

Self Impression: Exploration of Autistic Representation in Video Games through Self Advocacy

By

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Abstract

Representation in video games rarely includes autistic characters, and when they do they are fabricated in a way that produces a single note and flat design, or rarely speaks to the depth of autistic experiences in everyday life. Usually, autistic representation is made by those who are not autistic and autistic resources may be consulted but there aren't autistic voices within the project, which can lead to this static and stereotypical representation. What sort of representation is produced when autistic people are given the ability to direct the design, and how does this inform future autistic representation?

This is an exploratory research study upholding the principles of design justice with discussions on autistic representation and where it stands now, and where it can improve. There are participant-led character creation sessions where autistic people make their own representations of autistic characters. These characters, the way they were built and the messages they wanted their character to uphold inform further discussion of representation.

Results illustrate the need for autistic-made autistic representation in media, including video games due to a current lack of diversity in representation. The characters designed were vastly different from one another and spoke to each participant's individual experiences being a person with autism and the way their autistic identity may intersect with other identities or experiences unique to them. This spectrum is so vast that it is imperative to hire people with autism to create future representations to build fleshed out and unique characters, and which can boost empowerment and advocacy.

Keywords: Autism, Video Games, Representation, Self-Advocacy

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Table of Contents

Table of Figures.....	7
Definitions and Reasoning for Language.....	8
Introduction.....	10
Literature Review - What’s the Context?.....	13
Representation in Video games.....	14
Representation Impacts.....	15
Autistic Representation in Media.....	17
Autistic Gamers.....	19
Design Justice.....	21
Methodology - What did we do and How?.....	23
Level 1.....	28
Level 2.....	29
Level 3.....	29
Self-Impression: Autistic Self Advocacy.....	31
Participants.....	32
Level 1: Pre-Character Creation Discussion.....	34
Autistic Character Examples.....	34
Identifying Characters in Media as Autistic.....	36
Autistic Representations and Autistic Interpretations.....	37
The Grey Area of Autistic Representation (“Best Practices”).....	40
Alienation / Non-Human Characters and Autism (Robots, Aliens).....	43
Level 2: Character Design.....	45
Alia and AJ.....	46
Duo and Logan.....	49
Friday and Akua.....	53
Link and Hikari.....	57
Maya and Ramsey.....	60
Level 3: Participant Final Discussions and Additional Survey Comments.....	64
Participant Design Process.....	64
Characters as an Extension of Self - could be seen as Therapeutic / Cathartic.....	66
Differences / Similarities Between Characters.....	68
Autistic representation should be made by autistic people / with autistic counsel.....	70
Stereotypes in Autistic Representation.....	72
Autism as an Individual Experience.....	73
“Impossible” Not to Design an Autistic Character.....	75
Positive Emotions and Care.....	76

Stress / Negative Emotions During the Process.....	77
Additional Comments.....	80
Reflections.....	82
Limitations.....	85
Future Works.....	86
Conclusion.....	87
References.....	88
Appendixes.....	96
Appendix A: Questionnaires & Interview Scripts.....	96
Screening Form (Online Form).....	96
Intake Questionnaire (Online Form).....	97
Appendix B: Discord Prompts.....	97
Discord Discussion Prompts.....	97
Discord Presentation Prompts.....	98
Post-event survey (Online Form).....	98
Post-presentation and discussion (Discussion prompts).....	99
Appendix C: Initial Information Post.....	99
Appendix D: Initial Resource Post:.....	101
Appendix E: Duo Additional Images.....	103
Appendix F: Duo’s Game.....	106
Appendix G: Maya Additional Images.....	107

Table of Figures

Figure 1, Initial Setup.....	25
Figure 2, Character Creation Chatrooms.....	26
Figure 3, Updated Chatrooms.....	26
Figure 4, Final Discord Setup.....	27
Figure 5.1, Study Diagram.....	28
Figure 5.2, Study Diagram.....	31
Figure 5.3, Study Diagram.....	34
Figure 5.4, Study Diagram.....	45
Figure 6.1 and 6.2- Alia’s Character AJ.....	47
Figure 7.1 and 7.2 - Duo’s character Logan.....	50
Figure 7.3, Duo’s game mapped out on Twine.....	53
Figure 7.4 , Starting Screen for Duo’s Twine Game.....	53
Figure 8, Friday’s character Akua.....	57
Figure 9.1 - Photo of Oshawott.....	59
Figure 9.2, Link’s character Hikari.....	60
Figure 10.1 and 10.2, Maya’s character, Ramsey.....	62
Figure 11, Study Diagram	65

Definitions and Reasoning for Language

Before starting the paper, it is important to establish a concrete definition and language for the context of this work. The definitions here may be different than those outside this work, but for this work these were the definitions used:

Autism - Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain. People are born with autism, and it has no cure. Someone who is born autistic will always be autistic. Because autism is a spectrum that can vary in how many and how intense symptoms can be, every person's experience with autism may be different from one another, but there may be overlap or more universal general experiences that most autistic people relate to. People who are autistic sometimes refer to being neurodivergent or ND instead.

Neurotypical - not displaying or characterised by autistic or other neurologically atypical patterns of thought or behaviour. In other words, people who are not neurodivergent. Other ways to refer to this group include allistic, NT, or non-autistic.

In addition, when referring to those in the autistic community, there are two ways to do so, referred to as person-first language and identity-first language. Their definitions have been included here:

Person-first language - person-first language puts the person before the disability in the description, for example "person with autism".

Identity-first language - identity-first language puts the disability first in the description, for example "autistic person".

The rise of using person-first language came in the 1970's, and was founded in the United States of America by a movement called "People First" (*Writing Respectfully: Person-First and Identity-First Language*, 2023). This movement was an effort to recognize that the people who had disabilities are people first, and to see someone outside their disability and to move away from dehumanising language. However, the understanding of this way of referring to disabled people changed. Some groups have rejected person-first language, because it felt like it was trying to hide the fact that the person was disabled by stating they were a person first, and this implied that their disability was a negative. The preference now typically depends on the person.

Because of the complex history between the two ways of referring to disabled individuals, these two ways will be interchanged in this paper. This is not to put weight on one over the other, but understand both have their positives and negatives to them and be conscientious of their meanings and this diverse experience of being a person with a disability.

Further, the word participants is used in this paper as a way to refer to those who aided in the creation of this project. When used in the academic world, participants as a word is used in a more passive sense, and here it is used in an active way. The participants in this research were not a group to be studied, but rather a group of people who were active contributors and members of the team to bring this project to completion. This space is taken up to observe and highlight the use of the word participant in this paper and give context on how the word participant is used in this paper.

Introduction

Video games are an increasingly popular form of media. It has become a field filled with diverse forms of experiences, and with the increasing accessibility for both playing games and making them it has become an impactful part of popular culture. The focus of this paper is on the types of characters that you meet within these games and more specifically how characters that are autistic are or could be introduced, and represented, within these games.

My parents joke that my brother and I were born with controllers in our hands. I watched my mother play *Pikmin* (2001) on the GameCube as a child, and used to cry if she lost *Pikmin* in battle. I have a strong admiration for games; to me games became an activity where I was able to make strong connections, either with the characters on screen or the friends I made talking about games I loved. Meeting characters, getting to know them and enjoying a lovely narrative became the thing I loved the most in games, and it reflects in my favourite games. I joined communities based on these interests and met very like minded people. I also was discovering things about myself, and everytime I met a character that was just like me it affirmed that I was not alone in this world and that there is someone out there just like me.

This is common in all sorts of media; many people learn about race, culture, gender, sexuality and disability based on the media they consume. I learned what being transgender was from shows I watched with my mother and because it was presented neutrally, I wasn't afraid to explore my own gender identity and discover I was transgender. It also gave me a way to test the waters with my parents and gauge reactions they had to transgender people in the media in order to test if it was okay to come out.

Understanding autism is no different in the sense that the media we consume and the autistic characters we come across influence our understanding of autism. I note that before I met other autistic people, I didn't know much about autism at all aside from what I had seen online through representation in the media. Talking with more autistic people gave me an in depth understanding of autism and was what led to my diagnosis. After my diagnosis, I became more aware of how autism is represented in the media.

Autistic people in media are represented mostly the same way (Jones et al., 2023) - these characters are often used as a way to make non-autistic characters in media look good or bad depending on how they treat them, rather than display the character as having their own thoughts or feelings. Examples of this can be found in shows like *Atypical* (Rashid, 2017) and *The Good Doctor* (Highmore & Williamson, 2017), where the person with autism's experience is only told

through the lens of the non-autistic people having to interact with this person. These interactions also come across as a hassle or extra step than interacting with another non-autistic person.

What does this teach people who consume this media about interacting with autistic people? Yes, shows that feature autistic characters also help raise awareness and understanding of autism, but with such a one note display of something with such a vast spectrum of people and feelings, it begs the question: What are some other ways autistic people can be represented in media?

We are at the point now where games are a powerful media in popular culture and can become a leader in novel and authentic autistic representation. In researching autistic representation and representation in video games, I have yet to see those areas overlap. These gaps are what this research is trying to bridge.

Autism representation is a relatively new topic in academia with my research pointing to works as early as 2014 (Prochnow), but video games have been around for several decades at this point. As an autistic person who enjoys video games, I have always enjoyed the ability to engage with fictional worlds and characters and make connections in a way that I struggle with in the physical world. This is common amongst the communities I have interacted with, including my friends who are on autistic spectrum. Games are a form of escape.

I am very passionate about the way marginalised groups are represented in games. I have witnessed games with autism representation before so there are examples to be examined. The one I am most familiar with is David Archer from Mass Effect 2 (2007-2021). This character is confirmed autistic by the character's brother, who delivers most of the story dialogue that is important for the player to know. David Archer is a background character. All mention of David by his brother is insulting. He compares his brother to the main antagonists of the game, the Geth (who are a robot species), because he finds David as hard to understand as the Geth and thus dehumanises and alienates his brother. He refuses to provide accommodations to David when David mentions that the sounds around him are bothering him and typically uses him more like a journal and calculator than looking upon him as a human. This comes to a head when it is discovered that David's unnatural and superhuman abilities with maths could be useful, he painfully hooks up his brother to a computer to make use of his abilities and refuses to listen to David's pleas to remove him from the machine. The player gets the choice to either unhook David or leave him hooked up to the computer, and keeping him hooked results in David eventually becoming unresponsive and dying. David is never given any characterization that proves that he is a person with thoughts and feelings, and this depiction of autism in my opinion is just frankly dangerous to perpetuate.

Games are also an important way to educate individuals on certain topics because the way that games require you to learn how certain systems and mechanics relate to one another can allow

the player to determine for themselves the logical next step for the way they want to play. Applying that to the example of Mass Effect 2, leaving David in the computer could prove useful, as David has the potential to decode and help take down the Geth (although it is a small chance). This communicates that if you want to take down the Geth, the best strategy is to keep David within the computer system that is causing him pain.

The fact that games have this sphere of influence and that the representation of disability including autism in games (Shell, 2021) goes overlooked in academia is an issue I wish to address. With this research, I hope to give the autistic community a voice in the game design world, and allow for a diverse spectrum of individuals to share their different experiences. We also have no idea what impacts the current representation of autistic people in video games have and it is important that we have new insights on this underrepresented category.

In response to this gap, the research question I went into this study with was:

How might the autistic community be represented in video games in terms of character design through self-representation?

This is framed this way because despite my personal experiences and the inspiration for my research, I want to be able to do this research with an unbiased lens as much as possible. My own experiences are not universal, and expecting the research to confirm my biases may lead to confirmation biases and exclude more diverse data. Honestly I would love to be proved wrong in my opinion that current representation is poorly made. In addition, there is no mention of “best” representation. This is because autism is a vast spectrum, so trying to determine a “best” is not ideal for it implies a single best type of representation.

Further, another way of thinking of this research question is that I am asking the autistic community how we want to be represented. People with autism deserve to be asked how they want to be represented as opposed to representation being made regardless of the community of autistic individuals’ opinions. “Nothing about us without us” is the phrase that comes to mind. It is a sentiment that has been applied over many different contexts such as disability rights (Ryan, 2022) and business (Kaufman, 2022), but the one I am focusing on the most is the context around disability and design. “Nothing about us without us” is a phrase used in the disability advocacy world to speak to the fact that items that represent or are designed based off of or for a group of people should have people from that group as an active part of the design process, whether it be on the team, a leader or council. Disabled people are often not seen as able to participate actively in items that concern them, and instead are considered as a distant party or focus group rather than an equal. This phrase “Nothing about us without us” is the beginning of making more equitable interactions with disabled people in mind.

My research holds up this standard - everyone in this research project identifies as autistic, including me. This research is a set of activities that include group discussion and character creation in order to delve into topics surrounding representation of autistic peoples and video games. There were group discussions on various topics, and then the participants were given the prompt to make an autistic character, whatever that looked like for them. In response, participants through their own character design methods produced an array of text and media detailing what their character was like, then as a group we discussed what these characters were meant to represent for ourselves, and what this means in the grand scheme of things.

Literature Review - What's the Context?

The main goal of this literature review is to analyse the categories this research delves into and provide context for the research proposed in this paper. Because of a lack of direct research on autistic representation in video games, the scope of this research has become larger and interdisciplinary. I call upon these different areas of study to build this context and apply parts of other's context to my own to build a picture of the current landscape.

The categories I identified were: Representation in Video Games, Representation Impacts, Autistic Representation in Media, Autistic Gamers, and Design Justice. These categories were first determined by a train of thought:

1. What are the current discussions about representation in video games? What can I learn about who is and isn't studied? How are these representations being studied?
2. What are the impacts of these representations? How are we all affected by representation? Why is representation important?
3. What is the current academic conversation about autistic representation? What is currently being said about the representation outside of video games?
4. Are autistic people playing games? Are they seeing these representations? And how often are they seeing these representations?
5. What are some strategies I can use to start this conversation in a way that includes the autistic community?

These led me to read into many different areas, such as Communications, Psychology, Education, Video Games studies, Autism Studies, Queer studies and Literary Research. These all come together to paint the surrounding context to this study.

There has been research done in recent times for games as a learning tool for children with autism and their development of social skills (Zhu et al., 2016), and speech therapy (Lyon et al., 2016), however my research does not concern the education of the autistic individual. Instead,

the main focus of the work in this paper is to discuss and expand on autistic representation in video games and the potential impact of self-representation with and for autistic adults.

Representation in Video games

Representation in video games is a topic discussed in many contexts, and a lot of effort has been put into the recording of quantitative data for certain groups' representation in games (Utsch et al, 2019), and analysing them with a critical lens (Shaw et al., 2019; Kosciesza, 2023). What these games say about minorities and how they say it does not go unnoticed, and in recent times the research on representation on video games has been directed towards the LGBTQ+ community.

Utsch et al. did a quantitative analysis of queer representation in over 300 video games from 1986 to 2016, categorising the types of queer representation, such as whether a character is gay, bi and/or transgender or another identity, and amount of each type of representation. They also went into the different types of games these characters were in. Utsch et al. concludes that the representation of LGBTQ identities are becoming more common and diverse in types of representation over time, and were especially at a peak within the games they studied in 2010 (2017). This type of analysis is valuable quantitative data that shows the trends of queer representation and is one way we can start to keep track of what sorts of representation is out there in other areas like disability.

Shaw et al. carried out a similar study that examined 163 games from 1985-2005 with queer representation, but also analysed the race, humanness and role of queer characters within the video game. There was a mention of explicit or implicit representation within games and how the characters could be characterised as a member of the LGBTQ+ community without the explicit stating of their queer identity. There were no statistically significant relationships between race and queer identities found, but there was a positive relationship between the non-humanness and queer identity (specifically the ambiguity of the sexuality) of a character (2019). This means that queer characters were more likely to be non-human, which can have further implications as it alienates the LGBTQ+ community with this sense of otherness. This study is an example of starting to delve into the quality of representation in games, as it calls upon the ways that these characters are interacted with in the game and the stereotypes the games call upon to create the character (Shaw et al, 2019). These conversations are happening within the video game sphere.

