

# "There's Something for Everyone": User Motivation and Experience Across Commercial Social Virtual Reality Platforms

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Social virtual reality platforms are among the most popular virtual reality (VR) applications. Since the advent of consumer VR headsets, a number of researchers have examined how people use the affordances of social VR for their own ends. However, social VR is not a monolith. Different platforms have different cultures and norms that influence user behavior and their desires to use the platform. In this study, we interviewed 28 participants who were regular users of social VR platforms such as VRChat and Meta Horizon Worlds. We found that users gravitated toward different platforms due to consistent differences in the cultures and technical affordances. We discuss these differences as well as the effects on users' attitudes toward moderation, accessibility, and user generated content.

CCS Concepts: • **Human-centered computing** → **Empirical studies in collaborative and social computing**.

Additional Key Words and Phrases: social virtual reality; platforms; social interaction; social dynamics; user experience

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## 1 Introduction

With the growing accessibility and affordability of commercial virtual reality (VR) headsets such as the Meta Quest, social applications of VR technology are of increasing interest to researchers [16, 19, 30, 33]. Social VR platforms are online spaces where users can interact with each other as avatars in virtual worlds using head-mounted displays (HMDs). Since 2018 [31], researchers have investigated how people express and explore their identity [14, 17, 24, 43]; build social connections [13, 15, 26, 38]; experience harassment [4, 18]; and manage underage users [10, 27–29] on social VR platforms, among a number of other topics.

However, social VR is not a monolith. Different virtual environments have different norms, affordances, and cultures [5, 9, 11, 25, 41]. In addition, the landscape of social VR is rapidly changing, with once-popular virtual environments becoming obsolete [8, 12] or changing radically [21]. Thus, in order to understand the current and changing social VR landscape, it is important to understand how user experiences and motivations may vary across current platforms. This paper aims to answer the following research questions:

- **RQ1: What kinds of activities and interactions are users engaging in across social VR platforms, and what activities are not universal?**

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- RQ2: What features or experiences attract users toward specific social VR platforms?
- RQ3: What features or experiences discourage users from specific social VR platforms?
- RQ4: How do users leverage the affordances of specific social VR platforms to craft an ideal and personalized experience?

By comparing and contrasting the cultural aspects of social VR platforms (e.g., aesthetic style of avatars and worlds, demographics of player base, etc.) that lead to differences in user experiences, we uncover not only what features and experiences users look for when choosing a platform to join but what experiences users actively avoid or seek moderation to address. Therefore, this study contributes to the understanding of the current ecology of social VR platforms, with a particular focus on how users interpret, leverage and modify the affordances of different social VR platforms to their preferences.

## 2 Related Work

While similar to earlier social virtual platforms such as Active Worlds, IMVU, and Second Life, social VR provides the novel experience of embodied, avatar-mediated interaction through VR technology. Compared to desktop-based experiences, social VR allows for immersive experiences that more closely resemble physical interaction. For example, different forms of nonverbal communication (i.e., gaze, proxemics, gesture) are tracked in the physical world and represented in the virtual world via users' avatars. The embodied aspects of social interactions as represented through avatar appearance and behavior are thus important and relevant for users [16, 30, 39].

Currently, there are many commercial social VR platforms that users can access through both standalone (e.g., Meta Quest) and computer-based (e.g., Valve Index) VR headsets. Some platforms are only accessible through specific VR hardware, such as Meta Horizon Worlds (currently only available via the Meta Quest Store). Other platforms, such as VRChat, Rec Room, and Banter are not tied to particular devices and are thus accessible through both standalone and computer-based hardware. Despite these differences in technical accessibility, consumers have the option of engaging with a number of different social VR platforms that exist across both standalone and computer-based VR headsets.

### 2.1 Brief History of Social VR Platforms

The history of virtual worlds has been volatile. In 2018, McVeigh-Schultz and Isbister described 5 social VR platforms: Facebook Spaces; Rec Room; High Fidelity; VRChat; and AltspaceVR [31]. Since then, High Fidelity and AltspaceVR have been discontinued and Facebook Spaces has transitioned into Meta Horizon Worlds [32]. In 2019, Blackwell et al. identified an additional 3 platforms: vTime XR; Oculus Rooms; and Oculus Venues, the latter 2 of which are no longer supported [4]. In 2020, Freeman et al. identified an additional 6 platforms: Engage VR; Mozilla Hubs; Sonoroom; PokerStars; Sansar; and Anyland [19]. Of those, Mozilla Hubs and Sonoroom have been taken down, and PokerStars has been transitioned to Vegas Infinite. Finally, in 2021 Moustafa and Steed identified an additional 2 platforms: Spatial and Bigscreen, both of which are still supported in 2024. Other social VR platforms that have emerged since 2021 include Neos VR [34], Resonite [35], BanterVR [2], Riff XR [36], ChilloutVR [1], and Cluster [7].

### 2.2 Motives and Activities

**2.2.1 Motives.** Prior research on user motivations and goals of engaging in social virtual worlds has found that users are attracted to social virtual worlds to fulfil social needs, as a sense of escapism from real world constraints, as well as to engage in unique activities such as content-creation [23]. Following this research, Sykownik et al. conducted a

survey of over 270 users of the platforms VRChat, Rec Room, AltspaceVR (discontinued), Bigscreen, Facebook Horizon (now Meta Horizon Worlds), and NeosVR and identified four categories of user motivation: social; experiential; self; and functional [37]. Some social motives include: Meeting people and staying in contact, experiencing social presence, and finding shared interest groups. Experiential motives include *pastime and entertainment*; *escapism*; and *social VR as a creative outlet*. Finally, self and functional motives included *self-expression*; *overcoming social anxiety*; and *learning*. Additionally, a 2020 survey of over 200 users of the social VR platforms VRChat, Rec Room, AltspaceVR, High Fidelity, and Bigscreen, and Wave asked users to reflect on the perceived psychological benefits of using social VR (particularly during a period of social isolation due to the COVID-19 pandemic) [3]. The results suggest that users experience feelings of relatedness, self-expansion, and enjoyment, which were moderated by both spatial presence (feeling of "being there" in a physical space) and social presence (feeling of "being there" with others in a social space). These findings support the previously mentioned categories of user motives, particularly the social and self motivations to engage in social VR experiences.

