Alcoholics have persistent difficulties with emotional communication after long-term abstinence

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An important part of communication is non-verbal. Most people who engage in social interactions recognize a range of emotional states reflected in other people’s facial expressions, body postures, and/or tone of voice. Alcoholism has been linked to difficulties in perceiving and processing emotions expressed in these non-verbal cues. This study examined whether these difficulties persist after long-term abstinence from alcohol.

This study had two parts. In the first part, researchers recruited 30 participants via newspaper, radio, and self-help groups such as Alcohol Anonymous: 15 individuals (10 males, 5 females) had met diagnostic criteria for alcohol dependence (AD) but had abstained from alcohol for at least one year. An age- and education-matched “control group” was comprised of 15 individuals (8 females, 7 males) with no history of AD. All participants were asked to say neutral sentences in different emotional tones of voice, which were then acoustically analyzed. In the second part of the study, researchers recruited 24 native English speakers (13 female, 11 male) through campus and online advertisements to listen to the recordings and identify the emotional intention they believed the speaker sought to convey.

The study’s results suggested that difficulties with emotional communication – particularly emotional tone of voice – can persist long after alcoholics have quit drinking. The first
part of the study revealed that variation in pitch (highness and lowness of voice) was significantly more limited among the alcoholics than the controls. In the second part of the study, the listeners found that the intended emotions of the sentences produced by the alcoholics were more difficult to recognize than those produced by the controls. The authors suggested that future research should investigate whether difficulties among alcohol-affected individuals in their use of pitch stem from alcohol-related brain damage to motor control or damage to the vocal folds or muscles surrounding them.