## Learning instrument does not make children more intelligent, experts claim

Pushy parents who give their children piano lessons because they believe it will make them more intelligent are wasting their money, experts claim.



Children who take music lessons tend to have better-educated, higher-earning parents, and to do more extracurricular activities than other children their age Photo: Alamy

By Nick Collins, Science Correspondent, Boston 10:06AM GMT 18 Feb 2013

Common claims that learning music boosts children's IQ and helps them perform better at school can not possibly be true, psychologists said.

Evidence linking musical children to high achievement in school can be better explained by the fact they generally come from more privileged backgrounds, it was claimed.

Children who take music lessons tend to have better-educated, higher-earning parents, and to do more extra-curricular activities than other children their age.

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Their upbringing, and not the music lessons themselves, helps the children develop characteristics such as conscientiousness which boost mental processes like memory, learning and reasoning, researchers said.

Prof Glenn Schellenberg, a psychologist from the University of Toronto studied the link between musical training and intelligence in a group of 130 children who were aged 10 to 12.

His team studied whether the association could be explained by two key personality traits, conscientiousness and openness to new experiences.

Prof Schellenberg explained: "We were motivated by the fact that kids who take music lessons are particularly good students, in school they actually do better than you would predict from their IQ, so obviously something else is going on and we thought that personality might be the thing."

Presenting the study at the annual meeting of the American Association for the Advancement of Science in Boston on Sunday, he revealed that the association between music lessons and intelligence was mainly down to the children's personalities.

When researchers took into account the likely contribution of each child's personality to their school grades and IQ scores, and removed it from the overall equation, the link between music training and intelligence disappeared.

The study also showed it was possible to predict how long a child had been taking music lessons based on their answers to a personality questionnaire, Prof Schellenberg added.

"What this means is that kids who take music lessons have different personalities, and many or virtually all of the findings that have shown links between music and cognition may be an artifact of individual differences in personality," he said.

"You can explain almost all of the data that are out there by saying that high-functioning kids take music lessons."

The findings show that paying for a child to take music lessons purely for the presumed educational benefit is a "complete waste of time," he said.

"Primarily the associations are driven from the other direction, in that people with specific

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personalities and with higher levels of cognitive abilities and from more well-off families are more likely to take music lessons."

Prof Daniel Levitin, a psychologist from McGill University in Montreal, said this did not mean music lessons were of no value, however.

"There are benefits to having a society where more people are engaged with the arts, so even if music instruction doesn't make you a better mathematician or a better athlete, even if it only gives you the enjoyment of music, I think that is a good end in and of itself," he said.

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