**2.2.2 Activities.** Research regarding activities in social virtual worlds has emphasized that social virtual worlds tend to place minimal constraints on users, thus resulting in a more diverse array of social experience and interactions [22]. This degree of autonomy placed on users is particularly important for understanding user behavior on social VR platforms, primarily because the majority of content (i.e., worlds and avatars) on popular social VR platforms is user-generated. Thus, subsequent research has sought to better understand what kinds of interactions and engagements users both craft and participate in on social VR platforms. Sykownik et al. [37] found that common activities on social VR platforms generally fall into three categories: *Socializing*, *Entertainment*, and *Learning/Working*. Activities around socializing were the most popular among users followed closely by entertainment, with learning/ working being the least common. Among social activities, users reported *conversations* and *hangouts* to be the most common, with some users reporting engaging in more intimate forms of socialization such as erotic role-play (ERP). ERP refers to sexualized role play where users act out roles, most often mediated via their choice of avatar, to play out sexual fantasies and desires. Another common adult-centered activity that occurs on social VR is drinking. In particular, Chen et al. [6] discovered that not only is heavy drinking prevalent on social VR platforms (primarily focused on VRChat), but that the affordances of VR (e.g., social presence, embodiment) may exacerbate the use of alcohol by masking the effects of the substance. In terms of entertainment, users engaged in a variety of different activities from *gaming and playing* to *content creation, sharing, and exploration*. Some users (~10) reported *community events, role playing, and people watching* as primary activities. Only 4 users reported learning/ working to be activities that they regularly engage in on social VR platforms, indicating that users may approach social VR from a more casual, relaxed approach rather than a serious, exigent approach.

**2.2.3 Contexts.** Other studies have utilized in-depth interviews to gain further insight into the types of activities users are engaging in on social VR platforms, in particular by focusing on the social contexts that lead meaningful experiences. Maloney & Freeman found that users leverage the affordances of social VR to engage in everyday activities—such as sleeping—in novel and unique ways [26]. The platforms that Maloney and Freeman investigated in their studies were VRChat, Rec Room, AltspaceVR (discontinued), Bigscreen, High Fidelity (discontinued), Facebook Spaces (now Meta Horizon Worlds), vTime XR, Engage VR, Mozilla Hubs (discontinued), Sonoroom, Pokerstars (now Vegas Infinite), Oculus Rooms (discontinued), Sansar, and Anyland. Users reported frequenting "sleep worlds", which are virtual environments designed for a calm and serene experience where users engage in conversations whilst falling asleep in a low-light and relaxed atmosphere. Further, Freeman et al. found that collaborative world building (creating virtual environments) is

a popular activity that users regularly engage in, and build social connections around [15]. Professional events (e.g., conferences and workshops) were also found to be increasingly popular in social VR, particularly due to the heightened interactive nature of the platforms (e.g., interactive white boards) compared to less immersive conferencing solutions such as Zoom and Microsoft Teams. Finally, they found that users see social interactions in VR as opportunities to build social skills and improve their mental health, as interactions in VR can provide a higher level of anonymity through avatars and thus be considered as 'lower-stakes' compared to interactions in the physical world.

## 2.3 Avatars, Self-Presentation, and Identity

**2.3.1 Avatars and Self-Presentation.** Avatars are a central component of all social VR experiences as they are the mechanism through which users represent themselves visually. Previous work on avatar customization in virtual worlds has found that virtual worlds that offer more features or customization to personalize user avatars result in higher user engagement, embodiment, and identity imbueement [11]. In addition, research has also found that the features (e.g., height, attractiveness) of avatars that users' embody impact their dispositions toward others in virtual worlds [42].

Related to social VR specifically, Freeman et al. [19] interviewed 30 users of popular platforms around their experience with avatars and representation and found that participants felt more connected and intimate with their avatars on social VR platforms compared to traditional virtual worlds. These feelings were mobilized in part by the use of full body tracking technology, which tracks the positions of a user's limbs and maps them onto their avatar in real time. However, due to the technical difficulty of optimizing avatars with inverse kinematic (IK) and tracking technology, users also reported that creating avatars for social VR platforms was much more difficult and time consuming, often requiring the technical assistance of experts to achieve the level of customization desired. Additionally, Freeman and Maloney [16] found that users were frustrated with the lack of consistency regarding avatar creation and importing systems across platforms. Users reported a desire for a more centralized avatar system that works seamlessly across platforms, so users can maintain a more stable sense of identity and representation when navigating from platform to platform.

Freeman and Maloney [16] also identify additional aspects of avatar representation that influence interactions between users. In particular, they found that the aesthetic quality of one's avatar can either initiate or discourage interactions with other users. For example, some users reported that wearing a more exotic avatar made it harder to engage in and sustain social interactions with others in comparison to wearing a more realistic humanoid style avatar. In addition, it was discovered that gender and age both played a role in facilitating social interactions, with female representing avatars attracting much more attention from other users and avatars resembling older age receiving less attention from others.

**2.3.2 Underrepresented Groups.** Some research has focused exclusively on the representation (or lack thereof) of marginalized identities (e.g., people with disabilities, non-cisgender people) through avatars. Freeman et al. [17] interviewed 15 non-cisgender identifying users of social VR platforms and found that users explore and build their gender identity through avatar embodiment. Users reported that wearing different avatars allowed them to explore what self-presentation felt most comfortable to them, with many users switching between avatars depending how they felt at the time. Users also reported customizing avatars with clothing and accessories to further represent their non-cisgender identities in ways that are unique to them. In particular, they discovered that users with full body tracking technology felt particularly embodied and identified closer with their avatar compared to virtual worlds that don't support tracking technology. In addition, users utilized in-game virtual mirrors to see their own avatar from an external perspective.

Freeman and Acena [14] also interviewed queer identifying users, and found similar results. Namely, that users express their gender and sexual identities through avatar features, clothing, and accessories.

Other research has focused on how people with disabilities (PWD) navigate self-representation through avatars in social VR. Zhang et al. [43] interviewed users with disabilities and found that users preferred to make their disabilities visible through avatars (e.g., visible assistive technology). Platforms included in this study were VRChat, Rec Room, Meta Horizon Worlds, vTime XR, AltspaceVR (discontinued), Bigscreen, Alcove, Half + Half, Horizon Venues (discontinued), Villa, Arthur, Engage, Multiverse, PokerstarsVR, and Spatial. Users reported a lack of available tools and features to make such customizations, emphasizing the need to make such tools available to users across platforms. They also found that PWD faced additional barriers when it comes to accessibility during the avatar creation process, particularly for visually impaired (VI) users. Gualano et al. [20] conducted an interview study focused on avatar representation for people with less visible disabilities (e.g., neurodivergence, chronic pain). They found that many users felt a desire to make their disabilities visible through avatar clothing and accessories, but like Zhang et al. [43] found that users were left with little to no options to make such customizations in many social VR platforms.

## 2.4 Harassment and Moderation

In 2019, Blackwell et al. [4] described user experiences of harassment across 7 popular social VR platforms (AltspaceVR, Oculus Rooms, Rec Room, VRChat, Facebook Spaces, vTime XR, and Oculus Venues). They found that social VR platforms that were designed specifically for social interactions fostered more harassment and toxic behavior than those that incorporated more gamified elements. In addition, they also discovered that users' interpretations of what constitute harassment "deeply personal" and varied widely, which poses difficulty for moderation implementation at the platform level. They identified 3 categories of harassment: *verbal*; *physical*; and *environmental*.

