# Observation

1

Random World - Chatting - English - 15 min Total 5 - anime-style avatars 1 PC 1 - user 3-4 points tracking 2 - user 1 - known user 1 6 points tracking 2 - trusted user 1 - known user 1 -The designer is showing their subscribers the world-

Player 1: Hi, welcome! I am showing my subscribers a tour of my world, you can join us.

Player 3: Hi.

Player 4: Hello!

Player 1: Follow me, this way!

Player 2: Whoa, this looks amazing! The colours and lights of the dance floor are so

mesmerising!

Player 3: That's insane!

Player 4: Wow!

Player 1: Glad you like it! Here is also a DJ booth. There'll be events here every Saturday night 8 p.m. EST, and you can feel the groove!

Player 2: Sounds great, I'll definitely come.

Player 3: Dancing here! Let's go!!! (raising up their hands)

Player 1: And if you look around, you'll see some interactive areas. There are multiplayer games to keep things interesting.

Player 1: Of course! Allow me to introduce the private VIP booth. The entrance to the booth is equipped with a switch-controlled barrier. When the barrier is raised, people outside can't enter, and the sound from within remains confined to the booth.

Player 3: Oh that's amazing!

Player 4: This is really cool, you are a genius!

Player 2: Wow there are also some games here huh, is the Truth or Dare the same as the one in drinking night? (point)

Player 1: No, this is completely new. You can try it! And this switch is for controlling the barrier. Player 3: It's really nice to chill here.

2
Random World - Chatting - English - 30 min
Total 4 - anime-style avatars 0
PC 3 - visitor 2 - new user 1
3-4 points tracking 0
6 points tracking 1 - trusted user 1
-In a chilling world, lying on the sofa, the full body tracking user shares their story with some random users-

Player 1: Well, you see, John met this incredible girl in VRChat. They hit it off right from the start, spent hours together, and even introduced their friends to each other. Is that sound like the perfect virtual couple?

Player 2: Wait, you say girl?

Player 3: Sounds nice.

Player 1: Yeah.

Player 2: Are there really girls in VRChat?

Player 1: Well, you could find some.

Player 3: Then? What's going on?

Player 1: [Sighs] Yeah, well, things took an unexpected turn. One day, John logged into VRChat and saw the girl hanging out with his bro, let's call him... Alex. John was shocked, and when he joined them, he saw... [hesitates] them kissing.

Player 2: Oh dude.

Player 3: See, that's the thing.

Player 2: That's terrible! Poor John.

Player 1: Yeah, it really hit him hard. He didn't expect something like this to happen, especially with a friend he trusted. The worst part was when the girl said she couldn't continue the relationship with John after that.

Player 2: How can a person betray his friend, that's heartbreaking. Betrayal like that is tough to deal with.

Player 1: Absolutely. But John didn't want to cause any drama, so he just distanced himself from both of them. It's been tough, but at least he's been trying to find a way to cope with the whole situation.

Player 2: I can imagine. Virtual relationships can be just as intense as real ones, and when they fall apart, it's devastating.

Player 1: Anyway, thanks for listening to John's story, guys.

Player 2: This actually makes me want to see what a relationship is like in VRChat.

Player 1: Well, then you need a VR headset first. If you just use PC, that's a normal experience, but in VR, you would feel quite different.

Player 3: What do couples do together in VRChat?

Player 1: Usually exploring the worlds, watching movies, having some quality time with each other. Oh, some do VR sleeping together.

Player 2: What? Wearing a VR headset to sleep? No way!

Player 1: Yeah, it is not comfy, but in that way, you can feel your girl sleeping next to you, that's the point.

Player 2: Okay, it makes sense. But won't the headset be out of battery?

Player 1: Probably, I use a PCVR headset, with a cable. So no use worrying about that.

Player 2: That's cool. I want to get a VR headset now.

Player 3: Is it expensive?

Player 1: Some are pricy, but some are fine.

Player 1: Sorry guys, my friend invited me, I'll leave now.

Player 2: OK, bye!

Player 3: Bye! Thank you for the story!

Player 1: [waving their hands] Bye!

