

La ricerca

Meditare aiuta ad abbattere ansia e stress

"Sorprendenti" risultati dalla ricerca condotta alla Scuola Imt Alti Studi

Vincenti a pagina 9

Meditare fa bene, lo dice anche la scienza

I "sorprendenti" risultati di uno studio condotto dalla scuola Imt Alti Studi confermano la bontà delle pratiche di autorilassamento

LUCCA

Meditate, gente, meditate: lo stress e l'ansia sono destinati a evaporare, con benefici per il cervello. Lo conferma un nuovo studio della Scuola Imt Alti Studi Lucca, che rivela come i benefici che molte persone attribuiscono alla pratica della meditazione, come la riduzione dell'ansia e dello stress, siano accompagnati da specifici cambiamenti nel cervello, rivelati con la risonanza magnetica cerebrale.

Nello studio, i cui risultati sono stati recentemente pubblicati sulla rivista internazionale Brain and Cognition, vengono esaminati gli effetti della Meditazione Trascendentale, una tecnica di

rilassamento che consiste nella ripetizione silenziosa di un particolare suono senza significato, un «mantra» personale affidato dall'insegnante.

Grazie alla David Lynch Foundation, alla Fondazione Cassa di Risparmio di Lucca e all'Istituto Superiore d'Istruzione Sandro Pertini, è nata alcuni anni fa una delle prime esperienze di meditazione in ambiente lavorativo e scolastico, il Progetto 'Quiet Time - Meditate Lucca'. Nello studio, condotto dal Molecular Mind Lab (MoMiLab) della Scuola IMT, 34 giovani volontari sani sono stati suddivisi in due gruppi: il primo che ha praticato per tre mesi la Meditazione Trascendentale ogni giorno, mattina e

sera, in due sedute da venti minuti ciascuna; il secondo ha mantenuto inalterate le proprie abitudini di vita. All'inizio dello studio, i ricercatori hanno misurato tramite test psicometrici i livelli di ansia e la capacità di gestione dello stress di ciascun partecipante; i volontari sono stati sottoposti a un esame di risonanza magnetica funzionale a riposo, che consente di visualizzare l'attività nervosa e di misurare la connettività funzionale tra le aree del cervello. Dopo tre mesi sono stati ripetuti sia i test psicometrici sia la risonanza magnetica funzionale.

Il risultato? Sorprendente. «L'analisi dei dati ha mostrato che i livelli di ansia e di stress

percepito si erano significativamente ridotti nella maggior parte dei meditatori, ma in nessuno dei soggetti di controllo», spiega Giulia Avvenuti, allieva di dottorato della Scuola IMT e primo autore dello studio. «Sono molto felice dei risultati di questo studio. Ora sto lavorando per aprire in Italia la mia fondazione con insegnanti che realizzino progetti di meditazione trascendentale. Quello che desidero è mostrare tutti i benefici di questa tecnica tanto nelle scuole che in ambienti di lavoro e gruppi sociali, coinvolgendo quante più persone possibile» dice il regista David Lynch, che da anni promuove la diffusione di questo metodo.

© RIPRODUZIONE RISERVATA

IL REGISTA

David Lynch grande sostenitore di queste tecniche ha supportato la ricerca



Il regista David Lynch

L'intervista

"Si aprono nuove prospettive"

Il professor Pietrini, direttore della Imt, spiega come è stato e a quali risultati ha portato lo studio sulla meditazione

LUCCA

«Il dato che la pratica della Meditazione Trascendentale esercita effetti misurabili sul dialogo tra strutture cerebrali importanti nella modulazione dell'equilibrio emotivo-affettivo apre nuove prospettive nella comprensione dei rapporti tra mente e cervello». Lo conferma il professor Pietro Pietrini, direttore della Scuola IMT e coordinatore dello studio, dal quale arriva la conferma di una comune base cerebrale per strategie terapeutiche psicofarmacologiche da una parte e psicoterapeutiche dall'altra.

«C'erano studi già su altre tecniche di meditazione, grazie alla Fondazione Cassa, che ha creduto con coraggio in questo progetto, e alla Fondazione Lynch, abbiamo verificato gli effetti. Qualunque attività mentale ha un correlato celebrale: lo sco-

po dello studio era quello di capire se la meditazione fa bene e cosa succede al cervello».

Cosa ha dimostrato lo studio?

«E' stato un esperimento controllato per garantire la scientificità e dopo tre mesi dall'inizio abbiamo potuto verificare come coloro che si erano sottoposti alla meditazione trascendentale presentavano una ansia e stress percepiti inferiore di circa il 20 per cento rispetto all'inizio del periodo, mentre nell'altro gruppo era leggermente superiori alla fase iniziale. Dati che non sono legati al caso. Ma c'è anche un altro aspetto importante, ovvero che abbiamo visto come ci fossero mutamenti nella connettività funzionale tra le varie parti del cervello».

Benefici che potrebbero essere alla portata di tutti.

«Certo, l'impegno richiesto è di venti minuti due volte al giorno, lo stesso Lynch ci ha spiegato che sono 30 anni che non rinuncia mai e del resto si può fare ovunque, a casa come in ufficio. Credo ci possano essere benefici anche per le scuole, penso ai ragazzi che hanno qualche difficoltà che incide sul rendimento».

