

NEUROMYTHS

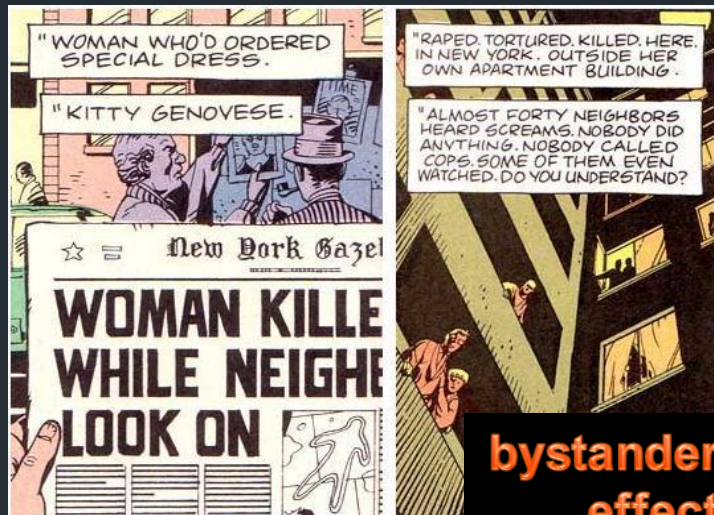
AS AN ILLUSTRATION OF KNOWLEDGE TRANSFORMATION



do you know which statements aren't correct?

Masaryk, R., Bašnáková, J., & Kostovičová, L.

(Trans)formation of Knowledge in Teaching of Psychology



bystander effect

"The well-known theorem says that success in politics equals 7% content, 38% tone of voice and 55% body language, nonverbal communication."
(Iveta Radičová, Reflex, 2011, 22).

Mehrabian's numbers



Jourard's touching frequency



Eskimo words for snow



Mozart's effect

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- common misconceptions about brain mechanisms, which are taken for granted in today's society
- *“a misconception generated by a misunderstanding, a misreading, or a misquoting of facts scientifically established (by brain research) to make a case for use of brain research in education and other contexts” (OECD, 2002)*

Dekker, S., Lee, N. C., Howard-Jones, P., & Jolles, J. (2012).

Neuromyths in education: Prevalence and predictors of misconceptions among teachers.

- 242 teachers from UK & Netherlands
- believed 49% neuromyths
- higher knowledge → more likely to believe neuromyths
- „brain as authority“



2, 4, 5, 7, 9, 10, 11, 12, 15, 19, 21, 22, 25, 28, 30, 32

Dekker S, Lee, N. C. , Howard-Jones, P., & Jolles, J. (2012). Neuromyths in education: Prevalence and predictors of misconceptions among teachers. *Frontiers in Psychology*, 3, article 429, 1-8.

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McCabe, D. P., & Castel, A. D. (2008). Seeing is believing: The effect of brain images on judgments of scientific reasoning. *Cognition*, 107, 343–352.

Waterhouse, L. (2006). Inadequate evidence for multiple intelligences, mozart effect, and emotional intelligence theories. *Educational Psychologist*, 41, 247–255.

Weisberg, D., Keil, F., Goodstein, J., Rawson, E., & Gray, J. (2008). The seductive allure of neuroscience explanations. *Journal of Cognitive Neuroscience*, 20, 470–477.

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A graphic illustration of a human head profile in orange, filled with gears, surrounded by various colorful circular icons representing different fields of study and technology. The background is dark blue with faint binary code.