

# Soul music

by [Martin E. Marty](#) in the [September 9, 1998](#) issue

Researchers say Mozart has amazing effect on rats," headlined the *Chicago Tribune* on August 11. "Music's boost to humans also occurs in rodents," read the subhead. I was skeptical. Like other rats, I like Mozart, but I hadn't known before that his music boosted rodents as well as humans.

The researchers said that "rats raised in a nightly sound bath of a Mozart piano sonata, K. 448, learned to run mazes faster . . . [than] genetically identical animals exposed to the contemporary music of Philip Glass or to white noise." In other words, those rats are maximalists, not minimalists. Frances Rauscher and her team at the University of Wisconsin say that this study "has strong implications for education and enrichment programs" and can help us learn more about how biology connects with experience and intelligence.

Scientists' studies of preschoolers and others led them to hypothesize that "the brain is 'wired' to respond to music--at least some music--and that there is overlap between brain areas specialized for music perception and those that carry out spatial tasks." College students who listened to the same Mozart sonata scored higher on spatial intelligence tests, but the effect lasted only ten to 15 minutes. That's still enough of a finding to inspire long lines at the CD checkout counter before exam time.

Hmmm; maybe there is something to it all. I heard my sister practice many Mozart sonatas when we were young, and I've found myself able to run fast through some of life's mazes. Hmmm; maybe things are the other way around: humans and rats who choose *not* to listen to Philip Glass's music may simply have superior taste, sense and intelligence, or at least better neural wiring in the first place.

Currently Harvard Medical School and John Templeton Foundation-sponsored researchers are conducting scientific tests of spiritual development. What might they learn about Bach? Try a nightly bath of his *Prelude and Fuge*, 'St. Anne,' BWV 552 ("Our God, Our Help in Ages Past") and see whether you will not henceforth run spiritual mazes faster and with fewer errors than those who bathe in brain-numbing

elevator-and-mall-music.

Gordon Shaw of the University of California-Irvine says that certain kinds of music "may be tapping into the internal neural structure of the cortex." Can't we hypothesize that certain kinds of sacred music may also be tapping into the neural nexuses where spiritual responses connect? If the more Mozart you hear, the smarter you are, perhaps the more Bach, the more spiritual you are.

Shaw turns all this to a minor key by adding that researchers never meant to suggest that Mozart's music is "uniquely beneficial." "We initially picked Mozart because, composing at the age of three, he would write down whole pieces of music without changing a note. We figured if anyone was exploring that natural inherent mechanism in the brain, it might be Mozart." Shaw's doctoral students are ready to try the experiment with other classical composers.

Could he lend some to check out sacred music composers and instruments? I can picture long lines at campus chapels on the morning of final exams. "Cramming with Bach" might do better than "jamming with Public Enemy or Gang Starr" for those who face life's mazes.