Natalie Grace Brigham*, Miranda Wei*, Tadayoshi Kohno*, Elissa M Redmiles[†]

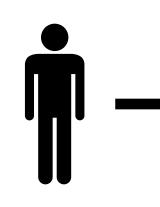
Content warning: this talk discusses forms of image-based sexual abuse

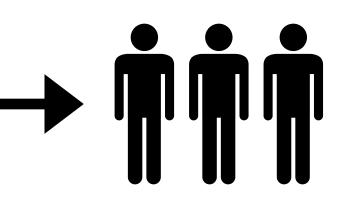
SOUPS 2024 Philadelphia, PA

"Violation of my body:" Perceptions of Al-generated nonconsensual (intimate) imagery

*University of Washington, †Georgetown University

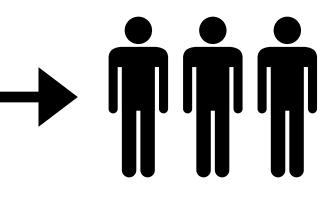
A friend uses AI to create a synthetic video of you dancing and sends it a group chat with you in it





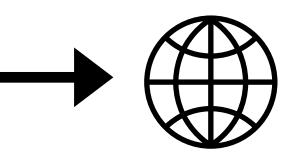


Do you find this acceptable? A friend uses AI to create a synthetic video of you dancing and sends it a group chat with you in it



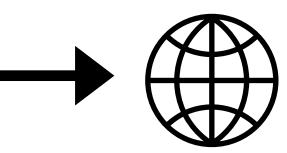


A friend uses AI to create a synthetic video of you dancing and posts it publicly



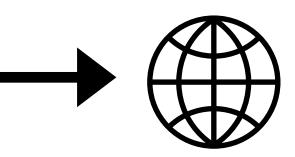


A stranger uses Al to create a synthetic video of you dancing and posts it publicly





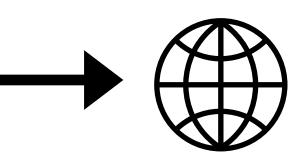
A stranger uses AI to create a synthetic video of you performing a sexual act and posts it publicly





A stranger uses Al to create a synthetic video of you performing a sexual act and posts it publicly

What about a situation shapes people's attitudes towards synthetic media?

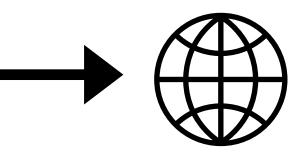






What about a person shapes their attitudes towards synthetic media?

A stranger uses AI to create a synthetic video of you performing a sexual act and posts it publicly





Al-generated non-consensual intimate imagery AIG NCI

[McGlynn et al. 2017]



Research questions

- what is depicted: sexual vs. non-sexual acts? RQ1
- **RQ2** who is creating the media and for what purpose?
- RQ3 attitudes towards sexual (a) consent and (b) non-synthetic content?
- gender?

How do attitudes towards non-consensual synthetic imagery differ depending on:



Vignettes

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]



Vignettes

A [creator] uses Al to create a synthetic video of you [action] for the purpose of [purpose]

m .



Vignettes

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]



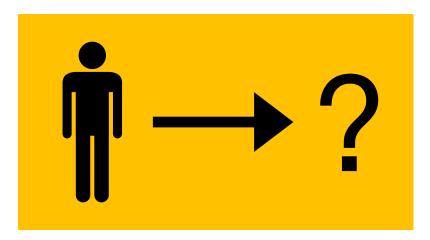
Vignettes

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]



Vignettes

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]





- Vignettes
- Sexual Consent Scale Revised

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]



Survey

In December 2023 of 315 people in the US

- Vignettes
- Sexual Consent Scale Revised
- Attitudes towards non-synthetic intimate imagery

A [creator] uses AI to create a synthetic video of you [action] for the purpose of [purpose]



Ethical considerations

- Survey did not involve any actual synthetic media
- IRB deemed study exempt
- Mitigated potential harm from hypothetical victimization scenarios Consulted subject-area experts

