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"You can't be deadnamed in a video game": Transgender and gender diverse adolescents' use of video game avatar creation for gender-affirmation and exploration

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ABSTRACT

Transgender and gender diverse (TGD) adolescents experience mental health challenges at higher rates than cisgender peers due to a combination of minority stress and gender dysphoria. Many TGD youth use video games to cope with stress and access informal networks of support. However, very little is known about the potential positive influence avatar customization has for this group of youth. To address this gap in the literature, in-depth, semi-structured qualitative interviews were conducted with ten TGD adolescents about their experiences with avatar customization. Thematic analysis revealed four primary themes including that (1) video game avatar customization offers a low stakes environment for gender exploration, (2) avatars offer both internal and external validation of gender identity and transition goals, (3) avatars allow players to enact aspirational appearance goals, and (4) video games and avatars offer immersion and escapism for TGD adolescents. These novel findings underscore the range of positive impacts avatar customization can have for TGD adolescents, particularly for youth with gender dysphoria. Video game avatar customization can be a key part of the gender exploration and affirmation for some TGD adolescents.

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Introduction

It is well-documented that transgender and gender diverse (TGD) youth report increased rates of mental health challenges due to the minority stress associated with having to navigate often transphobic and

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cis-normative cultural contexts, in addition to the stress associated with managing gender dysphoria (e.g., Becerra-Culqui et al., 2018; Bouman et al., 2017; Reisner et al., 2015a, 2015b). Within the current sociopolitical climate, transgender individuals have had to endure an increasing volume of anti-trans legislation that attacks both the rights and bodies of TGD people (Barbee et al., 2022). TGD young people, in particular, have had to manage transphobic policies that seek to significantly limit or eliminate transgender pediatric care services (Abreu et al., 2022; Paceley et al., 2021), exclude TGD youth from recreational and competitive sports (Clark & Kosciw, 2022), and contribute to the ongoing harassment and violence toward these youth and TGD youth of color in particular (Mahoney & Harris, 2019; Travers, 2018). In many ways Massachusetts represents a haven for transgender youth, with a suite of affirming laws and protections across both social accommodations and medical care. However, even in this more positive geographic environment, there remains a substantial transgender youth population in need of alternate avenues for support and affirmation.

In the face of such adversity, there remains significant need to understand what types of experiences may be particularly positive and affirming for TGD youth and can lead to positive feelings and a sense of connectedness. As more TGD youth begin to explore and realize their gender (see Herman et al., 2017), it is increasingly important for healthcare providers and caregivers to explore new ways of supporting these youths' self-discovery. Although research has underscored how healthy relationships with parents, school staff, and peers in the community are important protective factors for TGD youth (e.g., McGuire et al., 2010; Paley, 2022; Singh, 2013), this literature domain is still rapidly developing (e.g., Tankersley et al., 2021; Vance et al., 2021). Given heightened social, political, and safety concerns for TGD youth (e.g., Kuper et al., 2022), it may be particularly helpful for researchers to identify ways in which TGD young people can seek and experience affirmation when in-person social connection is not possible or reliably safe.

One way that TGD youth may attempt to find other forms of support and/or self-care is through playing video games (Strauss et al., 2019). Research has indicated that gaming can be an adaptive way of coping with distress and can increase psychological wellbeing for cisgender adolescents (see Granic et al., 2014; Kowal et al., 2021). Specifically, the creation of an avatar, or a digital self-representation through customization features offered through many video games (Waggoner, 2009), has been noted as one of the most positive and beneficial aspects of online mental health interventions for youth. For example, positive video game avatar creation experiences have been identified as beneficial for self-affirmation

among cisgender people (Kang & Kim, 2020) and for enhancing social functioning for autistic youth (Kandalaft et al., 2013), as well as for those experiencing anxiety symptoms (Dechant et al., 2021; Pimentel & Kalyanaraman, 2020) and auditory hallucinations (Leff et al., 2013). Furthermore, for cisgender youth, avatar creation and customization has been found to be helpful with expressing emotions that would be difficult to verbally communicate offline (Rehm et al., 2016). While these studies have not been replicated with TGD individuals specifically, some researchers have begun to explore the use of video game avatar creation for gender identity exploration and development.

Video game and gender identity research

The exploration of gender in video games has been wide ranging (e.g., Malkowski & Russworm, 2017; Murray, 2017; Travers et al., 2022). Public discourse on the exploration of gender in video gaming has largely focused on the portrayal of interpersonal violence and how video games recreate sexual and other forms of violence often directed at women (e.g., Beck et al., 2012; Henry & Powell, 2018) and other marginalized people (e.g., O'Brien, 1999; Ruberg et al., 2018). Video games can also engage in racial, class, and gender-based stereotyping that reinforces social systems of marginalization (see Burgess et al., 2011; Travers et al., 2022). For instance, there has been historical concern about the ways in which gender is portrayed in popular video games, how portrayals of traditional masculinity and femininity recreate and reinforce gender stereotypes (O'Brien, 1999), and how the virtual embodiment of characters in video games may lead players to internalize and reenact stereotypical beliefs about gender. However, there is a growing social science literature investigating the more nuanced aspects of gender that can be explored in video game environments, including some video games that have been specifically designed to allow people to explore various aspects of transgender experience (see Shaw & Friesem, 2016; Travers et al., 2022).