Thach delves specifically into concerns around transgender representation in video games. This article does an analysis on not only quantitative data but also critically examines the quality of transgender representation to find certain biases perpetuated in video games, such as the ideology that you need to want to medically / physically transition (n.d.). There is also concern about transgender non-playable characters acting as vessels to make those who are not transgender feel

heroic from their actions by stepping in to save a victim from a terrible situation (Kosciesza, 2023). This can be referred to as a “magical transness” - where the transness of a character is only there to make the non-transgender people feel good about supporting them - and is a phenomenon that can be witnessed in other categories (such as race), and can easily bleed into the category of people with disabilities. The magical transness trope is about invoking feelings of empathy for the character and provoking moral transformation - You’re supposed to want to treat them well because they’re transgender (Kosciesza, 2023). I would argue that this magical transness trope already exists for disabled characters in narratives like David from Mass Effect (2007-2021) where the character David only exists in a brief period of time for you to meet, and then you and you alone get to decide what is best for David. This representation is to make you feel good about ending the torture David is going through by making it the player’s choice to stop this torture. This is just another way that queer game studies in particular can really tie into the talk of disability representation and autistic representation, as the term magical transness is just as applicable to autistic representations.

For the articles that discuss the representation of disability in games, these are few and far between. There has been a qualitative analysis on games that represent those with various mental illness that found that 75% of games released in the past 20 years depict mentally ill characters in a negative light (Buday et al. 2022). This study was more so about depression, anxiety and schizophrenia, but did not delve into neurodiversity or physical disabilities. Shell (2021) examined game trailers from 2006 - 2016 for the inclusion and representation of characters with disabilities and found a notable lack of inclusion. When asked, players answered that there was not enough representation of disabled characters within video games. For further steps within this study, it recommended developing a set of “wants” as guidance for representation, but did not clarify specifically what these wants would be in the future.

The research I do starts to explore what these “wants” could be, specifically for autistic peoples in video games as a way to combat the lack of inclusion and representation of autistic individuals within games in a meaningful and insightful way, as a way to start negating some of the negative impacts that representation can have.

Representation Impacts

To investigate the impacts of representation, it is important to delve into articles about other minority groups and their issues in relation to representation due to the lack of research on the impacts of autistic representation in academia. This leads into further insights of the overall impact of representation and although the impact shifts slightly under different contexts, this research still provides context to some of the hardships that come with representation being stereotypical or lacking diversity.

Leavitt et al speaks to the representation of Native Americans and the impact of underrepresentation on identity and self understanding. Said underrepresentation can lead to deindividuation and self-stereotyping, and increased worry of fitting in with the group (Leavitt et al, 2015). In video games, Native Americans are typically represented as “savages”, and there are many examples of the perpetuated stereotype, such as Oregon Trail (Rawitch, D. et al, 1971), Mortal Kombat (1992), and Civilization (Meier, 1991) (“The mostly harmful history of Native representation in popular video games.”, 2022). These harmful representations affect not only the people of that group interacting with the media but also those outside the community’s interactions. For our context, fellow autistic people and I are “supposed” to be geniuses because of the representation that does exist like David from Mass Effect (2007-2021) portraying people with autism as such. Autistic people are seen as supposed to be really good at one thing that is useful to society or something exploitable. It feels like something is wrong with me or the label of “autistic” is wrong, because I don’t fit into this box that the underrepresentation has created.

Studies have shown that the representations of characters within games can have an impact on the players in a couple of different ways, and there has been extensive research on this, most of it being about the representation of self (Kafai et al., 2007; Ferchaud & Sanders, 2018; Ratan & Sah, 2015) and the disproportion of representation of minorities and women within games compared to males (Martis & Janz, 2003; Kafai et al., 2007; Hammar, 2015). Avatars or the character that one plays as within games can affect how players connect to the games that they are playing, and there is a noticeable difference in player enjoyment based on the different ways they are represented within a video game. The more the player is aligned with their representation on screen, the more attached / engaged they are with the game they are playing (Ferchaud & Sanders, 2018). And this character when reflecting the person who is playing becomes something like a second self (Kafai et al., 2007). Avatars within games can also invoke stereotype threat, which is the suggestion that people conform to negative stereotypes associated with their identity. Ratan & Sah (2015) found that those who created and played as characters who had negative stereotypes associated with them would then perform worse than those who did not play with those particular characters. These are additional impacts character design can have on the people playing a game, where who they see and how they see the characters can influence how they understand certain minorities.

Games are guilty of perpetuating negative stereotypes and can have a potent effect on the consumers of the media. Behm-Morawitz and Ta discovered within their study that certain stereotypes are perpetuated such as the White hero, Black criminal and Asian martial artist, and their research indicates that video games perpetuating these stereotypes about marginalised groups are able to influence and change the perception of the marginalised group in reality and can lead to racial and ethnic stereotyping and racism, such as associating Black people with crime (2014). There are further indications that games can make consumers desensitised to harmful gender stereotypes over the playing period, especially adolescents playing games that

feature stereotypical women. This can become an issue for other marginalised groups as well and requires further investigation (Henning et al., 2009). This lack of non-stereotypical representation is not just affecting racialized groups and women in a way that perpetuates patriarchal standards, and also actively affects the disabled community, and this research provides insights on the lasting impacts that representation in games can create.

There is research on the representation of autistic peoples in other forms of media. Within a study by Jones et al, it was found that there was a lack of improvement in attitude about autism and knowledge of what autism was after exposure to fictional examples. Interestingly enough, the study points out that most portrayals of autism are either a “saviour” or a “burden”, where the autistic character is either the one to produce a genius idea or needs consistent and constant help from the non-autistic cast. This lack of improvement of attitude and knowledge is considered an important highlight of the issues of current portrayal autistic characters in fictional media. Many of the consumers of these fictional media are under the age of 40 and can hold onto this portrayal for the rest of their lives (2023). Barrio et al. conducted research on books with characters on the autistic spectrum for children, and found that representation and storytelling can be a way to generate empathy and break stereotypes of the disabled community by educating kids what it is like to be a child with autism navigating school experiences (2021). There are ways to represent autistic characters in a way that boosts understanding and empathy for our community- representation can have positive or negative effects, depending on how they are viewed and executed.

These impacts can have a long lasting positive or negative effect on people who engage with a representation of a group, especially if the representation of the group is very homogenous. This is a potential issue for the autistic community, but for that we need to discuss autistic representation in the media just to be sure this is a trend and to start giving ourselves the language to talk about autistic representation.

Autistic Representation in Media

When autistic representation is discussed in academia, the forms of media are typically films, TV shows and books. Little research has been done on representations of autism on video games. However, this does not mean it is not an important thing, and that borrowing insights from other forms of media could prove useful in building language to talk about representation of autism in video games.

There has been research done on the portrayal of people with autism and specifically the main themes centred around TV representations, and it was found that the characters were either depicted as burdens or saviours for the neurotypical world to interact with. This is especially apparent in saviour or savant type of representations such as Shawn Murphy from The Good

Doctor (Highmore & Williamson, 2017). In addition, it is noted that most representations of autism are of white cis males, which gives the impression of homogeneity in a group that is very diverse (Jones et al., 2023).

Prochnow discusses the representation of autistic peoples and comes up with four categories of autistic representation: a magical / savant type of representation where there are magical qualities about them and they are supernatural with their abilities because of their autism, a “Different” / Quirky representation with the character choosing to be abnormal in behaviour or it is part of their personality, a Undiagnosed/Unlabelled representation where the character fits the criteria for an autism diagnosis but autism is not explicitly mentioned in reference to the character and it is left ambiguous, and a Realistic representation where the character is explicitly diagnosed and represented neither over the top nor subdued, nor portrayed in an overly positive or negative light (2014). These categories give us ways to describe autistic representation not just in TV and movies, but also in games. For example, the character David from Mass Effect (2007-2021) would likely be seen as falling under the Savant stereotype mentioned here due his supernatural abilities with maths. This language is a way we can start to categorise and label what we see in all different forms of media in terms of autistic representation, and gives people an equal understanding of what types of representation there could be.

Wisteria approaches the topic of autistic representation differently with a specific case example from TV of a show called “It’s Okay to Not be Okay” that was released in 2020 (Story TV). The show is a South Korean drama that features a female autistic character. Wisteria analysed the reception of the show and the autistic storyline and drew comparison of reception between South Korea and International viewers. It was found that the South Korean audience were hesitant to talk about ASD and Savant Syndrome, and the International viewers were more likely to discuss the representation of ASD (2022). This hesitance to talk about ASD is partly why we need to keep talking about representation.

Brooks examines specifically the representation of sexuality, dating and romances of autistic people in mainstream media. Overall, they found that the topic of autistic people in romantic and sexual contexts is uncomfortable and is shied away from. This is tied with the infantilization of autistic peoples and the stereotypes around autism (2018) . Often, people view autistic people and adults as akin to kids, especially when the autistic adult engages in an interest that is “meant’ for children. This leads to a lot of misconceptions about the mental maturity and romantic / sexual life of autistic people.

Autistic representations are not only made in mainstream media, but can be found in a form of self representation in other areas. Black et al. conducted a study on fan made content for Harry Potter and the inclusion of autistic narratives, and the diversity of representations and the participatory nature of fan-fiction can help create a better way to explore diverse experiences.

(2019). There was a found power to speak about autistic experiences through this point of view and how autism was established in an empowering way, There was validation from these fan written stories for the autistic audience consuming the material made from autistic creators. This is especially important because the representation of the autistic character was made by autistic people, and thus their own experience was written into the work as well (Black et al., 2018). I want to emulate this sort of validating experience within my work as well with video games.

Disability studies and game studies are not totally disconnected. Gibbons examines the representation of autism and other disabilities through game mechanics and character representation in a critical lens. There are two examples - *Auti-Sim* (Adev123@TaylanK, 2013) and *To The Moon* (2011) that are referred to. *Auti-Sim* is an Autism Simulator game that has received a lot of negative response due to the fact it appears to be “fear-mongering” instead of accurately representing autism in a neutral way. *To The Moon* features an autistic character as an NPC and has received mixed reviews because of the fact the game seems to be about autism but not from the autistic person’s perspective. The article highlights that it is important to examine how games shape our cultural understanding of disability and paint our understanding of how autism is lived out in a social context - not just whether the representation is effective (2015). There is a need to further these conversations about games and autistic representation, as the representation can be affecting both autistic and non-autistic audiences.

Autistic Gamers

While doing this research, I wanted to make sure that I and the peers around me weren’t some sort of rare case of autistic gamers. While it is true that representation has impacts regardless if a large autistic audience is playing games, I wanted to establish if there were a lot of autistic people consuming video games and its representation because of the previously mentioned impacts under or poor representation of a group can do to said group. In addition, I wanted to establish the weight of the matter - I think this topic is especially important because the autistic community are playing games.

Autistic traits are associated with more playing of video games in women, but it could be something of a “ceiling effect” that can make it appear that autistic males do not play as much due to their neurotypical counterpart playing often (Yang et al., 2022). Women are not typically associated with the “gamer” role and tend to play social games so there are less women who play what are considered “male-type” games, and thus it is more likely that the ones who do play these games are also autistic (Yang et al., 2022). Games are a way that one can play both together and alone at the same time where player versus players interactions are limited and can be avoided, and players versus non-playable character interactions are preprogrammed so provide a lot of predictability, which is favoured by the autistic community (Yang et al., 2022). For example, I tend to go and replay games that I know very well because I know how the game is going to end and that is predictable.

Concerto et al found that Autistic and ADHD symptoms or characteristics are positively associated with how intense or severe an Internet Gaming Disorder can be in adults. In other words, the more symptoms of autism and/or ADHD present within the individual of this study, the more intense their Internet Gaming Disorder or amount they game was (2021). In addition, Macmullin et al. specifically addresses autistic children and their neurotypical counterparts, and found that autistic children are far more likely to watch TV and play more video games than their neurotypical counterparts because it is a non-social form of engaging with electronics (2016). The fact that the autistic child does not have to spend energy on a social situation makes TV and video games a less energy consuming form of entertainment than things like social media.

People with autism play games to make friends or feel connections in a place where things are easier to manage. Mass Multiplayer Online Role Playing Games (MMORPG) have been used as a way to practise and develop social interaction skills in a safe environment and build connections (Gallup and Serianni, 2017; Stone et al., 2019). Video games are a great space for people on the autism spectrum to create lasting friendships, either online with other people or offline through discussion of a mutual topic (Finke et al., 2018). Video games provide a place to practise social interaction and bond in an area that is safe and controlled, and provides other people that share the same interest as them (the game they are playing) so it's not hard to find something to talk about within the game to start a conversation. These make it an optimal place to start forming these friendships.

Video games can also be a source of autonomy and agency for people with autism that allows them to explore more and different responsibilities in a space that is more forgiving than reality. It can contribute to self-regulation and help with emotional state, however things like schedules and social relationships can be thrown off with how immersive the world can be (Pavlopoulou et al., 2022).

Spaces in games such as Second Life (2003) can also be a place where autistic people can group together and focus on building autistic awareness and starting to advocate for themselves. Danilovic discusses a few of these spaces but one in particular known as the "Autistic Liberation Front " as a space for non-autistic and autistic people to come together to organise, educate and advocate. (Danilovic, 2009). These game spaces are important for autistic people to build a sense of community.

People with autism are more likely to play games, and yet we aren't seen in the games we are playing through the characters we interact with, and when we are, the representation is made by a group of non-autistic people. How can we make representation for this group that engages in games that are uplifting to the group?

Design Justice

Autistic people play games for a few different reasons, but we lack the research of our representation in video games. It was frustrating to see a lack of inclusion with the way our community had little say in how we were represented, in the very rare instance that we got represented. I wanted to bridge this gap between us as gamers passively enjoying games and us being active participants in our representation in games, as our representation affects us and those who interact with us greatly.

This is when I first came across the concept of Design Justice, and found my goals strongly tied to the concept of Design Justice.

From its conception, Design Justice was a communal effort between a group of design practitioners (Costanza-Chock, 2020, 5) to determine a series of principles that would move past the idea of good intentions being all that needs to be there for design liberation. In other words, Design Justice as a concept is trying to move to a set of principles that would inform design in a way that is more liberating to those impacted by the design than its predecessors.

Design Justice describes itself as a framework that focuses on the way design reproduces and/or challenges the matrix of domination. It aims to ensure a more equitable distribution of design's benefits and burdens, meaningful participation in the design, and recognition of community-based, Indigenous and diaspora design tradition, knowledge and practices (Costanza-Chock, 2020, 23).

There are a few key things to take away from this definition. One thing of note is the inclusion of the “matrix of domination” which is the idea that everyone exists on this matrix and receives both harm and benefits from the systems around us depending on where you are within that matrix. This matrix is another way of acknowledging intersectionality, which is the concept of our differences or our intersections of identity overlapping and creating a potential double discrimination due to identifying under multiple groups of marginalised identity (Crenshaw, 1989, 149). For example, I am not just a transgender person. I am not just an autistic person. I am both, and these groups overlap and affect how the world interacts with me differently because I am both, not just one or the other- and it also affects the harm done to me. People can be all over this matrix, because people are complex beings and can be more than one thing.

The definition is very explicit in mentioning an equitable distribution of the design. The way I interpret and understand this is that instead of design potentially being monopolised by one group, the aim is to give every group that would be affected by a design input. This means for example if there is something being designed for wheelchair users, all sorts of wheelchair users of differing ability would be asked to give input rather than one or two people because in the end, this design affects all wheelchair users. In my case, it means asking those who are autistic about

autistic character design rather than just consulting non-autistic people, because autistic people are affected by autistic representation, and trying to get opinions that are diverse.

Another thing is that the definition isn't considered "canonical" in the book but is a definition that is provisional, and can be adjusted in the future if something else comes along. It's fluid and when it is needed, it will shift with the context and new information, which adds this adaptability that is important for work in inclusion and advocacy.

The current form of Design Justice comes in 10 principles. It is a live document, available to be edited when needed, adding again to its ability to shift with new contexts.

Here are a few of the design justice principles I want to highlight:

1. We use design to sustain, heal, and empower our communities, as well as to seek liberation from exploitative and oppressive systems.
2. We centre the voices of those who are directly impacted by the outcomes of the design process.
5. We see the role of the designer as a facilitator rather than an expert.
6. We believe that everyone is an expert based on their own lived experience, and that we all have unique and brilliant contributions to bring to a design process.
7. We share design knowledge and tools with our communities. (Costanza-Chock, 2020)

I did not want to bring all of them into this literature review because I wanted to be able to focus on a few of them, but while working on this project I tried to uphold all ten principles. These five speak to the nature of design justice and the way the principles encourage the uplifting and decolonizing of the research. It raises up the voices of the affected groups that have come to speak, while also levelling the designer with the rest of the group as an equal. This also comes through with the way the tools are shared - the power of everyone having access to knowledge and tools means that everyone is on a more equal ground in terms of understanding how the items are being designed, and this gives more agency to those who are typically just being asked questions by designers.