3

Random World - Chatting - English - 5 min

Total 6 - anime-style avatars 1

PC 3 - new user 2 - trusted user 1

3-4 points tracking 2 - user 2

6 points tracking 1 - trusted user 1

-There are three groups of people chatting in different locations inside the world, when I come close to them, they stopped talking-

The FBT user is lying on the sofa, his head is on another user's legs.

4

Friends+ - Gaming - Chinese - 20min

Total 8 - anime-style avatars 8

PC 3 - user 1 - trusted user 2

3-4 points tracking 3 - user 2 - known user 1

6 points tracking 2 - trusted user 2

-4 users are playing Mahjong, while 2 are looking at the mirror and patting each other's ears-

Player 1: [Patting Player 2's ears] I love the fluffy ears on yours! Awww, they are so fluffy.

Player 2: [Giggles] Yours are so cool too! Btw, do you feel the touch?

Player 1: Yeah, I have a phantom sense of the ears. Although I don't have these cat ears in my real life, I can still feel it.

Player 2: Same here! I can even feel the warmth when you pat my ears. It's oddly comforting,

actually. Cuddles and ear pats are the best.

Player 3: Woooooow, I win!

Player 4: I'll have better luck in the next round.

Player 1: The ears are like an extension of myself.

Player 2: You know what I've been curious about? Can you feel the touch when you don't see the mirror?

Player 1: Maybe no, I just feel those I can see.

Player 2: I heard some people would use some vibration stuff to let them feel.

Player 1: That's actually cool, I also want that.

Player 2: Shall we go to a private world? I wanna test something.

### 5

Friends+ - Dancing - Japanese/ body language - 2 hours

Total 22 - anime-style avatars 22

PC 3 - user 2 - known user 1

3-4 points tracking 2 - user 2

6 points tracking 17 - known user 2 - trusted user 15

-In a kawaii dance event of a virtual idol group, PC users are standing and watching, while others are dancing with the video in front of the mirror, users in the event are generally mute and communicate by body language-

Player 1: Good evening!

Player 2: Good evening! Today is so tiring.

Player 3: Good evening!

Player 4: Good evening! Oh Player 1 is so cute! Hug! [Hug with player 1]

Player 1: Player 4!!! Cute!!! Hug hug!

Player 5: Good evening! How was your day?

Player 6: Good evening! I'm doing well! How about you?

Player 5: Good! Let's practise dancing together!

Player 6: I didn't eat dinner, I hope I won't faint.

Player 5: Oh no! Take some food and come back later!

Player 6: Ok! I'll go searching for some food!

Player 7: Good evening!

Player 8: Good evening!

Player 1: Good evening!

Player 9: Good evening!

Player 1: Hey everyone, the practice will start soon~

Player 2: Okay!

Player 4: OK!

Player 8: Okay!

[Players walk to one side of the wall to turn on the mirror and video player]

[When the music starts, there are barely people talking, a PC player using the camera to take screenshots of other users]

Player 9: Adorable!

[Some users standing around the entrance, using chatbox to chat]

Player 10 (chatbox): Your new outfit is really nice!

Player 11 (chatbox): Thank you!

[A PC user joins and walks directly to another user, stops in front of them, and jumps several times. The place they stop is in front of the mirror, the user who was dancing then takes a step back to make sure they can still see the video player and mirror]

Player 1: Time for resting! Drink some water, everyone~

[Most users changed to AFK, and some of them walk behind the mirror to look for their friends, the PC user jumps another 3 times, the user in front of them pats their head, and uses a finger to guide them to stand behind the mirror, the PC user changes their location after seeing the point ]

Player 1: Take more water, everyone~

Player 8: It's so warm today!

Player 1: Yes, have you turned your AC on?

Player 8: Yeah, but still sweating a lot.

Player 1: Haha, take some rest~

Player 1: Time for practising, everyone~

[There are some duel dancer choreography, after dancing, users use thumbs up and clapping to show their appreciation to each other, some also use thumbs up emoji in VRChat]

Player 12: I'm late. I worked overtime.

Player 1: Thanks for your hard work~ Let's dance!

Player 12: Okay!

Player 6 (chatbox): I need to leave a bit early QAQ

Player 8 (chatbox): Ok, no worries! Bye!

Player 6 (chatbox): Bye!

Player 1: You are all so cute! Everyone!

Player 4: Everyone is cute!