Avatar creation and embodiment among TGD people

Using data collected from four qualitative case studies, Griffiths et al. (2016) aimed to better understand the role of gaming in the lives of TGD adults experiencing gender dysphoria. Major themes included the use of character design in games "as a psychological tool to increase one's awareness of gender identity and/or part of the self" (p. 64). They also found that video games appeared to offer a safe and creative space for TGD players to explore their gender identity/expression and

come out to other players as a precursor to offline social transitioning.

Morgan et al. (2020) used focus groups with Australian TGD youth to examine the role of avatars in video gaming and the impact avatar creation had on this population's mental health. Data from 17 TGD participants between the ages of 11 and 22 revealed that the process of creating an avatar that closely reflected their own gender identity was helpful for gender identity consolidation. Other themes represented TGD youths' preference for a wide range of customization to allow for adequate self-representation, as well as resulting frustrations when binary gender features were imposed on players (e.g., allowing only binary pronouns or restricting avatar clothing options to one or the other binary gender).

Baldwin (2018) conducted interviews with TGD adults via instant messaging on a popular social media platform to learn about participants' understanding of ideal embodiment through avatar creation. Most participants described using avatars for gender experimentation but there were differences across gender identities. Generally, transmasculine adults identified more with their avatars and expressed excitement related to customization of physical attributes. Transfeminine adults, on the other hand, typically expressed the most interest "in simply […] exist[ing] as women in the virtual world" (p. 15) and not being questioned about their gender. Nonbinary individuals were more interested in creating avatars that subverted the gender binary.

One limitation of the existing literature is the lack of gender diversity within participant samples. For instance, there was only one transfeminine participant in Morgan et al. (2020), only binary identities were included in the Griffiths et al. (2016) case studies, and while Baldwin (2018) reported different themes across gender identities, the makeup of gender identities across the sample was unclear. Given differences in lived experiences of gender binarism and transmisogyny (Arayasirikul & Wilson, 2019) within video games (see Pozo, 2018) for transmasculine, transfeminine, and gender diverse youth, it is likely that TGD youth with different identities may have different experiences and opinions regarding avatar creation. Thus, it is important to include a broad range of gender identities of TGD youth in this research. In addition, in-depth and one-on-one qualitative interviews may allow for a more nuanced understanding of TGD youths' experiences than is possible to assess through focus groups and/or retrospective case studies.

The primary aim of the present study was to explore ways in which young TGD people may experience affirmation and validation during

avatar creation in video games. To address limitations within the existing research, this study (1) ensured there was equal representation of trans masculine/male, trans feminine/female, and gender diverse/nonbinary youth in the sample, (2) used in-depth, semi-structured interviews that allowed for a more tailored approach to understanding the unique experiences of each participant, and (3) collected quantitative demographic information to better characterize the sample.

Method

Procedure

Participants were recruited through a hospital-based gender clinic in Massachusetts specializing in providing gender affirming medical interventions to TGD youth in the northeast United States. Psychologists informed patients about the study during consultation appointments and clearly stated that participation in research had no bearing on their medical care. Interested patients' contact information was provided to the first author with patient and parent/guardian permission. The first author then provided study information and scheduled a phone call with the patient, and guardian for those under the age of 18, to determine eligibility and obtain consent. Eligible participants were between the ages of 13 and 18, felt comfortable speaking and understanding English, identified as transgender, nonbinary, and/or gender diverse, and had experience creating avatars while playing video games. Once consent was obtained, the first author conducted an in-depth semi-structured interview over Zoom, with live transcription and recording enabled. Transcriptions were reviewed against the audio recording to ensure accuracy and corrections to wording and misspellings were made. Following the interview, the participant was sent a REDCap survey link with questions about demographics, avatar creation goals, level of support for affirmed gender, as well as a measure about experiences as a TGD individual. Participants were provided with a $20 gift card to either the Nintendo, Xbox, PlayStation, Steam, or Google Play virtual video game stores.

Measures

Demographics and characteristics

Participants provided information about their age, race, gender identity, gender category, length of time since they started identifying as their affirmed gender, and medical transition status and desires. Gender identity information was collected using the open response question "How would you describe your gender identity". Exact words

Table 1. Categorical demographics and sample characteristics.

Variable	*n*
Race	
White	8
Asian	1
Black/African American	1
Affirmed gender Identity	
Male	2
Transmasculine	1
Nonbinary Demiboy	1
Nonbinary	2
Transgender Female	3
Girl	1
Gender category	
Male/Masculine	3
Female/Feminine	4
Nonbinary/Gender diverse	3
Gender affirming hormones	
No, but I would like to start	4
No, and not interested	1
Yes, currently	5
Pubertal blocker	
Never	5
Yes, currently	5

Note. $N = 10$.

participants used to describe their gender identity are included in Table 1. Gender category was collected using the prompt "The category that best describes my gender identity is" and the following three options were presented: male/masculine, female/feminine, nonbinary/genderfluid. This information was used to ensure adequate representation of each of the three primary gender identity categories in the sample.

Support and acceptance

Eight common adolescent social contexts were presented (e.g., immediate family, extended family, friends, school peers etc.), and participants were asked to report the level of support they experienced in each using a 3-point Likert scale (0 = *no support*, 1 = *partial support*, 2 = *full support*).

Avatar creation experiences

Participants responded to six questions adapted from van Aller (2018) about the extent to which they use avatar customization for gender appearance, expression, and affirmation. Respondents used a 5-point response scale ranging from *none of the time* to *all of the time*.

Experiences as a TGD individual

The Transgender Congruence Scale (TCS; Kozee et al., 2012) was used to capture the level of comfort participants felt with their gender

identity and external appearance. This measure contains 12 items and requires respondents use a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Sample items include "I experience a sense of unity between my gender identity and body" and "I am happy I have the gender identity I do". The TCS yields a total averaged score, as well as subscales for Appearance Congruence and Gender Identity Acceptance with higher scores indicating greater congruence and acceptance.