 - Informed consent about what survey included
 - Provided the option to opt out of specific questions



Data analysis

Quantitative

Cumulative link mixed regression models for acceptability ratings

Qualitative

Coded rationales for (un)acceptability



Data analysis

Quantitative

Cumulative link mixed regression models for acceptability ratings

Qualitative

Coded rationales for (un)acceptability



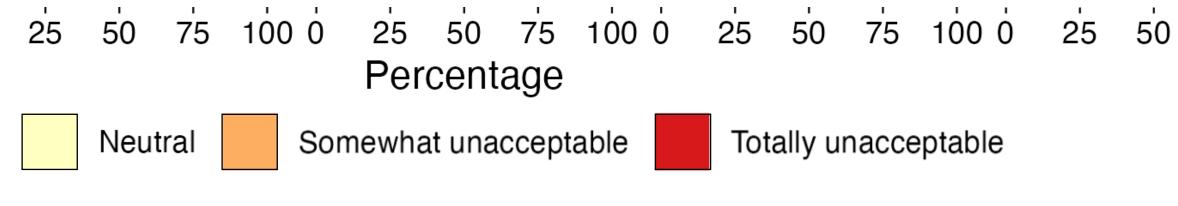
- V11 stranger/sexual act/harm
- V2 intimate partner/sexual act/harm
- V12 stranger/sexual act/sexual pleasure
- V10 stranger/sexual act/entertainment
- V1 intimate partner/sexual act/entertainment
- V3 intimate partner/sexual act/sexual pleasure

•		•	•	
0	25	50	75	100 0

Totally acceptable

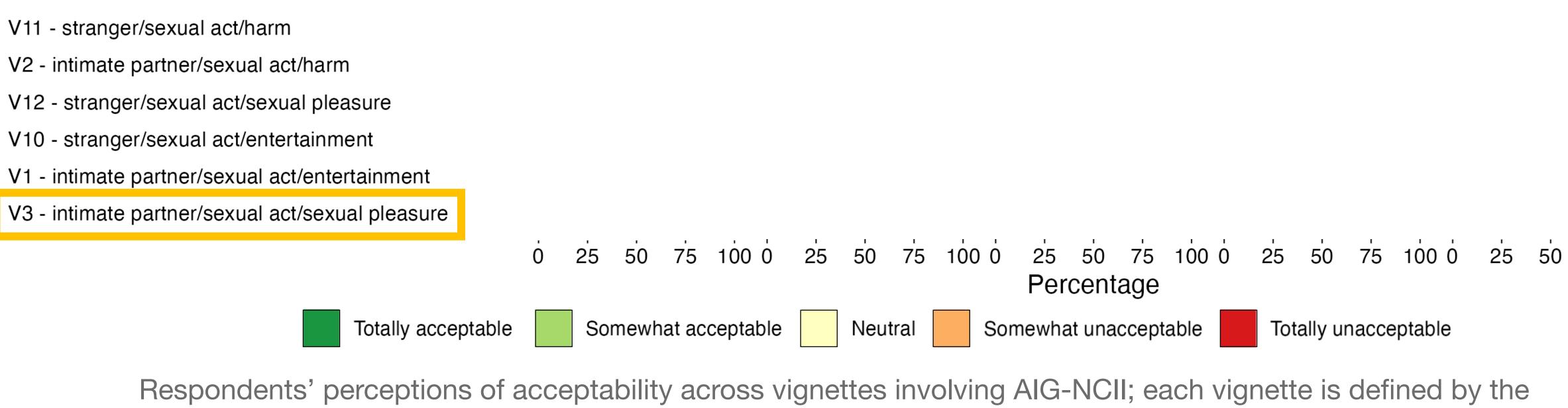
Somewhat acceptable

Respondents' perceptions of acceptability across vignettes involving AIG-NCII; each vignette is defined by the creator / action / intent.