Cosa vi attende nel futuro?

«Ci interessa approfondire uno studio su rapporto tra il sonno, in particolare negli adolescenti, con la meditazione. Il sonno è un indice iniziale importante nei casi di depressione».

Fabrizio Vincenti

© RIPRODUZIONE RISERVATA

11

La nostra salute

Meditare fa bene, lo dice anche la scienza

Un esperimento controllato ha dimostrato che la meditazione trascendentale riduce l'ansia e lo stress percepiti del 20 per cento rispetto all'inizio del periodo.



Si aprono nuove prospettive

Il professor Pietro Pietrini, direttore della Scuola IMT e coordinatore dello studio, dal quale arriva la conferma di una comune base cerebrale per strategie terapeutiche psicofarmacologiche da una parte e psicoterapeutiche dall'altra.

NOLEGGIO FURGONI?

Te aspettiamo a Lucca

Per info: Mario Carlo Del Prete 0571 - Tel. 333.1779120
Per info: Leonardo 0571 - Tel. 333.1779120

AmicoBlu

IN COLLABORAZIONE CON DAVID LYNCH

Ricerca **Imt**: «La meditazione riduce l'ansia»

LUCCA. Un nuovo studio di **Imt** rivela come i benefici che molte persone attribuiscono alla pratica della meditazione, come la riduzione dell'ansia e dello stress, siano accompagnati da specifici cambiamenti nel cervello, rivelati con la risonanza magnetica cerebrale.

Nello studio, i cui risultati sono stati recentemente pubblicati sulla rivista internazionale "Brain and Cognition", sono stati esaminati gli effetti della meditazione trascendentale, una tecnica di rilassamento che consiste nella ripetizione silenziosa di un particolare suono senza significato, un "mantra" personale affidato dall'insegnante. La meditazione trascendentale ha incontrato un successo crescente come tecnica di rilassamento in varie parti del mondo, compresa l'Italia dove, grazie alla David Lynch Foundation, alla **Fondazione Crl** e all'Istituto superiore Sandro Pertini, è nata alcuni anni fa una delle prime esperienze di meditazione in ambiente lavorativo e scolastico, il Progetto "Quiet Time - Meditate **Lucca**". Nello studio, condotto dal Molecular Mind Lab

(MoMiLab) di **Imt**, 34 giovani volontari sono stati suddivisi in due gruppi: il primo praticava la meditazione trascendentale ogni giorno, mattina e sera, in due sedute da 20 minuti ciascuna; il secondo manteneva inalterate le proprie abitudini di vita. All'inizio dello studio, i ricercatori hanno misurato tramite test psicometrici i livelli di ansia e la capacità di gestione dello stress di ciascun partecipante; tutti sono stati sottoposti a un esame di risonanza magnetica funzionale a riposo che consente di visualizzare l'attività nervosa e di misurare la connettività funzionale tra le diverse aree del cervello, vale a dire come esse dialogano tra di loro in assenza di compiti o stimolazioni specifiche. Dopo tre mesi sono stati ripetuti sia i test psicometrici sia la risonanza magnetica funzionale. «L'analisi dei dati ha mostrato che i livelli di ansia e di stress percepito si erano significativamente ridotti nella maggior parte dei meditatori, ma in nessuno dei soggetti di controllo» spiega **Giulia Avvenuti**, allieva di dottorato di **Imt** e primo autore dello studio. «La

risonanza magnetica mostra che la riduzione dei livelli di ansia e stress è associata a cambiamenti nelle connessioni tra alcune aree cerebrali (quali il cingolo posteriore, il precuneo, il lobulo parietale superiore sinistro e l'insula) che rivestono un ruolo importante nella modulazione delle emozioni e nella percezione degli stati interni del nostro corpo». Nel gruppo di controllo non è stato invece evidenziato alcun cambiamento di questo tipo.

«Il dato che la pratica della meditazione trascendentale esercita effetti misurabili sul dialogo tra strutture cerebrali importanti nella modulazione dell'equilibrio emotivo-affettivo apre nuove prospettive nella comprensione dei rapporti tra mente e cervello - spiega il professor **Pietro Pietrini**, direttore di **Imt** e coordinatore dello studio - ed estende i risultati di studi anche recenti che indicano una comune base cerebrale per strategie terapeutiche psicofarmacologiche da una parte e psicoterapeutiche dall'altra».

«Sono molto felice dei risultati di questo studio. Ora sto lavorando per aprire in Italia la mia fondazione con insegnanti che realizzino progetti di meditazione trascendentale. Quello che desidero è mostrare tutti i benefici di questa tecnica tanto nelle scuole che in ambienti di lavoro e gruppi sociali, coinvolgendo quante più persone possibile» dice il regista David Lynch, che da anni attraverso la sua fondazione promuove la diffusione di questo metodo. —



Una scuola del regista in Italia

David Lynch:
ora c'è la prova,
la meditazione
è in grado
di ridurre
ansia e stress

Uno studio della Scuola **Imt** alti studi **Lucca**, pubblicato su *Brain and Cognition*, rivela come i benefici attribuiti alla meditazione, come la riduzione di ansia e stress, siano accompagnati da cambiamenti nel cervello rivelati con la risonanza magnetica cerebrale. «Sono molto felice dei risultati di questo studio», ha detto David Lynch. «Sto lavorando per aprire in Italia la mia fondazione con insegnanti



Regista
David Lynch,
74 anni, Oscar
alla carriera

che realizzino progetti di meditazione trascendentale per mostrare tutti i benefici tanto nelle scuole che in ambienti di lavoro e gruppi sociali, coinvolgendo quante più persone possibile». Il regista da anni con la sua fondazione promuove infatti la diffusione di questa tecnica. «La meditazione trascendentale ha effetti positivi sul benessere psicologico già dopo pochi mesi di pratica», conclude.