Interview about experiences with avatar customization

A semi-structured interview guide was designed by the authors of this study. A young adult, gender diverse individual with an interest in video games was also consulted to provide feedback about question content, wording, and relevance. Interview topics included participants' approach to avatar design and connectedness to those avatars, how avatar creation and gender identity development may have impacted one another, how participants' avatars have changed over time, and how avatar creation may have helped with social transitioning. Open ended questions were designed to guide conversations about avatar customization experiences while allowing participants to discuss what was most important and salient for them. Interviews lasted up to 45 minutes, with a median time of completion being 35 minutes.

Data analysis

Thematic analysis was used by authors 1, 2, and 5 to identify and analyze patterns in participants' qualitative responses. Consistent with well-established thematic analysis procedures (Braun & Clarke, 2006), all members of the research coding team individually familiarized themselves with the data before coding each transcript and generating labels for different important semantic and conceptual features found in participant responses. Members then searched for themes, or meaningful patterns, in the data. The research team then met multiple times to review, organize, and define themes until members were in agreement. Prior to each of these meetings, members individually re-read and re-familiarized themselves with participant responses to ensure themes encompassed participants' experiences at each stage of analysis. At the conclusion of the analysis process, categories of themes, the themes themselves, and subthemes were mutually agreed upon.

Results

Statement of positionality

It is important for researchers to offer positionality statements given identities and lived experiences can impact one's worldview and, therefore, how researchers understand qualitative data (Holmes, 2020). Author 1 is a white, cisgender, queer man who provides clinical services to TGD youth. Author 2 is a transgender, agender, asexual Asian American individual who conducts research with TGD youth. Author 3 is a white, nonbinary, queer, chronically ill individual who provides clinical services to TGD youth. Author 4 is a white, cisgender, asexual woman who provides clinical services to TGD youth. Author 5 is a white, cisgender, queer woman who provides clinical services to TGD youth.

Quantitative analysis

Ten TGD adolescents between the ages of 13 and 18 participated in this study. Four participants both received puberty blockers and were on affirming hormones, one participant received only a puberty blocker, and one participant was only on affirming hormones without a history of a puberty blocker. Eight participants identified as White, one as Asian, and one as Black/African American. Three participants self-identified as nonbinary, three identified as male/masculine, and four identified as female/feminine. Specific labels participants used to describe different identities and other demographic information are provided in Tables 1 and 2.

Examination of quantitative measures revealed that participants reported experiencing the most support and acceptance of their gender from friends ($M = 1.89$, $SD = .33$) and immediate family members ($M = 1.80$, $SD = .42$),

Table 2. Quantitative demographics and sample characteristics.

Variable	Mean	*SD*	Min	Max
Age	16.60	1.71	13	18
Months as affirmed gender	34.00	22.40	11	72
Level of support				
Immediate family	1.80	.42	1	2
Extended family	1.40	.84	0	2
Friends	1.89	.33	1	2
School staff/Teacher	1.63	.52	1	2
School peers	1.50	.53	1	2
Work	1.50	.58	1	2
Social media	1.25	.46	1	2
Video games	1.33	.50	1	2
Total	1.53	.67	0	2
TCS				
Total	2.93	1.27	1	5
Appearance	2.51	.74	1	5
Acceptance	4.30	.75	1	5

Note. $N = 10$. Support (0 = no support, 1 = partial support; 2 = full support); Transgender Congruence Scale (TCS; 5 point scale – higher scores indicate more positive feelings about body and identity).

and the least support through social media ($M = 1.25$, $SD = .46$) and when playing video games online ($M = 1.33$, $SD = .50$). TCS scores indicated that participants in our sample reported experiencing less overall identity congruence ($M = 2.93$, $SD = 1.27$) and comfort with their external appearance ($M = 2.51$, $SD = .74$) compared to the original normative sample of TGD individuals ($M = 3.35$, SD = .97 and $M = 3.10$, SD = 1.13, respectively; Kozee et al., 2012). Gender identity acceptance among our sample ($M = 4.30$, $SD = .75$) was quite similar to normative samples ($M = 4.25$, $SD = .92$; Kozee et al., 2012), which indicate a generally high level of comfort with one's own affirmed gender identity (see Table 2).

Regarding experiences with avatar customization, participants shared that they spent the most time designing avatars based on how they wished they looked ($M = 4.60$, $SD = .52$), as a way to affirm gender expression ($M = 4.40$, $SD = 1.07$), and as a way to affirm gender identity ($M = 4.00$, $SD = 1.49$). Participants reported the lowest average amount of time spent on creating avatars based on their current appearance (Table 3).

Qualitative analysis

Four qualitative themes about TGD youth's individual experiences with avatar customization were identified. These themes captured that (1) video games offered a low stakes environment for gender exploration through avatar customization, (2) avatars offered both internal and external validation and affirmation of gender identity and goals, (3) avatars allowed players to enact aspirational appearance goals, and (4) video games and avatars offered immersion and escapism for TGD adolescents.

Low-stakes environment

There was agreement among many participants that video games offer a unique, low-stakes space for TGD youth to explore their gender identity

Table 3. Use of avatar customization for gender appearance, expression, and affirmation.

