Affirmative Consent and Gendered Harm in VR/AR Dating

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Gender-based harm is pervasive in computer-mediated dating, including harassment, coercion, and sexual violence linked to partners first encountered through digital platforms [1, 3, 5, 6]. We focus on emerging VR/AR dating, where embodiment and interactional immediacy can intensify consent ambiguity and raise the stakes of boundary violations. However, affirmative consent ("yes means yes") is hard to put into practice when platform interface choices and settings keep things unclear and shift safety work onto those most at risk, especially women and LGBTQIA+ users [2, 4, 7]. Drawing on participatory design with 17 stakeholders, we surface *socio-technical imaginaries* of responsible consent infrastructure: visions of how platforms, policies, and interfaces *should* redistribute responsibility for safety rather than treating consent as an individual communication skill. **Content warning:** gender-based online harm and sexual violence.

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1 Introduction

Online dating platforms increasingly structure how people meet and how sexual expectations form [1, 5, 6]. At the same time, gender-based harms including harassment, coercion, and boundary violations are unevenly distributed. Women and LGBTQIA+ people are disproportionately targeted and are often left to manage risk through vigilance, boundary work, and post-hoc reporting [2, 4, 7].

Affirmative consent is often presented as a response to these harms, but many dating spaces do not give people enough support to negotiate consent clearly. In practice, consent-relevant work is frequently pushed into reactive workflows that require targets to interpret ambiguous cues, document interactions, and report violations after harm occurs [2, 4, 7, 8]. From the perspective of socio-technical imaginaries for responsible design, this framing risks treating consent as an individual skill while leaving platform responsibility under-specified. To elicit concrete imaginaries of what "responsible" consent exchange could look like, we use immersive dating (VR/AR) as a speculative space. VR/AR surfaces consent breakdowns in exaggerated form (e.g., visibility of boundaries, haptic touch, automated intervention), helping participants articulate responsibilities that also generalize back to mainstream dating spaces, where ambiguity, unequal safety labor, and reactive reporting remain persistent challenges [8].

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2 Method

We conducted participatory design sessions with 17 women and LGBTQIA+ stakeholders. They participated in five groups, with 6+ hours of discussion and design work per group across three sessions. The first two sessions used VR dating scenarios to discuss what counts as acceptable versus unwanted behavior and how consent should be communicated in VR dating. Participants created scenarios and then reflected on possible safety features in later sessions. We focused on women and LGBTQIA+ stakeholders because they are more often targeted in dating contexts and are more often expected to do safety work.

3 Findings

Participants described these ideas because they wanted VR/AR dating to reduce gender-based harm and reduce the amount of safety work placed on women and LGBTQIA+ users. Across scenarios and group discussions, we found four recurring ideas for how people and systems could support giving, receiving, and denying consent in VR/AR dating contexts.

First, *visual consent* uses simple VR/AR signals (e.g., colors, auras, pop-ups) to make boundaries easier to notice during interaction, sometimes along with verbal confirmation. Second, *consent to stimulus* separates consent into two steps: users first opt in to the ability to feel a stimulus (e.g., haptics) and then consent to specific actions that trigger it. Third, *agent-mediated consent* introduces an AI "consent agent" that helps users set preferences ahead of time and can step in during interaction (automatically or when a user triggers it) to support clear consent communication. Fourth, *environmental consent* gives the virtual space a role in shaping what actions are possible or restricted and what users are told before entering certain spaces, which can improve safety but can also raise concerns about agency and privacy.

Participants liked these ideas because they reduce uncertainty and make boundaries clearer in the moment. For visual consent, participants described attention-getting cues such as an *"alert"*, *"warning"*, or a *"pop up"* (P1) to make a partner notice a boundary right away. For consent to stimulus, participants wanted explicit opt-in and mutual agreement, as one participant explained: *"Both players maybe need to like check a box, but if not, if only one of them checks a box, they can't [experience haptic touch]"* (P14). Overall, participants treated consent as something that needs ongoing support during interaction, not only a single question at the start.

Author Biographies

Meryem Barkallah is a Master's student in Computer Science at the University of Michigan-Flint and a Graduate Student Research Assistant in Dr. Zytko's lab. Her research examines consent exchange in digital spaces.
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References

[1] Edmond Pui Hang Choi, Janet Yuen Ha Wong, and Daniel Yee Tak Fong. 2018. An Emerging Risk Factor of Sexual Abuse: The Use of Smartphone Dating Applications. *Sexual Abuse* 30, 4 (June 2018), 343–366. https://doi.org/10.1177/1079063216672168 Publisher: Sage Publications Sage CA: Los Angeles, CA.

[2] Claudia García-Moreno, Christina Pallitto, Karen Devries, Heidi Stöckl, Charlotte Watts, and Naeema Abrahams. 2013. *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence.* World Health Organization.

[3] Rosalie Gillett. 2018. Intimate intrusions online: Studying the normalisation of abuse in dating apps. *Women's Studies International Forum* 69 (July 2018), 212–219. https://doi.org/10.1016/j.wsif.2018.04.005 Publisher: Elsevier.

[4] Claude A. Mellins, Kate Walsh, Aaron L. Sarvet, Melanie Wall, Louisa Gilbert, John S. Santelli, Martie Thompson, Patrick A. Wilson, Shamus Khan, Stephanie Benson, Karimata Bah, Kathy A. Kaufman, Leigh Reardon, and Jennifer S. Hirsch. 2017. Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLOS ONE* 12, 11 (Nov. 2017), e0186471. https://doi.org/10.1371/journal.pone.0186471 Publisher: Public Library of Science.

[5] Anastasia Powell and Nicola Henry. 2019. Technology-Facilitated Sexual Violence Victimization: Results From an Online Survey of Australian Adults. *Journal of Interpersonal Violence* 34, 17 (2019), 3637–3665. https://doi.org/10.1177/0886260516672055

[6] Janine Rowse, Caroline Bolt, and Sanjeev Gaya. 2020. Swipe right: the emergence of dating-app facilitated sexual assault. A descriptive retrospective audit of forensic examination caseload in an Australian metropolitan service. *Forensic Science, Medicine and Pathology* 16, 1 (2020), 71–77. https://doi.org/10.1007/s12024-019-00201-7

[7] Srijana Khatiwada May S. Chen Marcie-jo Kresnow Sharon G. Smith Sharon Caslin Ruth W. Leemis, Norah Friar and Kathleen C. Basile. 2022. The National Intimate Partner and Sexual Violence Survey: 2016/2017 Report on Sexual Violence. (2022).

[8] Douglas Zytko, Nicholas Furlo, Bailey Carlin, and Matthew Archer. 2021. Computer-Mediated Consent to Sex: The Context of Tinder. *Proc. ACM Hum.-Comput. Interact.* 5, CSCW1 (April 2021). https://doi.org/10.1145/3449288 Publisher: Association for Computing Machinery Place: New York, NY, USA.