

H20	H19	H18	H17	H16	H15	H14	H13	H12	H11	H10	H9	H8	H7
Julian	Brian	Anirudh									Ross		
		Abeer											
G20	G19	G18	G17	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7
								Yiteng	Hesper		Yuan	Nilesh	Jason
F20	F19	F18	F17	F16	F15	F14	F13	F12	F11	F10	F9	F8	F7
Alexis	Brandon	Henry			Kayla	Rachel							Joshua
E20	E19	E18	E17	E16	E15	E14	E13	E12	E11	E10	E9	E8	E7
					Tyden	Thanh-Nha	Don						
Yang	Cheng				Mokshita				Andres				
D20	D19	D18	D17	D16	D15	D14	D13	D12	D11	D10	D9	D8	D7
	Eric			Nicholas				Jacob	Tuan		Michael	Ethan	
Qingyang													
C19	C18	C17	C16	C15	C14	C13	C12	C11	C10	C9	C8	C7	C6
Ye	Qisen			Nishanth							Liangchun	Yunyi	Zoe
				Shreyas									
B14	B13	B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1
Harrison									Ainaz				
	Anahita							Isabella		Taggert		Ziyan	
A14	A13	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1

Row A = empty

Announcements



Reading notes due T & Th 7am

No class or Office Hours on Tuesday
Nov 7th next week

Please come to class on time so you
can see and follow the seating chart

Due to time constraints, groups will be asked to choose a question from the list and take 3 minutes to discuss them.

Week 5: Critical Analysis

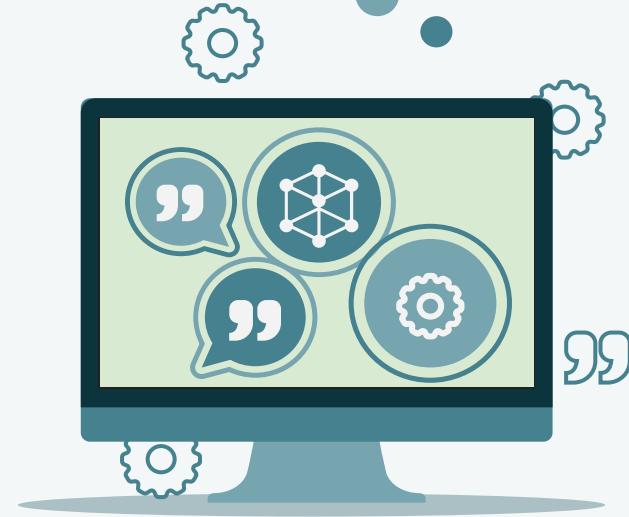
Don Le, Rachel Lim, Thanh-Nha Tran



01

A Critical Analysis of the Prevalence of Technology - Facilitated Abuse in US College Students

Naman Gupta, Sanchari Das, Kate Walsh, Rahul Chatterjee



Trigger WARNING: discusses Domestic Violence, Sexual Abuse, Stalking

Technology-Facilitated Abuse (TFA)



Abuse that is amplified by the use of technology

- Hate Speech
- Spying
- Stalking
- Harassment
- Doxxing,
- Bullying

 Nagaland Tribune

[Stress, depression and worse: The dangers of too much screen time](#)

Bangalore: Rise of technology addiction is a complex challenge that requires concerted effort from families, educators, mental health...

Jun 30, 2024



 Campus Safety Magazine

[Stalking on Campus: Know More, Do More](#)

Stalking is dangerous and devastating, often intersecting with physical and sexual violence. SPARC, Stalking Prevention Awareness and...

May 8, 2024



 CBS News

[Student-made app shut down on Sacramento campuses after cyberbullying claims](#)

A San Juan Unified School District student's app is creating controversy on campuses after claims students are being cyberbullied in the...

Apr 18, 2024



Research Questions

01

How prevalent is TFA among US College students?

02

How does socioeconomic marginalization impact the prevalence?

03

Who do the students survivors ask for support?

How Prevalent is TFA?

Table 3: Frequency distribution of victimization to abusive experiences (n = 776).

