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[Home](#) » [Harvard Health Blog](#) » [How simply moving benefits your mental health - Harvard Health Blog](#)

## How simply moving benefits your mental health

POSTED MARCH 28, 2016, 9:30 AM



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Contributor

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While it is obvious that your feelings can influence your movement, it is not as obvious that your movement can impact your feelings too. For example, when you feel tired and sad, you may move more slowly. When you feel anxious, you may either rush around or become completely paralyzed. But recent studies show that the connection between your brain and your body is a “two-way street” and that means movement can change your brain, too!

### **How exercise can improve mood disorders**

Regular aerobic exercise can reduce anxiety by making your brain’s “fight or flight” system less reactive. When anxious people are exposed to physiological changes they fear, such as a rapid heartbeat, through regular aerobic exercise, they can develop a tolerance for such symptoms.

Regular exercise such as cycling or gym-based aerobic, resistance, flexibility, and balance exercises can also reduce depressive symptoms. Exercise can be as effective as medication and psychotherapies. Regular exercise may boost mood by increasing a brain protein called BDNF that helps nerve fibers grow.

For people with attention-deficit disorder (ADHD), another study showed that a single 20-minute bout of moderate-intensity cycling briefly improved their symptoms. It enhanced the participants’ motivation for tasks requiring focused thought, increased their energy, and reduced their feelings of confusion, fatigue, and depression. However, in this study, exercise had no effect on attention or hyperactivity per se.

Meditative movement has been shown to alleviate depressive symptoms. This is a type of movement in which you pay close attention to your bodily sensations, position in space, and gut feelings (such as subtle changes in heart rate or breathing) as you move. Qigong, tai chi, and some forms of yoga are all helpful for this. For example, frequent yoga practice can reduce the severity of symptoms in post-traumatic stress disorder to the point that some people no longer meet the criteria for this diagnosis. Changing your posture, breathing, and rhythm can all change your brain, thereby reducing stress, depression, and anxiety, and leading to a feeling of well-being.

## **The surprising benefits of synchronizing your movements**

Both physical exercise and meditative movement are activities that you can do by yourself. On their own, they can improve the way you feel. But a recent study found that when you try to move in synchrony with someone else, it also improves your self-esteem.

In 2014, psychologist Joanne Lumsden and her colleagues conducted a study that required participants to interact with another person via a video link. The person performed a standard exercise — arm curls — while the participants watched, and then performed the same movement.

The “video link” was in fact a pre-recorded video of a 25-year-old female in a similar room, also performing arm curls. As part of the experiment, participants had to either coordinate their movement or deliberately not coordinate their movement with the other person’s arm curls. They filled out a mood report before and after each phase of synchronizing or falling out of synchrony. They also reported on how close they felt to the other person.

The results were interesting. When subjects intentionally synchronized their movement with the recording, they had higher self-esteem than when they did not. Prior studies had shown that synchronizing your movement with others makes you like them more. You also cooperate more with them and feel more charitable toward them. In fact, movement synchrony can make it easier to remember what people say and to recall what they look like. This was the first study to show that it makes you feel better about yourself, too. That’s probably why dance movement therapy can help depressed patients feel better.

## **Putting it all together**

Your mind and body are intimately connected. And while your brain *is* the master control system for your body’s movement, the way you *move* can also affect the way you think and feel.

Movement therapies are often used as adjunctive treatments for depression and anxiety when mental effort, psychotherapy, or medication is not enough. When you are too exhausted to use thought control strategies such as focusing on the positive, or looking at the situation from another angle, movement can

come to the rescue. By working out, going on a meditative walk by yourself, or going for a synchronized walk with someone, you may gain access to a “back door” to the mental changes that you desire without having to “psych yourself” into feeling better.

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### Comments:

POSTED MAY 11TH, 2016 AT 1:29 PM

**Madi**

If an anxious person with a high heart rate starts to run/exercise, would exercise increase their heart rate because it is already at a high level? Or would it decrease/stay the same because of exercise's ability to calm stress/nerves?

POSTED MAY 10TH, 2016 AT 8:37 PM

**Madi**

This was a great article to read! It provided me with lots of information for my school project! I feel that I now understand how the mind and body are better connected through physical activity.

Thanks!

POSTED APRIL 16TH, 2016 AT 3:19 PM

**BonsaiTreeGardener**

My brother recommended I may like this web site. He was once totally right. This post truly made my day. You can not consider just how much time I had spent for this info! Thanks!

POSTED APRIL 15TH, 2016 AT 4:55 PM

**Joanna Telacka**

what about Pilates? Pilates has many practical applications but at the core of it all is a series of controlled movements that restore the quiet body/mind connection. As a Pilates teacher and practitioner for over 16 years I see the positive and encouraging changes in my clients on daily basis.

POSTED APRIL 1ST, 2016 AT 3:58 PM

**Raj Kaul**

Agree absolutely and keep up this great work , RK

POSTED APRIL 1ST, 2016 AT 4:18 AM

**Arun**

Very well written. Easy to understand and follow.

Later on, please write about seizures in old age – forgetting, losing one’s surroundings, momentarily losing oneself, reduced cognitive function, etc.

POSTED MARCH 31ST, 2016 AT 3:41 PM

**Selvi**

Hi Dr. Pillay,

Thank you for a great article. I am interested in any suggestions for chronic headaches. I walk regularly and I find that very helpful with acute pain, as walking relaxes my neck and shoulders possibly. But I am not able to find something to prevent chronic headaches even after working with a good neurologist for a few years. I am open to trying anything at this point and would be interested in the meditative type exercises that you have touched upon in this article. I think many of us are unable to deeply relax, and the discipline to practice traditional meditation in this busy lifestyle almost seems impossible to me. Some form of gentle repetitive movement type meditative exercise that relaxes and calms our brains may work for someone like me than sitting quietly with my eyes closed 😊

What is your take on this....