From the research I have done and discussed in the literature review, I have noticed quite the gap. In the academic world, we can recognize the impacts of representation on those being represented and those interacting with the representation. This impact has been researched in games, and we also have the means to quantify and qualify representation in games, but have not

done so for autistic representation. Further, we have the means and language to talk about autistic representation based on previous conversations about autistic representation in other media. This is where we get the term “Savant” to talk about autistic representation. I established that the need for this representation is apparent through my research on autistic gamers, and how we are affected by game narratives, and learned how I could involve my community by calling upon the principles of Design Justice to design my own research.

I hope to take this context and expand on it, and start filling the gaps that I have noticed by building the conversation around autistic self-representation in video games.

Methodology - What did we do and How?

The centre of this project is to uphold the principles of Design Justice and try as much as possible to make sure my participants feel as if they were equals with one another and with me.

The principles of Design Justice were continuously referenced as I constructed my research and executed it. Above all else, I wanted the people participating to feel as though they were equals with me. While communicating with my participants, I tried to keep everything laid out as clearly as I could. Even at the cost of being too much information, before participants signed up I tried to give as much detail as I could so that participants felt like there were no surprises going in. I informed them that I may have questions, but we can ignore them or point out the flaws in them because I don't know more than them. Just like me, my questions may have flaws or biases, even though I tried to write them to be as open ended as possible.

I tried to inform them that they were experts and I was more here to host than be any sort of expert. I am only an expert of my own experiences of being on the spectrum. I have no idea what other's experiences are, and never will fully understand it. I may be here as the “researcher” role but the intention would be more of a facilitator, and I wanted to hear their experiences.

On top of this, when the participants joined the chatroom I made sure to lay out any resources I may have for them in an easy to access chat room (Appendix D: Initial Resource Post). All resources I used were, importantly, free to use, and I recorded a Twine workshop in order to make sure the participants had the ability to use the tool only if they wished.

The nature of this research was and is exploratory. I informed participants that there was no one way to do anything “right” and that we had nothing to prove, this was more so a mode to explore the topic as a group and shed some light on some ways to consider representation of people with autism. Character creation was left up to them to consider. I didn't inform them of a singular way to do it, but provided ideas of how one might approach the topic.

Most of my results and discussion will be considered their work. I am just the one who compiled and analysed it. All participants also had time where they are able to look over the paper before it is sent into the public and suggest changes to make sure their work is not misquoted or misinterpreted.

These are a few ways I hope I stuck true to the design justice principles; the participants hopefully feel uplifted and heard. I cannot say that they have - it is not my role to say that they have, but theirs. I do not decide that a space is inclusive because of the way I have set it up, but they do when they use the space. My hopes were that these participants felt safe and comfortable within the research project and that they felt free to participate at their own pace and to a comfortable capacity.

The participants were invited to engage in group discussion, individual discussion, workshop, and character creation. All of this research was conducted on a Discord server, and most participation was done over text and asynchronous over a two week period with the exception of the workshop that was over Discord voice chat. The entire codesign session lasted 14 days. The participants had access to all pre-presentation questions (Appendix B, Discord Discussion Prompts) from the start so when we started our conversations, there was no surprise as to what sort of questions would be at the start of the research. These were open-ended group discussions, where questions led into more questions.

The Discord was set up with several different categories with different chatrooms. The first category featured chatrooms for every participant to see. Under these, there was “Information”, “Schedule”, “Discussion-Topics”, “Resources”, and a “General” chatroom. Information had all set up information (Appendix C, Initial Information Post), and the schedule provided the schedule to the participants. The discussion topics hosted the discussion questions for the participants to view. The resources chatroom held all resources I had (Appendix D, Initial Resource Post), and the general chat was for introductions and saying hello.

The second and third category were made to be identical and host different groups. Both categories featured 2 discussion channels for the participants to discuss the topic in, and 2 channels specifically to talk about collaborating with other people.

There was an empty category for character creations, which was populated later.

The final category was to host the workshop, with a voice chat that could allow participants to chat with me or each other.

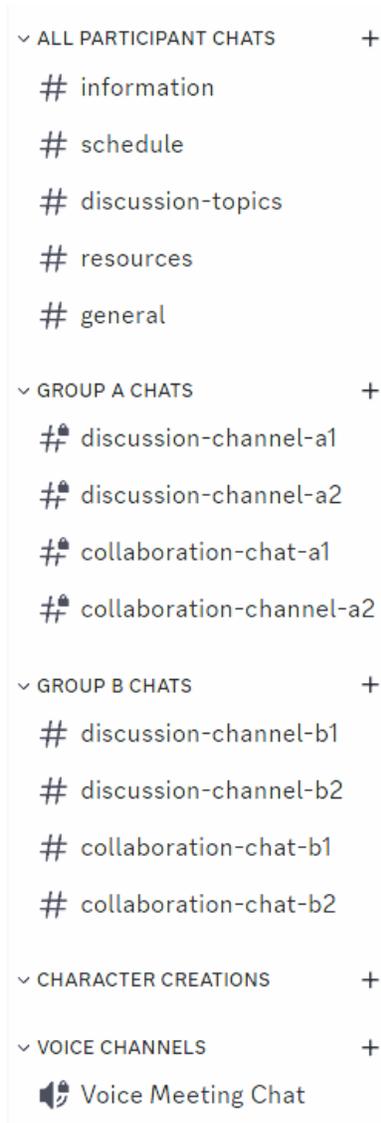


Figure 1, Initial Setup: An image of the initial set up of the Discord chatrooms, as described above.

Over time, the Discord set up changed as the group suggested changes to the discord to make the space their own. First, the character chatrooms were made. These had little lock symbols on the chatroom, which indicated it was locked to most people. These chatrooms when first made were only available to the participant who's name or alias is written in the character creation.

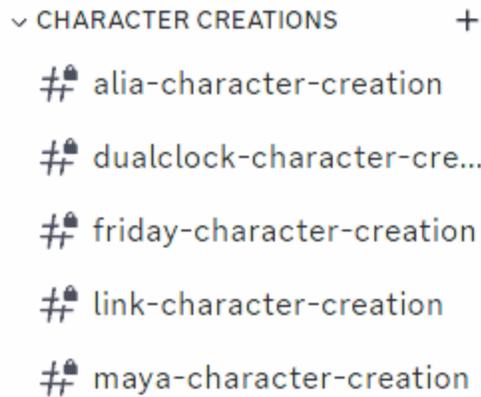


Figure 2, Character Creation Chatrooms: A screenshot of the Discord character chat rooms. There are two sections blocked out, for these were participants that backed out of the research process.

After the Twine workshop, the participants and I decided to add a couple of chatrooms. One of them was to ask questions about how twine worked in case there were specific questions for twine, and the other for topics unrelated to the research study. These chats were a sign of the participants being more comfortable with one another, and the off-topic channel specifically was used to share photos of pets and be friendly. Both these chatrooms were available to all participants.



Figure 3, Updated Chatrooms: A screenshot of the discord set up, which features the category of chat rooms available to all participants. These are the Information chat, Schedule chat, Discussion Topics chat, Resources chat, General chat Off-Topic chat, and Twine Help chat.

After the character sharing and final discussion begun, I noticed that some chat rooms were completely unused and instead were taking up space within the server and making the area more crowded. After discussion with the participants, I adjusted the discussion chatrooms to be less complicated. At the time, the number of participants had reduced to five, and they decided that they'd prefer to be able to see the discussions that happened within both chat rooms.

The final set up was 9 different chat rooms. There were two new chat rooms: one to conduct check-ins with the group as a whole, and one to have a large group discussion on the designs of the different characters. There is one chatroom from each group before they were merged together, now available to all participants, and then one chat room for each participant's character. These no longer had the locks on them, and now all participants could see this chat regardless of who they were made for.

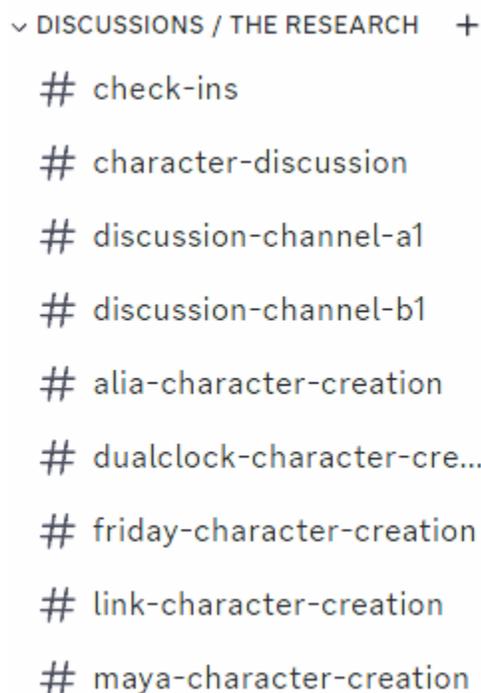


Figure 4, Final Discord Setup A Discord screenshot. It displays a total of 9 chatrooms, including a check in chat, character discussion chat, group discussion chats, and different character creation channels.

The set up of the research could be seen as three levels, or three areas that the participants could explore at their own pace. Although in separate categories or levels, the participants could move back and forth between the levels as they wanted.



Figure 5.1, Study Diagram - A diagram of the layout of the study, broken down into three parts or “levels”.

Before the research began, the participants had an introduction to each other and the project during our first day of interaction. Within the introductions participants could say as little or as much as they wanted about themselves, and then we moved into discussing styles of communication. This included topics like the use of emoticons, emojis, “reactions” in Discord, replying to one another, tone tags, and preferred language when talking about autism. This was intended to also establish healthy boundaries within the research and break the ice amongst the participants.

Level 1

After the introduction, the participants engaged in a group discussion guided by questions (Appendix A, Discord Discussion Prompts), what is the first level of this study. For the 2nd to the 4th day, this was the only activity. Because of the start of the codesign consisting of 9 participants, there were two group chats. Group A had 5 people and Group B had 4, to make sure that participants are not made uncomfortable by a larger group. Participants were encouraged to ask their own questions instead, or push back against why we were asking these questions in the first place. All discussions had rough schedules to allow a synchronous component if the participants wanted which was in the form of a hour long synchronous time determined by the group for conversations if wanted, but could be participated in fully asynchronously to allow participants to participate when they had the time to do so and collect their thoughts.

During this first level, the participants had the opportunity to participate in a workshop on voice call with me using the Discord app’s capabilities. I shared the contents of my screen within the voice call. This workshop was recorded and posted to the Discord so that participants could view it at any time during the session. The workshop went over the basics of using Twine, which is an open source text based interactive fiction tool. There, the core mechanics of using Twine such as

how to make branching and looping stories or how to access the “cookbook” which had more in depth explanation on how to use Twine were covered. None of the participants chose to join the workshop synchronously, but chose to watch the video if they wanted to use Twine for their creative output in level 2. Participants had the option to use Twine, but it was not required because it was a less commonly known tool and there could be additional stress put upon the people participating.

Level 2

The participants then went into character creation, level 2 which had 5 days assigned to its task. This was an open-ended creative response for them to complete - each participant got a separate text conversation on Discord where nobody else but them and I were able to access the chat to create their character in, and when it was time to share said characters, these text conversations would be made public to the rest of the group. This was supposed to be akin to using the Discord text chat as a presentation board. The participants had the freedom to use their text conversation any way they wanted, if it helped with displaying their characters.

There were little initial instructions; just “make a character who is autistic”, and some presentation prompts (Appendix A, Discord Presentation Prompts) to help the participants get a vague idea of what I was trying to ask. The reason why there were little initial instructions was because providing more in depth instructions may have restricted what the participants would have thought was possible. For example, if I had asked for them to provide a text description, participants may feel like they are not allowed to provide verbal or visual representations of their characters. If needed, additional prompts were given to the participants and workshopping with the participants to get to a conclusion that they were satisfied with, such as discussing what the prompt of making an autistic character meant to them. The characters they made and their response to making the character is the result of this character creation and can be found in the next section. These came in the form of text, images and even twine interactive media.

These characters were made organically by the participant’s own processes, so it is difficult to comment on the methodology of this part of the discussion.

Level 3

After character creation, we went back to discussions in level 3. The participants were asked to complete a survey about their characters and then also participate in a final discussion where they were able to see each other’s characters and discuss their thoughts on the similarities and differences, and any other items they wished to bring up as final thoughts. This was another 3 day discussion, just like the first level.

The previous levels were never closed early to the participants, and participants had opportunities to go back if they wished. After these twelve days (one for introductions, three for

first discussion, five for character creation, and three for final discussion) participants had two extra days to add any additional comments wherever they saw fit, as to make sure any additional thoughts they wanted to say or forgot about could be caught before we ended discussions.

The end result of this research - the discussions the participants had and their character designs - were hopefully something the participants could be proud of, and something that allowed them to use new tools in their own time or use tools that they previously used before as a way to explore the topic of autistic representation in video games.

The reasons why these particular methods were chosen were to attempt to show more care for the community and the individual into this project. The group discussion was to encourage the feelings of interconnectedness and solidarity, especially amongst topics participants could relate to one another with. The individual discussions were to check in with the people participating and make sure any comments, questions or concerns they had could be addressed in a private space instead in a public one if that made them uncomfortable. The workshop was in order to build community and share resources in a way that could be done in a safe and easy to manoeuvre environment. Finally, the character creation was supposed to encourage expressing oneself in a novel way that could let participants have a bit of fun playing with creating autistic characters and what that meant to them.

As a final note, participants were also asked to review the draft of the paper made for this project and suggest changes to it. This was to minimise misunderstandings about the participant's intentions and ideations, and was another layer of agency for the participants. The goal was to make the participant feel as if they had complete control of their participation.

Self-Impression: Autistic Self Advocacy

This research project is separated into three parts, but like everything there is always overlap. The participants spent two weeks interacting asynchronously with one another talking about anything they deemed related to the topic of autistic representation, or answering prompts if they found the prompts useful. These prompts can be found in Appendix A (Discord Discussion Prompts). I didn't structure the discussion and left it open for anyone to take it in a direction they deemed necessary, so that they could bring up any issues they had with the project.

Before we started, we had introductions to one another and discussed how we wanted to communicate with one another. This included the use of memes, emojis and the use of tone-tags. Tone-tags provide additional context to the tone of the message that you are sending. For example, if I wanted to make a joke, I would write out of my joke and at the end of my message write a "/j" at the end. This lets the reader know that I am in fact joking and not to take my comment seriously. These help reduce misunderstandings. In the end, the group wanted to use emojis and tone-tags within the research study when necessary.

The first stage of the research was an initial group discussion about representation, which led into character design in which the participants self-led a character design session and made a character who was autistic. It ended with a survey and final discussions on the topic, sharing one's characters and discussing the experience they had making a character.



Figure 5.2, Study Diagram - A diagram of the layout of the study, broken down into three parts or "levels".

There is a very limited amount of representation made for autistic people. Most characters that the autistic community associate with themselves are characters that are not confirmed to be autistic within the media they are from. Instead of having representation, often the autistic community has to instead read into the media and interpret characters as being autistic. Further, the representation that we see is typically one dimensional - characters who are super smart, and

are typically straight white men. They are terrible with social interactions and cannot determine when to include themselves in a conversation or may say inappropriate things. Sometimes they are pictured purely as a burden or a saviour type role, to either hinder or help the non-autistic cast and that is it. To try and stray away from this image and closer to an image of oneself, it is important to instead claim characters as autistic and ignore the canon of the media.

Participants

The participants in this study are the main focus of my research, because autistic voices need to be uplifted. They are my equals and I would not have made it this far without their valuable contributions. The principles of design justice also highlights this focus on the participants through principles like the second principle “We centre the voices of those who are directly impacted by the outcomes of the design process” and the sixth principle “We believe that everyone is an expert based on their own lived experience, and that we all have unique and brilliant contributions to bring to a design process” (n.d.). I hope to uphold these principles by centering what they said and adding my own comments. At the end of this section, there is a brief amount of information on each participant, including their name or an alias they used.

Participants were recruited via Discord invites. Discord is a social media platform for people who play games, so it is most likely that the people on Discord engage in playing video games. These invites were text messages sent with a link to a screening survey to collect interested parties' information. Originally there were 15 people interested, but in the end, only 5 participants participated in this research study. The Discords that participants were recruited from were either groups for autistic individuals, individuals in game design, or groups for specific schools or friend groups. Participants were chosen based on their responses to the screening questionnaire.

