

Brain Study suggests Classical musicians should improvise

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Joint study between researchers at the Guildhall School and Imperial College London found that listeners engage with classical music more when musicians improvise.

A collaboration of researchers from the Guildhall School, including [Professor John Sloboda](#) and [David Dolan](#), and [Imperial College London](#) examined the electrical signals in the brains of musicians and listeners.

Although improvisation is not commonly associated with classical music, the new study suggests that introducing elements of improvisation into classical concerts could increase audience engagement.

The team created a live concert, with a chamber music trio playing the same piece of music twice, once in an improvised fashion and once without improvising.

The three musicians, along with two audience members were wired up to a machine known as an electroencephalograph. This machine measures and records the tiny electrical signals sent between brain cells.

By comparing the brain signals produced during both the improvised and non-improvised versions of the performance the researchers were able to show a clear difference in brain activity during each piece.

An area of the brain known to be involved in sustained attention, working memory and the inhibition of responses, known as the Brodmann 9 area was much more active in both musicians and listeners during the improvised performances. This indicates that the audience were much more engaged when listening to classical music containing improvised elements.

The team hope that this work will go some way to helping classical music fight against declining audiences. They suggest that by incorporating improvisation into classical musical concerts, musicians will create a unique event that will be both engaging and captivating.

The results will be published in the online journal [Music Performance Research](#) later this month.

You can [watch a video featuring Guildhall School staff David Dolan and John Sloboda here](#).

For further information on Guildhall School research in this area, [please see our Research webpages here](#).