

New research demonstrates humans' right ear preference for listening

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Human ear. by David Benbennick, via Wikipedia

We humans prefer to be addressed in our right ear and are more likely to perform a task when we receive the request in our right ear rather than our left. In a series of three studies, looking at ear preference in communication between humans, Dr. Luca Tommasi and Daniele Marzoli from the University "Gabriele d'Annunzio" in Chieti, Italy, show that a natural side bias, depending on hemispheric asymmetry in the brain, manifests itself in everyday human behavior. Their findings were just published online in Springer's journal *Naturwissenschaften*.

One of the best known asymmetries in humans is the right ear dominance for listening to verbal [stimuli](#), which is believed to reflect the brain's left hemisphere superiority for processing verbal information. However, until now, the majority of studies looking at ear preference in human communication have been controlled laboratory studies and there is very little published observational evidence of spontaneous ear dominance in everyday [human behavior](#).

Tommasi and Marzoli's three studies specifically observed ear preference during social interactions in noisy night club environments. In the first study, 286 clubbers were observed while they were talking, with loud music in the background. In total, 72 percent of interactions occurred on the right side of the listener. These results are consistent with the right ear preference found in both laboratory studies and questionnaires and they demonstrate that the side bias is spontaneously displayed outside the laboratory.

In the second study, the researchers approached 160 clubbers and mumbled an inaudible, meaningless utterance and waited for the subjects to turn their head and offer either their left or their right ear. They then asked them for a cigarette. Overall, 58 percent offered their right ear for listening and 42 percent their left. Only women showed a consistent right-ear preference. In this study, there was no link between the number of cigarettes obtained and the ear receiving the request.

In the third study, the researchers intentionally addressed 176 clubbers in either their right or their left ear when asking for a cigarette. They obtained significantly more cigarettes when they spoke to the clubbers' right ear compared with their left.

According to the authors, taken together, these results confirm a right ear/left hemisphere advantage for verbal communication and distinctive specialization of the two halves of the brain for approach and avoidance

behavior.

They conclude: "Our studies corroborate the idea of a common ancestry - in humans and other species - of lateralized behavior during social interactions, not only for species-specific vocal communication, but also for affective responses."

More information: Marzoli D & Tommasi L (2009). Side biases in humans (*Homo sapiens*); three ecological studies on hemispheric asymmetries. *Naturwissenschaften*. DOI 10.1007/s00114-009-0571-4

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