One of the screening questionnaire questions delved into the participant's relationship with diagnosis. While we asked this question, any participant regardless of formal diagnosis was considered as long as they identified as a person on the spectrum. Formal diagnosis is hard to obtain - there can be complications in obtaining screening due to the cost, commitment or availability or the person can be denied diagnosis for a variety of reasons (such as age, ability to blend in, personal reasons, etc.). All participants were over the age of 18.

The characters and photos the participants made are theirs. I do not claim ownership over these characters at all- In the future if and when they are used in other media there is no need for the creators to call upon this study and give credit. It's truly exciting to see what these participants were willing to share with me.

Here are the introductions written by the participants in this project. They chose to either use their own name or an alias:

Link - hi!! my name is Link, and I use they/he pronouns! I graduated from SCAD in June with a bachelor's in 2d animation! i really love 2d animation and stop motion animation, and do both of these on my own time as well :D

Maya - Hello! My name is Maya, I go by she/they or they/she pronouns depending on the day. I graduated from Wilfrid Laurier in June 2022 in game design and development and I'm currently studying game programming at Humber college!

Alia - Hi!!! My name is Alia and I use she/they pronouns. I also graduated from WLU's Game Design and Development program in 2022 and then I immediately speedran WLU's Social Justice and Community Engagement Masters program and finished in September of 2023.

Friday - hello, I'm Friday and I use any pronouns! I'm currently working on enrolling in school to be able to study art history/ creative writing and or costume design.

Duo - introduction: we are dualclock/Duo. you may call us Duo, we use it/its or we/us. We are autistic and a system. Our main hosts are Eyedn and Sevender/Sev.

It appears that all the participants had some sort of previous experience in making characters. Alia and Maya are both game designers that I went to school with, and I know they've made characters before for their games. Friday has shown me a few of their characters in the past, and Link is an animator who has made characters for their previous projects. Duo also seemed to have experience as well from it's past, and showed this when it came to making it's character. It could be that the study and the way it was designed called to these participants who have made characters in the past, because it is less scary to them than to someone who has not designed a character before.

Level 1: Pre-Character Creation Discussion

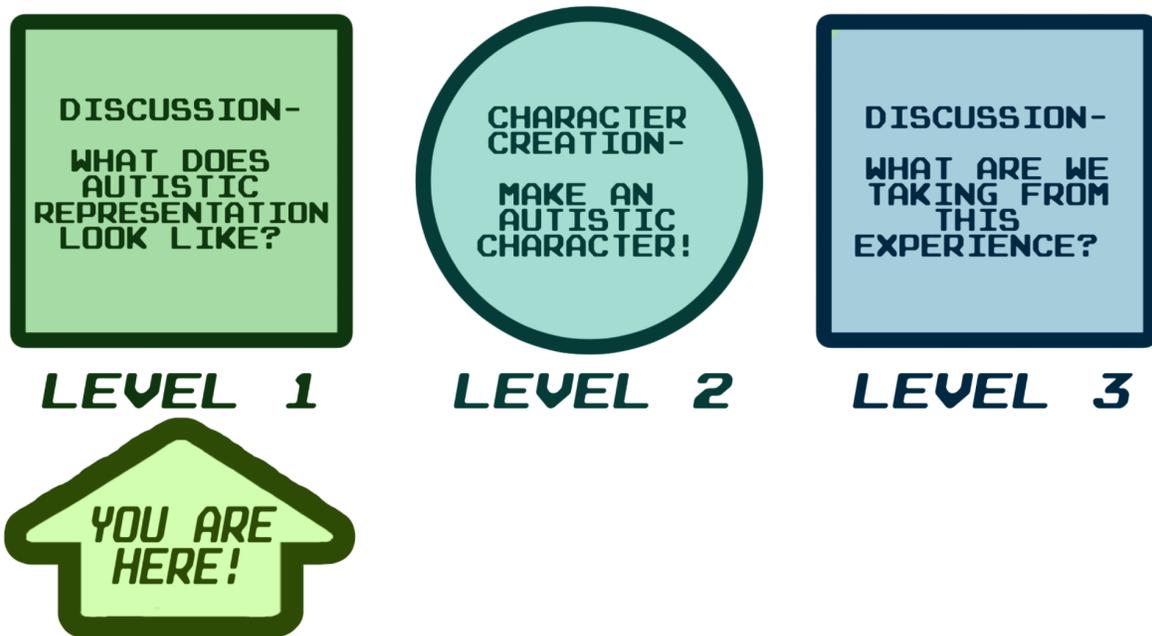


Figure 5.3, Study Diagram - A diagram of the layout of the study, broken down into three parts or “levels”. This one indicates that this part of the document is “Level 1”.

Before making the characters, the group had several conversations about autistic representation to build a base of understanding of autistic representation we could work off of. The next part is a combination of comments made by the group and my own personal notes. This project is a part of me as much as it is a part of my participants. I do not think it is justifiable to reduce all their comments to summary, and I think it is unbecoming of me to not give my own perspective. These are two halves of a whole.

The items that are indented are participant contributions.

Autistic Character Examples

As a way to start the conversation on autistic representation, the group gave examples of characters they’ve seen in various media that they thought were autistic, regardless of anything the source material stated about the character’s neurodivergency or lack of. In other words, they spoke to their own interpretation of character rather than the actual canon. Here are some of the characters they named:

Alia – Abed from *Community* (Russo, 2009), Captain Holt from *Brooklyn 99* (Goor, 2013)

Link – Mob from *Mob Psycho* (Matsuda, 2016)

Duo - Ishmael from *Moby Dick* (Melville, 2003)

Maya -

- **Abed** from *Community* was intentionally written to be autistic and helped the creator (Dan Harmon) figure out he was autistic
- **Data** and **Wesley Crusher** from *Star Trek Next Generation* (Roddenberry, 1987) as well as **Spock** from *Star Trek TOS* (Roddenberry, 1966) and **Julian Bashir** from *DS9* (Bernman, 1993) all read as autistic as well despite not necessarily being canonically autistic. Bashir is the only human character out of the ones I've singled out and he canonically has a learning disability but it is not specified what this learning disability is
- **Abe Sapien** from specifically the Guillermo Del Toro adaptations of *Hellboy* (del Toro, 2004) reads very autistic and much of his abilities have to do with empathy and reading emotions. Something many people do not associate with autism but his mannerisms come off very autistic and I've always related to him
- **Mordin** from *Mass Effect 2* and *3* (2007-2021) also reads autistic DESPITE the fact that *Mass Effect 2* failed to deliver an actual canon autistic person in a delicate or non problematic way
- Even a character like **Roman Roy** from *Succession* (Armstrong, 2018) can be read as, maybe not autistic but certainly neuro diverse and potentially suffering from some form of cptsd and it adds layers and texture to his character and to the writing if you are reading him as neurodiverse
- **Archer** from *Archer* (Reed, 2009) is confirmed to be autistic later in the series and I found it to actually be quite accurate but it wasn't taken seriously by fans of the show because of the comedic nature of the show. This goes for a lot of the examples I listed. If a character isn't *canonically* autistic, people don't take it seriously.

Friday – Laios of *Dungeon Meshi* (Kui, 2014)

The characters the participants called upon were all male individuals. Most of them were human with four of them being non-human (three aliens and one android character). Ten out of eleven characters are not from video games, coming from a mix of anime, television shows and books, and all of them are not confirmed to have autism within the source material.

Most of these characters were ones I had heard of myself, especially Abed from *Community*. He was a character I found myself relating to. There are characters that exist outside these examples

that are female, such as Twyla from the remake of Monster High (Keenban, 2022), who is stated to be autistic within the show. I don't think it is fair to categorise her as "non-human" because the point of the show is that everyone is non-human. My point is yes - there are rare cases that break this singular type of representation that my participants call upon, but the fact that nobody called upon these examples demonstrates that these examples are few and far between and were not memorable in participants' media consumption.

The participants as a whole called upon many different types of media - such as classic books, Sci-fi TV shows and anime. This is quite the diverse picking, and it likely stems from the fact that there is a severe lack of autistic representation. Because of how sparse autistic representation is, the media they pull references from have to be specific, or sometimes very niche and over a large spectrum of different source material. In addition, all their mentions were autistic interpretations instead of autistic representation, which means their examples were not confirmed autistic in the original source material. Their examples all stem from their own interpretations- instead of them being canonical representation- due to the fact that this representation is not seen often. It is hard to call upon autistic representation because it simply isn't in our media enough for those who are a part of this research to call upon, and when they do they are typically seen in a negative light.

Identifying Characters in Media as Autistic

The group discussed how they identified autistic characters in the media, and there were a few different approaches. Alia mentioned how they usually identify people on the spectrum in the media by how she relates to them.

Alia - I've always felt like I could understand [Captain Holt] and relate to him in the ways that he thinks, how he understands other people (or sometimes doesn't understand/takes much longer to understand).

Alia - I think it is hard too to really express why we think a character might be autistic because we each have a different lived experience with autism. Maybe we see some non-canon characters as autistic because we can relate to them in one or more ways?

Link spoke to the way the character acted in social situations and literal application of knowledge as a way to gauge whether the character is autistic.

Link - [Mob] really struggles with emotions and social situations, often not knowing what to do. he is very literal in his understanding and application of things. he is insanely powerful in terms of psychic powers, which i guess could be a parallel to usually being quite skilled in things like math and such for autistic people.

Duo discussed how the character interacts with their environment as a way to determine whether a character is autistic or not.

Duo - what makes a character feel autistic can come down to the ways in which sensory aspects are displayed, especially if the perspective is of the autistic character. what they fixate on in their environment, light or sound or touch, the way they stand or walk, hold their arms, move or stim, the way that they talk or struggle to talk or do not talk.

When I had learned about the different ways that my participants identify autistic characters, I reflected on how I identify autistic characters in the media. I immediately thought I did it like Alia, where I determined that the character was autistic based on how relatable they were to my own experiences. It was why a lot of characters I call upon for comfort I also deem as autistic, for they are like me and I am autistic. But I realised that I also look for autistic characteristics like Link does and examine how a character interacts with their environment like Duo does. I now know that there is more than one way to go about looking at characters who may be autistic that is larger than specifically me and my individualised experience. Instead, I am not looking for the specific experiences to relate to, but similar reactions to specific social situations or sensory input.

When claiming these characters, the participants are interpreting the media and the character before them in order to make their own autistic representations in media. Sometimes these are very far stretched, but with the care the participants put into their interpretations and how they methodically determine a character can be read as autistic implies that the character in reality may display many different signs of autism. I see little harm in autistic interpretations and often they can add additional depth to the media being consumed. The only issue I foresee is that interpretation of the character being autistic glossing over or ignoring a very real other representation in favour of the autistic interpretations. Interpreting a character as autistic and claiming them is a form of self advocacy, especially when the characters are claimed because they do something that the person claiming them can relate to.

In other words, interpretations in this case seem to be a way to say “fine... we will make the representation ourselves!” and overwriting the original intention of the author, which can lead to further creative works made based on these new interpretations.

Autistic Representations and Autistic Interpretations

A common theme that occurred was that the group continuously talked about the pitfalls of planned autistic representation and the benefits of autistic interpretation of characters. Duo spoke a lot to the issues of planned autistic representation written for a non autistic audience that seem to fall into many different pitfalls such as writing the character with contradicting actions, being stereotypical, or to make the neurotypical characters seem more kind or mean depending on how they interact with the characters.

Duo - ["good" autistic representation] is not cut and clear, and very often done better when done unintentionally, as frequently we find intentionally autistic characters to be written in ways that either feel counter to the described or intended autism, or otherwise derivative and stereotypical (when written by non-autistic people).

Duo - [Intended autistic characters] or written with stereotypical autistic traits (flat affect, stunted emotions, inability to read tone, literal understanding, special interest in topics that seem strange to the rest of the cast.) this can be frustrating as we do indeed experience many of these things, but the nuance is often lost in place of a note of "isn't that character strange?" shared by the rest of the cast, or seen as a source of tension and frustration. Autistic characters are often written to be "smarter" than other characters.

Duo - efforts may be made by non-autistic cast members to understand or relate to the autistic character, but this is seen as exceptional and gracious, and rarely is the autistic character seen attempting the same in reverse.

Maya writes about shows or media where the autistic character is written by a neurotypical writer and is the focal point of the media will still not feel like the character is the main character.

Maya - Often times, purposefully autistic characters written by neurotypicals (the main character in *Atypical* (Rashid, 2017), the main character in *Rainman* (Levinson, 1988), etc) are harmful and infantilizing stereotypes or if the characterization of autism as a condition is well done, the story isn't really about them even if they are the main character.

Duo comments on autistic representation for an neurotypical audience and talks about the time with the character is focused on interaction with the neurotypical cast and how different they are multiple times. This sort of narrative where the emphasis is on the neurotypical interaction with the autistic character could be related to why Maya writes about the autistic main character in some versions of media not being the main character.

Duo - ...I notice that often there is a focus put on human to human interaction when an autistic character is written for a non-autistic audience. how they relate or fail to relate to their fellow cast, and the ways in which this causes confusion or tension.

Duo - ...Media seems to hit more when they do not intend to portray autism, and miss when they do. in my experience, there is a difference as well in characters made by autistic people who are, themselves, autistic, and characters made to be autistic by a non-autistic media. often, i see "canon autistic" characters being played for comedy.

Duo's observation about the character's interaction is the highlight is something I have observed as well while watching mainstream tv shows that feature autistic characters, such as *Atypical*. If

the highlight is the autistic character's interaction with the neurotypical cast and not the character's feeling and understanding of their experiences, how is one meant to feel like the autistic character is the main character and not a tool to add conflict to the neurotypical character's storylines?

This is what ties into Maya's comment- autistic characters aren't the main character. It feels rather backwards that I came into this study to design autistic characters for players to interact with - which are usually not considered the "main character" in video games - but I wanted to target making characters to interact with like David from *Mass Effect* (2007-2021) as a point to start exploring representation. The characters that the participants have made have ended up not necessarily fitting into the role of a non-main character. Any of the characters could be a main character or a playable character, which was not the original intention of this study. I think it's interesting that this shift ended up happening naturally, and its importance highlights a potential bias I had. Why aren't autistic characters the main characters? Can't we have both? Autistic people are not just some sort of background character to be interacted with. This felt like a turning point for my own understanding of what is important to the other people within the community I am in.

Maya commented on how characters who are autistic and their representation is written well usually appear in a show written for comedy.

Maya - often when a character is canonically autistic and it is portrayed well and the story is about that character (and not some third party that acts as an audience surrogate) it often occurs in comedic shows.

When talking about an autistic representation for autistic audience, Duo comments on how the statement of a character being autistic may not even be needed if the character is able to communicate that they are autistic through other language, actions and interactions.

Duo - often for an autistic audience, these reactions are at the surface - to be experienced and related to from a direct perspective. nothing needs to necessarily be stated in unambiguous terms ("i am autistic"/"character is autistic"), because other language used by the character in their actions and interactions with their environment will portray that in a relatable way.

However, there is concern for a lack of a canonical representation and its perceived validity within the larger group that consumes the media.

Maya - If a character isn't canonically autistic, people don't take it seriously.

These comments paint a very narrow line for representation and the issues surrounding it, with interpretation of a character as autistic meaning that the source material makes no hint that the

character is supposed to be autistic and not stating it in the media, but the autistic community in some way has claimed this character as autistic for any sort of reason. It appears that the interpretation of a character as autistic does well in terms of accuracy and development because intentional representation falls into stereotypical representation, to the point where the interpretation of a character as autistic may be preferred. However, there is importance put on stating whether a character is autistic or not within the canon of the media, for if a character displays signs of autism and the media does not state the character is autistic, many people refuse to believe the character is autistic and opt to call the character quirky. This happens a lot online when a character is interpreted as autistic and posted about online, where negative comments and even threats are sent to the person claiming a character is autistic and citing the original source material as the reason why they're not autistic. Interpretation comes with its own dangers because of this negative effect, so in a way an intentional representation comes with its own protections for autistic people talking about autistic characters in the media.