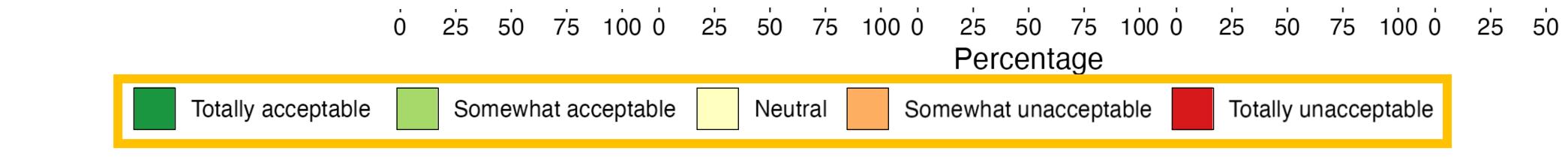


creator / action / intent.





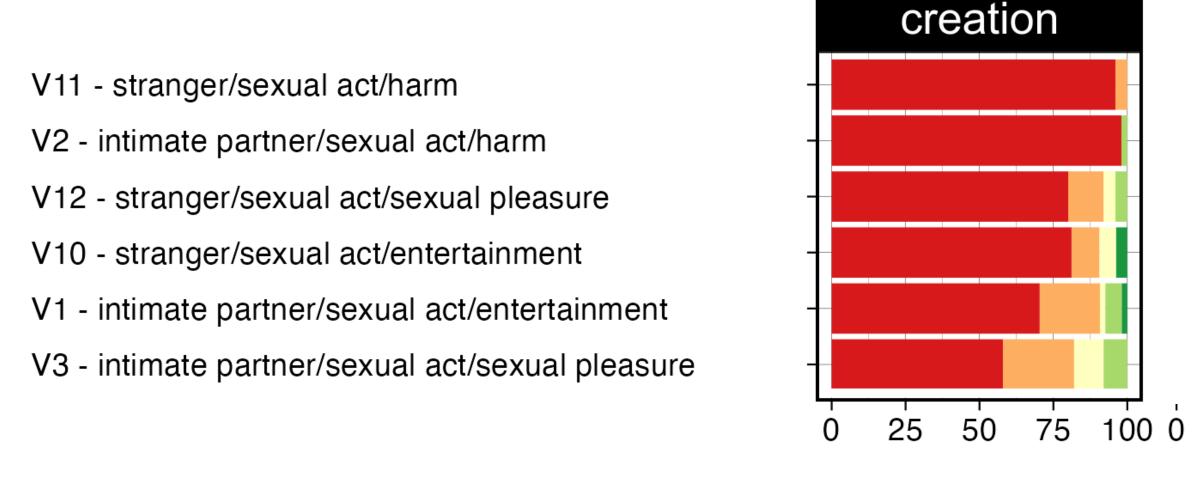
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- V2 intimate partner/sexual act/harm
- V12 stranger/sexual act/sexual pleasure
- V10 stranger/sexual act/entertainment
- V1 intimate partner/sexual act/entertainment
- V3 intimate partner/sexual act/sexual pleasure



Respondents' perceptions of acceptability across vignettes involving AIG-NCII; each vignette is defined by the creator / action / intent.



