

# **Dance raises your pain threshold and aids social bonding**

**Home > Impacts of arts and culture > Health and wellbeing impacts of arts and culture**

This research was conducted by **Bronwyn Tarr, Jacques Launay, Emma Cohen and Robin Dunbar** at the University of Oxford, UK

## **Summary**

Dance is a common cultural activity in which participants exert themselves in synchrony with music and with one another. Dancing is thought to help in the building of social bonds. This may be due to the release of endorphins, which can help to reduce pain and increase social bonding. Researchers in Brazil found that endorphins are released during dance (as would be expected given it's both a social activity and a form of exercise). The researchers suggested that dancing may cause some form of social 'high', which increases positivity towards people nearby.

## **264 Brazilian high school students performed small group dance activities**

Measurements were made of the students' ability to tolerate pain, and they were quizzed about their feelings of social bonding. Both these test took place before and after the dance activities. The results showed that both higher levels of exertion and synchrony were associated with greater feelings of closeness and similarity to the members of their group, and increased tendencies towards liking and trusting them. Similarly, higher exertion and synchrony were associated with better ability to cope with pain, suggesting that endorphin release may be the reason behind the changes seen.

Although this study was undertaken in a small and specific group, previous research would suggest that these findings may be applicable in a wide variety of cultures. The researchers also speculated that the same phenomenon may

be observed in the animal kingdom, where it manifests in activities such the beautiful courtship dances of grebes.

## A potential role in evolution

Humans may have placed emphasis on the creativity and cultural meaning embedded within dance over millennia due to the sense of community dancing can engender. As Darwin observed, dancing may also have a role to play in humans selecting a mate.

This summary is by **Vicky MacBean, King's Knowledge Exchange Associate**

### Keywords

**experiment** **dance** **Brazil** **social**

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