There is concern on how exactly a media who wants to state that a character is autistic explicitly does so. If it isn't natural, then it sticks out and can be alienating. But Duo's comment about it not necessarily needing to be stated stuck with me. I agree - there could be "intentional" representation without the need for an explicit statement of autism within a media based on how the character interacts with the surroundings and more implicit but specific hints. It works really well for an autistic audience, because they would more likely be able to relate and understand that this design, while implicit, is intentional. I am curious how this type of representation would fare with a non-autistic audience, and whether the design of the representation would be fully appreciated. Would neurotypical people be able to determine that the character is autistic? Would that be dependent on the type of character that is being represented and how much the audience knows about autism and how autism presents in people? Would these characters just be labelled as weird or seen as the butt of a joke because of how they do not fit in with the crowd? An example of this that comes to mind is my experiences of watching the Big Bang Theory (Lorre, 2007), specifically with Sheldon Cooper. I could not comprehend why the laugh track would play when Sheldon would be acting - as I saw - "normally" or in a way that I would act. How do we avoid representation made implicitly becoming something like Sheldon? I believe it depends on the context of the media. If Sheldon's behaviour was not laughed at or made fun of and instead existed without negative comments, I wonder what sort of opinions the viewers of the show would have of his behaviour.

The Grey Area of Autistic Representation ("Best Practices")

The group also delved into what seems to make representation of autistic characters better or worse regardless of their status. Alia started with the idea of autistic characters being played by autistic actors and that being a positive practice.

Alia - I wish there were more autistic actors that got hired to play autistic characters rather than having neurotypical people play an autistic character

Alia - It also feels like if a non-autistic person is playing a canonically autistic character they're automatically applying stereotypes as they don't have their own lived experience.

Alia's comment here reminds me of the reports around Sia's movie *Music*, who's main character was a high support needs autistic character played by a neurotypical person. Other autistic people have reported on the movie before (Layle, 2020) but even from the trailer it does not feel like an autistic character is in the movie, but rather a caricature. There are autistic actors out there who want to play autistic characters, and yet film studios do not make the accommodations needed to support autistic actors, and instead hire non-autistic people to play autistic characters.

Friday spoke to their example of autistic representation (*Laios from Dungeon Meshi* (Kui, 2014)) and how the representation is not made to be a hindrance but a difference that this character experiences. This was also seen in a positive light.

Friday - It's not a trait played against him, but rather seen as just a part of him, and it makes him a very interesting character to me to be able to think about.

Autism is a part of our experiences. It has its positives and its negatives, but the media seems to focus on the ends of the spectrum, such as being a saviour or a burden. Friday's example seems to give a healthy medium, which makes the character representation not seem overly negative or positive and aligns with the idea of a realistic representation suggested by Prochnow (2014).

Duo talked about whether a character stating a character is autistic or not carries value and if you're going to state it - what it thinks the best way doing it would be (within reason). It also delves into why other methods would have drawbacks or negative connotations.

Duo - is it important to state a character is autistic or not? we think it can be valuable, but can also set itself up for failure. it is best stated gradually, through action and reaction, and, if explicitly stated, we think best stated by the character itself, and when relevant to the character's own experiences in the moment. making it a casual fact that is not remarked on with derision or surprise by other cast is best.

Duo - when stated by others, especially when the autistic character is offscreen, it often feels infantilizing, as if the character wouldn't think to think this for themselves, much less express it clearly for the rest of the cast. An exception to this might be a character who is high-support-needs autistic having a carer/assistant express this for them, but with the lack of high-support autistic characters in-general, the chances of that being handled well feel low to us.

Duo's comments here remind me about how awkward people are with speaking the word "autistic" or "autism". I find in my day to day life, neurotypical people around me seem to get awkward or want to comfort me when I mention autism, or deny when I want to say that something I do is related to autism. Autism seems to be considered a dirty word, or it seems that mentioning autism evokes someone to mention a positive such as something comforting as if autism is a negative that needs to be brought to a neutral. I wonder if the idea of a neurotypical cast mentioning a character is autistic when not in the presence of the autistic character like Duo mentioned also evokes that feeling of autism being a dirty word.

It also talks about common pitfalls, and brings up a really interesting point that classic representation or items that are stereotypical or "negative" in relation to autistic representation and treatment could become really in depth and nuanced if it was treated differently.

Duo - we often find that poorly-done autistic rep finds pitfalls and focusing on the out-looking-in perspective. there are many times where even alienating or infantilizing aspects (or what could be perceived as such on the surface) are in fact absolutely vital and rare forms of representation, especially for higher-support-needs autistic folks, but when kept at a surface, pitiable, allistic perspective, it fails.

Duo - Even representation that falls in line with the most classic stereotypes can be something that an autistic person can see and feel seen by, relate to, but that representation has to allow itself to take the perspective of the autistic experience. The viewer/reader/player must be allowed to step into the experience itself in order to connect to it, be it empathetically or factually - as not everyone can relate directly in that way.

I also find it interesting that even "stereotypical" representations can be seen, related to and be seen as a positive according to Duo. It made me re-examine the bias I have - instead of writing off characters seen as purely good or bad representation, it may be better to break it down further. Even the worst cases or representation can have a bit of good to it if it makes someone on the spectrum feel seen for a moment. It doesn't mean that these "bad" representations don't come with their impact, but it is dismissive to the people who feel heard by these representations to write them off as just bad.

Duo talks about what the representation impacts could be for bad representation for both people on the spectrum and non-autistic peoples. This aligns well with the research done on Indigenous peoples that delve into deindividualization (Leavitt et al, 2015). Because there is a lack of representation, there is a pressure to emulate what representation there is, which Duo echoes in its comment.

Duo - we think [bad representation] impact is profound on both sides. People form expectations based on what they learn and see, autistic or non-autistic alike. non-autistic folks seeing poorly-done or stereotypical rep will come away in good faith at best with

the belief that there is some truth to be found in what they saw, and at worst will justify their own prejudice against those they believe to fit that description, autistic or not. An autistic viewer may, likewise, feel alienated by a poor representation, either frustrated that they are unable to emulate this representation (of unrealistic "super smarts" or the like), or insulted by bad faith representation.

From these quotes, the practices that are smiled upon seem to be forms of self representation like with what Alia mentioned with autistic actors playing autistic characters, and self-advocacy, such as what Duo mentioned with it's comment on mentioning in the media that the character is autistic and speaking to the idea that it should be done by the character who is autistic rather than the neurotypical cast (within reason). The representation shouldn't be over the top positive or negative, because both these representations are unrealistic and can have lasting negative effects on the neurotypical and autistic cast consuming these representations.

Alienation / Non-Human Characters and Autism (Robots, Aliens)

The group brought up topics related to alienation and non-human characters. Friday questions the affects of autistic traits being labelled as otherworldly and the impacts they have on our understanding of these traits.

Friday - What does it say when the first jump is to categorise these traits as otherworldly instead of things that everyday people live with? Though of course there is the broader view of even there being room for ND behaviour and identities outside humans and being able to share that context.

Friday- The immediate jump that most think of is the "non-human" autistic character. While I have mixed feelings on this trope as I've ended up relating to more of the non-human characteristics of a character, I do understand the for lack of a better word- alienating feeling it presents.

Duo talks about how exactly non-human characters would be seen as autistic based on how they are designed and interact with human characters, and the parallels it has with autistic and non-autistic interaction.

Duo - and often inhuman aspects (for better or for worse), in terms of design philosophies, and anything from altered manner of speech, accent, movement, affect, focus and priority can lend to coding a character as autistic.

Duo - [non-autistic made autistic representation] made to be inhuman in some regard. very often i see aliens/robots being described as autistic...

In addition, when listing examples of autistic characters, Maya brings up Spock, Data, Abe Sapien and Morbius as examples. These are all non-human characters and speaks to how often autistic representation is considered “otherworldly” or alien.

These comments from Friday and Duo make me wonder about the relationship between autistic people and non-human characters. Did these otherworldly characters get claimed by the autistic community because of the strange amount of similarities in the way they act, or were these characters designed with autistic traits in mind? It is hard to imagine that these characters are intended representation- instead, otherworldly characters may come off as autistic because of the different perspective writers and designers have to consider when writing a non-human character interacting with a human group. This non-human character is new to the customs and non-verbal communication, and even while usually speaking fluent English may not understand tone, expressions or common sayings. This comes off as autistic because a lot of visible autistic struggles to non-autistic individuals are social issues, and we also struggle with non-verbal communication. One example at the forefront of my mind would be the fact that I struggle with picking up sarcasm and take everything at face value, which makes joking hard- especially hard if it isn't obvious if the person speaking to me isn't joking. When thinking about other characters that struggle with sarcasm, the first thought is to think of robots as well, because in the media the joke commonly is that the robot “cannot compute” sarcasm.

Level 2: Character Design

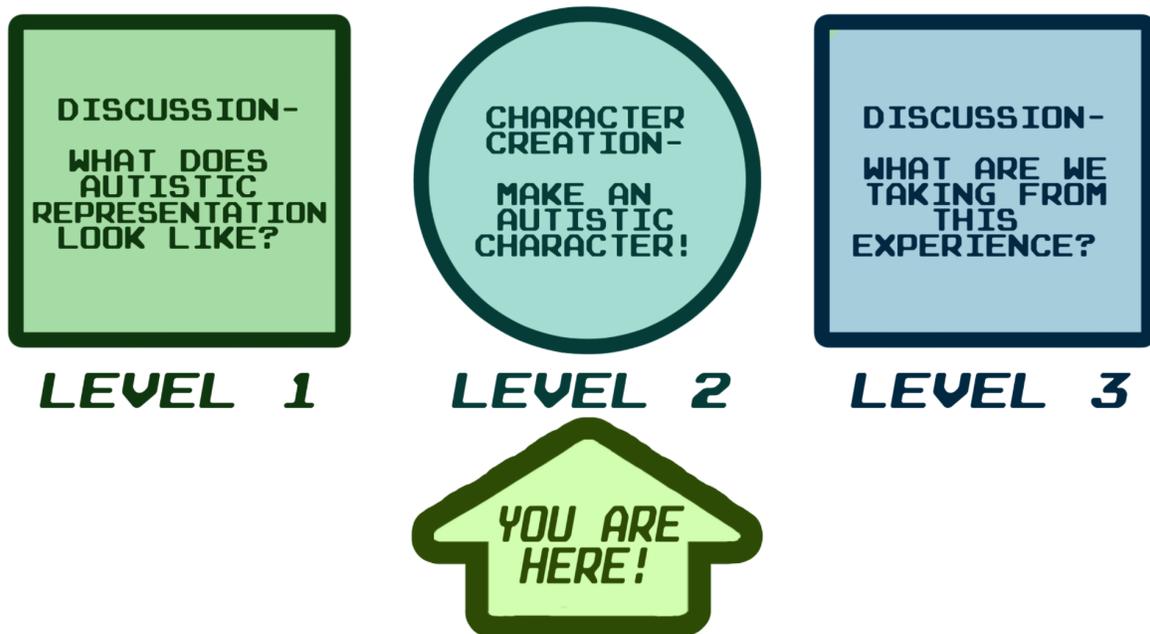


Figure 5.4, Study Diagram - A diagram of the layout of the study, broken down into three parts or “levels”. This one indicates that this part of the document is “Level 2”.

This section is dedicated to the characters that the people made. They are put alphabetically within this document. The participants were given little instruction on how to go about making their characters as to give them the freedom to interpret and go through with making a character how they would like to. There wasn't criteria to be met, but there was a set of questions to help participants get a general idea of what sort of prompts I would consider if I was the one presenting a character:

Briefly describe what you made and why.

What was your creative process?

How does this character interact with the player?

What kind of world do you imagine this character in?

What did you want to capture most with your character / if someone interacting with your character were to pull one message away from your character, what would you want it to be?

The participants may have glanced at these prompts for inspiration, but most of the responses followed their own character creation methods, which worked out really well! I was happy that my prompts weren't necessarily needed, because instead participants did what felt more organic to them or could be in the way they typically would design characters.

Participants all worked on their own for their characters, and I wonder if this was caused by the setup of the Discord server. Although I spoke to the idea of working as a group for some of the character making process, the space was set up so the participants had private sections to work in if they so choose, which may have implied a single way to work on this project.

Alia and AJ

Alia had the least amount of questions before jumping into creating their work, and so I had little idea what she was going to make before making it, which was exciting for me.

I used a couple of the picrews for the visuals since I am... still not excellent at digital drawing (but I have been practising!) and I thought it was really cool how the outfits I chose for both could essentially be exactly the same hehe

Those of you who have been around me in person can see that this character does look like me and that is sort of how this whole process went as I went through the character creation, I explain a little bit more of that in some of the "about" sections I wrote for them, but anyways my character's name is AJ!

Name: AJ **Age:** 25 **Gender:** "I'm not sure." (they/them) **Disabilities:** Autism, ADHD

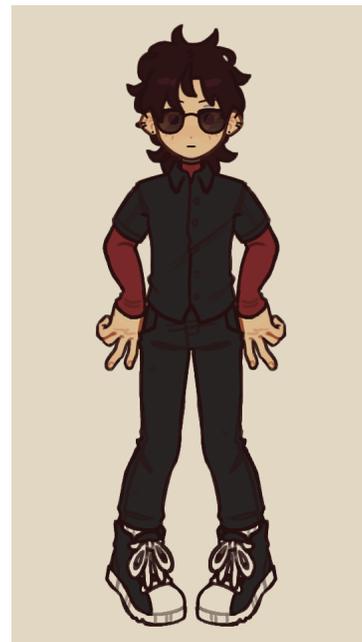


Figure 6.1 and 6.2- Alia's Character AJ: A visual representation of AJ, Alia's character. AJ has short dark brown hair, pale skin, red long sleeve undershirt, black short or medium length collared shirt, black pants and black and white sneakers. These were made using piccrew (SODAPVNK_, n.d. ; extra_nocpno, n.d.).

What does AJ look like??

Fashion Style: Anything to not stand out while looking as put together as possible. Everything is black, grey, red, or olive green

Accessories: Never leaves the house without a watch, headphones, and something to listen to music with. Still keeps an old iPod and an MP3 player. Wears sunglasses sometimes to make awkward lack of eye contact less uncomfortable for neurotypical characters.

Posture: Often has bad posture, tries to remember to fix it often but to no avail. Refers to themselves as being in "shrimp mode" when working at a desk or table for long periods of time.

How does AJ behave?

Temperament: Mild mannered most of the time, but will become very upset and find it hard to control feelings of anger or frustration if the situation becomes overwhelming, if there is severe conflict, or if too many things go "wrong"

Mannerisms: Uses a silly voice when being sarcastic so others know for sure they're being sarcastic. Tends to over-explain if a joke doesn't land or if it isn't understood right away. Cracks knuckles often, taps fingertips on thumbs often, usually to the beat, rhythm, or lyrics of a song. Hums, sings. Can be too loud or too quiet without realizing. Monotoned voice

Stims: Mimicking others' vocal tics sometimes, clicking tongue, fidgeting with small items, bouncing leg, tapping hands, fingers, feet on surfaces, snapping fingers

Fears: Getting really sick or hurt, others getting really sick or hurt. The open ocean, going to outer space. "No WAY am I ever going to Mars. I don't care WHO chooses to build a new world there, I'm happy to stay here on this burning planet"

I appreciate Alia's characterization of AJ through writing out something AJ would say. It makes the character feel even more human.

Morals: Very strong sense of justice, has a hard time understanding when others have differing opinions or beliefs on topics that appear to have a very clear moral “right and wrong.” Will not steal, will not cheat, tries not to lie unless it’s necessary

Skills: Reading, Writing, idea generation, quick problem solving, investigation and deduction, crafting, repair

Pet Peeves: When people use poor grammar, sing the wrong lyrics to a song, chew with their mouth open

What are AJ's strengths and weaknesses?

Physical Strengths: Average physical strength, nothing special

Intellectual Strengths: Above average intellectual strength when it comes to literature, puzzling, logic, reading, spelling, writing, and research. Has incredible common sense and adequate street smarts

Interpersonal Strengths: Emotionally intelligent. They worked very hard to be good at this one, and they tend to notice small differences in people’s behaviour or mood. This need to be emotionally intelligent and aware stemmed from many misunderstandings in their past. Additionally, they are excellent at listening and giving sound advice to others when needed.

Physical Weaknesses: HATES working out, so has an average stamina.

Intellectual Weaknesses: Any math beyond basic calculations. Physics, chemistry. Difficulties reading maps and navigating.

Interpersonal Weaknesses: Low self esteem sometimes makes them feel convinced that other people don’t like them or think that they’re annoying. Regular need for reassurance and regular self-doubt can cause frustration for other player-characters or NPCs that they regularly interact with.

Why Choose/Not Choose AJ as a Character? In most games where players are able to choose a player character, there are advantages and disadvantages for each playable character. For AJ, some of these advantages and disadvantages are related to their disabilities to create a realistic representation of very real strengths and weaknesses that autistic/neurodivergent people could have.

