato e tratto, riduzione dell'esaurimento emotivo.
- Miglioramenti in sintomi di depressione e stress, migliore accettazione, atteggiamento non-giudicante.
- Migliore abilità nel riconoscimento delle emozioni proprie e altrui.

Perché essere insegnanti consapevoli?

BENEFICI:

- Osservazione dei problemi
- Gestione dei genitori
- Cambiamenti nell'ambiente scolastico
- Consapevolezza del ruolo
- Consapevolezza delle emozioni (anche quelle sgradite)
- Gestione dello stress e dell'ansia

Il Progetto "Mindfulness Educazione Alla Consapevolezza"

(Università di Udine)

Studio, ricerca, diffusione del metodo MOM in ambito scolastico – educativo

Insegnanti e adolescenti

- 8 settimane di training 1 volta la settimana.
- Esercitazioni da fare a casa giornalmente.
- 1/2 ora ogni giorno

Bambini

- 8 settimane di training 3 volta la settimana.
- 1 volta con istruttore MOM, 2 con insegnante.
- 9 min → 30 min

“... la coltivazione sistematica di attenzione, consapevolezza e gentilezza verso gli altri e verso di sè, può aiutare gli adolescenti a navigare in modo più efficace attraverso un momento nella vita che può essere fonte di confusione, pieno di incertezze, ed estremamente stressante. Queste abilità di vita costituiscono la base per la costruzione di relazioni di successo, a cominciare da se stessi. Inoltre possono anche contribuire a ottimizzare l'ambiente sociale e scolastico...”

J. Kabat Zinn