Player 1: Time for photo! Come together~ Here, here!

[Users turn off the mirror and the video player, fix their camera in the world, and standing or sitting on the steps to take photos]

## 6

Friends+ - Chatting - Chinese/Japanese - 1.5 hours

Total 10 - anime-style avatars 10

PC 3 - trusted user 3

3-4 points tracking 2 - trusted user 2

6 points tracking 5 - trusted user 5

-Friends group chatting about their related happened things, and interacting with each other-

Player 1: Good evening!

Player 2: Hey! My next DJ event will be held on Friday evening!

Player 3: Is this a new DJ event? Or the same as the one you attended last week?

Player 2: This week's event will be anime themed.

Player 3: That makes sense.

Player 4: Hello Player 2!

Player 2: Let's go! Party people! Awa awa awa awa!

[Player 4 raises their hands and moves in the world, and so does Player 2]

[Player 5 pats Player 6's head, they come close and about to kiss each other]

[Player 1 grabs the drink in the world and pretends to drink it]

[Player 3 takes the drink over and put it on Player 1's head]

Player 1: No!

[Player 1 puts their hands above their head in a defensive posture, and Player 3 pats player 1's head]

Player 4: When'll you come to [city name]?

Player 6: I may be there next Saturday, will you be available at that time?

Player 4: Yeah, I think I'll have time then. What time will you be around [location name]?

Player 6: 11 a.m. if nothing goes wrong.

Player 4: Ok! Then I think we can meet and have lunch there.

Player 6: Great! See you then.

[Player 7 and player 8 are kicking each other with FBT, and chasing with each other]

7 Public - Music - Japanese - 55 min Total 15 - anime-style avatars 15 PC 12 - visitor 5 - new user 3 - user 4 3-4 points tracking 2 - user 2
6 points tracking - 1 known user 1
-Players are singing in a karaokePlayer 1: Oh I don't mean to order this song, let's skip it.
Payer 2: Ok!
[Players are singing together, but due to the different speeds of the network, their voices can't be heard at the same time]

8
Public - Dancing - Body language - 30 min
Total 28 - anime-style avatars 22
PC 6
3-4 points tracking 3
6 points tracking 19
-Players with FBT are dancing to the video, and some players are watching behind the mirror-

[All players are mute in this world, after the duet dance, the players give high five and thumb up to the players nearby] Player 1(Chatbox): I need to leave now, bye! [The other players around them wave to them]

9
Public - Chatting - English - 20 min
Total 15 - anime-style avatars 8
PC 12 - visitor 8 - new user 2 - user 1 - trusted user 1
3-4 points tracking 3 - user 2 - known user 1
6 points tracking 0
Players are talking in four different locations by groups

- Players are talking in four different locations by groups in the world-

Player 1: Wait dude, where did you get the happy happy cat avatar?

Player 2: You can find it in a meme avatar world called [world name]

Player 1: Ty, I'll have a look.

Player 3: Haha! This is going to be my new favourite reaction image.

Player 4: Did you make it from scratch?

Player 5: Yeah, I used a base model and then added my own textures and animations.

Player 4: So good! Do you learn modelling yourself?

Player 5: Yeah just watching some youtube videos, then go unity and chill.

Player 4: Haha, you must have spent a lot of time on Unity.

Player 5: No doubt.

[Some players are sitting or standing in front of the mirror and saying nothing]

[Some players come to check the players sitting or standing in front of the mirror, but the ones are still, maybe AFK now]