CERCA NOTIZIE

Griglia Timeline Grafici

Prima pagina Lombardia Lazio Campania Emilia Romagna Veneto Piemonte Puglia Sicilia Toscana Liguria Altre regioni

Cronaca Economia Politica Spettacoli e Cultura Sport Scienza e Tecnologia

Informazione locale Stampa estera

Meditazione, come cambia il cervello: studio Imt Lucca con la fondazione di David Lynch

GoNews 12693 1 ora fa

La meditazione trascendentale ha incontrato un successo crescente come tecnica di rilassamento in varie parti del mondo, compresa l'Italia dove, grazie alla David Lynch Foundation, alla Fondazione Cassa di Risparmio di Lucca e all'Istituto ...

[Leggi la notizia](#)

Persone: david lynch
giulia avvenuti
Organizzazioni: fondazione scuola
Luoghi: italia [lucca](#)
Tags: cervello risultati

CONDIVIDI QUESTA PAGINA SU



[Mi piace](#) Iscriviti per vedere cosa piace ai tuoi amici.

Tag Persone Organizzazioni Luoghi Prodotti

ALTRE FONTI (3)

Meditazione e cervello, i cambiamenti svelati dalla ricerca Imt



La **meditazione** trascendentale ha incontrato un successo crescente come tecnica di rilassamento in varie parti del mondo, compresa l'Italia dove, grazie alla David Lynch Foundation, alla Fondazione ...

[Lucca](#) in Diretta - 1 ora fa

Persone: david lynch foundation
sandro pertini
Organizzazioni: fondazione
Luoghi: italia [lucca](#)
Tags: cervello cambiamenti

Da IMT Lucca una ricerca sulle tracce neurali della meditazione nel cervello



La **meditazione** trascendentale ha incontrato un successo crescente come tecnica di rilassamento in varie parti del mondo, compresa l'Italia dove, grazie alla David Lynch Foundation, alla Fondazione ...

Lo Schermo - 3 ore fa

Persone: giulia avvenuti
david lynch foundation
Organizzazioni: scuola meditazione trascendentale
Luoghi: [lucca](#) italia
Tags: ricerca cervello

[Termini e condizioni d'uso](#) - [Contattaci](#)

Conosci Libero Mail?

Sai che Libero ti offre una mail gratis con 5GB di spazio cloud su web, cellulare e tablet?

[Scopri di più](#)

CITTA'

Milano	Palermo	Perugia
Roma	Firenze	Cagliari
Napoli	Genova	Trento
Bologna	Catanzaro	Potenza
Venezia	Ancona	Campobasso
Torino	Trieste	Aosta
Bari	L'Aquila	

[Altre città](#)

Gli articoli sono stati selezionati e posizionati in questa pagina in modo automatico. L'ora o la data visualizzate si riferiscono al momento in cui l'articolo è stato aggiunto o aggiornato in Libero 24x7



il nostro network

LIBERO PAGINE BIANCHE PAGINE GIALLE SUPEREVA TUTTOCITTÀ VIRGILIO

[Italiaonline.it](#) [Fusione](#) [Note legali](#) [Privacy](#) [Cookie Policy](#) [Aiuto](#) [Segnala Abuso](#)

© ITALIAONLINE 2020 - P. IVA 03970540963

We've updated our [Privacy Policy \(/neuroscience/privacy\)](/neuroscience/privacy) to make it clearer how we use your personal data.
We use cookies to provide you with a better experience, read our [Cookie Policy \(/neuroscience/cookies\)](/neuroscience/cookies)


I UNDERSTAND

TN *Stay connected with the science that matters to you*
Ensure you keep up to date with our FREE Newsletters

SUBSCRIBE

 **TN**
([HTTPS://WWW.TECHNOLOGYNETWORKS.COM/](https://www.technologynetworks.com/))

 **f**
([HTTPS://WWW.FACEBOOK.COM/NEURONEWSRESEARCH/](https://www.facebook.com/neuronewsresearch/))

 **SUBSCRIBE FOR FREE**
([HTTP://GO.TECHNOLOGYNETWORKS.COM/SUBSCRIBE-TO-NNR-NEWSLETTER](http://go.technologynetworks.com/subscribe-to-nnr-newsletter))

 **t**
([HTTP://WWW.TWITTER.COM/TECH_NETWORKS](http://www.twitter.com/tech_networks))

 **SIGN IN (/TN/LOGIN)**

 **@**
([HTTPS://WWW.INSTAGRAM.COM/TECHNOLOGYNETWORKS/](https://www.instagram.com/technologynetworks/))

 **in**
([HTTPS://WWW.LINKEDIN.COM/COMPANY/1179113](https://www.linkedin.com/company/1179113))

Like 1.6M

NNR

Neuroscience
News & Research [\(/neuroscience\)](/neuroscience)
from TECHNOLOGY NETWORKS [\(/neuroscience\)](/neuroscience)

Transcendental Meditation Linked to Increase in Functional Connectivity in the Brain

NEWS [\(/neuroscience/news\)](/neuroscience/news) ⓘ Feb 24, 2020 | Original story from IMT School for Advanced Studies Lucca
(<https://www.technologynetworks.com/neuroscience/go/lc/view-source-331184>)



Credit: Photo by Milan Popovic on Unsplash <https://unsplash.com/@itsmiki5>



 **Read Time: 3 min**

A new study has linked the emotional changes felt by people conducting transcendental meditation with measurable changes in the brain, data which adds further evidence for the benefits of the practice to the brain.