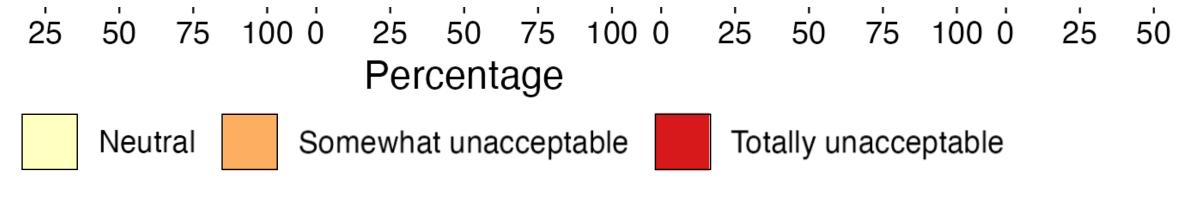




Totally acceptable

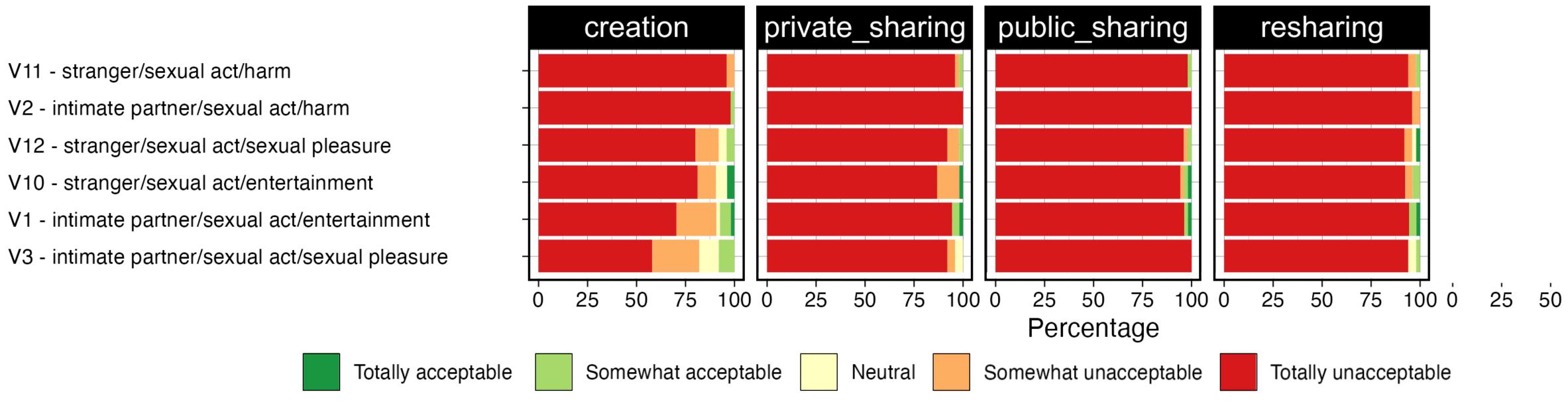
Somewhat acceptable

Respondents' perceptions of acceptability across vignettes involving AIG-NCII; each vignette is defined by the creator / action / intent.





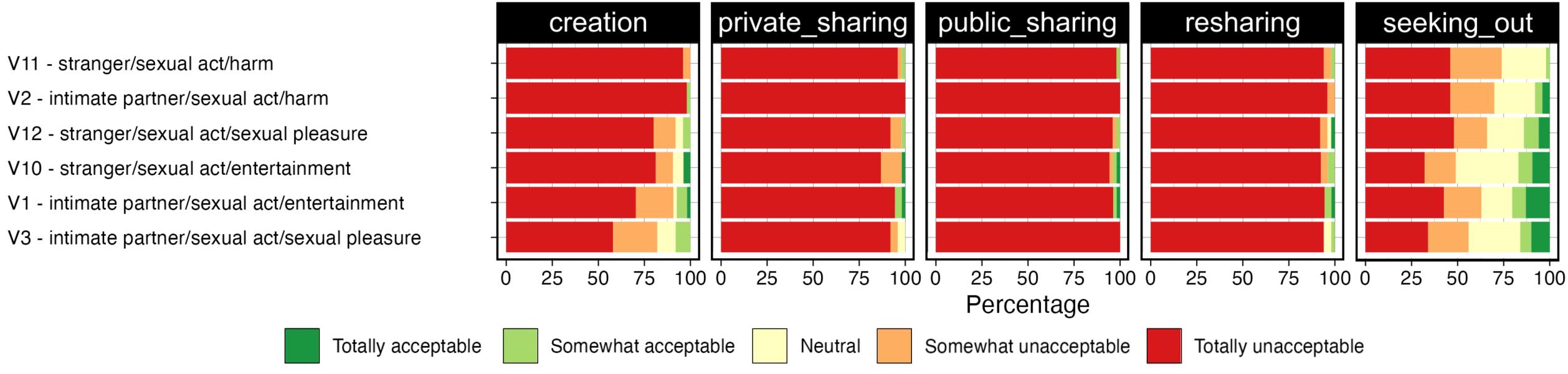




Respondents' perceptions of acceptability across vignettes involving AIG-NCII; each vignette is defined by the creator / action / intent.







