## PSYCO 403 Podcast Script

Yawn. Did you?

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## YAWN.

## Did you?

Yawning is an involuntary action usually occurring in response to exhaustion or boredom. Interestingly, yawning is a modal action pattern, which means once it is triggered it must be followed through to completion. This phenomenon spans all genders and ages. There is even evidence of yawning in foetuses as young as 15 weeks.

Then again, we have all experienced it at some point. Whether triggered by seeing someone do it, talking about it, or even reading the word, it is almost impossible not to. Ah yes, contagious yawning - and this has nothing to do with exhaustion or boredom. The effect of yawning in response to external cues is one of those topics that science has simply not been able to nail down with absolute certainty. However, those researching an evolutionary psychology perspective propose that the act of contagious yawning is to demonstrate empathy. In particular, a viewpoint by Shalini and Sreedharan supports that yawning is indeed a subconscious form of empathetic behaviour. Humans in particular have evolved to engage in empathetic behaviour as a way to strengthen community bonds, and to help interpersonal relationships.

John Sarneki, an assistant professor of philosophy at the University of Toledo, in his 2008 article likened the yawning reflex to other mirroring or mimicking behaviours. This article suggests that susceptibility to infectious yawning is then dependent on differing levels of empathetic response, implying that the more empathetic a person is the more likely they are to

display a yawn reaction. It also seems that individuals are more susceptible to contagious yawning based on emotional closeness rather than spatial proximity. Sarneki argued that this presupposes a connection between empathetic response and theory of mind. Theory of mind is an ability to understand the mental states of others, and as such requires both maturity and awareness. In fact where individuals are thought to have compromised theory of mind and empathy contagious yawning is usually not seen.

For example individuals with Autism Spectrum Disorders are known to have poor theory of mind, empathy, as well as other cognitive difficulties, and this has an impact on contagious yawning. In a study done in 2009 by Giganti and Ziello of the University of Florence in Italy, children with Autism exhibited far fewer contagious yawns when presented with both audio and visual clips, while frequency of spontaneous yawning showed no difference between any groups of children. In fact, high functioning autistic children yawned less than normally developing children, and further low functioning children yawned less than both of the other groups.

Evidence for an evolved empathetic behaviour grows, as contagious yawning tendencies are also found in domesticated dogs. Dogs have been domesticated for thousands of years and are known to form strong bonds with humans, and as we would then suspect a few studies have shown that man's best friend actually yawns contagiously when viewing humans yawning.

In one particular study done in 2008 by a team of researchers from the University of London, it was found that 72% of the dogs observed yawned in response to humans yawning, this is noteworthy because in studies involving humans only 45-60% showed contagious yawning and

only 33% of chimpanzees yawn in response to humans yawning even though they are our most closely related primate.

Behaviours evolve as way to efficiently guide us towards our proximate goals, and it appears that contagious yawning as a form of empathetic expression is no exception. Empathy is critical in facilitating and strengthening interpersonal relationships, and from this point of view, yawning takes on an entirely new perspective. In fact, susceptibility to contagious yawning may actually have something to say about an individual. Want to check if your date is in to you? Try yawning and see if they respond.