# Interview

#### P1 - the original answer is in Chinese

Asian. Man. My total VRChat playtime on Steam is 2471 hours. I start playing VRChat in June 2022, I play VRChat 20 hours a week, and I start using FBT in February 2023. I like that my avatar embodies some of my ideal states, such as hairstyle, clothes I want to wear, and the impression I give to others. Because I want to socialize as a human in the game, I always use human avatars in VRChat. Some models have clothes similar to those sold in real life, and I think those avatars are very realistic. But I also like the fantasy and cute-themed models, as they can represent different aspects of a person. People are complex and can be both cute and cool. Having unlimited avatar choices allows users to better express their multifaceted selves. The tall model is very cool, the furry model is very cute, and the meme model is okay to play occasionally, but it is a bit annoying to use it all the time. I don't take the initiative to interact with strangers. I pay more attention to one's personality, and I don't care about avatars. I'm more concerned with interacting with those places that are different from humans. I may have different aesthetics from users who like to use non-human avatars, and other aspects need indepth understanding to know. I usually express myself better in gaming worlds. When playing games with people I'm not familiar with, there is no awkward silence due to a lack of topics. I usually go to rooms with fewer people. Get a bit socially anxious unless my friends are there. The sleeping room is very comfortable, the room with few people, the world with a good view, and the dancing room will make me more willing to express myself. I used to not pay much attention to others when talking in real life, but now after playing VRChat, I feel like I can focus more on people's reactions when I speak. Gender doesn't really matter because I play to make friends. I saw some people wrote in their bio, saying the avatar's gender is their gender. I think it's pretty cool. Why bother caring about someone's gender in reality? You can see others doing some fidgeting, some purposeless behaviours with conscious decimate sions, which may influence the assumptions of the gender others made of them. I would do some actions in VRChat that I wouldn't do in real life, such as patting others on the head. Because the immersion is stronger in VR, any actions feel like they're happening in real life, so I can become closer to others. And thanks to VRChat, cute avatars and voice changers, the gender inside is ambiguous, and I think it's very comfortable and wonderful that the concept of gender is about to collapse. The feeling that it doesn't matter if the inside is a man or a woman is the best. I feel that the difference between playing on a PC and using FBT in VR is enormous when interacting. Others can know if you're listening to them, your thoughts on what they're saying, and your mood. Verbal communication is still important during interactions, but body language has become much more pronounced...In VRChat, because you're wearing a VR headset, you can tell if others are listening to you, just like in real life. I think being able to see others' reactions makes my communication smoother. When using text-based communication in social apps, not being able to see people's reactions sometimes makes me wonder if I said something wrong. I often do some actions to show that I'm thinking, like putting my index finger on my chin and shaking my head. I found that I started doing this in real life too. Even though it's the same model when different people use it, the feeling they give is different, especially when using FBT. From their gestures, you can feel their distinct personalities and the unique atmosphere they create.

#### P2 - the original answer is in Chinese

Asian. Woman. My total VRChat playtime on Steam is 1257 hours. The first time I played VRChat was in December 2021, but I only played for a while, and I really started playing in November 2022. I play around 50 hours a week. I have FBT in January 2023, using Slime VR, then switched to Vive tracker in April. I prefer human avatars because their proportions are closer to mine, making movement feel more natural. My avatar is just a character in the game like I'm borrowing this appearance. It doesn't represent my personality and doesn't resemble my real-life appearance. I treat my avatar like a virtual daughter that I can nurture. I spend 1/3 of my free time modifying my avatar, adding new clothes, hair, and accessories, changing gestures and expressions, and enhancing avatar functions. Another 1/3 of my free time is spent in VRChat testing new content and making adjustments based on the results, and only the remaining 1/3 of my free time is spent genuinely enjoying VRChat. Non-human avatar shows the diversity of VRChat, but I think users using non-human avatars are more pretend to be funny and make others laugh. If someone is not using a microphone, playing on a PC, and using a non-human avatar, I won't interact with them. From the avatar, I can sense that our preferences are different, and it's hard to find common ground for conversation. The impression of the user themself is more than that of the avatar. I feel more comfortable in friends' worlds, not friends+ worlds, but the ones that only my friends can join. That's because people who are already my friends are familiar, so I can relax. In VRChat, when you do something, you always receive feedback from others, whether it's verbal or through actions, and it's very timely feedback. I feel more comfortable in spacious and bright settings, but that's just me. I also find dancing worlds, where I don't need to use my mic, very comfortable. I guess I just don't like talking to strangers that much. Real life and behaviour in VRChat interact with each other. I often do gestures corresponding to my avatar's expressions when I walk in real life. I didn't have many chances to sway my leg while waiting in real life, but now I often do that in VRChat. I think people who guess whether someone has a voice changer on or off have malicious intent. Based on regular chats, social media screenshots, and various experiences, I think 80% of users in VRChat are male. So, before hearing their voice, I assume they are male. In VRChat, boys learn to do those purposeless behaviours that girls usually do to misleading gender assumptions. But those behaviours are just part of the stereotype I think, girls don't always behave like those. I prefer to do fewer movements and avoid doing those fidgeting stuff to hide my real gender. I think VRChat is just a game, and people may not really want to be women when they do these actions, but just talk and joke.