	Mean	*SD*	Min	Max
I try to create my avatar based on how I currently look.	2.70	1.49	1	5
I try to create my avatar based on how I wish I looked.	4.60	.52	4	5
I use avatar customization as a way to explore my gender expression.	3.60	.97	2	5
I use avatar customization as a way to affirm my gender expression.	4.40	1.07	2	5
I use avatar customization as a way to explore my gender identity.	3.10	1.10	1	5
I use avatar customization as a way to affirm my gender identity.	4.00	1.49	1	5

Note. $N = 10$. 1 = none of the time; 3 = some of the time; 5 = all of the time.

and expression. Participants often recalled using avatars early on in their gender journey to experiment with gender because this was a safer and easier alternative to such exploration in physical spaces. For example, one participant shared how avatars allowed for low-pressure experimentation:

> [A]vatars were a tool in which I was able to explore my identity, without having to consciously think about it. It's less of a "Oh well let's customize an avatar to fit my gender" and more so it's a way to kind of nonchalantly put myself into a different world and see how that would feel. (17-year-old, transmasculine individual)

Multiple respondents shared similar experiences and commented on how video games and avatars offer more privacy and freedom for ongoing exploration of gender or expression that otherwise would not have been possible in the "real world" without social repercussions and/or stigma. Some participants reported that this feeling of safety also afforded them opportunities to practice what it would be like to come out or socially transition, with one participant stating:

> Creating avatars definitely helped with socially transitioning in that it helped me understand who I am and how I want to be referred to. Creating avatars essentially helped me test the waters of coming out to people online and see how they respond before doing it IRL [in real life]. (18-year-old, nonbinary individual)

This ability to "test the waters" offered participants a unique and valuable experience of exploring what it would be like to be seen and understood as a person with a gender identity or expression different from what was socially expected of them based on their sex assigned at birth. This participant noted the specific importance of coming out to other players in online video gaming communities as being especially helpful and important to them when deciding if and how they would like to share this part of their identity in offline communities.

Participants also often spoke about how this unique environment for gender exploration has created a bidirectional relationship between avatar creation and gender identity development, with one participant stating: "Gender identity affects the character creation, character creation facilitated the exploration of gender identity" (18-year-old, nonbinary demiboy). This sentiment was echoed by other participants, who described having a low-stakes virtual space as being an important contributor to early gender exploration via avatar creation, which facilitated their own gender identity development, which then impacted the gender expression and embodiment of later avatars, and so on.

Avatars as affirmation

Interviewees also spoke about how self-representation in video games through the customization of avatars allowed them to present as their affirmed gender without being questioned by others. Given that many TGD youth are faced with considerable discrimination and transphobia from existing in a cis-normative culture, the ability to freely exist in a world as themselves allowed many participants to experience both internal and external validation of their affirmed gender.

Internal validation

Experiencing internal validation as a result of avatar customization was a common theme across all participants. Specifically, avatar creation was understood by TGD youth in this study as a vehicle to better understand their gender identity and to become more comfortable with this part of their identity exploration. For instance, one participant spoke about how the creation of avatars helped him first realize he was transgender and helped him decide on an affirmed name:

> I just like playing video games with like guy avatars and that's what made me like realize I was trans. And I picked my name the first time when I played Persona 5. I named that character [affirmed name] and that's how I found out that that's the name I wanted. (15-year-old, binary transman)

Another participant noted that avatars validated and affirmed physical transition goals, as well as different parts of their body as a nonbinary young person, stating: "[A]vatar creation has not just helped me know what I want to do with my body, but also helped me feel happier with certain aspects of my body" (18-year-old, nonbinary individual). Other nonbinary participants also shared similar experiences of internal validation with games that allowed players to design avatar bodies that were not inherently gendered as male or female.

Some participants also expressed that avatar creation offered internal validation and affirmation of gender identity in the face of self-doubt. One participant reflected that he would look back on his avatar creation as evidence in moments where he was questioning his identity and desire to medically transition:

> Sometimes I worry if I'm really trans even though I know I am. And then, when I create a male avatar, it's just an instant reminder and it's like "No, that's how I really feel". So, I'd say avatars help me be more sure of myself and who I am. (15-year-old, binary transman)

This "instant reminder" and accompanying validation via avatar design is a critical component for TGD adolescents who might question themselves

due to unsupportive environments or pressures from societal expectations of cisnormativity. Such a positive experience can offer important reassurance for TGD youth about the validity of their identities and that any experiences of gender dysphoria and/or gender euphoria (e.g., the pleasure or satisfaction with gender expression or congruence) are real and deeply felt.

External validation

The avatar creation process also served as a form of external validation for affirmed gender identity. Many participants spoke about how relieved they felt to know that their gender would be perceived by other game characters accurately and without question or doubt, with one interviewee reporting: "Being perceived entirely as female is validating. Like, being seen as totally female and not having to deal with people questioning or messing up who I am is a relief" (17-year-old, transgender female). Participants also frequently talked about what a relief it was that other characters in video games would dependably always use the correct name:

> [T]he ability to pick a name for a character in a game is the best thing in the world. You can't be deadnamed in a video game. Other characters will always get your name right. And that really carries a lot of weight. (18-year-old, nonbinary)

Many TGD youth in the sample reported experiences of people offline either intentionally or unintentionally using their assigned name at birth rather than their affirmed name (i.e., "deadnaming"). Entering a video gaming world where others automatically refer to one using the correct name was therefore an important and impactful form of external affirmation and validation.