The research, which appeared in *Brain and Cognition*, examined the effects of the technique known as Transcendental Meditation (TM), which consists in the silent repetition of a meaningless sound, a "mantra".

For the study, conducted at the Molecular Mind Laboratory (MoMiLab) of IMT School for Advanced Studies Lucca, the researchers enrolled 34 healthy young volunteers and divided them in two groups. The first one practiced Transcendental Meditation 40 minutes per day in two sessions of 20 minutes each, one in the morning and the other in the evening; the second group did not change its daily routine.

At the beginning of the study, the researchers also measured through psychometric questionnaires the anxiety and stress level of all the participants, as well as their ability to manage stressful situations. Each individual was also subjected to a functional magnetic resonance imaging test (fMRI), in order to measure brain activity at rest and changes in the functional connectivity among different cerebral areas. After three months, at the end of the study, the same tests were repeated.

The analysis of the data clearly showed that levels of anxiety and stress perceived by the subjects who followed the meditation program were significantly reduced in comparison with those of the volunteers who did not practice TM. "Magnetic resonance imaging also shows that the reduction of anxiety levels is associated with specific changes in the connectivity between different cerebral areas, such as precuneus, left parietal lobe and insula, which all have an important role in the modulation of emotions and inner states", explains Giulia Avvenuti, a PhD fellow at IMT School and first author of the study. "In the control group, instead, none of these changes was observed". "The fact that Transcendental Meditation has measurable effects on the 'dialogue' between brain structures involved in the modulation of affective states opens new perspectives for the understanding of brain-mind relationships" says Pietro Pietrini, IMT School's Director and coordinator of the study. "It also extends the results of recent research suggesting that drugs therapies and psychotherapy leverage on the same biological mechanism".

Transcendental Meditation has recently gained an increasing success worldwide as a relaxation practice also thanks to the David Lynch Foundation, which co-financed the study along with the Fondazione Cassa di Risparmio di Lucca. Founded in 2005 by the movie director David Lynch, who is himself a longtime practitioner and supporter of the social value of Transcendental Meditation, the David Lynch Foundation promotes TM practice as an approach to reduce stress in schools (as for the 'Quiet Time-Meditate Lucca' project at the Pertini High School) and workplaces, and to build resilience in victims of trauma.

"I am very happy of the results of this study that used the latest technology to show the beautiful benefits for the human beings of TM. Now I'm working to form my foundation also in Italy, with teachers who teach transcendental meditation in schools, work places and other groups, reaching as many people as possible" says David Lynch.

This new study, coherently with previous ones, shows that even a few months of practice of Transcendental Meditation have positive effects on psychological well-being and that these effects are correlated with measurable changes in the brain.

Reference: Avvenuti, G., Leo, A., Cecchetti, L., Franco, M. F., Travis, F., Caramella, D., Bernardi, G., Ricciardi, E., & Pietrini, P. (2020). Reductions in perceived stress following Transcendental Meditation practice are associated with increased brain regional connectivity at rest. *Brain and Cognition*, 139, 105517. <https://doi.org/10.1016/j.bandc.2020.105517>

This article has been republished from materials provided by IMT School for Advanced Studies Lucca (<http://www.imtlucca.it/en>). Note: material may have been edited for length and content. For further information, please contact the cited source.

Supercharge Your Self-Esteem

Transform your thinking through hypnotherapy. Mindvalley masterclass with Marisa Peer.

HOME ([HTTPS://WWW.THEWEEK.IN/HOME.HTML](https://www.theweek.in/home.html)) INDIA ([HTTPS://WWW.THEWEEK.IN/NEWS/INDIA.HTML](https://www.theweek.in/news/india.html))

WORLD ([HTTPS://WWW.THEWEEK.IN/NEWS/INDIA.HTML](https://www.theweek.in/news/world.html)) BUSINESS ([HTTPS://WWW.THEWEEK.IN/NEWS/BIZ-TECH.HTML](https://www.theweek.in/news/biz-tech.html))

SPORTS ([HTTPS://WWW.THEWEEK.IN/NEWS/SPORTS.HTML](https://www.theweek.in/news/sports.html)) SCI/TECH ([HTTPS://WWW.THEWEEK.IN/NEWS/SCI-TECH.HTML](https://www.theweek.in/news/sci-tech.html))

LEISURE ([HTTPS://WWW.THEWEEK.IN/NEWS/LEISURE.HTML](https://www.theweek.in/news/leisure.html)) ENTERTAINMENT ([HTTPS://WWW.THEWEEK.IN/NEWS/ENTERTAINMENT.HTML](https://www.theweek.in/news/entertainment.html))

