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Individual Differences in the Functional Role of Arousal Synchrony on Empathy

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Abstract

Previous work has shown that people's arousal states become synchronized during natural communication. The present study examined the functional role of such synchrony. We recorded 10 personal stories, half happy, half sad, from a set of storytellers while continuously measuring electrodermal activity (EDA). A separate set of participants listened to the recordings while EDA was measured, and they completed a state-empathy questionnaire following each story. We predicted listeners would empathize more with storytellers when EDA synchrony was higher. Results revealed that synchrony did modulate empathy, but this depended on the valence of the story and the trait empathy level of the listener. Among people with low trait empathy, as synchrony increased, so did state empathy. Among people with high trait empathy, this correlation was negative. These relationships obtained only for sad stories. The findings point to intriguing individual differences in the functional role of arousal synchrony on empathy.

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