Examples of verbal harassment included personal insults, hate speech, and sexualized language, occurring over voice over IP (VoIP) and private messages. Physical harassment occurred in the form of unwanted touching, violation of personal space, and visible sexual gestures. These forms of harassment occurred via avatar movement, which is possible due to the more physical and embodied nature of VR tracking technology [30, 39]. Finally, environmental harassment included unwanted sharing of explicit content (via screen sharing) and throwing virtual objects.

## 2.5 Children and Teenagers on Social VR

Within the social VR ecosystem, it is generally known that children are prevalent across all platforms [27]. Research has sought to understand the interaction dynamics between adult and children users [10, 18, 27–29]. Freeman et al. [18] found that children often harass adults through screaming, verbal insults, and "game-breaking" (purposefully trying to crash the game via information overload). Maloney et al. [27] however found that many adults users were concerned for the safety of children on platforms, finding that children are also often the subject of harassment from adults. In addition, users expressed concerns of children being exposed to adult language and content in public virtual worlds. They did find some positive interactions between adults and children on social VR platforms, particularly when parents were involved which were seen as improving family relations.

Teenagers are another population that are prevalent on social VR platforms. Maloney et al. [29] found that teenagers were motivated to use social VR through YouTube content and by encouragement from offline friends. Further, teenagers were attracted to social VR for its wide variety of available activities, including social settings and competitive gameplay. They were also attracted to use social VR as a creative outlet, with many teenagers designing games, rooms, and weapons to share with their friends. However, they also found that teenagers frequently experiences bullying and harassment,

which often discouraged teens from spending significant time on the platforms. Deldari et al. [10] interviewed parents and bystanders to better understand the perception of teenagers on social VR platforms and found that adults were worried about the safety and exposure of teenagers. In particular, they were concerned about privacy, stalking, physical harassment, exposure to sexual content and adult language, and exposure to drinking behavior.

### 3 Methodology

The primary source of information for this current study was interviews. Both the first and second author had prior experience with social virtual reality (the first author for one year, the second author for nine years), and the second author validated the findings from the interview study by visiting social virtual reality worlds the participants mentioned. In addition, the initial draft of the paper was shared with the interviewees and their feedback was incorporated in the final draft.

#### 3.1 Recruitment and Interviews

Participants (n=28) were recruited for a semi-structured interview about user experiences in social VR via Reddit and Discord posts in community forums for social VR platform communities (e.g., Reddit.com/r/VRChat, Reddit.com/r/HorizonWorlds). Interested participants were asked to respond to our posts via comments or direct messages (DMs), and we also conducted snowball sampling through participants who offered to connect us with users with similar experiences. All participants were either read or sent an informed consent form ahead of time, after which all participants gave verbal or written consent to participate in the study. Participants were asked to share their experience with social VR platforms, including what kinds of activities, worlds, avatars, and social interactions they regularly use or engage in. In particular, participants were asked to reflect on what draws them back to social VR, as well as what issues they face in terms of moderation, harassment, and other accessibility issues. Because we particularly wished to draw comparisons between VRChat (by far the most popular virtual world) and other virtual worlds such as Meta Horizons and Banter, we intentionally oversampled participants whose primary virtual world was not VRChat, resulting in 6 participants (approximately a fifth of our sample). The interviews took place and were recorded via the communication platform Zoom, and lasted on average between 45 minutes and 1 hour. They were transcribed using the software Otter.ai. There was no monetary compensation for this study. All procedures were approved by the university Institutional Review Board (IRB) to proceed with data collection and all participants verbally consented according to the protocol.

#### 3.2 Participants

All 28 participants in this study were 18 years of age or older. While we required that users had at least 6 hours of experience in social VR, most of our participants far surpassed that amount, with many having several thousand hours logged. Among the 28 participants, we obtained demographic (i.e., age, gender, and race/ethnicity) information for 27. Participants ranged in age from 19 to 72, with the average age being 32.37. Of the 27 we received demographic information for, 16 are cisgender males, 4 are cisgender females, 4 are non-binary, and 3 are transgender (2 male, and 1 female). A large proportion of our participants (19) identified VRChat as their primary social VR application. However, many of those participants also had hundreds of hours of experience in legacy social VR applications such as Altspace VR and vTime XR. A summary of demographic information can be found in Table 1.



Table 1. Participant Demographics

ID	Gender	Age	Race/Ethnicity	Social VR Platforms Used (first = primary platform)
P1	Male	26	White	Meta Horizon Worlds
P2	Male	30	White	VRChat
P3	Male	24	Asian	VRChat; ChilloutVR; NeosVR
P4	Non-binary	32	White	VRChat
P5	Male	33	White	VRChat
P6	Trans Male	21	Native American	VRChat
P7	Trans Female	25	White	VRChat; ChilloutVR NeosVR
P8	Female	27	White	VRChat; ChilloutVR; NeosVR
P9	Male	22	White	VRChat
P10	Male	39	White	VRChat; ChilloutVR; Meta Horizon Worlds; Rec Room
P11	Male	26	Native American	VRChat; ChilloutVR; Helios; NeosVR
P12	Female	24	Latinx	VRChat
P13	Male	19	White	VRChat
P14	Male	20	White	VRChat; ChilloutVR; NeosVR
P15	N/A	N/A	N/A	VRChat
P16	Male	20	White	VRChat; AltspaceVR; Meta Horizon Worlds; Rec Room;
P17	Trans Female	40	White	VRChat; Innerworld
P18	Male	34	White	VRChat*; Meta Horizon Worlds; NeosVR
P19	Non-binary	22	White	VRChat; AltspaceVR; Anyland; ChilloutVR; Meta Horizon Worlds; NeosVR
				Oasis VR; Pararea; Rec Room; Resonite
P20	Non-binary	23	Latinx	VRChat; ChilloutVR; NeosVR; Resonite
P21	Male	72	White	Banter; Meta Horizon Worlds; VRChat
P22	Female	61	White	Banter; AltspaceVR; Engage; Meta Horizon Worlds; Multiverse; Spatial; VRChat
P23	Female	40	White	Meta Horizon Worlds; AltspaceVR; Banter; Cluster; Engage
P24	Non-binary	59	White	Meta Horizon Worlds; Banter; VRChat
P25	Male	25	Latinx	VRChat; NeosVR
P26	Male	39	Latinx	Bigscreens; Banter; Rec Room; VRChat
P27	Male	30	White	VRChat; AltspaceVR; Meta Horizon Worlds Rec Room
P28	Male	41	White	VRChat

### 3.3 Data Analysis

The two authors read all of the transcripts and generated preliminary codes; we then met and discussed our codes and created a refined code book. We then recoded five transcripts and met again to discuss discrepancies. After finalizing the codebook, we recoded all transcripts and conducted a thematic analysis using affinity diagramming in Miro. We drew key themes from the thematic analysis and we report on those findings.