HEADLINE: Meditation may be associated with specific brain connection changes: Study ([HTTPS://WWW.THEWEEK.IN/NEWS/HEALTH/2020/02/22/MEDITATION-MAY-BE-ASSOCIATED-WITH-SPECIFIC-BRAIN-CONNECTION-CHANGES-STUDY.HTML](https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html))

VIDEOS ([HTTPS://WWW.THEWEEK.IN/VIDEOS.HTML](https://www.theweek.in/videos.html)) MORE

[t \(https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html\)](https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html)

[p \(https://pinterest.com/pin/create/button?url=https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html\)](https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html)

[in \(https://www.linkedin.com/sharing/share-offsite?url=https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html\)](https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html)

[✉ \(mailto:subject=&body=Article:https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html\)](mailto:subject=&body=Article:https://www.theweek.in/news/health/2020/02/22/Meditation-may-be-associated-with-specific-brain-connection-changes-Study.html)

Meditation may be associated with specific brain connection changes: Study

[PTI \(https://www.theweek.in/authors.pti.html\)](https://www.theweek.in/authors.pti.html)

By PTI ([HTTPS://WWW.THEWEEK.IN/AUTHORS.PTI.HTML](https://www.theweek.in/authors.pti.html)) | February 22, 2020 16:48 IST

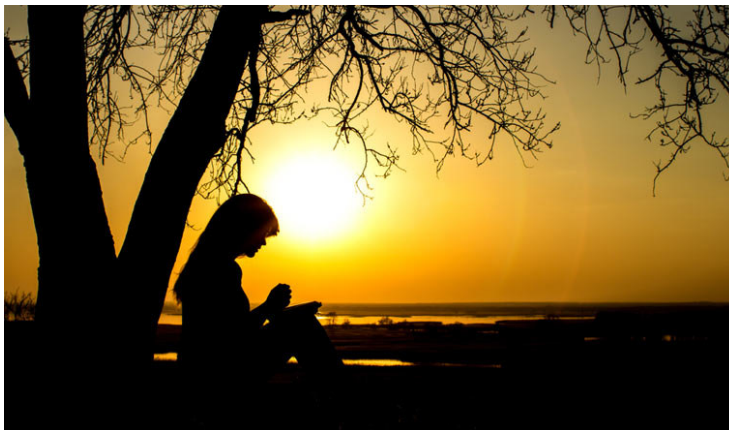


Image for representation | Shutterstock

The subjective feeling of well-being experienced by many people with the practice of meditation is associated with specific changes in the brain, according to a study which may lead to better clinical recommendations of the practice.

The study, published in the journal Brain and Cognition, examined the effects of the technique known as Transcendental Meditation, which consists of the silent repetition of a meaningless sound. The Transcendental Meditation technique or TM is a form of silent mantra meditation,

developed by Maharishi Mahesh Yogi.

We use cookies to understand how you use our site and to improve your experience. This includes personalizing content and advertising. By continuing to use our site, you accept our use of cookies and revised Privacy Policy ([HTTPS://WWW.THEWEEK.IN/PRIVACY-AND-SETTLEMENT.HTML](https://www.theweek.in/privacy-and-settlement.html)).

READ MORE



Donald Trump Jr. to get permit to hunt Alaska grizzly bear for \$1,000 ([HTTPS://WWW.THEWEEK.IN/NEWS/2020/TRUMP-JR-TO-GET-PERMIT-TO-HUNT-ALASKA-GRIZZLY-BEAR-FOR-1000.HTML](https://www.theweek.in/news/2020/trump-jr-to-get-permit-to-hunt-alaska-grizzly-bear-for-1000.html))



Rishabh Pant's run-out was turning point of India's innings: Tim Southee ([HTTPS://WWW.THEWEEK.IN/NEWS/SPORTS/2020/CRICKET-RISHABH-PANT-RUN-OUT-WAS-TURNING-POINT-OF-INDIA-INNINGS-TIM-SOUTHEE.HTML](https://www.theweek.in/news/sports/2020/cricket-rishabh-pant-run-out-was-turning-point-of-india-innings-tim-southee.html))



Team of 'Thappad' supports campaign against on-screen gender-based violence ([HTTPS://WWW.THEWEEK.IN/NEWS/ENTERTAINMENT/2020/THAPPAD-TEAM-SUPPORTS-CAMPAIGN-AGAINST-ON-SCREEN-GENDER-BASED-VIOLENCE.HTML](https://www.theweek.in/news/entertainment/2020/thappad-team-supports-campaign-against-on-screen-gender-based-violence.html))



India needs pro-business, not pro-crony policies, says CEA ([HTTPS://WWW.THEWEEK.IN/NEWS/BIZ-TECH/2020/02/22/INDIA-NEEDS-PRO-BUSINESS-NOT-PRO-CRONY-POLICIES-SAYS-CEA.HTML](https://www.theweek.in/news/biz-tech/2020/02/22/india-needs-pro-business-not-pro-crony-policies-says-cea.html))



'Frozen bird found to be 46,000-year-old horned lark' ([HTTPS://WWW.THEWEEK.IN/NEWS/SCI-TECH/2020/02/22/FROZEN-BIRD-FOUND-TO-BE-46000-YEAR-OLD-HORNED-LARK.HTML](https://www.theweek.in/news/sci-tech/2020/02/22/frozen-bird-found-to-be-46000-year-old-horned-lark.html))

