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Stuttering

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1. Abstract

This paper provides some simple calculations from AT Math and Physics on how stuttering may occur. We see that adrenaline affects the frequency of the human mind resulting in a nerve signal velocity that is too slow for the tongue muscle to respond, thus no clear speech.

2. Introduction

In this paper, we consider the mathematics and physics behind stuttering. We have observed that stutters do worse under stress, yet, when not under stress, their speech is lucid. I hypothesize that it is adrenaline (norepinephrine) that leads to a worsening circumstance for stuttering to occur. We begin with the chemistry of adrenaline. Familiarity of AT Math is assumed.

$C_9H_{13}NO + 9\,H_2O + 2\,½\,H_2 \Longrightarrow 9CH_4 + NO + 4\,½\,O_2$

Norepinephrine +Water ==> Methane + Nitrous Oxide +Oxygen

12.0107 x 9=108.0963

14.0067 x 1= 14.067

15.999 x 10=159.98

1.0008 x 36=36.288

Σ 318.43x6.023=1917.9 g

318.43~frequency of the human mind=$1/\pi$

Freq=$1/T=1/((1/t)$

$E=1/t=3.141\sim\pi$

TE=M [0.15915]

3.141=M(0.15915)

M=-1.9736

M=ln t

t=exp(1.9736)

=1.0199~102

$t=KE=1/2Mv^2$

$1.02=1/2\ (1.9736)\ v^2$

$v^2=1.03357$

v=10.166 <11.027

Δv=0.861

It takes 1/5 sec to utter a word.

v=d/t

0.861=d/(1/5)

d=1.722

$1.722/\sqrt{3}=0.0994=\rho_{blood}$

$t=KE=1/2\rho\ v^2$

s=t=d

$1.722=1/2(0.994)(v^2)$

v=1.861

GMP E=-1.248~-1.25

The nerve signal is too slow for the tongue to respond with flight or fight adrenaline in the speaker's system.

3. Conclusion

We see that perhaps it is adrenaline that worsens stutters speech.

References

1. Cusack PTE. Stuttering Mechanism. J of Psychiatry and Neuro Science. SAR. 2020.