## 4 Results

Analysis of interview transcripts uncovered key similarities and differences across commercial social VR platforms relative to both cultural and technical affordances. One of the primary differences across social VR platforms is the relative sizes of the active user bases, with VRChat far surpassing all other social VR platforms in terms of active monthly users [40]. The more active and larger player base of VRChat was both an attraction and a deterrent for different users. We found both similarities and differences regarding activities that occur across social VR platforms. While all platforms allow casual socialization or "hangouts", platforms like Meta Horizon Worlds, Banter, Resonite, and

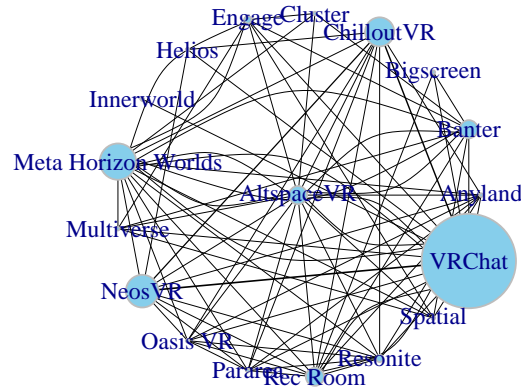


Fig. 1. DRAFT: Social VR Platform Population and Shared Connections

Rec Room support cooperative in-game world building, a technical affordance which was found to be a key motivation for some users. Other platforms such as VRChat and ChilloutVR require users to import complete 3D models via computer for custom worlds and avatars.

Another key technical affordance that differed across platforms was tools for creating customized and personalized avatars. Currently, two primary types of avatar customization tools are provided to users of social VR platforms. The more basic and less personalizable type is known as an avatar creator, where users are able to make edits to a "stock" avatar or set of avatars. These edits commonly include biological features such as skin tone, face shape, and hair style, and accessories such as clothing, make-up, and jewelry. Often, these accessories are paid digital assets sold by the social VR platforms with real currency. The more advanced type of avatar customization tool allows users to import any 3D model from an external modeling program such as Unity or Blender. These types of customization tools, while much more expansive and personalizable, require significantly more technical skill to produce. As a result, users with advanced programming skills have begun offering avatar customization services for a commission, allowing users with less technical skill to obtain highly personalized avatars for a fee. These two types of avatar creation modalities have led to the production of a vast array of available avatars for users to embody in social VR, and users leverage different avatars for different social purposes. Below we break down some of the most common ways avatars are used to scaffold different social experiences, and why users might gravitate toward specific platforms as a result.

Activities such as drinking and partying were found to be extremely common in VRChat compared to other platforms. In addition, sexualized avatars were also much more common due to the ability to import 3D models via computer. The large player base of VRChat also attracts a host of toxic users who actively engage in trolling and harassment. Overall, the more adult-centered, high intensity culture surrounding social norms and activities on VRChat was both an attraction and deterrent for different users. In contrast, platforms like Meta Horizon Worlds, AltspaceVR, and Rec Room were much more welcoming and tolerant of children and new users, and thus placed a heavier emphasis on moderation. Users on VRChat frequently mention the need to self-moderate content due to the frequent occurrence of unwanted harassment and other toxic behavior. One primary strategy for self-moderation in VRChat was the utilizing of private world instances, allowing users to set permissions (e.g., invites) on worlds to avoid encountering random strangers.



## 4.1 Activities

While some users mentioned spending time in virtual worlds alone, the vast majority of participants reported engaging in activities that were social in nature, which aligns with previous findings [3, 26, 31]. These social activities vary widely, from casual engagements to more adult-oriented activities. In this section we break down these activities, and describe how different social VR platforms facilitate or impede users' engagement—leading many to gravitate toward specific platforms that more closely accommodate their preferences.

*4.1.1 Casual Socialization.* Across all social VR platforms, participants reported socialization as a primary activity, as described by Sykownik et al. [37]. In particular, participants reported spending a significant portion of their time in social VR engaging in casual conversations or "hangouts" with other users. Often these interactions included sharing personal stories and experiences with others as a form of seeking social support. P8 explained:

*"...sitting in front of a mirror with somebody and just talking about anything, like [if] they had a rough day... letting them vent that out, talking about it and sharing your experiences with this complete stranger that you [may] never meet again... maybe you guys become friends? There is something about that that is unmatched".*

P8 is referencing the act of "mirror-dwelling", a common activity that is specific to VRChat. Mirror-dwelling refers to the act of socializing while in front of a virtual mirror. Users reported engaging in mirror-dwelling as a way of feeling more embodied in their avatar, particularly those with full-body tracking capabilities. For some users, seeing their physical movement represented their avatars (assisted by the virtual mirror) was a way of feeling more present and connected not only with their avatars, but with others in virtual worlds. Therefore, mirror-dwelling is not only an activity that highlights the importance of avatar embodiment for VRChat users, but also serves as its own unique context of socialization that were not found on other social VR platforms.

However, different social VR platforms offer different types of virtual worlds, which in turn foster specific kinds of user activities. Sometimes casual interactions with other users take place in the context of a particular virtual world designed around a particular purpose: such as comedy clubs and concerts. Further, these worlds will often host specific social events that bring users of similar interests and backgrounds together as P23 shared:

*"If I'm in a mood where I really want to interact a lot, I might go see a show in Meta Horizons. I like that they do iHeartRadio shows where they'll stream musicians live".*

P22 emphasized how these events helped find a community on social VR:

*"I have become friends with people I never would have expected to become friends with in a million years. But I liked entertainment, and the way I met some of my best friends in Altspace was going to open mic events".*

Some social VR platforms such as Banter and Meta Horizon Worlds broadcast events via a global events calendar, allowing users to search for social gatherings around their personal interests. However, other platforms such as VRChat require users to find organized community events on their own (often via Discord and Reddit posts). For some users (such as P22 and P23), having a global events page is a primary reason they might gravitate toward specific platforms, as finding community can be a challenging and overwhelming task—especially given the large player base on a platform like VRChat.

4.1.2 *"World-Hopping", Exploration, and Gaming.* Following Sykownik et al. [37], we also found that world exploration (commonly known as "world-hopping") and gaming were common across all social VR platforms. Some users reported their entire experience in social VR is built around exploring and interacting with different virtual worlds, such as P4 who shared:

*"The focus of everything I do is world-hopping, which is essentially looking at the worlds list, and seeing what cool things we can find. And that can range anywhere from horror maps to beautiful exploration worlds, to abstract things to whatever. So my focus is less on the social aspect, but more so seeing what people have created".*

World-hopping is often organized by a group of people who explore various worlds together as a collaborative activity. Additionally, many virtual worlds are designed with gamified elements which can scaffold the social experience of world hopping for users, such as P9:

*"We'll just start hitting random worlds and go explore them. You'll find some really crazy stuff, some weird stuff...we also play a lot of the social games like Among Us in VR, murder mystery, "would you rather", or "never have I ever".*

