

## **IDEA HUNT: On the dynamics and conditions of recognizing creative solutions**

*How to recognize good ideas, i.e., those worth implementing?*—is a question asked not only by creativity researchers but also by scientists, artists, and entrepreneurs—to name just a few relevant professions. The history of revolutionary discoveries, breathtaking artworks, innovative business products, or socially significant actions shows that accurately recognizing ideas is indeed quite challenging. Consider the case of Beethoven: when judging 70 his musical compositions, he vastly overestimated the chances for success in at least fifteen instances. While he expected success, the effects were mediocre (as per Beethoven's quality, of course). Notably, not only eminent creators and inventors struggle with the accuracy of assessing their ideas. In everyday life, both professional and personal, apart from generating ideas, accurate evaluation also matters.

The long tradition of creativity research supports the fairly common belief that generating ideas is vital and decisive for success in creative thinking. This makes sense: there is no creativity without ingenuity. Yet having ideas alone is not sufficient for creative effects. We know quite a bit about individual and situational factors influencing and conditioning producing original and useful solutions to a given problem. We know, for example, that over time, ideas become more original (a so-called serial order effect). However, we still do not understand how, for example, the evaluation of ideas changes over time, what influences its effectiveness of recognition, or how it can be improved.

So what makes us (or not) good selectors of ideas? Do we become more effective in recognizing them over time? When, under what conditions, and utilizing what factors, can we learn to identify those ideas that are original, potentially useful, and new? This project aims to deepen the knowledge of the psychological and situational mechanisms responsible for the effective recognition of creative solutions. Based on the results of previous research, I posit that the acquisition and development of creative metacognitive accuracy is a dynamic process, susceptible to the influence of factors related to the task and context and dependent on individual cognitive characteristics. This project uses a series of studies, including one correlation study, five experimental studies, and intervention. Each study will test specific plausible mechanisms of metacognitive accuracy. In Study 1, I plan to identify the temporal dynamics of accurate idea recognition. In subsequent experiments, I will investigate how the effectiveness of identifying ideas is strengthened by examples and knowledge (Study 2a and 2b), feedback (Study 3), and cognitive load (Study 4a). I will also check whether intelligence helps deal with detrimental situational influences (Study 4b) and whether and to what extent it is possible to transfer an accurate assessment of solutions to simple problems to more complex and real ones (Study 5). Finally, in the intervention study, I will examine to what extent the training increases knowledge and metacognitive skills so shapes the accuracy of recognizing creative solutions (Study 6).

The obtained data will allow systematizing the knowledge about the idea evaluation process, considering the complex, mutual relations between the temporal, task-related, and individual characteristics. Consequently, they will contribute to developing a more coherent theoretical framework describing the process of recognizing creative ideas from a metacognitive perspective. These results can also be applied in designing methods and tools (e.g., training) supporting teachers, employees, or social leaders' efficiency in recognizing those solutions that are unexpected, meaningful, useful, and positively influencing our lives.