Chatbots for the clinical training of psychologists

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The quality of interaction is important in clinical settings and clinical education. The use of chatbots to support learning and teaching is increasing in both psychology and education. Although still hampered by their limited ability to simulate the specific characteristics of human interaction, their potential is increasingly being recognized. This study investigated the characteristics of the human-chatbot relationship in the context of clinical psychology education. To this end, a chatbot trainer was developed for psychology students to train them in a cognitive-behavioral therapy technique called ABC (Antecedent-Behavior-Consequence). There were two experimental conditions: in the first group (n=41) students interacted with the chatbot believing it was a human trainer (human condition), whereas in the second group (n=41) they knew it was a chatbot (chatbot condition). Questionnaires were used to assess perceptions of intelligence, safety, likability (Godspeed Scales III-IV-V), morality and dependence of the agent (PMAS), trust in the agent (CTPA), and positive and negative affect during the interaction (PANAS). Results showed that the two groups differed only in perceived dependence on the agent (higher in the "chatbot" group). Positive significant correlations were found in both conditions between trust, positive affect, perceived intelligence, safety, and likability; only in the human condition did trust correlate positively with morality and negatively with negative affect. However, participants in the "chatbot" condition perceived the training as significantly more useful than participants in the "human" condition. These differences provide an interesting insight into the key properties of chatbots that are relevant for clinical training purposes.