Human infants are born with the ability to process rhythmic structure

Studying neonatal auditory perceptual capabilities, researchers at the Institute for Cognitive Neuroscience and Psychology have shown that newborn infants detect the rhythmic structure of sound sequences. Collaborating with partners within the framework of an EU project, István Winkler and his colleagues have found that the brain of sleeping neonates responds differently to rhythmic violations affecting the downbeat of a regular rock rhythm compared with violations affecting other positions of the rhythmic structure. This result suggests that humans are born with information processing capabilities conducive to music perception. The authors suggested that the presence of these capabilities at birth supports the bootstrapping of various forms of communication, including music. The evolutionary advantage of being prepared for communication is obvious as superior information transfer underlies the success of human race.

Publication

Differences between Tight and Loose Cultures

Indicating the relation of the members of a society to social norms and deviant behavior, tightness and looseness is a possible dimension along which various cultures can be compared. The research was an empirical study of how cultural systems are created by ecological, historical and institutional factors, together with everyday life situations and individual psychological traits. Gathering survey data from 6823 respondents across 33 nations, the researchers found that, among others, cultural tightness is associated with higher population density, dearth of natural resources and more frequent natural disasters. The research also focused on the tightness and looseness of behavioral rules in everyday situations. In tighter cultures, situational behavioral norms allow for much narrower behavioral options and are more obligatory in nature; whereas in looser cultures, there are less social norms and even these are observed to a lesser degree. Members of tight and loose cultures acquire psychological mechanisms that allow them to comply with expectations of their cultures. In looser cultures, cautiousness, dutifulness, self-regulation, impulse control, need for structure and self-monitoring ability are present at a lesser degree. The researchers assume that extremities along the tightness-looseness dimension may refer to societies of less optimal function.

Publication