

Imagine that you need to answer a question that concerns your memory for the past event. When you went for the first date with your current spouse, did you watch Lord of the Rings or Sense and Sensibility? Today, have you left your car keys on a bookshelf or in the bathroom? Did you see person number 1 or person number 2 committing the crime? All of these are examples of forced-choice memory questions. You may respond to such a question and then rate your confidence that your response is correct. Yes, I am sure we watched Lord of the Rings, I am positive that the car keys are on the nightstand, it could be person number 2 but I'm not sure. These statements of confidence matter because other people are likely to infer the correctness of our responses based on these expressions of confidence. For example, the police would be much more interested in a suspect identified with greater confidence. The crucial question that guides research on confidence in memory is thus whether expressions of confidence truly reflect the likelihood that particular responses these expressions accompany are correct.

Is confidence positively related to memory accuracy? Much research confirms such a positive relationship but clearly there are some exceptions. The most famous exceptions pertain to questions posed in the forced-choice format. Research using recognition tests for pictures showed that there are at least two situations in which improving recognition accuracy may actually lead to a reduction in confidence with which correct responses are provided. First, it seems that accuracy of responses increases when alternatives in a memory questions are similar to each other. Thus, for example, it can be easier to correctly decide whether one watched Fellowship of the Ring or Two Towers, than it would be to decide between two very dissimilar films. However, it seems that confidence does not behave in the same way and people are generally more confident when alternatives between which they need to decide are dissimilar to each other. Second, it is obvious that accuracy of responses increases when one alternative is implausible. It seems unlikely that one left one's car keys in the bathroom, in which case the chance that they are on a bookshelf are high. But when rating confidence people seem to disregard the plausibility of the unchosen alternative (bathroom) and focus on the chosen alternative only, which means that while plausible incorrect alternatives lower accuracy, they may actually increase confidence when the correct alternative is endorsed – this alternative needs to be particularly strong to overcome the plausible incorrect alternative.

While we already know some examples of situations in which confidence is no longer predictive of accuracy of memory responses, we do not know whether these are general rules operating across all memory tasks, or they remain specific to the recognition test for pictures, in which they have been so far documented. After all, there is much more to memory than just recognizing the previously presented alternative. Thus, the purpose of the present project is to investigate in a variety of memory tasks whether confidence tracks accuracy under conditions varying similarity of alternatives included in the question and plausibility of the incorrect alternative. The project will employ tasks such as detection of new items (Which of the alternatives do you see for the first time?), a source memory task (Which of the alternatives was presented in this particular source?), a frequency judgment task (Which of the alternatives was presented more often?), and a recency judgment task (Which of the alternatives was presented more recently?). A particular attention will be devoted to confidence in a line-up identification test of the type used in forensic practice – deciding whether a given line-up of faces includes the culprit. Finally, for cases in which dissociations of confidence and accuracy will be found, it will be investigated whether bases of confidence can be changed in order to bring them back into alignment with patterns of accuracy.