Other participants noted that avatars had served as "proof" to others that their affirmed gender identity was authentic and true. For example, a participant stated:

> I think [avatars] were more so helpful in terms of like my parents and family's journey then *[sic]* for mine. […] Like for my parents it was sorta like "oh, yeah, well he's always used boy avatars" so it was easier for them to mentally trail it backwards and be like "oh, this makes sense". It was probably helpful for them to feel more comfortable with me starting testosterone. (18-year-old, transgender male).

For this individual, the avatars that he had created in the past offered an archive of his gender identity and documented his strong desire to be seen and understood as conventionally masculine. This may be particularly important for people under the age of 18 who are required to have written consent by their parents to medically transition (e.g., hormones). Avatars may serve as evidence of the adolescent's affirmed gender and ease the

worries of anxious parents. This not only offers an important form of external validation for TGD youth but potentially facilitates their ability to medically transition.

Avatars as aspirational

Numerous participants stated that they often created avatars based on how they wanted to look rather than how they currently looked. When asked about the connections that players have to their avatars, one interviewee stated "[W]ell, it's an ideal version of me […] it helps me feel closer to who I really am rather than someone who is stuck and not able to look the way I want" (17-year-old, transgender female). For this participant, avatar design represented an opportunity to create an aspirational version of herself that she feels unable to currently embody, and that this had a positive impact on her feeling more alignment between gender and gender expression.

Another participant discussing the aspirational nature of avatars stated that, for her, avatars represented medical transitioning goals: "[Avatars] encompass my goals for transitioning. Like medically and surgically what I want to look like I'd say" (18-year-old, transgender female). For participants who may not be able to presently pursue medical transitioning for a variety of reasons (e.g., lacking parental/guardian support, preexisting medical conditions, age minimum requirements, long wait times), avatars offer a way of existing in an affirming body that might not otherwise be possible at that moment. One participant even reflected on how the aspirational avatars he created when he was younger are now accurate depictions of him after medically transitioning: "I've tried to always create avatars that look like how I wanted to look in the future. It's kinda cool that now I create avatars that just look like me" (18-year-old, transgender male). This example underscores how avatars represent and hold physical ideals and goals for TGD players and may serve as blueprints for how they would like to look in the future.

Escapism and virtual reality immersion

Avatar creation also allowed TGD youth in this sample to fully submerge themselves in the video games they were playing and to become their avatar for a period of time. Multiple participants discussed the joy that came with being able to temporarily escape some of the difficult experiences they encounter as a TGD young person. One participant commented on how immersion in video gaming provided a respite from gender dysphoria:

> I guess that's what's great about this sort of thing that, you know, you can escape from the dread of reality. […] Like, dysphoria. It's nice to play a game and just have a moment, a break. It's a relief. (17-year-old, transgender female)

Other participants also shared similar experiences and discussed how video games are distinctively able to transport them into a new world and try-on being someone else. As mentioned by this participant, this opportunity had positive psychosocial effects because she was able to leave behind her gender dysphoria for a period of time and to exist without these distressing internal experiences.

Some participants also noted how virtual reality (VR) video games hold uniquely helpful and affirming capabilities for TGD individuals. In brief, VR games allow players to physically embody their avatars via a first-person experience with the assistance of a head-mounted display and multiple controllers or body sensors. For instance, when a player turns their head to look toward the left, they see what their avatar sees from turning their head in that direction. For many participants, this added level of reality to video games was affirming:

> [T]here are some virtual reality games that you can customize yourself essentially. That is like extremely affirming because […] with the normal computer games there's a fourth wall between you and your character that sorta like separates them from you. But in virtual reality games I've noticed that like it's a lot more real because you can like look down and see the right things and look in a mirror and see someone who's more reflective of yourself. (17-year-old, transgender female)

This ability to "look down" and see an avatar's body that has been crafted to the player's liking can be especially powerful for TGD youth with dysphoria. Such capabilities might also allow youth who are questioning or exploring their gender identity to virtually experience what it feels like to be in different types of bodies.

Discussion

Much of the current literature on gender in video gaming focuses on interpersonal experiences of gender and how gender is both subverted and reified in social interactions (e.g., O'Brien, 1999; Travers et al., 2022). The limited literature on avatar creation, including this article, instead focuses on the player's intrasubjective experiences of gender. The experience of avatar creation allows the individual to position themselves socially within a virtual setting in a way that is most authentic to the self, and affords players the opportunity explore their own gender and interact with a virtual world as that affirmed gender.

Avatar customization in video games can offer TGD youth a uniquely positive and affirming experience of their genders. Specifically, themes revealed that TGD youth found avatar creation provided a safe place to explore their social environment as a more accurate, digital representation of themselves in a low-stakes manner that was free from many social repercussions (e.g., discrimination and transphobia, etc.). The opportunity to use avatar customization to present themselves without being questioned or doubted allowed some TGD youth to not only better understand and feel more comfortable about their gender identity, but also freely explore and change their gender identity. In addition to such internal affirmation and validation, avatars allowed TGD players to receive external validation through reliable affirmation by other players or non-playable characters without the fear of being misgendered or deadnamed. Avatars also provided important documentation of gender identity to others (such as family members) and served as proof to TGD adolescents and those around them, that their identity is authentic. Many participants also noted that avatars allowed them to explore aspirational or idealized versions of themselves and helped them gain clarity about how they would like to look in the future. Lastly, avatars and gaming offered players the chance to escape from difficult experiences associated with being TGD, including gender dysphoria, and that virtual reality may be an especially useful tool for exploring the benefits of avatar embodiment.

