

Two in One or One in Two?

A closer look at the Default-interventionist model

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INTRODUCTION

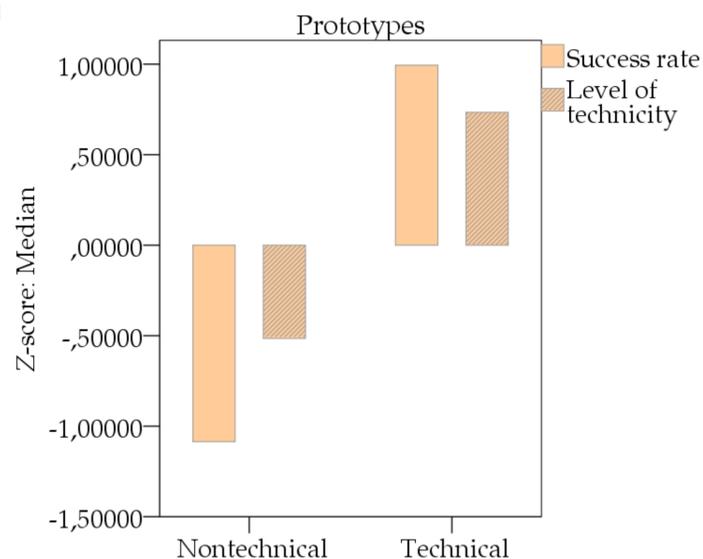
Differences in thinking across cultures and individuals have been explained generally by dual process theories. Evans and Stanovich have referred the theoretical approach in which rapid autonomous processes (T1) are assumed to yield **default responses** unless intervened on by distinctive **higher order reasoning** processes (T2) [1].

Authors emphasize the role of individual differences. However, Kruglanski [2] considers their model to be a proof for single process theory instead of the dual one.

He claims that individual differences matters very much. The processes are qualitatively alike.

RESEARCH OBJECTIVES

The aim of this poster is to find out whether people use **dual processing** when reasoning or there are **two prototypes of reasoners**. The core hypothesis is formulated as follows: there are no significant differences in cognitive reflexive test under time pressure across several professional backgrounds.



METHODS

In our internet-based experiment [3], participants (48♀ + 49♂, M = 24.6 years, SD = 5.08) performed a cognitive reflection test (CRT) in modified version [4]: **WITH** and **WITHOUT time pressure**. K-mean cluster analysis to differentiate groups with respect to education was performed.

RESULT

There is **no difference** between system 1 and system 2 in nontechnical ($U = 514.0$, $p = 0,551$) neither in technical group ($U = 90.0$, $p = 0,495$).

CONCLUSION

- **Default reaction probably depends on training**
- **The empirical evidence could be the manifestation of two different prototypes of reasoners instead of dual processing**

References:

- [1] J.S.B.T Evans and K.E. Stanovich, "Dual-Process Theories of Higher Cognition: Advancing the Debate", *Perspectives on Psychological Science*, vol.8, no.3, pp. 223–241, 2013
- [2] A.W. Kruglanski, "Only One? The Default Interventionist Perspective as a Unimodel—Commentary on Evans & Stanovich", *Perspectives on Psychological Science*, vol.8, no.3, pp. 242–247, 2013
- [3] G. Stoet, "PsyToolkit: A novel web-based method for running online questionnaires and reaction-time experiments" *Teaching of Psychology*, (in press)
- [4] L. Kostovičová, M. Konečný and K. Dudeková, "Čo to vlastne meriame? Reflexia Testu kognitívnej reflexie" In I. Sarmány-Schuller (Ed.), *Otázky rozhodovania: teória, empiria, život*, 31. (s. 166-171). Bratislava: STIMUL, 2013

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