World-hopping was one of the activities that were common across all social VR platforms. In addition, some users reported switching *between platforms* ("app/ platform-hopping") to explore different kinds of worlds, as the tools for world creation vary across platforms, leading to worlds with very different aesthetic elements. P22 mentioned:

*"Once Altspace closed, all of the world hopping that we were doing was happening on VRChat. And then some people said, 'well you know we need to start including other platforms with our world hops. So it might be that they do a bunch of worlds in VRChat, and then hop over to Horizons and do some of the worlds there..."*

Further, they emphasize that hopping not only between worlds but across platforms has opened up opportunities for a diverse range of activities and socialization in VR:

*"The funny thing is that I have become friends with people I never would have expected to become friends with in a million years. But I liked entertainment, and the way I met some of my best friends in Altspace was going to open mic events... I just saw two of them the other night, we went over to Bigscreen. See, like I said, I go everywhere... I go to a lot of karaoke events in different platforms and sing... there's another group of friends that I met through educators in VR... they formed a group over on VRChat now since Altspace closed down, so I go over there and do world hops and things with them... So I love being involved in those kinds of things. I know there's something for everyone."*

4.1.3 *Collaborative World-Building.* Some social VR platforms such as Meta Horizon Worlds, Banter, and AltspaceVR (discontinued) allow for collaborative in-game world building, while others such as VRChat and Resonite *require* users to import 3D assets from an external computer program such as Unity. Following the findings from Freeman et al. [15], the ability to collaborate on user-generated content (i.e., virtual worlds) *in headset* was a primary motivation for some users. As a result, some users gravitated towards platforms which allow such collaboration. P23 described their experience creating with others in Meta Horizon Worlds:

*"Honestly, that's one of the reasons why I'm in [Meta] Horizon much more is because it's in VR, it's in-headset building, and you can collaborate and you can also set permissions... So they allow a lot of collaboration and that's super helpful because not everyone is good at the same things. So for me, I love it*

521 *as an artistic outlet but I'm not as adept with the scripting side of things... It helps so much to be able to ask*  
522 *other people in the community [for help].*  
523

524 They further explain how the ability to create worlds collaboratively in VR has informed their preferences for what  
525 social VR platform to use:

526 *"I do still build worlds in Unity for VRChat, but for me, it's more enjoyable to do it in-headset... It's so much*  
527 *more rewarding once you finally complete your world and you think about the camaraderie with these other*  
528 *creative people and you've been able to use your different skill sets and look what you've made together".*  
529

530 Another user (P21) also emphasized the education and skill set related transfer associated with collaborative building in  
531 VR :  
532

533 *"So initially I was kind of surprised I would build things with other people, and once I started doing that I*  
534 *started to have conversations with people as you're building together... and so I tended to hang out with*  
535 *people who were either teachers or were knowledgeable in areas that were important and what I found is*  
536 *that I can trade some of my experience in exchange for other things and actually to just simply become*  
537 *friends with people as you transfer value, experience, and education".*  
538  
539

540 **4.1.4 Drinking, Drugs, and Adult Content.** Following Chen et al. [6] and Sykownik et al. [37], we also found that many  
541 users frequently engage in more adult-centered activities on social VR, such as drinking, drugs, and sexual activity (e.g.,  
542 ERP). However, we found that the vast majority of these types of activities occurred exclusively on the platform VRChat.  
543 Additionally, we found these adult-centered activities to exist on a spectrum: from more casual and moderated behavior  
544 to more excessive bingeing and less moderated behavior. P18 described their experience with drinking on VRChat:  
545  
546

547 *"VR became primarily my space for kind of letting loose and having some drinks and meeting people the*  
548 *same way that I used to at bars and clubs... I will say, kind of the dark side, you do see alcoholism a fair bit*  
549 *more with VRChat... you can have an entire world egging you on for 12 hours drinking, drinking, drinking..*  
550 *and that can go south pretty fast".*  
551

552 Some participants highlighted the differences in adult activities across platforms, such as P22:

553 *"There were raves in Altspace, but you didn't have people taking the MDMA, they weren't doing drugs.*  
554 *There were some underground sex things going on, but nothing like the ERP that does on in VRChat. VRChat*  
555 *is just mega overdrive of everything. We don't find a lot of that stuff in the smaller platforms, at least not*  
556 *yet. Banter, they've got a couple of cannabis worlds...but otherwise, I'd say most of Banter is pretty tame at*  
557 *this point".*  
558  
559

560 Participants with experience in other platforms described their perceptions of drinking behavior on those platforms  
561 and, such as P18 who described their experience drinking in Meta Horizon Worlds:  
562

563 *"So I've only been to one bar that had a group of drinking people. And if they were drinking, I mean,*  
564 *they seemed to be drinking, [but] their behavior was like very acceptable, like they weren't fighting with*  
565 *each other, arguing with each other... They weren't being very wild at all, they were very sociable versus*  
566 *VRChat—it's not hard to walk into a world where there's someone kind of like completely out of control".*  
567  
568

569 Overall, drinking and adult content were not only more common on VRChat, but these kinds of behavior were  
570 tolerated much more. P18 further expressed how the presence of in-game moderators on Meta Horizon Worlds impacted  
571 their personal behavior and expression on the platform:  
572

*"I don't really log on to Meta Horizons to drink and party like that... I would say that something else that I'm very conscious of in Meta Horizons is that there are moderators there. There are literally people who have moderator flags above their heads to kind of tell everyone that this is a moderator. And I think that does affect the environment a little bit. It affects how people socialize, it makes sure that people don't get a little too crazy... and when someone does get a little too rowdy they get kicked from the world by the moderators".*

Users then might be oriented toward specific platforms depending on the kind of social experience they desire. Users looking to engage in more adult-centered activities might find that VRChat provides them the social experience they look for in online socialization. While others who desire a more family-friendly and moderated experience might find that Meta Horizon Worlds is more compatible with their preferences. P23 explained their perception of VRChat and why they prefer other platforms:

*"I do go into VRChat, sometimes they have some cool stuff in there... But I don't like necessarily the crowd aspect there, it's a little more of the 18+ [and] sometimes people are more inappropriate in there. I don't fit in the same group that's drawn to it".*

## 4.2 Avatars and Identity

While every social VR platform allows users some degree of avatar customization, the tools provided to users to make such customization differ from platform to platform—resulting in avatars that vary widely in terms of their aesthetic and functional (e.g., interactive, expressive) elements. Furthermore, users gravitate toward specific platforms that they feel meet their needs in terms of avatars personalization and self-representation. While some users wear different avatars as a way of role-playing, others utilize specific avatars as a way of exploring and expressing different kinds of identities as well as finding community and fostering social connections (e.g., through shared interests).