Some of these findings are well-supported by the extant literature. For instance, Morgan et al. (2020) noted that avatars were reflections of experienced gender for the TGD young people in their sample, that avatar creation was helpful in facilitating gender exploration and consolidation, and that this process was a positive experience. Further, participants' use of avatars as an ideal self was also a major theme in Baldwin's (2018) study. The present study's findings offer additional nuance to these findings by identifying some specific reasons why avatar experiences are so beneficial, such as the different ways avatars offer internal and external validation, as well as the impact of avatars representing aspirations.

The unique low-stakes context of video games providing a safe space for TGD youth to explore their gender was also explored by Griffiths et al. (2016). This study also identified video games as being a "non-threatening, non-alienating, non-stigmatizing, and non-critical environment" for TGD individuals to express their affirmed gender (p. 64). The current study both replicated these findings and explored how avatar creation can be an essential component to gender identity exploration in digital spaces. Our findings suggest that a combination of the low-stakes environment and affirming avatar experiences contribute to gender development and consolidation.

One finding of this study that warrants further exploration is the documentation of TGD adolescents' beliefs about VR offering more immersive avatar embodiment, and therefore, more affirmation. While some researchers have begun to explore the psychosocial benefits of VR and found it to be helpful for building meaningful social relationships with other online players (e.g., Marciano et al., 2014; Pare et al., 2019), these studies did not define VR in the same way participants in the present study did. For example, Marciano et al. (2014) and Pare et al. (2019) included third-person avatar experiences in their conceptualization of VR, whereas participants in this study referred to VR that allowed the player to physically embody their avatars in the first-person. What was named as particularly affirming for this study's participants was the ability to "look down" at their avatar's body and see a digital representation of themselves that was more accurate of their affirmed gender. This may be analogous, to a degree, to the way that mirror therapy is used to remap the sensory experiences of individuals who experience phantom limb pain after amputation (Xie et al., 2022). The progression of VR capabilities and graphics may make it a valuable tool for gender affirmation and exploration.

Limitations and future research

There are several limitations to this study that are worth noting. All participants were recruited from one large gender clinic in the northeast of the United States, and parents of minors interested in this study were required to give consent prior to participation. Both the recruitment site and the requirement for parental consent may have inadvertently excluded TGD adolescents with unsupportive parents—a group whose stories are incredibly valuable and important to explore. Furthermore, TGD youth who can access hospital-based gender clinics may be more socioeconomically privileged than their counterparts who are not able to access such gender care, as financial resources are often required to access such clinics (e.g., Gridley et al., 2016; Tordoff et al., 2022). However, it is important to acknowledge that Massachusetts, the state in which the recruiting clinic was located, has a history of Medicaid expansion, and the gender clinic sees a substantial number of youth who are covered by publicly funded insurance plans. Therefore, while it is possible that participants in our sample were of higher socioeconomic status than other TGD youth, which can shape access to affirming healthcare (see Travers, 2018) as well as avatar creation experiences, this may be less of a concern than in other states with greater barriers to accessing insurance coverage for gender affirming care. The majority of participants also identified as white and thus avatar creation experiences of TGD people of color were likely not

Table 4. Sample prompts clinicians could use when discussing avatar creation with TGD Youth.

1. Do you play any video games where you get to create an avatar?
2. What are your avatars like?
3. What is it like for you to be seen and understood by other characters in the video game as your avatar?
4. How do you think avatars have been helpful or not for your gender exploration?
5. Can you tell me about your favorite avatar you've created and what you enjoy the most about it?

adequately represented in the current study. It is strongly recommended that future research work to recruit more inclusive samples across a variety of factors including race and ethnicity, geographic location, and level of parental/guardian and community support. Certainly, there is much to be learned about how experiences with avatar creation differ for TGD youth with diverse racial and ethnic identities, especially because their experiences of social marginalization may be compounded by limited representation within avatar customization features. Amplifying these community members' voices in future research will allow for better understanding of avatar design experiences for people with intersecting marginalized identities.

Conclusion

The present study suggests that video game avatar creation can be a uniquely positive and affirming experience for TGD youth across gender identities and experiences. Clinicians and healthcare providers should consider discussing such experiences with their TGD patients to better understand both their gender histories and how they seek support. For patients who enjoy video games and have experience with avatar customization, asking questions about these experiences can not only shed light on the patient's gender identity development but help to quickly build rapport given this is a passionate topic for many TGD youth (see Table 4 for sample questions healthcare providers can ask). These types of inquiries may open the door for deeper discussions with adolescents about gender and gender exploration in a way that feels exciting, relevant, and enjoyable rather than uncomfortable and anxiety-inducing. Future research may reveal other opportunities to use avatar creation and video games in the care and support of TGD youth, including through VR.

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References

Baldwin, K. (2018). Virtual avatars: Trans experiences of ideal selves through gaming. *Markets, Globalization & Development Review*, *3*(3). https://doi.org/10.23860/MGDR-2018-03-03-04

Barbee, H., Deal, C., & Gonzales, G. (2022). Anti-transgender legislation—A public health concern for transgender youth. *JAMA Pediatrics*, *176*(2), 125–126. https://doi.org/10.1001/jamapediatrics.2021.4483

Becerra-Culqui, T. A., Liu, Y., Nash, R., Cromwell, L., Flanders, W. D., Getahun, D., Giammattei, S. V., Hunkeler, E. M., Lash, T. L., Millman, A., Quinn, V. P., Robinson, B., Roblin, D., Sandberg, D. E., Silverberg, M. J., Tangpricha, V., & Goodman, M. (2018). Mental health of transgender and gender nonconforming youth compared with their peers. *Pediatrics*, *141*(5).