Thank you!

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POSTED MARCH 31ST, 2016 AT 8:30 AM

**Marcia L.W. Steinbrook**

Nice to see that the well-done research supports anecdotal evidence for the value of movement for mental health. As a devotee of Zumba! dance, I have no doubt that this is true.

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POSTED MARCH 31ST, 2016 AT 8:08 AM

**Bryan Young**

Now a days Health is a very essential role in life and different types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle.

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POSTED MARCH 31ST, 2016 AT 7:43 AM

**nORMAN hESLIP**

I EXERCISE 3 TIMES A WEEK AND I DO AEROBIC EXERCISES REGULARLY PLUS I DO A LOT WALKING AS WELL AS MEDITATING.

nORMAN hESLIP.

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POSTED MARCH 29TH, 2016 AT 1:11 PM

**Noelle morgan**

Golf & Yoga always bring oxygen to my brain and make me feel better

The more I keep up with golf & yoga

The less I eat

And therefore the better I feel

There is a direct connection between mind & body

They challenge each other & create energy through their interaction

& support our natural circle of life

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POSTED MARCH 31ST, 2016 AT 7:42 AM

## **Srini Pillay**

Noelle—we really couldn't have too many reminders of the mind-body connection. Thanks for your comment. "Unfocusing" from your daily routines is also a powerful way to recharge your brain. Glad that you're implementing this in your life.

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POSTED MARCH 29TH, 2016 AT 4:33 AM

## **Sammy Kerre**

Hi. I've noticed over the years that when I jog, I'm very positive, confident and have a can-do attitude. A few days after I stop, depressive thoughts come in, tasks become burdensome and participating in family activities seems like climbing Mt Everest. Thanks for opening my eyes.

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POSTED MARCH 31ST, 2016 AT 7:44 AM

## **Srini Pillay**

Thanks for sharing your positive experience with jogging, Sammy. One lesson my personal trainer taught me is that your movement should only be limited by your imagination. Pain or mood, when obstructive, should be addressed to allow you to move.

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POSTED MARCH 31ST, 2016 AT 5:28 PM

## **Cecilia Wong**

Yes, regularity is very important. Pretty soon the exercise itself becomes the reward.

When I first started my morning exercises, looking forward to my coffee was the reward – now I don't want my coffee until I exercise because it makes me feel fresh and new ideas come for my writing.

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POSTED MARCH 29TH, 2016 AT 3:01 AM

## **CESAR CARDENAS**

Hello i am Cesar Cardenas and i reading the article related with how moving benefit the mental health, really I have interest to learn more abouted.

My regards

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POSTED MARCH 31ST, 2016 AT 7:46 AM

## **Srini Pillay**

There's so much out there Cesar. Here's a study that shows that exercise can stop your brain from shrinking! <http://www.ncbi.nlm.nih.gov/pubmedhealth/behindtheheadlines/news/2016-02-11-exercise-in-middle-age-stops-your-brain-shrinking/>

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POSTED MARCH 29TH, 2016 AT 12:26 AM

**Alaa**

Dear's Health Harvard.

Thanks for your published on different tips related health advices. And hope to see more information relating citica " back pain "

Regards, Alaa

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POSTED MARCH 28TH, 2016 AT 5:34 PM

**Bernard Gauthier**

This is a great article with plenty of good research. I had a craniotomy to remove a colloid cyst a little over a year ago and have found that exercise often has the reverse effect on my mood. Runs and work outs can leave me feeling anxious, depressed and generally scattered. I still do it because I value the physical benefits but I wonder why my brain is reacting to exercise this way, when I've been a regular exerciser for more than 30 years...

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POSTED MARCH 29TH, 2016 AT 2:36 AM

**Vakil Saheb**

Since you have been exercising regularly for 30 years, your body has become strong and you must understand the strong effect on the mood due to the surgery and how bad it could be if not for the regular exercise you have done for the past 30 years! Keep it up!

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POSTED MARCH 31ST, 2016 AT 7:54 AM

**Srini Pillay**

Bernard—It's always best to discuss this with your PCP and surgeon. There are some studies that show that for certain CNS diseases in animals, exercise may not be beneficial (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2998194/>) . In humans, exercise has been shown to exacerbate some inflammatory conditions (<http://www.ncbi.nlm.nih.gov/pubmed/24231601>). Also, overtraining or high volume exercise

can be detrimental to mood (<http://www.ncbi.nlm.nih.gov/pubmed/2192422>). That said, for every individual, this is different. This is a great question to ask your current doctor so that you can weigh the risks and benefits moving forward.

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POSTED MARCH 28TH, 2016 AT 5:29 PM

**Lisa Wilder-Cappoli**

More proof of the power of movement in our lives! Great info here.

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POSTED MARCH 28TH, 2016 AT 1:56 PM

**AROR ARK O'DIAH**

Excellent information with references as to how the organic body associates with functioning Mind. Healthy Body relates to healthy Mind more frequently than unhealthy Body association to unhealthy Mind.

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POSTED MARCH 28TH, 2016 AT 12:57 PM

**Sandra M Boletchek**

Your articles are inspiring and than you. Sandra M. Boletchek

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POSTED MARCH 31ST, 2016 AT 10:29 AM

**Srini Pillay**

Thank you for reading and for your comment. If you have any requests for other topics, please feel free to request.

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POSTED MARCH 28TH, 2016 AT 12:48 PM

**Gloria**

Very interesting and usefull. I'll put them in practice.

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