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Toolkit for exploring ethical aspects of digital social and affective touch interactions

Laura A Dima¹, Merel M. Jung², Lili Golmohammadi³, Gijs Huisman⁴, Karen Lancel⁵, Anouk Keizer⁶, David Parisi⁷, and Jan van Erp⁸

Abstract—In this hands-on demonstration, people are invited to use a newly developed toolkit to scrutinize their attitude and preferences towards digital social and affective touch interactions.

Index Terms—social and affective touch, digital touch, haptic technology, ethics, toolkit

I. TOOLKIT OVERVIEW

As a result of technological advances in areas such as haptics, social robotics, and virtual reality this is a crucial time to interrogate the ethics of digital social and affective touch interactions [1]. In our workshop at the World Haptics Conference 2023, participants will collaboratively develop a card-based toolkit designed to support designers, developers, and users of digital touch technologies to reflect on the ethical aspects such as the physical harassment of avatars in virtual reality (see Fig. 1). Card-based toolkits have found to be a useful resource for inspiring and informing design methods and processes [2]. While a wide range of card-based toolkits span a host of disciplines and domains, few focus on the still-emergent, and highly complex field of digital touch. In this hands-on demonstration, people are invited to use the toolkit to explore ethical aspects of digital touch and to suggest improvements and extensions to the toolkit.

The toolkit will consist of cards depicting scenarios in which a digital social and affective touch interactions takes place (see Fig. 1 and demonstration video^a). These scenarios vary in terms of technology (e.g., virtual reality, human-robot interaction, mediated touch), type of interaction (e.g., handshake, arm touch, hugging) and social context (e.g., a work meeting, comforting a close friend, an approach from a stranger). The deck of cards is intended to be sorted based on



Fig. 1. Example of a toolkit card depicting a digital touch scenario (left) and placement of cards on different sorting templates (e.g. “How comfortable would you be in such a situation” (top) and “consent required?”(bottom)) based on an individual’s attitude towards the depicted scenarios (right).

an individual’s attitude towards the scenarios using different scales (e.g., ranging from 1: completely inappropriate to 5: completely appropriate or whether this interaction requires consent: yes, no, or possibly). The primary aim of the toolkit is to provoke (future) users of digital technologies to scrutinize their attitude and preferences towards digital social and affective touch interactions and foster discussion of digital touch etiquette. The secondary aim is to further develop the tool into a validated scientific instrument and leverage it to study differences in attitudes regarding the ethics of digital social and affective touch interaction between people of different cultures, ages, and genders. Moreover, a specialized version of the toolkit for children could be developed for educational purposes. To maximize impact, we will provide open access to the finalized toolkit.

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^ahttps://vimeo.com/818466271