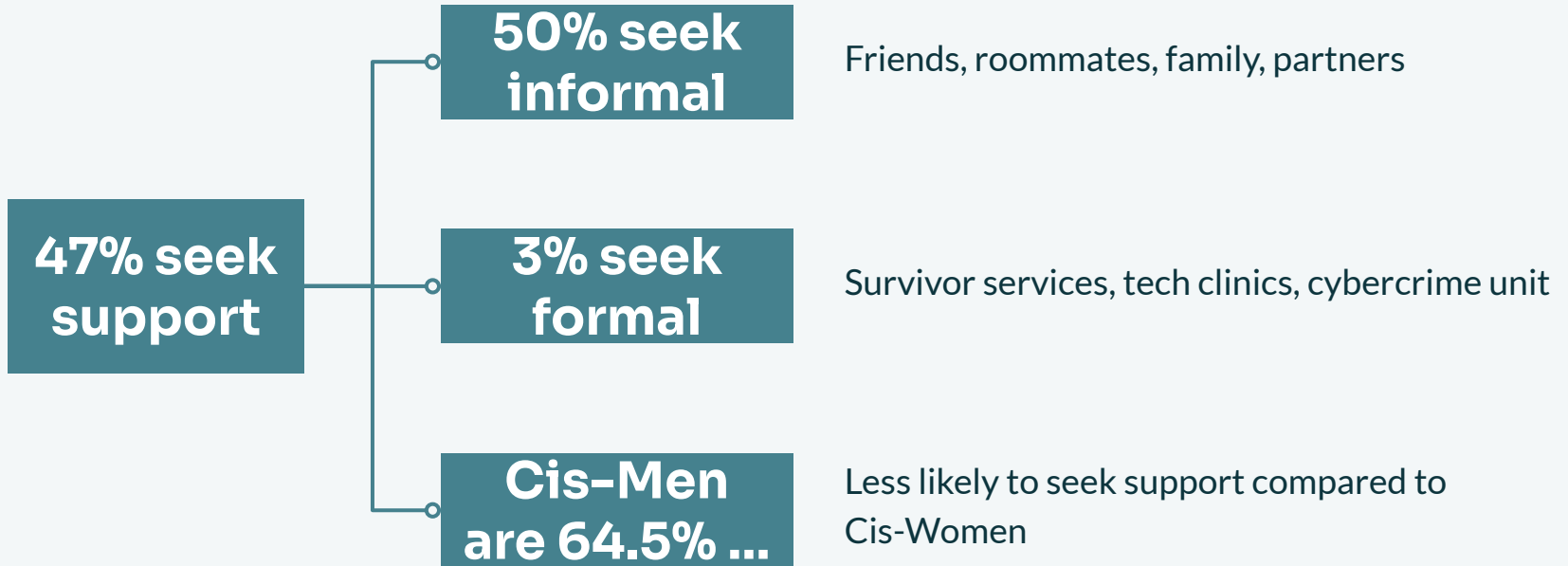
Item	At least Once	Once	Twice	3+ times
made unwanted phone calls, emails, voicemails, texts, or instant messages?	472 (60%)	133 (17%)	85 (10%)	254 (32%)
posted unwanted messages, pictures, or videos online?	204 (26%)	88 (11%)	54 (6%)	62 (7%)
shared intimate images or messages about you without your consent?	198 (25%)	98 (12%)	32 (4%)	68 (8%)
convinced you to share your account access, passwords, or recovery questions	88 (11%)	58 (7%)	15 (1%)	15 (1%)
Used technology to threaten the life or safety of your friends, family, or pets?	79 (10%)	52 (6%)	14 (1%)	13 (1%)
Installing spyware on your phone?	10 (1%)	7 (0%)	2 (0%)	1 (0%)
Using applications like GoogleMaps, iCloud, or Snapchat maps?	160 (20%)	50 (6%)	22 (2%)	88 (11%)
Using shared devices like computers, phones, iPads, cameras, smart-devices,	63 (8%)	26 (3%)	8 (1%)	29 (3%)
Controlled or restricted access to finances, financial services and statements	24 (3%)	14 (1%)	2 (0%)	8 (1%)



Demographic Association with TFA

Gender	Cis-Women as 1.83x more likely than Cis-Men
Gender	LGBTQ+ are 1.95x more likely than Cis-Men
Disability	2x more likely than student w/o disabilities
Race	All races were generally equal
Economic Status	No statistically significant difference
First Generation Status	No statistically significant difference

Support Seeking Survivors



Resources at UCSD

Counseling & Psychiatry Services

CAPS provides confidential counseling and psychiatry services for registered UC San Diego students. Call CAPS at 858-534-3755 to make an appointment or to discuss urgent concerns. For after-hours Urgent/Crisis counseling, call 858-534-3755 (Option 2). For life-threatening emergencies, call 911 or go to the nearest emergency room.

What is CARE at SARC?

CARE at the Sexual Assault Resource Center is the UC San Diego confidential advocacy and education office for sexual violence and gender-based violence (dating violence, domestic violence, stalking).

