

PHILOSOPHY

HOW TO DO BETTER RESEARCH

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There is an interesting new dissertation (["Ulrich Frey. Der blinde Fleck. Kognitive Fehler in der Wissenschaft und ihre evolutionsbiologischen Grundlagen"](#)) that contains a nice game

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According to [Frey](#), this test is being done now for 40 years with most people answering "E" or "E" & "4".

Only 5% come up with the correct answer of "E" + "7" - the only solution that is able to falsify it. The rule is being false with "E" and an unequal number or "7" and a vowel - also known as the [Wason Selection Task](#).

So here is rule #1: The research outcome can be greatly improved by active attempts to falsify a hypothesis. Take care as confirmatory results can be memorized up to 3 times better than falsifying data. Frey cites [Plous](#)

Thus over a wide range of situations, perceptions of risks were strongly biased in the direction of preexisting views ... Conservatism is the tendency to change previous probability estimates more slowly than warranted by new data.

We usually do not want to spent too much time on such boring tasks like falsifying an hypothesis – creating something new is certainly more rewarding. As children we learned that often the first hypothesis generated is already satisfactory; daily life questions are frequently solved by a simple answers – while science questions are completely different. So we need to remain sceptical and falsify, falsify, falsify -will be continued tomorrow-

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