Overall Character Strengths/Advantages: Problem-solver, moral compass (will not steal or lie and cannot be penalized for stealing or lying), puzzle advantage (add ?% of time to any puzzle solving segment in a game to show this advantage), can craft and

modify basic weapons and tools. Logic: Can sometimes see the outcome of making certain decisions just based on logic (roughly 15% of the time a choice is presented)

Overall Character Weaknesses/Disadvantages: Low navigation skills (map visibility is lower than other characters), can become frustrated easily if triggered and make careless mistakes (element of choice is taken away in scenarios where player is offered a choice), 2 inventory slots already occupied by music device and headphones. No special physical strengths

I appreciate how Alia also wrote about different types of strengths and weaknesses and even further how they would change the way characters within a game would interact with them. You can tell that Alia really thought about them in a video game setting, particularly talking about statistics you'd see in a game such as stamina and inventory slots.

Character Inspiration and Development Process When tasked with creating an autistic character, it was difficult to separate the character from myself in the beginning and I spent a long time trying to figure out how to do it. I ultimately decided it was best not to detach this character from myself in the end. My experience with autism shapes how I picture an autistic character in my mind. All of their quirks and traits are based off myself and my own experiences. In a way, it feels as if I were to be stereotyping if I tried to design an autistic character who experiences autism differently than I do, and it would not feel like an authentic representation of autism to me. It would feel as if I were catering to society's stereotypical views on what an autistic person is like. AJ does not have any extreme sensory issues, is verbal, and is quite good at masking most of the time. Of course, this isn't the case for every autistic person and therefore other autistic characters made by other autistic designers will likely have different traits and quirks and "symptoms" of autism than AJ does, because that's how autism is for people in the real world.

Alia's character was a lot like Alia. AJ seems to be able to be fitted into a lot of different types of games because of the vast amount of different types of strengths and weaknesses. Alia's character could fit into a game where you need to interact with other characters, solve puzzles and/or have to run around. I am curious about what kind of game Alia envisioned when making a character like AJ and listing these strengths or weaknesses. Another approach could have been making a character with a general information that could have further been moulded into a specific scenario, like building scaffolding for a character that could be fleshed out when being fit into a game. Either way, I think that it is super interesting that this character feels rather flexible with how it would fit into different scenarios, like real humans are.

Duo and Logan

Before starting it's character design, Duo asked if it was alright if it used a character it previously made in the past as a part of this project. I told it that it was okay to do so.

Name: HeghlaHbe' yIHem-loQ'a'wI'/Logan "Crow" Crowsteeth

Species: ghotQa'/h?man

Gender: agenderfluid (it/its)

Summary: you cannot die, but you can be killed. you wash ashore. your existence is tied to perception. you survive here as long as you can. everyone around is not quite human, not to you. The uncanny has been inverted.

The first impression of looking at Duo's character Logan's summary was that the mood was intense and serious. It made me excited to learn about this character, because it made me feel like I was stepping into Logan's world. Duo has made a lot for Logan, and I have included more images in the Appendix (Appendix E, Duo Additional Images) to see more of what it has produced for this character over time.



Figure 7.1 and 7.2 - Duo's character Logan: A visual representation of Logan, Duo's character. Logan has light grey hair, dark skin, an eyepatch, and wears a yellow long sleeve crop top, a green scarf, a blue and grey long trench coat, and dark grey pants. It has only one foot, and is drawn next to the supplies it carries including a bag. These images were supplied by Duo.

Sexuality: bisexual

Height: 6'4"

Weight: 131 lbs

Age: 26 (comparatively)

Disability: amputee (missing right foot); legally blind (missing left eye, right eye is farsighted +9 diopter scale); chronic illness (suffered a pandemic-scale wasting virus as a young child that bleached its hair and attacked its muscles. It is physically weak and cyclicly experiences flare-ups that result in high fever, tachycardia, hypertension and blindness.); memory loss; colorblind

I noticed that Duo's character was the only character in our group with a physical disability. Often when autistic characters are represented, they don't have a combination of disabilities but "just autism". We can have more than one disability, and Duo highlighted that with Logan.

Neurotype: autistic

Favourite Colour: yellow

Other: it is a hypercarnivore; h?mans of its species are capable of sprinting in short bursts at speeds of up to 45 mph

Link actually included a part of their character with items on special interests and sensory issues, and in response Duo asked if it could have any resource they used so it could add to it's character. This was added because of Duo's inspiration with Link's character, and I appreciate this brief moment of care between the participants.

Special Interests: Logan is very interested in whales, "whales", unwhales, and various other large marine life. It will gladly share any and all "facts" it knows at any moment. It is also very interested in "flicks" (see: hand-animated cartoons, the first of which were invented when it was a young child). It had ambitions to become a "flickerman" (cartoon animator) when it got older, going to far as to creating a pitch for a cartoon about a were"seal" flapper that saves a cardshark from gangsters, and will talk about cameras and cinematography whenever possible.

Sensory issues: Logan cannot handle strong citrus scents, and if it cannot escape them, it will meltdown. It is very particular about the texture of clothing it wears; it has about 20 pairs of identical heavy canvas cargo pants and will not wear pants that arent made of similar material (though it can handle skirts much more easily). Its teeth are not well designed for chewing food, so it struggles with particularly gummy/sticky foods (such as marshmallow, peanut-butter). It cannot handle prolonged shrill/whistling sounds, even if they're quiet.

Stimming: It is a scrimshander (bone carver) and finds great sensory comfort in wittling away at bone or wood. It tends to carve crosshatching patterns into things, which makes for something rather tactile to run the fingers over. It "sees" best with its hands, and has a fantastic tactile memory. It will also purr, or growl, to itself as a self-soothing action. It is covered in full-body tattoos, hand-tapped, with a method that leaves them as raised scars; in addition to finding great comfort in the sensory sensation of receiving tattoos, it also often stims by trailing its fingers up and down its arms, following these patterns.

Unhealthy Stims: It does have harmful stims; it tends to engage in sensory-seeking behaviour that puts it at risk of bodily harm, especially punching at "training dummies", wood; biting objects, often without realising.

Something I really appreciate is that Duo wrote about unhealthy stims. One thing I find in my day to day life is when I stim, it's seen as cute. However, some of the things I do can harm me. I used to make a habit of punching floors as a sensory seeking behaviour. I used to bruise my knuckles with this behaviour. Autism is not always cute, it has major impacts on our lives.

In addition to the text Duo provided, it also made a small twine game from the perspective of Logan.

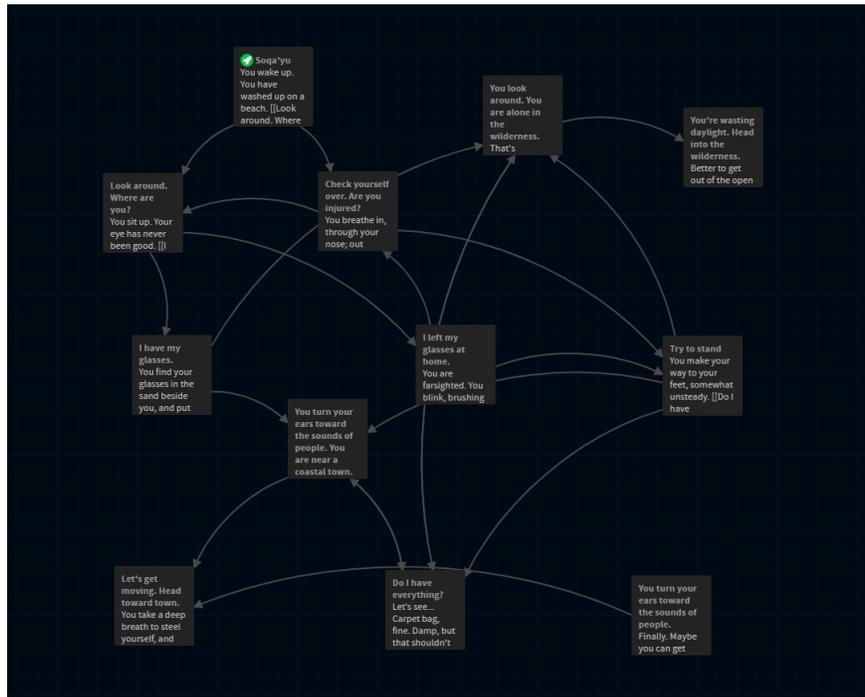


Figure 7.3, Duo's game mapped out on Twine: A screenshot of Duo's game mapped out. There are 12 different boxes with lines drawn between them to indicate which ways you can travel with this game.

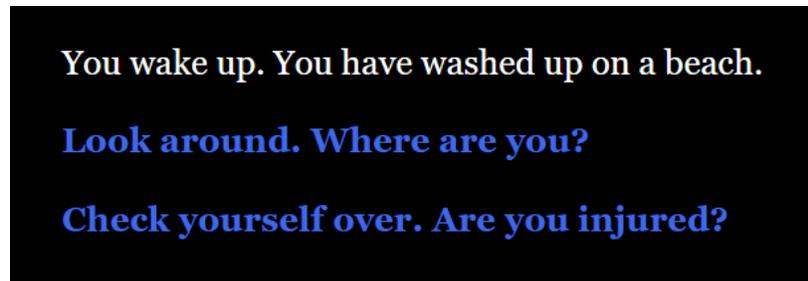


Figure 7.4, Starting Screen for Duo's Twine Game: A screenshot of the beginning screen to Duo's game. When starting the game, this is what you will see. It states "You wake up. You have washed up on a beach." with two hyperlinks below stating "Look around. Where are you?" and "Check yourself over. Are you injured?"

Duo's game can be found in the Appendix (Appendix F, Duo's Game).

Duo's character comes with a lot of lore made in the past for Logan, which was very exciting. It had its own species and culture built around it. It was fascinating to see such an in depth character within this study. Logan is a clearly well loved and cared for character that Duo shapes to fit the narrative it is working on. Its creation makes me draw the connection I made with Alia's character- how we adjust ourselves to the world around us. I think between the two, Alia's character would be easier to adjust to a different setting because there isn't a specific culture or species AJ is. Duo has provided a character that fits really well into the contexts that make space for who it is, but would not adjust well to games and other media that does not have the space for it, such as a narrative that does not allow for anything beyond human. This is not bad at all! It is good to see this specificity - It follows its own rules that allows its own narrative to shine in a really unique way. The way Logan's character was presented painted a very specific picture of who Logan was and the mood that it had in general, especially with its summary. It doesn't talk about strengths or weaknesses but rather labels everything as things it does, which I found interesting and speaks to something that is seen as a weakness or a strength actually is just neutral, but in some situations is better or worse.

Friday and Akua

Friday struggled a lot at the beginning with the character creation. Before they started working on their character, they talked to me privately about the issues they were having. They seemed really fixed on making sure their character was made correctly, and that they did a good job. We adjusted the prompts slightly for them, and talked about what kind of character they would prefer to have seen or want to see in the future. I hope that I was able to sow confidence in them by

letting them know that the fact they are worried about doing a good job shows they care, and that means that no matter what they provided it was going to be good for this research.

Friday's presentation felt like I was in a room with them just chatting with them. It reads much more like a string of thoughts, which I felt like was a very organic way of approaching their character and welcomed me in to listen to what they had to say.

For my character, I had moments of getting stuck mentally. What could I do that would make a "good autistic character"? That line of thinking made me want to dissect it more. There can't be a one size fits all for representation for any matters so holding myself to that standard is not worthwhile. Though my thought process could be broken down into a series of overthinking spirals that condense to; "I want to do a good job." Which led me to my second mental rabbit hole; what could I do that would be a worthwhile example.

My first thought went to the types of characters I like creating. It is often when I make characters, my neurodivergent behaviour tends to bleed into some. In small ways or in full. At times, it feels harder to write a neurotypical character than a neurodivergent one. My mind went to who don't I see very often to try and work with that more but also something I would have liked to see. Often I don't see POC of African descent such as myself get much mental health or disability representation. It's something that might relate to a cultural attitude but there is this odd feeling of otherness/disconnection that comes from a 2nd generation point of view.

Friday laid out the foundation of how they got to where they did for their character and it was something that really made me feel connected to Friday's process. I do hope that this pressure was not too much for them, but the care they had for the process and the conclusion of combining the lack of representation they see and what they want to see was a wonderful one to have. The fact they chose to make a character with a similar background to them drives home how the characters are truly a part of the participants who made them.

As a result, I wanted to create a Ghanaian character due to being able to count on my hands the times I've seen a fellow Ghanaian in the media growing up. Within the universe I've created this character in, she's from a different world/universe but still has Ghanaian coding baked into her fellow people. Some elements may not be perfect due to my experience/exposure to them as 2nd generation but there's still the heart in the centre of it. (if that makes sense)

Another factor I continued to think about is the topic of non-human ND characters. I do understand and agree with the feelings that arise when seeing the only ND character to exist being a fish out of water non-human in a story. Though I do have a soft spot and history of relating and treasuring such characters for the feelings they explained in myself

feeling alienated. Are they ND coded for being other or are they ND coded for being themselves? (If that makes sense.)

With me creating a humanoid but not exactly human character for this assignment, I thought there has to be a happy medium that won't send me into a spiral of overthinking. An element that I was thinking of showing is the broadness of the spectrum in this case. These characters are still able to share familiar traits if that makes sense along with how they interact with others of their people. It's an interesting topic to think about how ND is approached by non-Earth cultures.

Friday's contemplation lays out a wonderful back and forth about representation. It's hard-non-human characters are treasured in the autistic community because they are how we have seen ourselves, but at the same time they do create a sense of alienation - however Friday points out that is another feeling neurodivergent / autistic people face and the fact that the character is non-human adds that layer of alienation. Is it criminal to remove alien representations of autism for the sake of making the character human like everyone else, to remove this added nuance? This was the first time I contemplated this. I think that the best answer I can provide is that the context and how the representation is cared for is what truly matters in this situation.

Questions like; how are the challenges we may face handled with them in their society, what are the traits that may affect them? This section had some of my harder to articulate thoughts in a matter I can refine or get concise so I hope they properly come across.

I didn't particularly have the time in my schedule to draw a character sheet like I had played around with the idea of so I had to stick to Picrew. I'll still explain my thought process via text however. The first draft is what I had made when I had struck the idea of something I had wanted to create. Her ears were a notable feature and part of her character world building wise as most people in that world have large ears in a similar nature. They were something I had wanted to keep since I was developing her for a personal writing project so I had to find a picrew that suited them. Though they weren't exactly right so they will change in the 2nd draft. It was around this draft, I had chosen the name "Akua", an Akan day name along with the last name, Boakye.

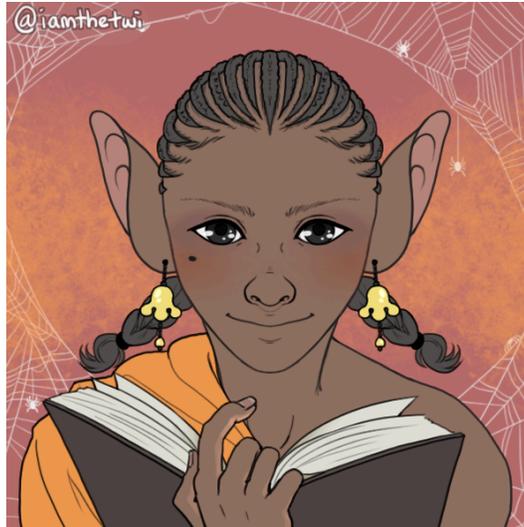


Figure 8, Friday's character Akua: A visual representation of Akua, Friday's character. Akua has short dark brown hair in cornrows that turn into twin braids, brown skin, and yellow cloth draped over her shoulders to represent decorated woven fabric. This was made using piccrew (TheTwi, n.d.).

Personality is something I had wanted to get across with a lack of personal interpretation, her eyes titled with quiet mirth and a cheeky grin. Her hair was something I wanted to play with. She has a thick enough head of hair to cornrow into sections and plait into twin braids (presumably) but has sparse eyebrows on her face. I'm a bit charmed by the idea of it being the result of a stim as I also have stims that manifest in trichotillomania. Cornrowing hair away is also a good way to keep wandering picking hair away from them. I see her keeping the style for most of the time to avoid the temptation of idle picking. With clothing, I was starkly aware I couldn't get exactly what I was looking for. That was up to me to draft the specific clothing I would want but I can lay down the foundations. The yellow clothes draped over her shoulder is a placeholder for the decorated woven fabric that I'm more familiar with. I thought the weight along her shoulders works well as a comfort because of how heavy it tends to be. Below that it's presumed she wears a sleeveless wrapped top along with a long skirt. Pants may be more practical for her day to day but the restrictive nature around the legs would be annoying. From this point, I gave them a book that they could idly thumb through. This is a frequent character action as Akua has a strong interest in the study of knowledge and the equivalent of journalism.