**4.2.1 Role-Playing and Escapism.** Avatars allow users to embody different characters, species, and objects. For platforms that offer more advanced avatar customization tools, users have created (and continue to create) a variety of avatars for users to explore and represent their presence in virtual worlds. Many of these avatars feature content from popular media, which allow users to role-play as some of their favorite characters from video games, movies, and television. P17 shared their experience role-playing in different avatars:

*"...my avatars are 99% Nintendo, video game characters, comic book characters, and Disney characters so I get to like run around as all my stuff I grew up with, I get to be these [characters]. Instead of using my imagination, I can be these things and I'll run as Pikachu doing a Pikachu voice, or I'll run around as Gizmo, and I'll turn into a Gremlin and start going crazy. I get to just play and act out my childhood fantasies... and that's the allure for me is that camaraderie you get from people, having fun and just being able to do and be whatever you want to be, literally".*

Some users expressed that being able to embody different avatars provides a sense of escapism, allowing users to temporarily separate themselves from their experience in the physical world, P4:

*"Social VR as a whole is kind of like home to a lot of people who don't get to be themselves in their everyday life, you know, let's say you have a guy who's kind of questioning who they are. [They] go to an office everyday dressed up in a suit and tie and then they come home and they go on VR and get to be a cute anime girl... It's totally different from what their IRL colleagues know about them or how they view them but they can just go home and be that".*

P9 shared personal experience with using social VR as a sense of escapism:

*"It's definitely the embodiment of escapism... I look forward to some days coming home from work, I get to come home and I can put on my headset and just forget about what happened today and just go hang out with some friends and just be, not necessarily a different person, but just have no worries, you know. Put the IRL worries aside"*

Finally, P4 shared how this element of escapism and role-play can help provide a sense of social connection and support with others:

*"Essentially you can be whoever you want, you can display yourself however you want. And for a lot of people that's big on, you know, finding their identity, discovering themselves... And I think that leads to more genuine interactions with people because you're not necessarily putting up a wall as much as you would face-to-face. You know, you can have someone running around as a toaster next to like a super realistic rave girl next to someone who's an anime character. And then like Kermit the Frog walks in, and that's just normal. That's just VRChat... And it makes it easier to open up about things.."*

Custom avatars like the ones described above, however, are only available on a limited number of social VR platforms, with VRChat having the most amount of options currently available. Therefore, users seeking social VR experience that involves role-playing and escapism through avatar embodiment might gravitate towards VRChat. Users who seek a social VR experience that more closely resembles a typical experience in the physical world might be more attracted to a platform like Meta Horizon Worlds. P22 walked through their experience finding an avatar on VRChat:

*"When I first got into VRChat, I wanted to be a human being. I said 'I don't like any of these avatars, I want to be a human being.' And once I found one, I said 'okay it looks like a female human being I'm good with that'... I tried to get something that's close to my hair color, same color as my eyes. So it is, for me at least, somewhat of a physical representation of me.. So I know not everybody feels that same way. A lot of people like to go out and explore and try really strange things".*

**4.2.2 Identity Exploration, Expression, and Community Support.** As alluded to in the previous section, avatars allow users a great deal of personal expression through self-representation. We also found, consistent with findings from Freeman and Maloney [16, 17, 19], that users leverage avatars to explore and express different identities. In particular, we found that gender and sexual identity were the two most common types of identities expressed through avatar embodiment. Gender identity exploration/ expression was common across many social VR platforms, while sexual identity exploration/ expression was limited to VRChat. This finding is explained by both the avatar customization tools that VRChat supports, as well as the more relaxed state of moderation on the platform. P4 shared their experience exploring identity in VRChat:

*"Going back to you can be whoever you are, I feel like VR and VRChat in general has opened that up for a lot of people. I have known a lot of people who have discovered a lot about themselves by playing VRChat... whether that be a gender identity, or sexual identity or something else, just because they were able to express themselves in different ways. You know, I myself am a non-binary born male. And all that means to me is that I don't care, like my approach is I don't have any connection with gender, I'm just me. But I wasn't really able to explore that until I was able to, you know, put on a female avatar.. put on a male avatar.. put on a silly avatar, rather than spending money into like cross-dressing or make up... you just click a button and see how you feel about it. And I feel like it was a big awakening for a lot of people, because there's a*

very strong trans community on VRChat... I had friends who didn't realize they were furies until they tried on a furry avatar... So it's a big open avenue to just exploring yourself and seeing who you think you might be with an open mind, which was pretty cool".

Experiences like P4's were not uncommon. P7 also shared their experience with exploring and expressing identity in VRChat:

"It's an entirely different experience in socialization because looks don't matter, so anyone interacts with anyone. I think that's a big part of it. And I think the reason people gravitate to VRChat as a whole is because of that. It's because there's no predisposed notions, you don't have to be who you are in real life. You can experiment, you can be someone else, you can be someone who you want to be or in some cases like with the huge trans population in the game including me, who you need to be. It's something that's really significant and it adds a lot of weight to social interactions in VR".

For users like P4 and P7, the ability to explore identity through avatars is a primary motivation to use a more expressive and open platform like VRChat. Other platforms such as Meta Horizon Worlds and Rec Room, for example, only allow users to represent themselves via a humanoid avatar with limited personalization options. Thus, spontaneous and exotic modifications to one's avatar is currently only something that can be achieved via a platform like VRChat.

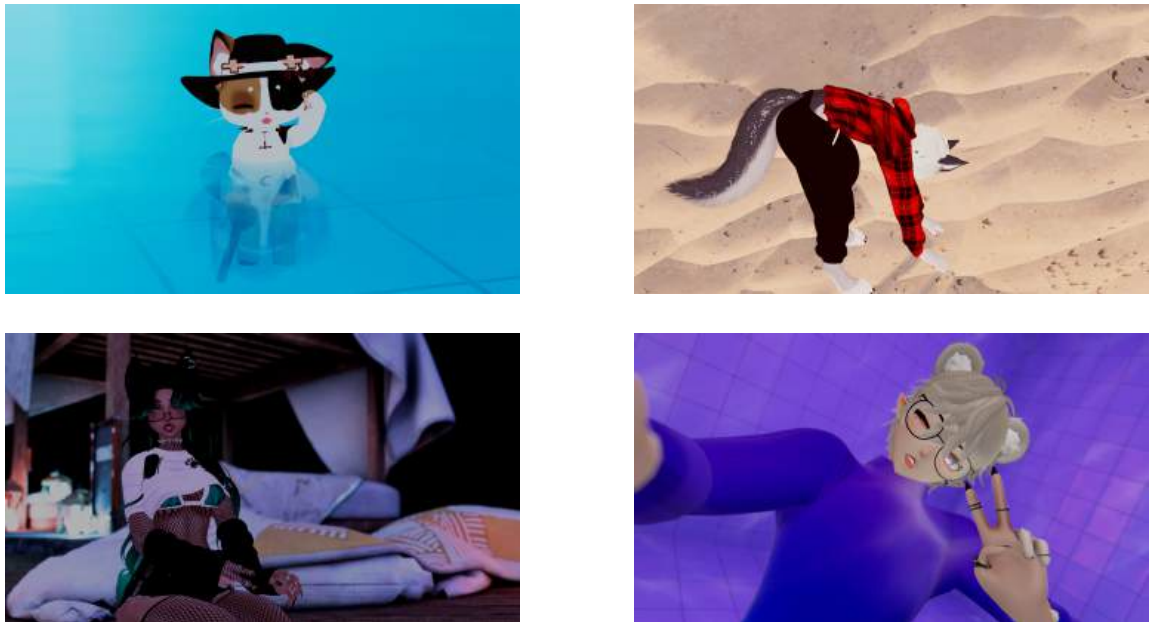


Fig. 2. Examples of Different Avatars in VRChat Supported by Full-Body and Face Tracking