EDITOR'S PICK



Theatre of the absurd ([HTTPS://WWW.THEWEEK.IN/THEWEEK/COVER/2020-OF-THE-ABSURD.HTML](https://www.theweek.in/theweek/cover/2020-of-the-absurd.html))



Risk master ([HTTPS://WWW.THEWEEK.IN/THEWEEK/LEISURE/2020-RISK-MASTER.HTML](https://www.theweek.in/theweek/leisure/2020-risk-master.html))



Trial will impact how we practise management of stable heart disease ([HTTPS://WWW.THEWEEK.IN/HEALTH/COVER/2020-WILL-IMPACT-HOW-WE-PRACTISE-MANAGEMENT-OF-STABLE-HEART-DISEASE.HTML](https://www.theweek.in/health/cover/2020-will-impact-how-we-practise-management-of-stable-heart-disease.html))



Evolving luxury ([HTTPS://WWW.THEWEEK.IN/THEWALLET/ECONOMY/LUXURY.HTML](https://www.theweek.in/thewallet/economy/luxury.html))

In the study, the researchers from the IMT School for Advanced Studies Lucca in Italy, enrolled 34 healthy young volunteers and divided them in two groups.

They said the first group practised TM 40 minutes per day in two sessions of 20 minutes each, one in the morning and the other in the evening.

The second group, the scientists said, did not change its daily routine.

Using questionnaires, they also measured the anxiety and stress levels of all the participants at the beginning of the study, as well as the subjects' ability to manage stressful situations.

According to the researchers, the participants were also subjected to a functional magnetic resonance imaging (fMRI) brain scan, in order to measure the organ's activity at rest, and changes in the excitation among different cerebral areas.

They repeated the tests after three months, at the end of the study.

According to the study, the levels of anxiety and stress perceived by the subjects who followed the meditation program were significantly reduced in comparison with those of the volunteers who did not practice TM.

READ MORE

British woman plays violin during brain surgery
(<https://www.theweek.in/news/world/2020/02/20/british-woman-plays-violin-during-brain-surgery.html>)

Time of day linked to decrease in activity in specific brain regions: Study
(<https://www.theweek.in/news/health/2020/02/19/time-of-day-linked-to-decrease-in-activity-in-specific-brain-regions-Study.html>)

"Magnetic resonance imaging also shows that the reduction of anxiety levels is associated with specific changes in the connectivity between different cerebral areas, such as precuneus, left parietal lobe and insula, which all have an important role in the modulation of emotions and inner states," said study co-author Giulia Avvenuti from the IMT School for Advanced Studies Lucca.

"In the control group, instead, none of these changes was observed. The

fact that Transcendental Meditation has measurable effects on the 'dialogue' between brain structures involved in the modulation of affective states opens new perspectives for the understanding of brain-mind relationships," said Pietro Pietrini, IMT School's Director, and co-author of the study.

"It also extends the results of recent research suggesting that drugs therapies and psychotherapy leverage on the same biological mechanism," Pietrini said.

According to the researchers, even a few months of practice of TM can have positive effects which can be correlated with measurable changes in the brain.

TAGS

Brain-Human (<https://www.theweek.in/Tag.the-Week-New-Tags~Brain-Human.html>)

DOWNLOAD

The Week Mobile App

(<https://www.facebook.com/TheWeekMag>)

(<https://twitter.com/TheWeekLive>)

(<https://www.youtube.com/channel/UCPE9uEcDKRaGq7G9yJVg91w>)

(<https://www.theweek.in/rss.html>)

(<https://itunes.apple.com/in/app/the-week-live/id1126659550?mt=8>)

(<https://play.google.com/store/apps/details?id=com.manoramaonline.week>)

We use cookies to understand how you use our site and to improve your experience. This includes personalizing content and advertising. By continuing to use our site, you accept our use of cookies and revised Privacy Policy (<https://www.theweek.in/privacy-and-settlement.html>).

Ad

Know how high your IQ is?

Answer 20 questions to find out

www.test-iq.org

Follow @TheWeekLive

Tweets by @TheWeekLive

THE WEEK
@TheWeekLive
#Congress leader @ShuklaRajiv praised #GautamGambhir for demanding actionbit.ly/3a3PUqh

'Whether Kapil Mishra or anyone...': Gamb...
The MP asked those protesting against the C...
theweek.in


8m

THE WEEK
@TheWeekLive
Italy has been Europe's most affected country in the coronavirus outbreak. The total number of confirmed cases is now 200 #covid19Italy #Korea #coronavirus

[Embed](#)

[View on Twitter](#)

Ad



200 Hour Yoga Teacher Training - Tamarindo, Costa Rica

kennedywilkinson.com [Visit Site](#)

Meditation may be associated with specific brain connection changes: Study



(Eds: Correcting dateline)

London, Feb 22 (PTI) The subjective feeling of well-being experienced by many people with the practice of meditation is associated with specific changes in the brain, according to a study which may lead to better clinical recommendations of the practice.

The study, published in the journal Brain and Cognition, examined the effects of the technique known as Transcendental Meditation (TM), which consists of the silent repetition of a meaningless sound.