Beck, V. S., Boys, S., Rose, C., & Beck, E. (2012). Violence against women in video games: A prequel or sequel to rape myth acceptance? *Journal of Interpersonal Violence*, *27*(15), 3016–3031. https://doi.org/10.1177/0886260512441078

Bouman, W. P., Claes, L., Brewin, N., Crawford, J. R., Millet, N., Fernandez-Aranda, F., & Arcelus, J. (2017). Transgender and anxiety: A comparative study between transgender people and the general population. *International Journal of Transgenderism*, *18*(1), 16–26. https://doi.org/10.1080/15532739.2016.1258352

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. [Database] https://doi.org/10.1191/1478088706qp063oa

Burgess, M. C., Dill, K. E., Stermer, S. P., Burgess, S. R., & Brown, B. P. (2011). Playing with prejudice: The prevalence and consequences of racial stereotypes in video games. *Media Psychology*, *14*(3), 289–311. https://doi.org/10.1080/15213269.2011.596467

Clark, C. M., & Kosciw, J. G. (2022). Engaged or excluded: LGBTQ youth's participation in school sports and their relationship to psychological well-being. *Psychology in the Schools*, *59*(1), 95–114. https://doi.org/10.1002/pits.22500

Dechant, M. J., Birk, M. V., Shiban, Y., Schnell, K., & Mandryk, R. L. (2021). How avatar customization affects fear in a game-based digital exposure task for social anxiety. *Proceedings of the ACM on Human-Computer Interaction*, *5*, 1–27.

Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *The American Psychologist*, *69*(1), 66–78. https://doi.org/10.1037/a0034857

Gridley, S. J., Crouch, J. M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., Schimmel-Bristow, A., Woodward, J., Dundon, K., Schaff, R., McCarty, C., Ahrens, K., & Breland, D. J. (2016). Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. *The Journal of Adolescent Health*, *59*(3), 254–261. https://doi.org/10.1016/j.jadohealth.2016.03.017

Griffiths, M. D., Arcelus, J., & Bouman, W. P. (2016). Video gaming and gender dysphoria: Some case study evidence. *Aloma: Revista de Psicologia, Ciències de L'Educació i de L'Esport*, *34*(2), 59–66. https://doi.org/10.51698/aloma.2016.34.2.59-66

Henry, N., & Powell, A. (2018). Technology-facilitated sexual violence: A literature review of empirical research. *Trauma, Violence, & Abuse*, *19*(2), 195–208. https://doi.org/10.1177/1524838016650189

Herman, J. L., Flores, A. R., Brown, T. N., Wilson, B. D., & Conron, K. J. (2017). *Age of individuals who identify as transgender in the United States* (pp. 1–13). University of California.

Holmes, A. G. D. (2020). Researcher positionality – A consideration of its influence and place in qualitative research – A new researcher guide. *Shanlax International Journal of Education*, *8*(2), 1–9. https://doi.org/10.34293/education.v8i2.1477

Kandalaft, M. R., Didehbani, N., Krawczyk, D. C., Allen, T. T., & Chapman, S. B. (2013). Virtual reality social cognition training for young adults with high-functioning autism. *Journal of Autism and Developmental Disorders*, *43*(1), 34–44. https://doi.org/10.1007/s10803-012-1544-6

Kang, H., & Kim, H. K. (2020). My avatar and the affirmed self: Psychological and persuasive implications of avatar customization. *Computers in Human Behavior*, *112*(April), 106446. https://doi.org/10.1016/j.chb.2020.106446

Kowal, M., Conroy, E., Ramsbottom, N., Smithies, T., Toth, A., & Campbell, M. (2021). Gaming your mental health: A narrative review on mitigating symptoms of depression and anxiety using commercial video games. *JMIR Serious Games*, *9*(2), e26575. https://doi.org/10.2196/26575

Kozee, H. B., Tylka, T. L., & Bauerband, L. A. (2012). Measuring Transgender Individuals' Comfort With Gender Identity and Appearance. *Psychology of Women Quarterly*, *36*(2), 179–196. 10.1177/0361684312442161

Kuper, L. E., Cooper, M. B., & Mooney, M. A. (2022). Supporting and advocating for transgender and gender diverse youth and their families within the sociopolitical context of widespread discriminatory legislation and policies. *Clinical Practice in Pediatric Psychology*, *10*(3), 336–345. https://doi.org/10.1037/cpp0000456

Leff, J., Williams, G., Huckvale, M. A., Arbuthnot, M., & Leff, A. P. (2013). Computer-assisted therapy for medication-resistant auditory hallucinations: Proof-of-concept study. *The British Journal of Psychiatry*, *202*(6), 428–433. https://doi.org/10.1192/bjp.bp.112.124883

Mahoney, A. D., & Harris, H. B. (2019). When the spirit says dance: A queer of color critique of Black justice discourse in anti-transgender policy rhetoric. *U. Md. LJ Race, Religion, Gender & Class*, *19*, 7.

Malkowski, J., Russworm, T.M. (2017). *Gaming representation: Race, gender, and sexuality in video games*. Indiana University Press.

Marciano, A. (2014). Living the VirtuReal: Negotiating transgender identity in cyberspace. *Journal of Computer-Mediated Communication*, *19*(4), 824–838. https://doi.org/10.1111/jcc4.12081

McGuire, J. K., Anderson, C. R., Toomey, R. B., & Russell, S. T. (2010). School climate for transgender youth: a mixed method investigation of student experiences and school responses. *Journal of Youth and Adolescence*, *39*(10), 1175–1188. 10.1007/s10964-010-9540-7

Morgan, H., O'Donovan, A., Almeida, R., Lin, A., & Perry, Y. (2020). The role of the Avatar in gaming for trans and gender diverse young people. *International Journal of Environmental Research and Public Health*, *17*(22), 8617. https://doi.org/10.3390/ijerph17228617

Murray, S. (2017). *On video games: The visual politics of race, gender and space*. Bloomsbury Publishing.

