Comparison of Subjectively Experienced Emotions and Dispositions in Man-Machine and Man-Man Scenarios

Steffen Walter¹, Cornelia Wendt², Kerstin Limbrecht¹, Sascha Gruss¹, Harald C. Traue¹

Department of Medical Psychology ¹University of Ulm Frauensteige 6 89075 Ulm ¹steffen.walter@uni-ulm.de ²cornelia.wendt@unibw.de

Abstract: The authors of this study take the scientific position that of the major technologies of the future will be companion systems. This study examines which emotions and dispositions are relevant in this regard. It assesses which emotions and dispositions in the experienced scenarios of man-machine interactions are retroactively reflected in comparison with man-man interaction. The sample consisted of N=145 participants, which were divided into two groups. The first group described positive, and the second group negative scenarios man-machine and man-man interaction. Subsequently, the participants evaluated their respective scenarios with the help of 94 adjectives relating to emotions and dispositions. The correlations of the occurrence of emotions and dispositions in the man-man vs. man-machine interactions are very high. However, adjectives that are particularly relevant for man-man or man-machine interactions could also be identified. The results speak for a high similarity in the reproduction of subjectively experienced emotions and dispositions between man and machine in the emotional realm. Even though the scenarios did not describe any interactions of visionary companion systems, this is an indication that the interaction of the user with a companion system will be similar to man-man interactions.