In the study, the researchers from the IMT School for Advanced Studies Lucca in Italy, enrolled 34 healthy young volunteers and divided them in two groups.

They said the first group practised TM 40 minutes per day in two sessions of 20 minutes each, one in the morning and the other in the evening.

The second group, the scientists said, did not change its daily routine.

Using questionnaires, they also measured the anxiety and stress levels of all the participants at the beginning of the study, as well as the subjects' ability to manage stressful situations.

According to the researchers, the participants were also subjected to a functional magnetic resonance imaging (fMRI) brain scan, in order to measure the organ's activity at rest, and changes in the excitation among different cerebral areas.

They repeated the tests after three months, at the end of the study.

According to the study, the levels of anxiety and stress perceived by the subjects who followed the meditation program were significantly reduced in comparison with those of the volunteers who did not practice TM.

"Magnetic resonance imaging also shows that the reduction of anxiety levels is associated with specific changes in the connectivity between different cerebral areas, such as precuneus, left parietal lobe and insula, which all have an important role in the modulation of emotions and inner states," said study co-author Giulia Avvenuti from the IMT School for Advanced Studies Lucca.

"In the control group, instead, none of these changes was observed. The fact that Transcendental Meditation has measurable effects on the "dialogue" between brain structures involved in the modulation of affective states opens new perspectives for the understanding of brain-mind relationships," said Pietro Pietrini, IMT School's Director, and co-author of the study.

"It also extends the results of recent research suggesting that drugs therapies and psychotherapy leverage on the same biological mechanism," Pietrini said.

According to the researchers, even a few months of practice of TM can have positive effects which can be correlated with measurable changes in the brain. PTI VIS VIS VIS

Disclaimer :- This story has not been edited by Outlook staff and is auto-generated from news agency feeds. Source: PTI

More from Website



All Parties Will Take Steps To Restore Peace In Delhi: Arvind Kejriwal After Meeting Amit Shah



Table Tennis World Team Championships Postponed Due To Coronavirus

US First Lady Melania Trump Visits Delhi School, Attends 'Happiness Class'

More from Outlook Magazine



It Starts With A Dream To Dare



How Many Acres Of Print Does A Baron Need?



Opinion: A Media House Should Come Under RTI On Its Own -- The 12 Commandments For A Trustworthy Press



Cruise with the Philadelphia Eagles



Rodney Whittenberg at Chestnut Hill College



PA Ballet to present "La Bayadère"

FEBRUARY 21, 2020

Transcendental meditation soothes anxiety by changing connections in the brain

Structures related to mood regulation altered by the practice, study finds



BY **VIRGINIA STREVA**
PhillyVoice Staff



PRASANTH INTURI/PEXELS

Transcendental meditation changes the structures in the brain known for regulating mood, according to a study published by Brain and Cognition. The practice is known for relieving anxiety and stress.

It's no secret that meditation can soothe even the most intense anxiety with enough practice, but now scientists are able to show how it changes the brain.

A study published in Brain and Cognition found that transcendental meditation promotes overall wellbeing by reducing stress. Scientists also found that certain brain structures related to mood-regulation changed after daily meditation.

MORE HEALTH

The current flu shot appears more effective than last season's vaccine

What is a pandemic – and will the coronavirus outbreak become one? Health experts weigh in

Musician plays violin while undergoing brain surgery at King's College Hospital

Transcendental meditation involves silently repeating one-word mantras to oneself. The mantras typically are only one or two syllables long. In order to see the most benefits, experts recommend people meditate twice a day for 20 minutes.

When study participants followed that recommendation for three months, researchers observed changes in the connectivity of three major brain regions – the precuneus, left parietal lobe and insula. The participants also experienced reduced anxiety and stress levels.

"The fact that transcendental meditation has measurable effects on the dialogue between brain structures involved in the modulation of affective states opens new perspectives for the understanding of brain-mind relationships," Pietro Pietrini, a director at the IMT School for Advanced Studies Lucca, said in a statement.

To try this form of meditation yourself, Yoga Journal recommends finding a position that's comfortable to you – either sitting or lying down. Silently repeat the mantra you have chosen twice — once when you inhale and again when you exhale. If thoughts arise, just notice them and then softly return to the mantra.

Follow Virginia & PhillyVoice on Twitter: @vastreva | @thePhillyVoice

Like us on Facebook: PhillyVoice

Add Virginia's RSS feed to your feed reader

Have a news tip? Let us know.



VIRGINIA STREVA

PhillyVoice Staff

virginia@phillyvoice.com

Transcendental Meditation Relieves Perceived Stress And Leads To Specific Cerebral Changes



Photo via: iStockPhoto

For researchers at IMT School for Advanced Studies Lucca, a study evaluating the effectiveness of Transcendental meditation (TM) among healthy participants led to promising findings.

According to new research, released in the journal *Brain and Cognition*, Transcendental meditation was linked to reductions in perceived stress. The technique, first developed by Maharishi Mahesh Yogi, involves the use of a mantra practiced with eyes closed, a few times a day.

Researchers studied 54 healthy participants, half of which incorporated Transcendental meditation to their daily routine for 40 minutes per day. The other half carried on without meditation implemented into their normal daily routine.