O'Brien, J. (1999). Writing in the body: Gender (re)production in online interaction. In M. Smith & P. Kollick (Eds.), *Communities in cyberspace*. Routledge.

Paré, D., Sengupta, P., Windsor, S., John, C., & Thompson, M. (2019). Queering Virtual Reality. . In *Critical, Transdisciplinary and Embodied Approaches in STEM Education (pp. 307–328)*. Cham, Switzerland: Springer https://doi.org/10.1007/978-3-030-29489-2_17

Paceley, M. S., Dikitsas, Z. A., Greenwood, E., McInroy, L. B., Fish, J. N., Williams, N., Riquino, M. R., Lin, M., Birnel Henderson, S., & Levine, D. S. (2021). The perceived health implications of policies and rhetoric targeting transgender and gender diverse youth: A community-based qualitative study. *Transgender Health*.

Paley, A. (2022). 2022 National Survey on LGBTQ + Youth Mental Health. *The Trevor Project*. https://www.thetrevorproject.org/survey-2022/

Pimentel, D., & Kalyanaraman, S. (2020). Customizing your demons: anxiety reduction via anthropomorphizing and destroying an "anxiety avatar". *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.566682

Pozo, T. (2018). Queer games after empathy: Feminism and haptic game design aesthetics from consent to cuteness to the radically soft. *Game Studies*, *18*(3).

Rehm, I. C., Foenander, E., Wallace, K., Abbott, J. A. M., Kyrios, M., & Thomas, N. (2016). What role can avatars play in e-mental health interventions? Exploring new models of client–therapist interaction. *Frontiers in Psychiatry*, *7*, 186. https://doi.org/10.3389/fpsyt.2016.00186

Reisner, S. L., Greytak, E. A., Parsons, J. T., & Ybarra, M. L. (2015a). Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. *Journal of Sex Research*, *52*(3), 243–256. 10.1080/00224499.2014.886321

Reisner, S. L., Vetters, R., Leclerc, M., Zaslow, S., Wolfrum, S., Shumer, D., & Mimiaga, M. J. (2015b). Mental health of transgender youth in care at an adolescent urban community health center: A matched retrospective cohort study. *The Journal of Adolescent Health*, *56*(3), 274–279. https://doi.org/10.1016/j.jadohealth.2014.10.264

Ruberg, B., Phillips, A., Pozo, T., Stone, K., & Youngblood, J. (2018). Queerness and video games not gay as in happy: Queer resistance and video games. *Game Studies*, *18*(3).

Shaw, A., & Friesem, E. (2016). Where is the queerness in games? Types of lesbian, gay, bisexual, transgender, and queer content in digital games. *International Journal of Communication*, *10*, 13.

Singh, A. A. (2013). Transgender Youth of Color and Resilience: Negotiating Oppression and Finding Support. *Sex Roles*, *68*(11-12), 690–702. 10.1007/s11199-012-0149-z

Strauss, P., Morgan, H., Wright Toussaint, D., Lin, A., Winter, S., & Perry, Y. (2019). Trans and gender diverse young people's attitudes towards game-based digital mental health interventions: A qualitative investigation. *Internet Interventions*, *18*, 100280. https://doi.org/10.1016/j.invent.2019.100280

Tankersley, A. P., Grafsky, E. L., Dike, J., & Jones, R. T. (2021). Risk and resilience factors for mental health among transgender and gender nonconforming (TGNC) youth: A systematic review. *Clinical Child and Family Psychology Review*, *24*(2), 183–206. https://doi.org/10.1007/s10567-021-00344-6

Tordoff, D. M., Sequeira, G. M., Shook, A. G., Williams, F., Hayden, L., Kasenic, A., Inwards-Breland, D., & Ahrens, K. (2022). Factors associated with time to receiving gender-affirming hormones and puberty blockers at a pediatric clinic serving transgender and nonbinary youth. *Transgender Health*. https://doi.org/10.1089/trgh.2021.0116

Travers, A. (2018). *The trans generation: How trans kids (and their parents) are creating a gender revolution*. New York University Press.

Travers, A., Marchbank, J., Boulay, N., Jordan, S., & Reed, K. (2022). Talking back: Trans youth and resilience in action. *Journal of LGBT Youth*, *19*(1), 1–30. https://doi.org/10.1080/19361653.2020.1758275

van Aller, M. (2018). *Transgender and genderqueer experiences of avatar creation in games* [Thesis]. Uppsala Universitet.

Vance, S. R., Boyer, C. B., Glidden, D. V., & Sevelius, J. (2021). Mental health and psychosocial risk and protective factors among Black and Latinx transgender youth compared with peers. *JAMA Network Open*, *4*(3), e213256. https://doi.org/10.1001/jamanetworkopen.2021.3256

Waggoner, Z. (2009). *My avatar, my self: Identity in video role-playing games*. McFarland.

Xie, H. M., Zhang, K. X., Wang, S., Wang, N., Wang, N., Li, X., & Huang, L. P. (2022). Effectiveness of mirror therapy for phantom limb pain: A systematic review and meta-analysis. *Archives of Physical Medicine and Rehabilitation*, *103*(5), 988–997.