# Article information:

Frontiers | Cognitive psychology-based artificial intelligence review
<https://www.frontiersin.org/articles/10.3389/fnins.2022.1024316/full>

# Article summary:

1. Artificial intelligence (AI) development is based on brain cognition research, but psychology and its derived philosophy of mind play an important role in guiding breakthroughs in emotional response and decision making.

2. Cognitive psychology studies advanced mental processes of human cognition, including thinking, deciding, reasoning, motivation, and emotion, which can be used to train AI to recognize emotions and understand human feelings.

3. Examples of cognitive psychological AI applications include face attraction prediction using deep learning-based templates and multi-task learning schemes, affective computing for emotion recognition in music, and intelligent surveillance management systems for public opinion analysis based on big data analysis technology.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article provides a comprehensive overview of the current state of research on artificial intelligence based on cognitive psychology. It highlights the importance of psychology and its derived philosophy of mind as one of the fundamental support theories for AI. The article also discusses various applications of cognitive psychological artificial intelligence, including face attraction, affective computing, and music emotion.

However, the article has some potential biases and limitations. Firstly, it focuses mainly on the positive aspects of cognitive psychological artificial intelligence and does not explore any potential risks or negative consequences that may arise from its use. Secondly, it presents a one-sided view by only discussing the benefits of incorporating cognitive psychology into AI design without considering any counterarguments or alternative perspectives.

Additionally, some claims made in the article are unsupported by evidence or lack sufficient explanation. For example, the article states that current AI design makes extensive reference to human cognitive models but does not provide any specific examples or evidence to support this claim.

Furthermore, while the article provides a detailed analysis of various applications of cognitive psychological artificial intelligence, it overlooks other important areas where this technology could be applied. For instance, it does not discuss how cognitive psychology could be used to improve cybersecurity or enhance decision-making processes in business.

In conclusion, while the article provides valuable insights into the current state of research on artificial intelligence based on cognitive psychology, it has some limitations and potential biases that should be taken into consideration when interpreting its findings.

# Topics for further research:

* Cognitive psychology and cybersecurity applications of AI
* AI design without reference to human cognitive models
* Negative consequences of cognitive psychological AI
* Alternative perspectives on incorporating cognitive psychology into AI design
* Decision-making processes and cognitive psychology in business
* Limitations of current AI design in relation to cognitive psychology

# Report location:

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