# **Dancing Makes You Smarter**

# by Richard Powers

In 2003, the <u>New England Journal of Medicine</u> reported on the effects of various recreational activities on mental acuity as people age.

The 21-year study of senior citizens 75 and older was led by the Albert Einstein College of Medicine in New York City. Their method for objectively measuring mental acuity in aging was to monitor rates of dementia, including Alzheimer's disease.



# The study examined

- *Cognitive* activities such as reading books, writing for pleasure, doing crossword puzzles, playing cards and playing musical instruments.
- *Physical activities* like playing tennis or golf, swimming, bicycling, dancing, walking for exercise and doing housework.

One of the surprises of the study was that while the cognitive activities served to reduce dementia, almost none of the physical activities appeared to offer any protection against dementia. There can be cardiovascular benefits of course, but the focus of this study was the mind.

# **Only Dancing Works**

There was one important exception: the only physical activity to offer protection against dementia was frequent dancing.

- Reading 35% reduced risk of dementia
- Bicycling and swimming 0%
- Doing crossword puzzles at least four days a week 47%
- Playing golf 0%
- **Dancing frequently 76%.** That was the greatest risk reduction of any activity studied, cognitive or physical.

What could cause these significant cognitive benefits? It appears that participation in mentally engaging activities lowers the risk of dementia by improving neural plasticity, the constant rewiring of neural pathways, as opposed to habitual patterns of thinking and living.

#### **About Intelligence**

What exactly do we mean by "intelligence"?

As neuroscience educator Robert Sylwester notes, mobility is central to everything that is cognitive, whether it is physical motion or the mental movement of information. Since we can move, we need a cognitive system that can comprehend sensory input and intelligently make choices. As Jean Piaget put it, intelligence is what we use when we don't already know what to do.

#### Why dancing?

We immediately ask two questions:

• Why is dancing better than other activities for improving mental capabilities?

Does this mean all kinds of dancing, or is one kind of dancing better than another?

### What kind of dancing?

Not all forms of dancing will produce the same benefit, especially if they only work on **style**, or merely retrace the same **memorized paths**. *Making as many split-second decisions as possible, is the key to maintaining our cognitive abilities*. Remember: intelligence is what we use when we don't already know what to do.

We wish that 25 years ago the Albert Einstein College of Medicine thought of doing side-by-side comparisons of different kinds of dancing, to find out which was better. But the kind of dancing most of [the test subjects did] in retirement was what they began when they were young: freestyle social dancing -- basic foxtrot, waltz, swing, and maybe some rumba and cha cha. Freestyle social dancing isn't that simple! It requires a lot of split-second decision-making, in both the Lead and Follow roles.

At this point, I want to clarify that I'm not demonizing memorized sequence. There are stress-reduction benefits of any kind of dancing, cardiovascular benefits of physical exercise, and even further benefits of feeling connected to a community of dancers. So all dancing is good.

But when it comes to preserving (and improving) our mental acuity, then some forms are significantly better than others. While all dancing requires *some* intelligence, I encourage you to use your **full** intelligence when dancing. The more decision-making we can bring into our dancing, the better.

This benefit is greatly enhanced by dancing with different partners, not always with the same fellow [or gal]. With different dance partners, you have to adjust much more and be aware of more variables. This is great for staying smarter longer.

# **Full engagement**

Those who fully utilize their intelligence in dancing, at all levels, love the way it feels. That's the most succinct definition I know for intelligent dancing: **a highly active attention to possibilities**.

Once this highly active attention to possibilities, flexibility, and alert tranquility are perfected in the art of [dancing], dancers find it even more beneficial in their other relationships, and in everyday life.

#### **Dance often**

The study made another important suggestion: do it often. Seniors who did crossword puzzles four days a week had a measurably lower risk of dementia than those who did the puzzles once a week. If you can't take classes or go out dancing four times a week, then dance as much as you can. More is better.

And do it now, the sooner the better.

Richard Powers is a dance instructor at Stanford University. Although his article was aimed at ballroom dancing, his comments and conclusions clearly apply strongly to square dancing.

Read the <u>full article</u> at http://socialdance.stanford.edu/syllabi/smarter.htm.

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