Chapter 8
Testing Creativity of ChatGPT in Psychology: Interview With ChatGPT

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ABSTRACT

ChatGPT is a large language model trained on a vast amount of text and can generate human-like responses to natural language queries. However, the extent to which ChatGPT can be considered a creative system is still unclear. There is a need to develop methods to test the creativity of ChatGPT and assess its potential for generating novel and valuable responses. In this study, the authors have only focused on the creativity of ChatGPT in the field of psychology. In this study, they asked questions for testing the creativity of ChatGPT. They used a combination of quantitative and qualitative methods to evaluate the creative potential of ChatGPT. They assessed the novelty and usefulness of ChatGPT-generated responses. However, it is not clear how to assess the novelty of ChatGPT. The results suggest that ChatGPT has the potential to generate creative responses. Additionally, the responses generated by ChatGPT were found to be similar in quality to those developed by human experts in certain domains. ChatGPT could produce texts by logic without directly citing previous texts.

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1. INTRODUCTION

ChatGPT is a large language model that has been trained on a vast amount of text data and has the ability to generate human-like responses to natural language queries and previous manuscripts investigated its relationship with psychology (Dana & Gavril, 2023; Elyoseph, Hadar-Shoval, Asraf, & Lvovsky, 2023; Liu, 2024; Uludag, 2023e). While ChatGPT has been widely used in various applications such as literature (Haman & Školník, 2024), economy (Zarifhonarvar, 2024), language learning (Belda-Medina & Calvo-Ferrer, 2022; Huang, Hew, & Fryer, 2022; Jeon, Lee, & Choe, 2023), and programming (Biswas, 2023; Bucaioni, Ekedahl, Helander, & Nguyen, 2024; Tian et al., 2023; Uludag, 2023a, 2023b, 2023c, 2024; Yilmaz & Yilmaz, 2023), its potential for generating creative responses in psychology remains unclear. In this study, we aim to test the creativity of ChatGPT in psychology by conducting an interview with the language model. The interview will be designed to assess the ability of ChatGPT to generate responses that are novel, useful, and emotionally resonant in the context of psychological problems and interventions.

The study has important implications for using ChatGPT in psychology and related fields. If ChatGPT can be shown to generate creative responses that are comparable to those generated by human experts, it could be used to enhance the effectiveness and efficiency of psychological interventions, such as therapy and counseling. Additionally, the study may contribute to our understanding of the creative potential of language models and their potential use in other innovative applications.

In the following sections, we will describe the methods used to interview with ChatGPT, present the study results, and discuss the implications and limitations of our findings.

2. METHODS

We have used the first ChatGPT version produced in 2023. We have asked ten questions regarding the creative skills of ChatGPT. This study is not a systematic review. The questions aimed to help ChatGPT to produce novel responses related to the field of psychology.

By focusing on creativity within this field, the study likely uncovered unique perspectives and generated responses that could potentially contribute to the exploration and advancement of psychological concepts and theories.

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