

Journal of Psychological Research https://ojs.bilpublishing.com/index.php/jpr

EDITORIAL Outlook of Cognitive Neuroscience

Bo Liu^{*} Wei Xie

School of Economics and Management, Southwest Petroleum University, Chengdu, 610500, China

Social science researches at present emphasize the construction of relations between multiple constructs. Psychological science is no exception. Before verifying whether their hypotheses are true with a questionnaire method or experimental method, scholars will check out the hot topics of recent years and construct multiple mediating and moderating relations first. They work on scattered topics that more or less overlap with many other disciplines. In previous years, the author focused on studying the youths with poor mental health in the new era of China, observing their moral choices in the corporate environment through game theory experiments ^[11]. The conclusions are usually surprising- most new-generation youths choose to maximize their self-interest from between pro-social behaviors and risk aversion ^[21].

Psychological researches sometimes cannot go far alone. Outstanding scholars usually combine them with the knowledge of other disciplines, for example, social psychology that combines psychology and sociology, and clinical psychology that combines clinical medicine and psychology. The author hereby refers to the cognitive psychology that combines psychology and neuroscience, as well as the derived cognitive neuroscience. Some scholars have been focusing on studying brain nerves and constructing cognitive neuroscience experiments to explain the existing psychological problems with neuroscience-related knowledge. Cognitive neuroscience was a late starter compared to other disciplines. It came into being in the late 1970s but then fell silent for a long time ^[3]. Afterward, with the rapid development of computer science, modern cognitive neuroscience came into existence. Cognitive science once made a major breakthrough. Traditional cognitive science focused on researches on memory, thinking, attention, and other elements, but lacked inclination for psychological researches. By contrast, second-generation cognitive science has inspired people to consider such issues as mind-body relations and ideology. Psychological science includes two different research directions: scientism and humanism, both of which have produced many solid theories and articles. Cognitive neuroscience at the present stage offers an opportunity to combine the two flexibly ^[4].

Social cognitive neuroscience, in essence, is to study existing social cognitive phenomena with neuroscience technologies. General items of psychological researches, such as emotion, self-consciousness, decision making, and attitude, can be excavated deeply by neuroscience technologies. Existing research results show that cognitive

*Corresponding Author:

Bo Liu,

School of Economics and Management, Southwest Petroleum University, Chengdu, 610500, China; *Email: th100th@swpu.edu.cn*

Received: 28 December 2021; Accepted: 10 January 2022; Published: 13 January 2022

Citation: Bo Liu, Wei Xie. Outlook of Cognitive Neuroscience. *Journal of Psychological Research*, 2022, 4(1), 4287. https://doi.org/10.30564/jpr.v4i1.4287

DOI: https://doi.org/10.30564/jpr.v4i1.4287

Copyright © 2022 by the author(s). Published by Bilingual Publishing Co. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License. (https://creativecommons.org/licenses/by-nc/4.0/).

neuroscience is changing some of the ideas held by the psychology community about psychological researches. Researches on the biological foundation of social behavior and social cognition are expected to become a branch of neuroscience and cognitive science ^[5]. Therefore, the establishment of a strong social cognitive neuroscience research team and the opening of social cognitive neuroscience courses in psychology and cognitive neuroscience will cultivate a group of world-class research talents and also a large number of teaching and application talents. Additionally, fundamental research results of social cognitive neuroscience will closely link the intervention of emotional problems and abnormal social behaviors in schools to the practical applications of hospital prevention and treatment of emotional disorders, helping build a Harmonious Society.

Of course, cognitive neuroscience also has its drawbacks. It may be unable to explain a complete psychological activity or describe human psychology and behavior. Most of the time, it can only reveal the correlations between cognitive behaviors and the nerves. However, these do not affect the research value of cognitive neuroscience. Cognitive neuroscience has the same elaborate experiments as that of cognitive psychology, and physiological psychology, neuropsychology, and other psychological categories may also be integrated under the same research paradigm.

Therefore, cognitive neuroscience, based on modern cognitive science and neuroscience, can be a future

research direction for scholars.In particular, construct game experiments and use EEG research to solve the decision-making problems of contemporary youth, or to verify some important field theories in game theory.

References

- Liu, B., Luo, L.C., Xiao, Q.Y., 2018. Determination and correlation analysis of mental health influencing factors among ant tribe young intellectuals based on cognitive neuroscience. Neuroquantology. 16(5), 901-906.
- [2] Liu, B., Xie, W., Zhang, J.H., Chen, C., 2021. Psychological Influence Factors Analysis of the New Generation Employees' Moral Choices from the Perspective of Cognitive Neurology. International Journal of Mental Health Promotion. 23(4), 589-604.
- [3] Costas, A., Grille, I.R., Garcia, G.G., Fernandez, E.J., 2017. Cognition predicts psychosocial functioning and psychological treatment adherence in depressive disorders. European Neuropsychopharmacology. 27, S798-S799.
- [4] Xiao, G., 2018. Psychological mechanism of adolescent internet addiction and brain functional imaging. Neuroquantology. 16(5), 915-920.
- [5] Yoo, C.W., Sanders, G.L., Cerveny, R.P., 2018. Exploring the influence of flow and psychological ownership on security education, training and awareness effectiveness and security compliance. Decision Support Systems. 108, 107-118.