- Psychology

## Background noise can help, says study |

## Louder background noise helps counter loneliness, a new study shows

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Do you switch on the television when you are alone to feel less lonely? A new study, published in the Personality And Social Psychology Bulletin last month, has shown that noise can indeed help drive away the blues.



Led by Singapore-based researcher Adam Wang, it found that loudness induces feelings of closeness and can guard against loneliness.

Dr Wang, 31, a senior lecturer at James Cook University in Singapore whose research interests lie in interpersonal judgments and social exclusion, always noticed that people tend to shun silence.

But he never thought to study it systematically until he rewatched sci-fi thriller film I Am Legend (2007) a few years ago.

"When (actor Will Smith) was driving through the barren postapocalyptic city, the silence was just overwhelming," Dr Wang says.

At the time, the social psychologist also took an interest in embodied cognition, a theory that suggests experiences of the body and mind are intertwined.

He realised social experiences such as exclusion were often characterised by silence – just think of words like "silent treatment".

This made him want to investigate the association between loudness and closeness, and whether loudness could counter loneliness.

In this study, researchers first tested whether the volume of an audio clip participants listened to affected their perception of physical and social proximity to others.

Physical proximity was measured by getting 100 students from a local university to estimate the number of people within a 30m radius, while social proximity was measured by asking a different group of 100 to rate their closeness to a self-nominated individual on a seven-point scale. Both groups were told at random to listen to the audio clip at either the "loudest volume possible without it being uncomfortable" or the "quietest volume possible without it being incomprehensible".

The study found that loudness did make people feel physically and emotionally closer to others. But one caveat is that the strength of one's mental association between loudness and closeness influences how much this effect manifests in an individual.

To also examine the effectiveness of loudness as an antidote to loneliness, researchers randomly assigned 128 students from a local university to one of four conditions in a two (loud versus quiet) by two (social exclusion versus inclusion) design.

Participants had to play an online game with three computersimulated players while listening to an emotionally neutral audiobook segment as background noise. After that, they had to fill in a mood scale that included metrics of loneliness and hurt feelings.

The study found that the socially excluded group exposed to soft background noise fared significantly worse on the mood scale, while the socially excluded group exposed to loud background noise did not differ from socially included groups.

This ability of loudness to fully mitigate the effects of social exclusion came as a surprise to researchers.

"We speculate that on top of providing a false sense of companionship, loud stimuli may also have been an effective distraction that took participants' minds off the social pain they experienced," says Dr Wang.

For people who live in isolation and feel lonely, these findings have especially important implications.

"I have come across many people who live alone and report loneliness, yet rarely have any background noise on in the house. Perhaps they can try having background noise on as the default and see if it makes a difference," he says.

While it may seem intuitive to switch on the TV or radio to feel less lonely, Dr Wang believes that findings of psychological studies need not be counter-intuitive to serve the purpose of informing the public. "In fact, the notion that something is intuitive actually speaks to the validity of a phenomenon," he says.