CARE provides violence prevention education for the entire UCSD campus and offers free and confidential services for students, staff and faculty impacted by sexual assault, relationship violence and stalking.

Formal Resources

Technology abuse is the use of technology to harass, threaten, monitor, exploit, or otherwise harm another person. It is a complex and widespread problem, affecting people of all backgrounds. Technology abuse also plays a widely recognized role in intimate partner violence (IPV).

The Technology Abuse Clinic Toolkit



DQs (1/3):



3:00

01

If a friend confided in you about experiencing TFA, would you feel prepared to guide them toward campus resources? Would you also be able to recommend any outside resources?

02

What are your thoughts on the resources available on college campuses to support students experiencing TFA? Are there specific resources you believe would be helpful at UCSD?



DQs (2/3):



01

What type of design interventions can be implemented to help reduce the most common types of TFA experience that students face?

Item
made unwanted phone calls, emails, voicemails, texts, or instant messages?
posted unwanted messages, pictures, or videos online?
shared intimate images or messages about you without your consent?
convinced you to share your account access, passwords, or recovery questions
Used technology to threaten the life or safety of your friends, family, or pets?
Installing spyware on your phone?
Using applications like GoogleMaps, iCloud, or Snapchat maps?
Using shared devices like computers, phones, iPads, cameras, smart-devices,
Controlled or restricted access to finances, financial services and statements

02

When designing and creating new technology, should designers consider informing users of the potential dangers? If so, how should the implementation the warnings?

DQs (3/3):



01

We examined factors such as gender, race, sexual orientation, disabilities, and socio-economic status in studying technology-facilitated abuse. Are there additional factors you think should be considered in future research?

02

Are there any factors you'd like to explore in greater depth, and why? How would you expand the study to investigate these areas further?



Reminder that this study did an online survey of college students. They included 776 students.

DQs:



01

When designing and creating new technology, should designers consider informing users of the potential dangers? If so, how should the implementation the warnings?

02

What are your thoughts on the resources college campuses have to support students who experience TFA? What kind of resources would you like to see here at UCSD?

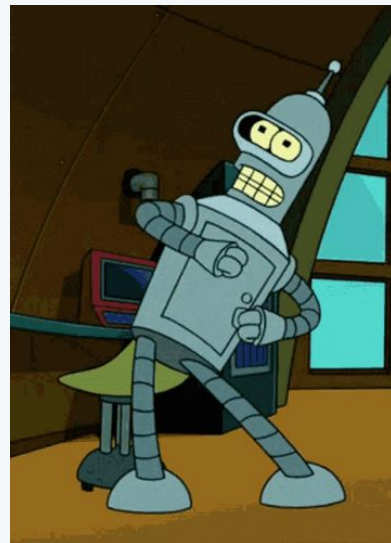


Takeaways

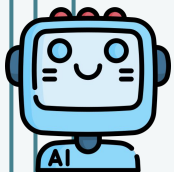
- TFA is an issue 70% of college students face.
- Design of technology should be more considerate towards ensuring prevention methods for TFA
- Campus policies can help keep student informed about the support available to them.
- Lack of research in intersectional identities
- Possibility of establishing timeline

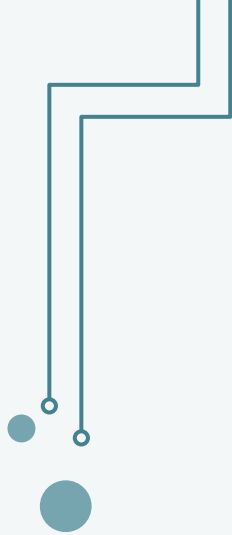
Are Robots Ready to Deliver Autism Inclusion?: A Critical Review

Naba Rizvi, William Wu, Mya Bolds, Raunak Mondal,
Andrew Begel, Imani Munyaka

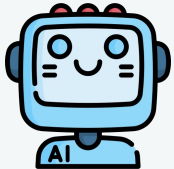
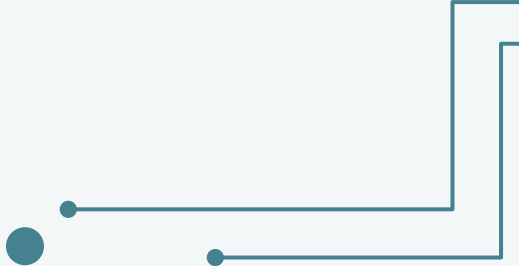


Trigger WARNING: discusses Domestic Violence, Dehumanization, Infantilization





Much of the recent work in the space of
human-robot interaction and autism is
rooted in problematic views and
stereotypes that stigmatize autism.