#### 4.3 Toxicity, Children, and Moderation

In line with previous work on harassment and toxicity in social VR [4, 18], we found toxicity to be prevalent across all social VR platforms. We also found the presence of children widespread across all platforms, consistent with previous findings [10, 27–29]. Like drinking and adult content, however, VRChat was found to foster more toxicity and harassment



than other platforms. In this section, we reveal some of the toxic behavior experienced by users, how some of these interactions may or may not include children, as well as discuss the role that moderation tools play in mitigating these kinds of occurrences across social VR platforms.

*4.3.1 Chaos, Toxicity, and Sexual Harassment.* While toxic behavior was found across all social VR platforms, VRChat was found to concentrate some of the most frequent and toxic forms of harassment. Many worlds in VRChat were commonly described as "chaotic" by participants. Chaos and toxicity was found to be more common in worlds that were well-known among the community and thus highly populated, such as "The Black Cat" in VRChat. Participants expressed that world population (i.e., how many players are logged into a particular instance) greatly affects the kinds of social interactions and connections made, P4:

*"So there's a lot of chaos, but you know, every once in a while you could meet someone who's like really chill, and you can sit and talk with for a while. It really depends on where you go. So different hangout worlds have different vibes to them. So like the Black Cat, since it's the most popular attracts the most chaos, whereas if you go to a slightly less populated one, you might have better chances of meeting someone who's looking for that."*

P6 also explained why they advise new players to look for worlds that are less populated for a better user experience:

*"I think a big thing is something that I tell a lot of new people, or like people who are just starting to get into it, or who want to look into it further: avoid anything that's on the popular tab. Any of the worlds that are in the popular tab for world searches will usually have not so great people in them. A lot of kids, and a lot of adults who act like kids."*

Some users, particular those who identify as female, encountered unwanted sexual advances in VRChat, such as P8 who shared:

*"Just because I'm a girl, a woman, [in] one of the raves I was in someone came up to me and like sniffed and made licking sounds [they] were like: 'damn girl, I would sure like to lick you' and I was like 'what the fuck?' I was having fun dancing with my friends and now I'm just weird-ed out... and he wouldn't leave me alone, I had to just block him."*

Some users reported encountering other users who purposely try to break other players' game clients via "crasher" avatars. Because VRChat allows users to import custom avatars created from external 3D modeling programs, users have implemented avatars that purposely overload the game client. Crasher avatars are particularly prevalent and problematic in publicly accessible worlds (more on private versus public worlds in the following section). P12 shared their experience with crasher avatars:

*"I know there's sometimes people who have a lot of issues lagging, like some people completely avoid public worlds entirely because I've had times where I join, and there's these people that come in trying to like crash other people."*

Participants shared that excessive chaos, toxicity, and sexualized activity on some social VR platforms like VRChat were primary motivations to use other platforms. P21:

*"My experience with VRChat wasn't particularly positive. It wasn't so much the children is was the massive amount of chaos... I don't know what furies are, I don't want to know. I don't want to know about pirated videos that I shouldn't see, or I don't want to see. I just don't want to know about stuff like that. So as much*

as Horizon Worlds is sterilized... it did provide more or less the pieces of a social platform that I could live with an enjoy."

P23 described a similar preference for less a sexualized social experience:

"I'd say the only thing personally—and this is just completely personal preference—that I don't like about VRChat is there's so many sexualized avatars. And that's not my preferred VR experience. I liked, you know, the Altspace or Horizon aspect where everybody's kind of cartoony, but we're just here for fun. And I understand there are so many different application for VR and people want to do in there. But I just don't prefer to see so many sexualized avatars..."

4.3.2 *Children and Teenagers.* Children were found to be present across all social VR platforms. Some participants shared some toxic encounters with children, such as P28:

"You have to filter the wheat from the chaff. You know, like I said, there's a bunch of crappy little children running around saying the N word, but you have to filter those and and you find some really cool and interesting people."

P19 discussed how unguided youth can become negatively influenced by other toxic users:

"And, you know, as the kids who are unguided and unsupervised start to invest themselves in this culture, what starts out as what likely could have been irony turns into a full blown conversion. Now you've got children spitting racial epithets and a sort of phobic of every kind, profanity and such. And that's more or less the issue VRChat has at the moment. That it's easy for children to come online and get mixed in with the wrong crowd."

The majority of participants were not resentful of the presence of children on social VR, but rather worried about their safety as they navigate public worlds (many of which contain adult content). P4 expressed their opinion on children in social VR:

"I think there's too many children playing VR. And I don't mean that as like the kids are ruining the platform like a lot of people probably say. I mean it so much for their own safety... There's very clearly kids that are like 6 to 8 years old playing this game, which really should not be unsupervised by parents. You know, it's just that there's some adult content in VR, which can be avoided, But when you're thrown into a public lobby of the just the internet, I feel like you know, a 13+ old can handle themselves, but someone who is younger than that... I feel like there should be more safety procedures in place to protect the younger kids..."

4.3.3 *Moderation.* The level of community moderation varies across social VR platforms. VRChat is the least moderated, while Meta Horizon Worlds and Rec Room were generally found to have higher levels of moderation. This is primarily because Meta Horizon Worlds and Rec Room have community moderators who occupy public instances to prevent and mitigate instances of violence and harassment. It can also be explained partially due to the significantly higher player base on VRChat, which increases the amount of both highly toxic adult users and young unsupervised children. Available tools for moderating one's own social experience were found to be quite similar across platforms. The most common moderation tools exist in the form of a block, mute, or kick. If a user encounters an unwanted interaction with another user, they can choose to block them (which will eliminate their avatar and voice communication from their client), mute them (which will eliminate only the voice chat), or kick them if they are the current owner of the instance (which will kick them out of the world instance).