Friday's attention to detail and how they wanted their character to communicate many different things with how they looked was something else that came to the forefront when reading over their work. Every design detail in their character had reason, and seemed like it added to how fully-fleshed their character was. Although Friday did not have the opportunity to delve into the

setting they imagine this character in as much, I found that I was able to imagine this character standing idly or moving about her day, especially with the little details with her book and the mention of trichotillomania. It is clear that a lot of thought went into how this character was going to be structured, which was not mentioned as much by the other participants. Friday seemed to be heavily into the process of producing their character and how their character design had an affect on others.

Link and Hikari

Link reached out to me before they started his work and asked about basing their character off of a specific series, called *Pokemon Concierge* (The Pokémon Company, 2023). Because it is a spin off from a game series, I thought it was appropriate to do so and if it helped with designing a character there was no harm in basing a character off a world that already exists.

Pokemon Concierge OC

Name: Hikari (ひかり) (meaning “light”)

Age: 25

Gender: Transmasc

Pronouns: He/They

Hikari is a pokemon concierge at the Pokemon Resort, and is partnered by an Oshawott. He is autistic, and a little hesitant to usually share that with others.

I found it interesting that Link mentioned that their character, Hikari, is hesitant to share that he is autistic with others. I can’t help but think about my own hesitance and where that comes from- I hesitate when I worry that people may have a previous understanding of autism that may bring harm to me if they apply that understanding to me, or that I will not be believed. I am curious what specifically made Link make this specific detail. Perhaps it is not safe for Hikari to mention to the people around them that he is autistic.

Autistic Traits

- *Special Interest*- He has been passionate and hyperfixated on Japanese culture and history since he was little, as it was a part of his own history and growing up. He especially has great knowledge on samurai and the Shinto religion.
- *Difficulty in Social Situations* - Hikari is not always the best with social situations, and often struggles to understand moments of sarcasm and jokes. Luckily, his Oshawott partner helps him in those moments of uncertainty.

- *Sensory Dysfunction* - He hates the feeling of untreated wood, and physically cannot handle it. When he encounters untreated wood, he often needs someone else to handle it for him. Food textures are also a hit or a miss for him, and any texture he cannot handle he avoids at all costs.
- *Stimming*- Hikari often stims by fiddling with his fingers, or playing with a fidget toy. Sometimes, his Oshawott lets him play with their scalchop, and he practices samurai moves with it.

Hikari sounds like his Oshawott (which is a pokemon) helps with emotional regulation. I wonder if it is a fair assumption to compare their relationship to a service pet and their handler based off these descriptions. It would be very interesting to continue to explore how worlds with critters like Pokemon can explore the different ways that animals and other creatures can uniquely support disabled and specifically autistic people in a way that accepts them.

His Oshawott

Hikari's Oshawott plays an important role in his life. The little sea otter creature helps him when he feels unsure in situations, and serves as a source of calmness in times of anxiety. When Oshawott is not helping Hikari, they are known to perform samurai shows at the resort to impress the guests, pokemon and human alike. They also like to just play with the other pokemon at the resort when they have free time.

for those unfamiliar with pokemon (i totally get it, im very new to it myself, its just that pokemon concierge has taken a hold of me) here is what oshawott looks like!



Figure 9.1 - Photo of Oshawott: Link's photo of Oshawott, from Pokemon. The character looks like a sea otter, but is made to be white and blue. On it's chest, it has a scallop. Photo provided by Link.

here is my ideation for character designs! The starred one is the design I'm going with, and will be developing more.

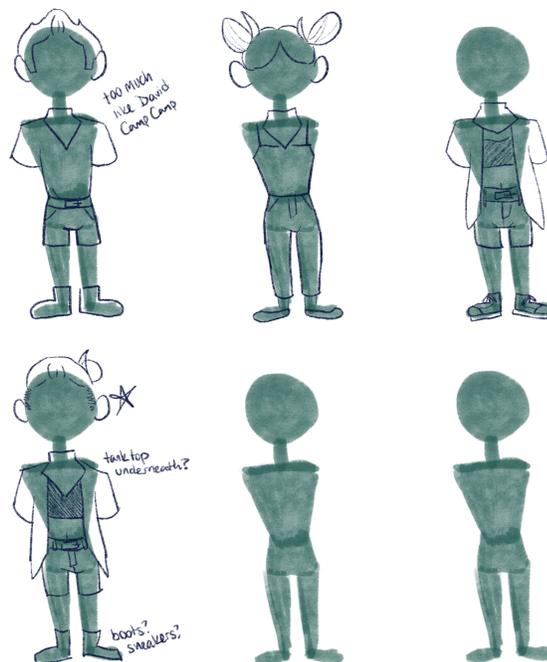


Figure 9.2, Link's character Hikari: A visual representation of Hikari, Link's character. Link has drawn 6 silhouettes for the character and has sketched over 4 of them with different designs. The one that has a star has his hair tied back, wears a scarf, a jacket, a tank top, shorts and some sort of boot or sneaker. The character is all drawn in teal.

they would most likely have a color palette of teals and blues to match the oshawott, alongside some reds to give a pop of color!

im gonna try to design the actual character and get a sketch at least done today with some rough colors so that everyone can see what i was really going for :)

Link unfortunately did not get the time to finish the design of their character, but the sketches they created for their character showed a lot of care with how the character was presented and how they wanted to explore different ways their character could be presented.

truthfully this is my first time intentionally making an autistic character, especially since i have started identifying as somewhere on the autistic spectrum.

Link's character Hikari showed a different type of companionship that I initially considered-companionship with animals (or in this case, Pokemon). I often find myself leaning towards interacting with animals over humans because of the social expectations put on interacting with humans. These are washed away as soon as we start interacting with animals, and thus makes it easier to interact with them. A cat is not going to judge me if I stammer or stutter, or talk about the same topic for a very long time. Hikari explores this space where although interacting with humans may be hard, companionship comes in many different forms and can often provide comfort without the discomfort of interacting with another human.

Maya and Ramsey

Before starting this part of the project, Maya asked me privately if they could use a character they had made before. Like Duo, I agreed to it.

The character I made isn't actually a character that I newly made for the study but is in fact a character I made a very long time ago when I wanted to create a main character that would feel more like myself being represented in my genre of choice, supernatural fiction. I created Ramsey Sharp based off my own experiences with autism and how I would think that me, as an autistic person, would react to the changes in your body that would come about during a vampiric transformation (heightened senses, forced schedule changes, discomfoting new sensations, bloodlust, etc). Ramsey is a pansexual, androgynous nonbinary person. I purposefully made them both very androgynous leaning and nearly agender while being curvy and AFAB because I can't really express a more androgynous sense in myself partially due to how I feel about the way that I look in androgynous fashions.



Figure 10.1 and 10.2, Maya's character, Ramsey: A visual representation of Ramsey, Maya's character. Ramsey has short black hair, pale skin, and wears a black turtleneck with black pants, and a black trench coat that has a dark red lining. The second image details the colours used to draw Ramsey. These images were supplied by Maya.

I think it's really interesting that Maya's character is someone who has been featured in games Maya has made. This is a character that has been designed to be featured in a game before and has been in games before as well.

I have multiple different entries in this series that I've planned or made prototypes for (I'm currently writing a book where Ramsey might show up briefly and be very far from a main character) but depending on the entry in the series, they're either a main character, a side character or the POV character. For example, in my capstone project for my game design degree (Harry, 2023.) AND in a project I made for my third year of game design (Harry, 2021), they were the main character.

When they are not the main character, they would most likely be an npc or side character that provides important insight into the ways in which the political system of the world I've designed runs. They're an investigator at a supernatural government organization called the Bureau and they help enforce their rules. A lot of their internal conflicts is the conflict between their rule following tendencies, their own moral compass and the many faults in the system the bureau has set up.

Maya like Duo has a context made for this character. In this case, this character is made for the world that Maya has created that features a supernatural government. I do think that like Logan, Ramsey would be able to fit into contexts that allow for their part of the world to fit into the

media being produced, but outside of that Ramsey doesn't really fit in. I think it's wonderful that these characters exist in a way that does not allow for them to exist outside their contexts, it speaks to how well their contexts fit them.

The things I wanted to capture most with this character was mainly the fact that autistic people are different from neurotypicals but can still be the main character of their own stories and provide meaningful engagements with topics in fiction that most neurotypical writers/characters wouldn't be able to provide. For example, the fact that these heightened vampire senses are a fantasy that's enticing to many but would be horrific to me. There's always the allure of eternal life and the intrigue and depression that goes along with that present in vampire stories but the heightened senses are always meant to seem desirable. Ramsey, as a character, wears earplugs and sunglasses to dampen their senses in the ways I usually would but they have to deal with it at a crescendo constantly. I wanted to make a character for autistic people to see themselves in a story that isn't *just* about being autistic as many abled people seem to think that all stories about disabled people have to be some sort of inspiration porn that's exclusively about the amount a person suffers due to their condition.

When I was making Ramsey, I wanted them to be cool and interesting, I wanted people to think of them as an interesting character who happens to be autistic. Not a character where autism is their only purpose like a character like the main character of atypical. I also wanted to show people being ableist to them in an intentionally negative light instead of just having a bunch of people around them infantilizing them throughout the story and have those people be the good guys of the story and the main character not actually being autistic but an audience surrogate.

Maya's intentions are different from the intentions I originally had for this study, but the purpose that Maya outlines here is very important and honourable. I am happy that Maya introduced a character that is a main character of their own story and provides a new and interesting insight. Ramsey is autistic representation that is about a vampire- not about Ramsey being autistic. Thinking about what Friday said about Laios from Dungeon Meshi, the autism is a part of them, not a trait played against them. It's not about them being autistic, but we also can't deny that autism affects how they experience the world. Maya's attention and care to their representation shows that she has thought a lot about how a character who is autistic interacts with those who are not and what that entails.

Most likely, Ramsey won't be the main character in every story I tell in this universe (because I have so many characters in this universe) but they will play a big role in a lot of plot relevant nonsense. I wanted to make sure that they had character traits that weren't just "Look they're autistic." They're stubborn, intelligent, a strict rule follower, serious and deadpan but they also have a lightness and wonder to them that was more present in

them when they have freshly been turned into a vampire. They have a special interest in the Matrix and science fiction and much of their look is based on a combination of Neo and Trinity from the Matrix. Their stories will focus on the inner workings of the Bureau and often be much more adherent to the rules that the society of supernaturals expects for their residents.

Some of the stories I will be including will include characters who break away from the Bureau but Ramsey is there to enforce those rules. There will be moments where they break those rules (I have a moment planned where in a struggle they bite and drink the blood of someone without their permission as a tactic in a hand to hand fight that could've ended in their death which is *very* against Bureau rules and how they will document that and grapple with that) but most of their stories will be about how they as an enforcer works within the system of the bureau.

Maya details the future plans with Ramsey, which I thought was a very important part as well- Ramsey will continue to be a big part of their work in some way, regardless of how big their part actually is. These future plans make it exciting to think about how these characters have longevity to them that is past "they're autistic". Ramsey is a fleshed out character that can be applied to many situations.

Level 3: Participant Final Discussions and Additional Survey Comments

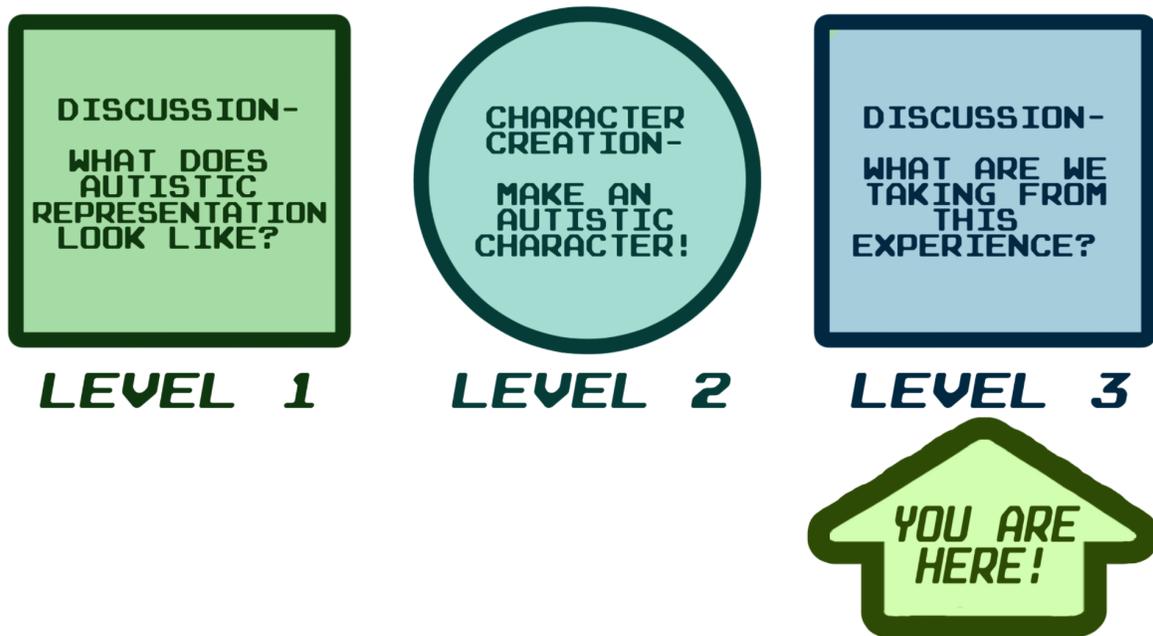


Figure 11, Study Diagram - A diagram of the layout of the study, broken down into three parts or “levels”. This one indicates that this part of the document is “Level 3”.

After the participants shared their characters, there was a survey sent out that was all about the feelings of going through the experience, and additional questions asked to prompt discussion about the characters. This was discussed as one large group with all participants involved.

The survey questions and the Final Discussion prompts can be found under Appendix A.

Participant Design Process

The participants were asked about the way they approached designing their characters. Each one had their own ways of approaching the task, especially since their instruction was not very explicit and allowed them to explore their character in the way they wanted to. Everyone took the work very seriously.

Duo and Maya had one thing in common where they both built characters off of previously developed characters.

Duo - This character started as a backstory anecdote for a different character, and developed from there. We have a very difficult time directly making characters, and tend

to have an easier time building up anecdotes from the ground up. Over time, we developed a culture, internal anatomy, even a conlang for this character.

Maya - My creative process is also often unconventional. Ramsey came about as the result of making a gender neutral default character name and appearance that could greet you at the start of a game and then became their own character through me getting attached to them. I often create characters from random doodles that I do and slot them in in places that make sense. Sometimes I sit and deliberate and design characters off of prompts but it depends on where my head is at.

Duo and Maya although working on previously developed characters still have a lot of differences between their development style - Duo's character seems to have an entire world built around it and focuses on moulding the world around it to it while Maya's character initially fitted a purpose and developed more meaning over time, and seems more focused on slotting the characters into a world that she has built.

Some worked first on the visual first, such as Link and Alia, but still had several differences with their approach. Link called upon their understanding of how characters are designed in animated films, and Alia played with the visuals through the application piccrew to determine how they wanted her character to look.

Link - i tried to go about it how character ideation for films and such would go, where you work on silhouettes first before committing to a design. i also tried to be more in depth about the experiences of this character than i usually go for some of my characters because i knew it was important to be thorough, especially about their experiences being autistic

Alia - I started from the visual aspect and I made a couple of picrews and the character ended up looking like me, I decided I wanted to have the character essentially be a video game character version of myself because I didn't know how better to accurately portray a character with autism outside of my own experience

Friday thought of the character creation as figuring out a puzzle, which really reads in their presentation of their character.

Friday - as I've mentioned before, I did things in a series of mental steps and tried to pick out pieces from there to put together like a puzzle

Friday - Though, I might not have clearly illustrated it, I tried to represent aspects of a character who's autistic that has found their niche to be able to be themselves with society (akua having a role similar to a journalist/archivist with a special interest in collecting knowledge about all things in the world)

Friday's final comment stuck out to me - It sounds like a dream job, the world that their character lives in and the ability to indulge in a special interest as a job. I suppose it's similar to what I have done here with this project. A lot of autistic people tend to have "special interests" which are focused on one particular topic. Some people can have more than one or general ones (or really specific ones too). I have a special interest in clowns and jesters which is a general interest, but I also have a special interest in games and representation. By doing this study on autistic representation and studying inclusive design with a focus on video games, I have begun to make my niche that pertains to my special interest much like Akua. I find I have endless energy when discussing my special interests, and can't help wondering what Akua's feelings around her work is like. I would describe it as freeing to have this sort of situation, where I get to discuss the topics I usually don't get to in a setting where it is appropriate to do so.