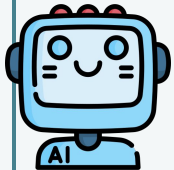


Medical Model

"treats autism as a disorder that needs to be cured so that a person can be made 'normal'"

Social Model

"defines disabilities as a social construct that emerged due to a lack of accessibility"

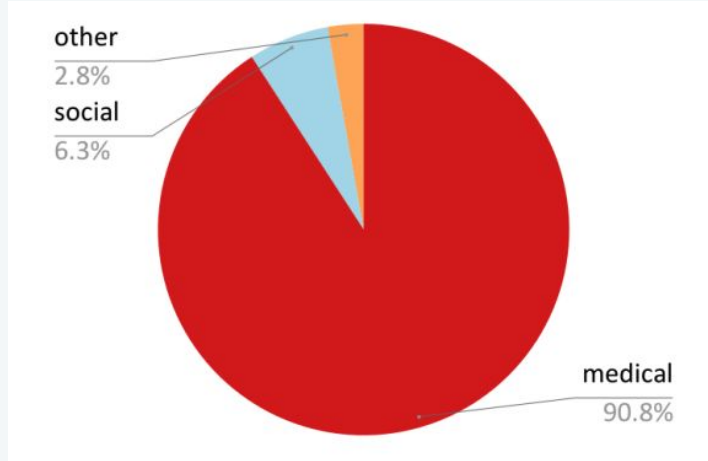


What are some of the ways in which approaching a study design from a medical model view might not be inclusive of autistic people?

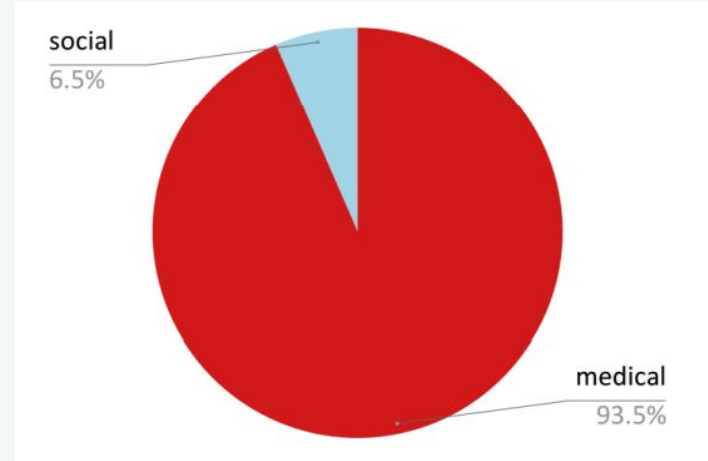
What are some steps we can take to be more equity-minded in our research?



Main corpus

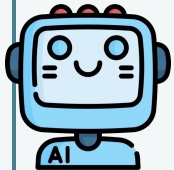


Referenced work corpus



Medical Model: "treats autism as a disorder that needs to be cured so that a person can be made 'normal'"

Social Model: "defines disabilities as a social construct that emerged due to a lack of accessibility"



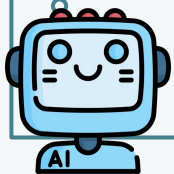
What are some strategies we can use to approach past literature in a more critical and socially inclusive way?

What are some challenges of applying past research into study designs?



Double Empathy Problem

- when people of different neurotypes communicate, they may both have difficulty understanding each other
- both sides should try to create a shared communication system and learn about each other's communication styles
- typically the burden has been placed on autistic people to conform to neurotypical social standards

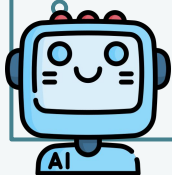


What are some examples of other scenarios in which it would be beneficial to apply the framework proposed by the double empathy problem?



Takeaways

- much recent HRI and autism research stigmatizes autism
- study designs are often not inclusive of autistic people's lived experiences and perspectives
- researchers should diversify their perspectives and collaborations to move towards more inclusive work



Virtual Don

A Critical Examination of Virtual Reality Technology in the Context of the Minority Body

Kathrin Gerling, Katta Spiel



VR and the Assumed “Standard” User

VR is a body-centric technology → poses barriers for disabled users

Research Questions:

Which **assumptions** about people’s bodies are **inherent** in the current wave of VR?

How do these **assumptions** affect the **access** to VR for people with physical disability?