Typically, toxicity and harassment manifest in publicly accessible instances of virtual worlds. Many platforms give users the ability to choose between creating a public instance (open to anyone playing the game) or a private instance (only users with an invite can join). As a result of the massive amount of toxicity and harassment occurring in public worlds, a substantial portion of the player base on VRChat has migrated exclusively to private instances of virtual worlds. In these instances, users don't have to worry about encountering random bouts of toxic behavior. They are also given access to additional moderation tools as owners of an instance such as the kick feature. P10 drew a comparison of public worlds to being in public in real life:

*"The majority of people, including myself, don't spend much time in public worlds... I think people look at public worlds the wrong way. Alright, you wouldn't go out into like Times Square in New York and just start talking to random people, you're gonna get a really interesting experience. And that's what it's like when you go into a public world, you're going out into this public arena with random people that have basically no social constraints put on them."*

Finally, P28 explained why they were compelled to migrate to private worlds:

*"That community, like many other people over the age of 18 were fed up with the level of little children running around in the public worlds. So that world was created [for] a safe place where we're not inundated by crazy little minors and [to] have our own space to be our own community."*

Overall, moderation was found to exist on a spectrum across social VR platforms. Given the expressive and open-ended nature of VRChat, the platform tends to lean much more heavily on *self-moderation* via mute, block, and kick features as well as private instances. Given the more family friendly nature of platforms like Meta Horizon Worlds and Rec Room, these platforms tend to lean more heavily on *community moderation* where employees and volunteers have a physical presence in public worlds. Users looking for a more open, expressive and self-moderated user experience might gravitate towards a platform like VRChat. Users who desire a more family friendly, moderated experience will likely gravitate toward platforms like Rec Room and Meta Horizon Worlds.

## 5 Discussion

We found a number of fundamental similarities and differences across social VR platforms that greatly influence user experience in and motivation for using different social VR platforms. VRChat is a primarily adult-centered platform supported by user generated content focusing on embodiment through a variety of avatars ranging from humanoid to exotic objects and species. Meta Horizon Worlds aims to appeal to a broader, more family-friendly community with technical affordances valued by participants interested in co-building *in* VR, and draws from user populations from other social VR platforms like AltspaceVR that also focused on building. Participants who are interested in environment design affordances are also involved in the development of niche platforms like Banter and Resonite which build on older communities and established social circles. We highlight the differences in terms of user activities, particularly by emphasizing the different contexts of socialization that scaffold user experience and how those contexts differ across platforms (RQ1). Across platforms, community engagement is fostered by members hosting social events (concerts, karaoke, open mic nights, dancing competitions, etc.) that bring together users with shared backgrounds and interests. However, heavy drinking and other adult-centered activities such as ERP primarily occurred on the platform VRChat, whereas other platforms like Meta Horizon Worlds and AltspaceVR typically fostered a more casual, family-friendly focus.

We give special attention toward how these different contexts, which are in part sustained by the culture of the player base, both detract and attract users according their preferences (RQ2 and RQ3). For example, some users expressed a preference for a less-moderated and more openly self-expressive platform like VRChat which allows them to engage in more adult-centered activities such as drinking without fear of judgement. Other users preferred a more tame and moderated social experience such as Meta Horizon Worlds and AltspaceVR, where there is a greater focus on community engaged world-building, exploring, and gaming rather than "hanging out" in a more mature, intimate worlds.

We also reveal how different modalities of self-representation through avatars attract users with specific intentions in virtual worlds toward specific platforms (RQ2 and RQ4), as well as detract certain users away from specific platforms (RQ3). Many VRChat users shared that their goals in social VR are more closely linked to avatar embodiment through role-playing as characters, or through identity exploration and expression through various types of avatars. Users of platforms like Meta Horizons preferred or at least tolerated more restrictive avatar customization menus that allowed the creation of universal, humanoid style avatars. For these users, the focus of socialization is less dependent on avatars and self-presentation and more on the design of various virtual worlds (e.g., gamified and interactive elements).

Finally, we report on the current state of moderation, harassment, and other forms of toxic behavior across social VR platforms. Differences in user preferences for the cultural differences of virtual worlds explain why attitudes toward moderation and especially the presence of children may vary. These cultural differences and attitudes toward moderation lead users to be attracted toward as well as detracted away from specific platforms (RQ3). We highlight ways in which users interpret and leverage various moderation tools to control their own social experience (RQ4). Some users shared that they don't prefer to see so many sexualized avatars in social VR. While others, particularly those who use VRChat, mentioned leveraging moderation tools such as the mute and block feature as well as private instances to avoid the presence of children and toxic adults who tend to congregate in publicly accessible virtual worlds.

## 6 Limitations

The landscape of social virtual reality platforms is rapidly changing, so one limitation to this work is that it can only provide a snapshot of the current moment. For example, the death of AltspaceVR led to users flocking to other social VR platforms to have a grater online presence across the social VR ecosystem. Similarly, the influx of unsupervised underage users in VRChat due to the increased popularity of the inexpensive Oculus Quest 2 has led experienced users to shift to private worlds rather than engaging in public worlds over the past two years. A second limitation is recruitment. Participants were recruited from Reddit. On the one hand, this method allowed for the recruitment of more experienced users, many of which had tens of thousands of hours in social VR. On the other hand, we likely undersampled more casual and newer users who might share a different perspective than more established members of various social VR communities. A third limitation was that our sample was restricted to English-speaking users, leaving out potential insights from different cultures and backgrounds. Our sample was also restricted to adult users of social VR, however as mentioned previously a large portion of social VR users are children.

Given that VRChat comprises the bulk of social virtual reality users, one argument might be that comparing VRChat experiences to other worlds is not important since these users comprise a tiny minority of social VR users. While we argue that these experiences are still important, it is also notable that many users whose primary platform is not VRChat are long-time users who have moved from other platforms like Altspace and have years of experience in social VR. These users have formed the initial user base of newer platforms like Banter or Resonite. Thus, while their numbers are small, they are perhaps disproportionately influential in the social VR ecosystem.

## 7 Future Work

Future work investigating user experience on social VR platforms should consider how platforms evolve as they rise and fall in popularity. Many social VR platforms have been discontinued in the last few years, such as Mozilla Hubs and AltspaceVR. As platforms grow in player base, competing interests often emerge between the developers and consumers of social VR platforms. Often, these competing interests result in tension between social VR developers and consumers, leading users to vacate platforms in search of other opportunities. Future research should investigate how differences in user adoption, preference, and platform moderation influence the life cycle of social VR platforms.

## 8 Conclusion

This paper highlights that what constitutes being "social" in VR varies widely from user to user, and platform to platform. The technical affordances of different social VR platforms scaffold user experience by providing specific contexts of socialization, forms of user-generated content, and levels of moderation. These technical differences lead to cultural differences across platforms. Two examples of how platform cultures can loosely predict user attitudes and activities are user generated content, and user attitude toward moderation. Many participants who primarily use VRChat users reported prizing self-expression and experiential self presence through control over their avatar representation and embodiment. Participants who sought communal building experiences and were less invested in avatar appearance gravitated to platforms like Meta Horizon Worlds. Participants who report seeking more adult-focused experiences gravitate to VRChat; other participants preferring a more all-ages social experience may avoid VR Chat in favor of more moderated, less chaotic experiences. As social VR platforms continue to evolve, future research should investigate both the cultural and technical differences and similarities of social VR platforms that lead to important differences in player base, user experience, and user expectations.

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