

THE EVOLUTION OF YAWNING:  
WHY DO WE YAWN AND WHY  
IS IT CONTAGIOUS?

by

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Title: THE EVOLUTION OF YAWNING: WHY DO WE YAWN AND

WHY IS IT CONTAGIOUS?

Though common across the animal kingdom, little is known about why we yawn, and even less about why yawning is contagious in humans. By means of literature review and laboratory-based study, this thesis investigates why we yawn and under what circumstances observation of yawns elicits a contagious response. Previous studies have failed to investigate effects of dominance, sex, and hormones on yawning contagion. Research suggests that yawning helps facilitate transitions between activities. Costly signaling theory suggests that because yawns signal anticipated change in activity, they impose a certain “cost” by revealing critical information about the yawner; therefore, dominance factors, sex, and hormones should all affect the frequency of contagious yawns. The experiment sampled subjects’ salivary testosterone and recorded their reactions to short videos featuring various yawn stimuli, in an effort to understand better the evolution of an apparently widespread feature of social signaling, controlled subconsciously by social and physiological criteria.

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