

2026 臺中市青年模擬聯合國暨國際議事培訓營校內甄選-公佈篇目

Artificial intelligence can dramatically improve productivity, but growing evidence suggests that excessive reliance on it may weaken independent thinking. The problem resembles hiring a personal trainer and asking the trainer to lift the weights for you. The task is completed, but you gain no strength. Likewise, when AI solves equations, drafts reports, or writes code for us, we may achieve impressive results without developing the skills needed to perform those tasks ourselves.

Research demonstrates both the benefits and risks. In a 2026 study involving Boston Consulting Group consultants, Ethan Mollick and his colleagues found that participants using GPT-4 completed 12% more tasks and worked 25% faster than those without AI. Their work was also rated more highly when tasks matched AI's capabilities. However, when assignments exceeded the technology's competence, AI users made more mistakes, suggesting that dependence on technology can reduce careful judgment.

Similar concerns emerged in research led by Grace Liu. Participants using AI solved nearly 90% of online fraction problems correctly, compared with 72% among those working independently. Yet once AI assistance was removed, their performance fell below that of participants who had never used it. They also gave up on difficult problems more quickly. Surprisingly, this effect appeared after only ten minutes of AI assistance.

Researchers Steven Shaw and Gideon Nave identified another danger: "cognitive surrender," in which users accept AI-generated answers without evaluating them critically. When AI gave correct answers, participants performed significantly better; when it was wrong, their accuracy dropped below the no-AI baseline. Nevertheless, users remained highly confident in both situations.

The researchers describe AI-assisted thinking as "System 3," which operates alongside Daniel Kahneman's intuitive System 1 and deliberate System 2. Ideally, this third system could challenge assumptions and strengthen human reasoning. In practice, however, people may surrender their judgment to machines.

The solution is not to reject AI but to use it strategically. Instead of replacing human thought, AI should serve as an intellectual sparring partner that questions our reasoning and encourages reflection. Used wisely, it can improve productivity without weakening the cognitive abilities that make us capable, independent thinkers.