Respondents' perceptions of acceptability across vignettes involving AIG-NCII; each vignette is defined by the creator / action / intent.



Non-sexual actions and intent to entertain increased acceptability





- Men found creating and privately sharing synthetic imagery more acceptable

Non-sexual actions and intent to entertain increased acceptability

Creation: p < 0.005, **Private Sharing**: p < 0.01



- Men found creating and privately sharing synthetic imagery more acceptable

"The content she generated **sounds cool** and indicates she's **attracted to me**" (P65, V6 - intimate partner/sport/sexual pleasure)

Non-sexual actions and intent to entertain increased acceptability



- Men found creating and privately sharing synthetic imagery more acceptable

Non-sexual actions and intent to entertain increased acceptability

Rationales for unacceptability were both harm- and rights- based



- Men found creating and privately sharing synthetic imagery more acceptable

"It's not harming me or blackmailing me or anything. As long as it doesn't get shared I think it's ok" (P163, V3 - intimate partner/sexual act/sexual pleasure)

Non-sexual actions and intent to entertain increased acceptability

Rationales for unacceptability were both harm- and rights- based



- Men found creating and privately sharing synthetic imagery more acceptable

"I feel it's unacceptable to manipulate my image in such a way - my body and how it looks belongs to me" (P195, V1 - intimate partner/sexual act/entertainment)

Non-sexual actions and intent to entertain increased acceptability

Rationales for unacceptability were both harm- and rights- based



Distributed Responsibility

Ethical responsibility is spread across the network of online actors

[Ess 2014, de Vries 2022]

Individual Deterrence

Technical and social interventions to break the sense of distributed responsibility





Distributed Responsibility

Ethical responsibility is spread across the network of online actors

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Right to consent

(P19, V3 - intimate partner/sexual act/sexual pleasure)

More **positive attitudes** towards establishing sexual consent (SCS-R2)

"No content should be made in someone else's likeness without their consent."



*p < 0.005

Connection between online and offline consent norms



Right to privacy

"This completely violates my sense of **privacy**" (P10, V2 - intimate partner/sexual act/harm)



Future research

- Measuring prevalence of content online to better understand perpetration and victimization
- Mapping AIG-NCII creation tools and sharing ecosystem

Monitoring attitudes and acceptance over time and across countries



"Violation of my body:" Perceptions of Al-generated nonconsensual (intimate) imagery

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Elissa M Redmiles elissa.redmiles@georgetown.edu

- Survey of 315 people measuring attitudes towards non-consensual synthetic media
- People found the seeking out of AIG-NCII more acceptable than the creation/sharing of it
- Rights to privacy and consent as well as potential harms were key factors in percieved (un)acceptability
- Future measuring and mitigating of AIG-NCII needed





Vignette factors

Creator	Creator Action		Media Status
	Performing a sexual act	To harm	Creation
Stranger Intimate partner	Saying something	To entertain	Public/private sharing
	Playing a	For sexual pleasure	Resharing
	sport		Seeking out



CLMMS

[acceptability] ~ [creator] + [action] + [intent] + [SCS-R2] + [SCS-R4] + [non-synthetic acceptability] + [gender] + (1 | participant)

[acceptability] ~ [creator] + [action] + [intent] + [SCS-R2] + [SCS-R4] + [non-synthetic acceptability] + [gender] + [creator] * [intent] + [action] * [intent] + (1 | participant)

[acceptability] ~ [creator] + [action] + [intent] + [SCS-R2] + [SCS-R4] + [non-synthetic acceptability] + [gender] + [gender] * [creator] + [gender] * [action] + [gender] * [intent] + (1 | participant)