What are the **implications of these assumptions** for Human-Computer Interaction (HCI) research on VR?

Theory-Led Analysis of VR

- **Surrogate Body Theory**
 - Originally from Film Studies
 - Viewer embodies a “surrogate body” for affective engagement and immersion
 - Theory extended by authors to observe immersive aspects of play
 - Six contexts:
 - spatial **distance** between user and hardware
 - embodied **affect**
 - **actions** lent
 - spatial **environment**
 - **multi-user**
 - **bodily involvement**

Theory-Led Analysis of VR

- **Minority Body Theory**
 - Being disabled “simply makes you a minority”
 - it is **value-neutral**, regarded as mere difference with no judgment of value or well-being of individual
 - This model allows for exploration / evaluation of **features** (of a system) that result in **local or global goods or bads** for the minority body
 - can depend on extrinsic or intrinsic factors - wider society and individual lived experiences

Theory-Led Analysis of VR

- Theories drove structure of study - authors assess VR technology with the six contexts of the Surrogate Body Theory and through the lens of Minority Body Theory.
- Testimonies collected via surveys to complement analysis and illustrate points (a common pairing to theoretical work in field of disability studies)

Example: Actions Lent

Common actions that VR systems expect people to lend:

- Mid-air pointing - for selection, object interaction
- Locomotion - techniques for user to move through virtual world
 - physically walking, teleportation, buttons / joysticks

Through lens of minority body:

- specific physical actions required by design can be challenging for individuals with arm/spine injuries, assistive devices, tremor
- actions increasingly difficult to produce over time due to fatigue

The **expectations of VR in this context** turn the “mere-difference” of the minority body into in a **local bad**, due to various access barriers



Figure 3: In 6DoF VR systems, people lend actions extensively; this can include the entire body. Here, a person is engaging in mid-air pointing.

Bodily-Considerate Design Strategies

- Study findings: “VR is an inherently ableist technology that assumes a ‘corporeal standard’ (i.e. an ‘ideal’, non-disabled human body), and fails to adequately accommodate disabled people”
- Suggested strategies to help remove bias toward the corporeal standard:

Section	Strategy	Technological	Bodily	References
4.2.1	Appreciate Diversity	Reflect Continuously on Exclusions Created by VR Systems	Account for Disabled Bodies from the Start	[1]
4.2.2	Challenge Status Quo	Consider Speculative and Future-Looking Approaches	Prioritize (Minority) Bodies over Technological Constraints	[20, 46]
4.2.3	Individualized Designs	Develop Hardware in a Modular Fashion, Provide Adaptive Interaction Paradigms	Involve Disabled Communities Equitably in Design	[31, 40]

Table 1: Strategies for the hardware design of Virtual Reality technologies along technological and bodily considerations with references for further consultation.

DQs (1/3):



01

What are some accessibility challenges you have personally had when using VR?

02

Remember Zuckerberg's vision of a 'Metaverse' a few years ago? What were some assumptions being made about people, behaviors, and society in general for this vision of widespread VR adoption?



DQs (2/3):



3:00

01

Try applying the Surrogate Body Theory and Minority Body Theory to analyze another immersive user system.

- (e.g. desktop, game console, phones)
- (** AR phone games like Pokemon Go could be interesting to analyze!**)

Surrogate Body Theory

- spatial **distance** between user and hardware
- embodied **affect**
- **actions** lent
- spatial **environment**
- **multi-user**
- **bodily involvement**

Minority Body Theory

- Being disabled is **value-neutral**, simply in minority
- Allows for exploration / evaluation of **features** (of a system) that result in **local or global goods or bads** for the minority body

DQs (3/3):



3:00

01

Discuss some real world examples of accessible design that uses one of the suggested design strategies. How effective were they?

02

What are the advantages and disadvantages of this paper's theoretical approach, versus empirical approaches focusing on participants, tasks, data, etc?

DQs:

01

Remember Zuckerberg's vision of a 'Metaverse' a few years ago? What were some assumptions being made about people, behaviors, and society in general for this vision of widespread VR adoption?

3:00



Takeaways

- Current VR technology design assumes “standard” characteristics of the human body and thus creates access barriers for disabled users
- Theoretical analysis helped analyze VR technology by observing various factors of immersion through the lens of disabled users
- Design strategies for improving accessibility of VR include
 - appreciating diversity
 - challenging the status quo
 - investing in individualized designs

Topic DQ:



3:00

01

What are the advantages and limitations of tackling a critical analysis from a purely/mostly theoretical approach, versus empirical approaches focusing on participants, tasks, data, etc?