Before the participants began their routines, psychometric questionnaires were administered to measure levels of anxiety and stress. Additionally, functional magnetic resonance imaging tests were conducted to gain further insight into stress levels at a neuropsychological viewpoint, by measuring brain activity and changes in functional connectivity in certain brain areas. The tests were then initiated again at the conclusion of the study.

“Transcendental Meditation (TM) is defined as a mental process of transcending using a silent mantra. Previous work showed that relatively brief period of TM practice leads to decreases in stress and anxiety,” researchers stated.

1° Regola per la Mente

La tua mente può migliorare la tua vita. Grazie a questo esercizio. Guarda questo video.

PiuChePuoi.it

APRI

“Using a longitudinal design, we combined psychometric questionnaires, structural and resting-state functional magnetic resonance imaging (RS-fMRI) to investigate the potential brain modifications underlying the psychological effects of TM.”

Based on the results, data analysis showed reductions in levels of stress and anxiety following meditation sessions. The beneficial effects were considerably higher compared to the participants who did not take part in Transcendental meditation.

From the brain scans, researchers also found the reduced levels of anxiety were correlated with changes in various brain areas like the insula, left parietal lobe, and precuneus. Increased activity between the posterior cingulate cortex and the right insula was presumably the result of alterations in interoceptive awareness.

Overall, the new findings suggest the use of Transcendental meditation to reach beneficiary effects for psychological well-being.

“These preliminary findings indicate that beneficial effects of TM may be mediated by functional brain changes that take place after a short practice period of 3 months,” the findings concluded.

The study was funded by the David Lynch Foundation and Fondazione Cassa di Risparmio di Lucca.

NEW Corel Painter 20

Unleash your creativity! Paint and draw with tools that work just like the real thing.

Corel Painter

[NEWS](#)[TOPICS](#)[CONFERENCES](#)[RESOURCES](#)[SUBSCRIBE](#)

iNtuition 4.4.13.P5 Upd

Mitral Valve*, Mismatch Maps, and Automatic Workflows - **Learn**

* All offerings are subject to availability and regulatory clearance, which may vary by country. Please verify product status with your local TeraRecon representative.

Meditation alters brain connectivity in areas associated with emotion, MRI shows

[Matt O'Connor](#) | February 21, 2020 |
[Advanced Visualization](#)



We use cookies on this site to enhance your user experience

Accept

By clicking the Accept button, you agree to us doing so. [More info](#)

Practicing meditation has a significant impact on perceived stress levels and alters brain regions associated with regulating emotion, a new MRI study revealed.

That research—published in the March issue of [Brain and Cognition](#)—specifically analyzed Transcendental Meditation’s effect on a small number of volunteers. Using functional MRI, along with stress and anxiety questionnaires, the authors found that practitioners felt less stressed after practicing meditation, which led to connectivity changes in multiple areas of their brain.

“The fact that Transcendental Meditation has measurable effects on the 'dialogue' between brain structures involved in the modulation of affective states opens new perspectives for the understanding of brain-mind relationships,” first author, Giulia Avvenuti, PhD, with IMT School for Advanced Studies Lucca in Italy, said in a statement.

Transcendental Meditation requires practitioners to repeat a particular sound with no literal meaning—known as a mantra—to reach a level of “consciousness without content,” the authors wrote. A host of past imaging studies have shown connectivity alterations in brain regions as a result of this practice, notably in the posterior cingulate cortex and frontal central executive network. It is less known, however,



By using cookies on this site to enhance your user experience

Accept

By clicking the Accept button, you agree to our terms of use.

[More info](#)

whether Transcendental Meditation impacts functional brain changes within the same network.

For their study, Avvenuti et al. split 34 healthy volunteers into two groups. The first (19 individuals) meditated for 40 minutes each day, dividing their time between two sessions, and the second group did not meditate at all. Prior to the study, each person completed a psychometric questionnaire to measure their anxiety and stress levels, along with a fMRI exam to determine their baseline brain activity. Each volunteer underwent the same group of tests three months into the study and after it was over.

Compared to those who did not meditate, participants who did reported “significantly” lower perceived stress and anxiety levels. And fMRI detected connectivity changes in the brain that may help explain this drop.

“Magnetic resonance imaging also shows that the reduction of anxiety levels is associated with specific changes in the connectivity between different cerebral areas, such as precuneus, left parietal lobe and insula, which all have an important role in the modulation of emotions and inner states,” Avvenuti added. “In the control group, instead, none of these changes was observed.”

We use cookies on this site to enhance your user experience

Accept

By clicking the Accept button, you agree to us doing so. [More info](#)

A [similar study published late last year](#) used PET imaging to analyze how Transcendental Meditation impacted patients with coronary heart disease. That research, shared in the *Journal of Nuclear Cardiology*, reported that those who incorporated meditation into their heart rehab routine increased their cardiac blood flow by more than 20%.

Both this study and the one published in 2019 are preliminary, the authors noted. However, Avvenuti and colleagues believe even a few months of practice can produce a positive impact.

Transcendental Meditation has gained worldwide popularity thanks in part to the David Lynch Foundation, which also co-financed this study.

Subscribe to Health Imaging News

The free newsletter
covering the top
medical imaging
headlines

We use cookies on this site to
enhance your user experience

Accept

By clicking the Accept button, you agree to
us doing so. [More info](#)