#### P3 - the original answer is in Chinese

Asian. Man. My total VRChat playtime on Steam is 2653 hours. I've been playing VRChat since January 2022, I've been playing 50 hours a week, and I've been using FBT since July 2022. I started to have a strong sense of immersion and felt that the avatar was me or me on the internet after using FBT, and it fully inherits my personality. I spent a lot of time learning to modify avatars in Unity and Blender. I basically buy new clothes or accessories for my avatar every week, just like someone dressing up in real life. I use Unity to dress myself. It takes a lot of time to learn, which can be difficult for new users. Additionally, you need to invest a lot of money in buying models and accessories. Many VRChat newcomers simply copy models from

model worlds, but many of those models actually violate copyright laws. Without purchasing the original files, you can't customize your avatar's appearance. I respect non-human avatar users, and I sometimes use it myself. Most of the time, I interact with people I know and don't pay much attention to avatars. But if someone uses an avatar that I really like and has customized it to look impressive, I might initiate interaction with them and try to get to know them. It is very interesting to be able to become like this on the Internet which cannot be realized in reality. I think non-human avatars are cool, human avatars are more common. If I know that this person uses other models, then using meme models and so on is trolling. If it is someone I don't know, I will feel uncomfortable. When I am with very close friends, I am more willing to express myself. If I have only met others once, I am unwilling to express myself, because I am introverted and shy. I've always liked small spaces, but I can't always experience that in real life. In VRChat, there are many small Japanese-style closet spaces. I find it very relaxing to sleep in those spaces. When I go to dancing or kawaii move events, there isn't much need for verbal communication. I can communicate through body language without using my mic. I mostly attend these events for my own enjoyment and don't worry too much about what others are doing. So, I frequently participate in dancing events, kawaii move events, and DJ events. I get nervous at avatar gatherings, where the main activity is chatting, so I don't go there as often. In VRChat, when you touch each other's ears, when you do gestures, or when you dance together, you can quickly develop a bond. In real life, doing these things would be strange. When playing MMORPGs, there isn't such an immersive feeling, and you can't freely control your actions. So there isn't that the ance sense of quickly building relationships with others. After guessing their gender, I pay attention to my words. If I think they are female, I don't use foul language in front of them. I have many friends who are babiniku, which refers to male Vtubers or VRChaters who use female avatars. Some of them use male voices, some use falsetto, and some are otokonoko. Many people will write babiniku in their bio, so I think VRChat has the most babiniku users. Everyone likes to use anime girls. Friends with a deep level of role play will open a voice changer to better perform their avatar. Some men learn to produce female voices, but they often sound similar and can be identified. If I want to sugar with someone, apart from the appearance of the avatar, I will pay more attention to their personality and hobbies. Many of my friends, building relationships from games to reality, are all the same gender. The position of my knees when sitting and the position of my hands when standing will become factors for others to judge my gender, so I am more careful and cautious in VRChat, even though I may not care about these behaviours in real life. And I always ensure that my avatar is wearing a pair of safety knickers. In VRChat, as I act as a girl, it is stipulated that I cannot sit with my legs split when wearing a skirt, and I will also shake my hands when I am waiting for others, and I will dangle when I am standing, so as to increase my own girl. These behaviours are basically the impressions given to me by the images of girls in anime. I practice kawaii moves, everyone does that in VRChat because it's cute. There might be a wish to become the gender displayed in the game in reality. It's challenging and costly to change in real life, but being able to do something in virtual reality that I cannot do in real life is interesting. When I was playing VRChat, I didn't just want to be a girl, but I thought that maybe I'm actually a girl.

