Title: Affinity in Human-Chatbot Interactions  
  
Authors:  
  
1) Riddhi Jain, Department of Experimental Psychology, University of Oxford  
2) Santiago Castiello de Obeso , School of Medicine, Yale University  
3) Gabriella Fitzgerald, Department of Experimental Psychology, University of Oxford  
4) Daniel Lametti, Department of Psychology, Acadia University  
5) Robin Murphy, Department of Experimental Psychology, University of Oxford  
Presenting Author: Daniel Lametti, Department of Psychology, Acadia University

Abstract: The development of large language models (LLMS) has propelled systems like ChatGPT into the spotlight, with claims that they have passed the Turing Test. However, social interaction extends beyond mimicking human responses; it involves fostering an affiliation and nurturing a shared social understanding. Here, we examine the correlation between individuals' mental health symptoms and their affiliation with different types of Chatbots. Two distinct chatbots were developed: one modelled to reflect anxiety and depression symptoms, and another representing a neutral emotional state. 100 participants engaged with both bots for 10 minutes and then completed a short questionnaire assessing how relatable, understanding, and enjoyable they found the bot. Results indicated a form of homophily; participants with high anxiety scores found the anxious bot more relatable and understanding, while those with lower anxiety related more to the neutral bot. Despite the affiliative tendencies, participants of both groups were disinclined to interact with the anxious bot in the future. The findings contribute to the broader understanding of dyadic exchanges in the context of mental health. This work lays the groundwork for more nuanced considerations in the deployment of LLMs, for example, within therapeutic scenarios, where the bot's characteristics may affect user experience.