P4 - the original answer is in English and French

Caucasian. Man. I have 4400 hours of playtime. I started in October back in 2018. I play VRChat for 40 hours per week. I got FBT in 2022 October. I don't use a lot of fully human avatars like usually, they have cat ears, tails and stuff like that, it's fun, why not? You can be whatever you want in this game, so why not be something that you cannot be in real life? My avatars can represent some part of my taste for sure because of course you only wear avatars you like. They are tools for interaction for sure, caz I don't really mind I want sth that looks like me, or something that I would dress like in real life, it's more like I like it and it looks good. To other people, this is me, but for me, this is a representation of me, it's more like a part of me, than what I'm really like, because you only show people what you want in VRChat, you don't show your whole personalities you don't show yourself.

Because it is funny, because of the meme, he looks funny, his mouth moves funny. It does represent a part of my personality, it gives me a chaotic energy that I really like, being very random and doing stupid stuff. So that is more like myself than wearing a meme avatar. Unless they are very funny, and I would like to tell them I love their avatar, otherwise the same. I'm kind of shy in real life, I got social anxiety stuff, it's not that bad, but it's still like there and I don't do some things. But in VRChat, I can do stuff that I won't do in real life, like dancing. I danced sometimes in VRChat, with some friends. I really don't do that in real life. Expressing my feelings or emotions is way more accessible in VRChat because you can choose the world and the people you want to stay with. You are with someone like face-to-face here, but face-to-face in real life could be very intimate, and you may have social bias, like certain people from certain stuff. In VRChat everyone I feel is more open to talking about their personal stuff. Expressing myslf feelings or emotions is way more easier, as you know they are not close to you. You don't see the person in reality. Good connection with people. Solid base on your personality, instead of look, or state, it feels more genuine in VRChat. You can feel others' feelings here in VRChat, like by the atmosphere of the world, the gesture they use, and the moments you stay with them. You can choose which person you want to hang out with, not only by the avatars, but only by the feeling you stay with them, and the mood. If I am one-on-one with someone, in some private world, vibing or listening to music, I feel very comfortable, like I am with my friends in real life. I always walk or sit in a girl's way, then I do it in VRChat, but dancing in a girl's way, I didn't do in my real life, but I do sometimes now. I do not care about people's gender. I think it's very funny, sometimes I go mute and everyone assumes that I am a girl. But it sometimes happened in real life too, because I have long hair and a slender body. I am accustomed to it. I don't really mind. I would guess the gender based on the voice or the behaviour. If you hear a feminine voice, you think there is a girl. When they act in a certain way, you would expect someone of a certain gender, like dancing, walking, sitting in a certain way. People are very visual. For a guy, people don't sit the same way. Based on their avatar if that is a female avatar and doesn't talk, I think it's her. The guessing, it just happens. 90% of my guess is correct I will say. I feel more myself when I use FBT.

#### P5 - the original answer is in English

Caucasian. Man. My total VRChat playtime on Steam is 184 hours. I started to play in 2022 April. I play 20 hours per week. My avatar is from manga, I like the character. I am related to my avatar. It's not me, but my friends can recognize it as me, it is like my virtual agency. I see my friends as themselves, there is a person behind it, I don't care about the avatars. If I'm with my

friends, I don't mind going to some world with more people. Sometimes friends' friends may be annoying, so I prefer to go to friends-only worlds, but if I'm with my friends, I don't mind going to some world with more people. I always do the peace sign after playing VRChat, and I also do that in real life. I feel I focus more on body language now...In some photogenic worlds, I do some behaviour that I wouldn't do in real life, for a selfie.

#### P6 - the original answer is in English

Caucasian. Man. My playtime is about 1353 hours. My VRChat began on February 2020, I play 15 hours a week. The day I got my FBT was the same day I got my VR headset, it's October 2020.

I use furry avatars, they look cool. For me, an avatar is a tool for finding other furries because of their hobbies and identities. It is also half me, it represents some part of me. When it comes to customization, everything a human avatar can do, a non-human avatar can do, and even more. Like the skin of human avatars, they can only have tattoos or change their colour, but you can do more on furries' skin. If they have a good-looking avatar, I am more open towards them and want to be friends with them. If I am with a group of people, I feel being watched. Friends+ world is more like semi-public, I like staying in a place with fewer people, those cosy worlds. I'm a lot more social now, I feel I'm easier to have a conversation in real life. I may guess the gender subconsciously. I think it's stupid. Based on social norms, sitting pose can influence the assumption. When someone sitting with their knees goes down, it is more feminine. I don't focus on gender, so I just sit in the way I like.