Each participant had a unique way of approaching making their characters, which made them focus on different areas they were talking about in their presentation. I find it wonderful that their own creative process didn't seem heavily hindered by the structure of the research, because it really highlighted the many different ways one can go around making a character and how the different ways of developing a character can bring out important aspects of the character. I know the prompt of me asking for an autistic character without giving much detail could be really intimidating and can evoke feelings of stress, but it made the individuality of the designers come through. I think in the future, character design should start as loose as this does- it allows people to go as specific to them as they want and the freedom to create what they envision- and then bring in more prompts to adjust the characters more to the world.

Characters as an Extension of Self - could be seen as Therapeutic / Cathartic

All participants reported some version of finding themselves within their character or feeling as if the connection to their character is strong. Friday talks about having cultural connections to their character, on top of behavioural connections with the character.

Friday – [character creation thoughts] As a result, I wanted to create a Ghanaian character due to being able to count on my hands the times I've seen a fellow Ghanaian in the media growing up.

Friday - I have a deep cultural connection with Akua but also behaviour wise, I'd say I've found myself similarly for some factors.

Maya speaks to the origins of Ramsey's character creation. They touch on the way that Ramsey is their understanding of how vampiric transformations would make them feel and thus, Ramsey is an extension or different version of themselves.

Maya - I created Ramsey Sharp based off my own experiences with autism and how I would think that me, as an autistic person, would react to the changes in your body that

would come about during a vampiric transformation (heightened senses, forced schedule changes, discomfoting new sensations, bloodlust, etc).

Maya - Ramsey feels like a fictionalised version of myself. They are how I feel I would experience vampirism and for that I have always been attached to them since I created them in 2021. They are a part of an ever changing fictional world I've created that I hope to put to paper and make digital as soon as possible.

Duo speaks to how it is connected to the character through the way it feels about certain things it struggles with.

Duo - We definitely feel a connection to this character. It embodies a lot of our feelings toward memory/loss, difficulties communicating, and a feeling of detachment or confusion with your surroundings.

Link speaks how they put the experience of both them and their mom into their character and how it made it feel more like them and an insert of themselves into a different universe rather than a separate character altogether.

Link - i added in experiences both my mother and i have had and that made it feel more personal which was really cool

Link - for me personally, i put some of my own experiences into the character, so i feel like he does represent at least a little how i experience the world around me.

Link - especially since i put my own experiences into this character, i feel almost like this is more a self insert than just an original character im creating.

Alia speaks about how they didn't know how to do the activity without making the character like them and the complicated experience that came from that.

Alia - I feel good about them! A little weird that they're basically a representation of myself and not a more separate character.

Alia - I didn't know how better to accurately portray a character with autism outside of my own experience.

Alia - It felt like much more of a challenge than I initially thought it would be. I had a hard time separating myself from the character and couldn't do so in the end. It was hard to create an autistic character that didn't just represent myself because my experience with autism is different from the next and so on.

She also delved into how they added some of the social issues she faces when interacting with the public to this character, and how it is deemed as less desirable.

Alia - [My character] represents only some aspects [of autism is to me] I think. I did talk a little bit about how they're insecure about whether people like them or think they're annoying and the constant need for reassurance can get actually annoying to other characters. It's much more mild for AJ than it is for me, but I did want to give them some of my less "desirable" autistic traits and not just have them be a quirky nerdy weirdo.

There were some strong emotions tied to expressing one's characters. While Link describes it as cathartic, Alia expressed insecurity and Maya expressed getting very emotional over writing for Ramsey.

Link - i had never intentionally created an autistic character before, and had a lot of fun doing it. it also felt a little cathartic to be able to express these aspects of myself.

Alia - I felt a little bit strange about AJ basically being me, and worried about what others would think but that's generally typical insecurity from me.

Maya - Sometimes when I write for Ramsey I get quite emotional. I have often cried while working on their stories. They hit very close to home so it's often hard to deal with that influx of emotions.

All characters were born from the experiences my participants have had. I would argue that there is no real way to separate one from one's character in totality when you are building a character based on one's own experience. The character has parts of you embedded into their build up, so denying the connection feels like denying those parts of you. I found it quite inspiring that these characters are built so close to the heart of the participants. It adds depth to these characters- one does not need to think if something is reasonable for a character or not because it is something they personally experienced, so it could happen to this character as well.

With how close to their own selves the designs the participants made are, I think about the non-autistic experience of making characters with autism. If people with autism are pulling from their own experiences to make these characters, what are non-autistic people pulling from? And how reliable are their sources? Even someone who has spent a long time around autistic people still doesn't know what it is like to physically be those people, so how close to the character are they? Do they still feel the same kind of connection that these participants feel to their characters, or is there a disconnect because of the difference of neuro-type? These are the type of questions that come up and I believe that there will always be some sort of wall that only lived experience of being that neurotype can get through.

Differences / Similarities Between Characters

There was discussion on how the characters compare to one another, but it was hard to name similarities outside naming the way they are individualised. Duo talks about this similarity and then it talks about how the characters are different because the way the people within the group experience autism is different from one another.

Duo - We think that the most common theme, ultimately, between these characters, is that while they are all Very different from each other conceptually, they were all created based on our own experiences with autism. Things they do, or do not do, or the ways in which they act and their perspective is shown all reflect the ways that we individually experience autism.

Duo – In concert to this, the important differences between the characters are the differences themselves. Being heavily influenced by our own experiences, our characters all ended up being drastically different in tone, setting, appearance, and personality - which we think is very telling as to the ways in which autistic characters are made and portrayed in general. There is no one way to make a character autistic, and there is a great diversity within that. We imagine if the sample group size was larger, we would see this amplified considerably.

Link – i gotta agree with Duo, i think the most common theme between them all is that theyre all based off of our own experiences with autism and how we see the world. theyre all different in how the characters showcase that, but they share the fact that they draw from how the creators experience the world themselves.

Looking at the characters, their main similarity is that they were all designed with personal experiences in mind. It is hard to call upon additional similarities. A few of them are non-human and a couple of them are human, but there aren't too many similarities other than that. And I think that is great! It means that the characters are so different from one another which is something I expected to come out of this.

Duo then goes into the key differences between the characters and how every character had its own highlights. It amplifies that none of the characters are the same.

Duo - ...in a way, every character was a surprise. AJ was very cohesively made and thoroughly put together, with the idea of being a playable character in a theoretical video game in mind; Logan, our own character, was made to fit into any setting or media type easily, yet always be an outsider to it, applying its own cultural understanding to solve problems; Akua is a character with strong cultural background that feels geared toward a narrative setting, and would be a primary character in that setting; Hikari and Oshawott are characters built to exist in a pre-existing video game world (pokemon), but seemingly as characters you the player could encounter, rather than play (as with AJ); Ramsey, similarly, is a character that, while very important to their narrative, is not necessarily the

narrative's POV. Theoretically, these 5 characters could all act in concert with one another and the cast would feel diverse and strong; despite all five characters being autistic, they're not the SAME, to any degree, which is very cool.

Link brought up that the purposes that the characters were designed for or their setting vary as well.

Link - i think some important differences with the characters were how they were all created with different purposes in mind. they still all fit the prompt, but i think its really cool that some were made to be used in any setting while others were made for a specific setting; how some were made a while ago and some were more newly made; just kinda stuff like that. I like that they're so different and yet still similar at the same time.

Link - i think all of the characters surprised me, to be honest, they each surprised me in how they were portrayed, and how detailed they all were in their own ways. I thought it was really cool how different they all were from each other, and yet all related to each other with the prompt. its really cool to see everyone's creativity shine in the various ways people created their characters.

Link calls attention to again the prompt of making an autistic character being the only thing that ties these characters together. These differences are so strong, it is like comparing fruit to one another - only the classification of fruit really ties them together. These characters are their own, and they work for the setting or context they were built for. I think this is an accurate way to look at these characters and that while looking at differences and similarities it is important to understand that looking for these isn't supposed to be a way to reduce their characters to "autistic character with _ difference" but highlight the fact the characters are different, because the participants have their own lived experience.

The characters are different because the people participating are different and bring their own unique experiences. Their only similarity that includes all 5 characters is that they are autistic, which speaks to the vastness of the spectrum and experiences on the spectrum.

Autistic representation should be made by autistic people / with autistic counsel

When asked about practices that would help with making autistic characters, most participants brought up how they believe autistic characters should be made by autistic people or with autistic counsel. There was a large emphasis of non-autistic made representations falling into stereotype.

Maya - I feel as though more of it needs to be made by autistic people. It's often lacklustre and I tend to see myself more in inhuman characters who happen to embody autistic traits instead of characters properly designed to be autistic.

Maya - I feel like there shouldn't necessarily be guidelines but there should be research and consultation with actual autistic people. It's not hard to find people who are willing to help with proper representation as opposed to just relying on flat stereotypes and audience surrogate characters to help stories along.

Alia - I wish there were more autistic actors that got hired to play autistic characters rather than having neurotypical people play an autistic character.

Alia - I would definitely hire an autistic consultant, or consult with employees who are on the spectrum to ensure that the representation is respectful and accurate and not perpetuating any harmful stereotypes. The saying "nothing about us without us" comes to the front of my mind when thinking about how companies should design autistic characters.

Link - i would say that they should at the very least refer to the lived experiences of autistic people rather than just rely on what they think autism looks like. i know its not the same for everybody who has autism, but they should ask people what their experiences are and work off of those. Also don't use autism speaks stuff.

Duo speaks to a focus on autistic perspectives over autistic appearances as a way to navigate making autistic representation, with a focus still on consulting autistic peoples.

Duo - We think there should be a focus on autistic perspectives over just autistic Appearances. When autistic characters are left as something to be reacted-to, not as something to experience or relate to, it begins to feel wrong. As always, these perspectives are best emulated by consulting with those that experience them.

Maya makes a point for autistic people to share their experiences through writing and generating empathy.

Maya - I think more autistic people should share their experiences through their writing. It would create more textured worlds that have more interesting characters and create more empathy for our disorder.

I agree with the participants on their stance on autistic representation being made with autistic counsel or autistic people. This was something that I believed before this study - I can't help but wonder if the way that this study was made and highlighted self representation contributed to the high density of the people who think that representation should be made by the group being represented, or if a majority of the community believe in self-representation and this is reflecting that majority. It could even be both statements being true! Either way, this group advocates for self-representation with the alternative having a more likely potential of falling into stereotypical

representations because they don't have their own lived experience on the spectrum and likely have to rely on stereotypical representation to create their understanding off of.

Tying this back to previous points, I think again about the fact that these characters are very similar to the participants - perhaps this is another reason why autistic representation should be made with autistic people - while someone who is neurotypical can call upon their own experiences and how autistic people interact with them, they do not know what it is like to be an autistic person and cannot fully flesh out how they interact with the world. With the participants calling upon personal experiences and putting those into the characters, the characters become more fleshed out in a way that can not be realised by someone only having an outside experience.

Stereotypes in Autistic Representation

The group delved into autistic representation and stereotypes that they've seen in the media they've consumed. What Link describes seems to fall into the savant sort of representation (Prochnow, 2014). I do not know much about Young Sheldon (Molaro, 2017), but I am curious if it is the same character tropes as Sheldon Cooper in the Big Bang Theory (Lorre, 2007).

Link - that they're intellectual pariahs and are insanely smart about mathematics and logic things (im thinking specifically young sheldon cooper here)

Alia mentions that although Abed from Community is seen as fair representation, there are still issues that can be seen with his character such as being treated like a robot.

Alia – I haven't engaged with much media lately where there are canon autistic characters other than Community, and I do think that while Abed is a reasonably fine representation, I do think that there are heavy stereotypes that are written into his character (I.e. other characters always compare him to a robot and treats him like a robot or infantilize him)

There are some general stereotypes that came up as well. Duo's comment here once again reminds me of Sheldon Cooper from the Big Bang theory (Lorre, 2007), especially when it mentions comedy.

Duo - Smart, inhuman, flat, annoying. Even well meaning, these things can come up, played for comedy at the expense of the character or rooting for the character, regardless.

There was mention of how representations of people with autism who have high support needs seem to be the type that is the only one taken seriously. Maya delves into the feeling of not being the main character of her own story.

Maya - Most autistic representation that's meant to be taken seriously is of high support needs (or perceived high support needs) autistic people who bumble through the world and require an audience surrogate to translate their experience to the viewer (at least in the eye of the writer). A lot of the time we aren't allowed to tell our own stories. It's why, up until recently, I didn't consider myself a main character in my own story. I felt like a side character in someone else's. The weird girl (sort of) and not much more.

I think Maya's comment highlighted something I felt myself and has been echoed within this study more than once. Even when we are the main character, we aren't the main character. And those affects Duo mentioned earlier about fitting into the role given to autistic characters has affected Maya in the form of not feeling like the main character in their own story. I can echo these feelings- I have had feelings around the thought of not being the main character myself and felt like I wasn't supposed to be the one in charge of my life. This hasn't reduced, but instead reformed into something else in my life where instead of feeling as if someone else has to take control, I push myself to take more control as a way to tempt this thing that is "supposed" to control my life instead, egging it on as a way to prove to myself that I am the main character of my story. I didn't realise that this was another way the representation of autistic peoples has affected me until someone else within the group pointed out how it affected them.

These stereotypes cause real harm, and they are perpetuated by surface level stories of autistic experiences without the depth and further explanation that is required for autistic characters not meant to be the butt of the joke or made to be the weird extra character. Autistic people can fit into many different narratives and the stereotypes and the implementation of these representations really paint a one-note picture.

Autism as an Individual Experience

When asked to describe what autism is to Duo, it had a bit of trouble with trying to summarise it. Instead, it gave descriptions of specific experiences it has in its life.

Duo - Autism for us is too big to sum up nicely. it affects and disrupts our speech/scripts, the overlap of senses. understanding and focus, being unable to eat or do things without first knowing exactly how it will proceed. this is all we can think of right now. the way rooms buzz or the way only certain places in them are good to sit or stand. cannot be touched. moving one finger and feeling that movement in your whole body.

Alia further this topic into the idea of not being able to determine how one deems a character who isn't stated as autistic as autistic, because the spectrum is too vast. Friday echoes this when making their character and struggling to capture a "one size fits all" type of character to represent autism.

Alia - It's actually very hard to think of what makes non-canon autistic characters autistic, because I know that each autistic person is different. With Autism being a spectrum there really isn't one way to experience being autistic or a list to check off when you're portraying an autistic person through a character.

Friday - There can't be a one size fits all for representation for any matters so holding myself to that standard is not worthwhile.

Alia noted during the creation process that detachment from this character and how this character experiences the world was impossible from herself. They deemed it as inauthentic to try and portray this character as different to them.

Alia - When tasked with creating an autistic character, it was difficult to separate the character from myself in the beginning and I spent a long time trying to figure out how to do it. I ultimately decided it was best not to detach this character from myself in the end. My experience with autism shapes how I picture an autistic character in my mind. All of their quirks and traits are based off myself and my own experiences. In a way, it feels as if I were to be stereotyping if I tried to design an autistic character who experiences autism differently than I do, and it would not feel like an authentic representation of autism to me. It would feel as if I were catering to society's stereotypical views on what an autistic person is like.

She then noted that this would translate to the traits being different amongst the group's characters as well.

Alia - therefore other autistic characters made by other autistic designers will likely have different traits and quirks and "symptoms" of autism than AJ does, because that's how autism is for people in the real world.

Maya reflects on just how personal their character is to her experiences as an autistic person, but also how they are a character who expresses the same experiences differently due to the fact that they lead a different life.

Maya - They represent what autism is to me yes but maybe not what autism is to everyone with autism. They embody several of the things I have worked hard to overcome but also I wish I could embrace. They have a flat effect to their voice, they tend to wear earplugs and sunglasses to help with sensory needs and while they mask a little, they are often in environments where they deem it unnecessary. They're a character that, because of supernatural strengths, doesn't feel like it's dangerous to be unmasked and more openly autistic than I allow myself to be.

Duo expresses that although a character may be autistic representation, that doesn't always mean it is someone it can relate to.

Duo - It feels good to see characters that are good, genuine and honest representations of autistic perspectives, even if we do not always identify with these characters.

As a wish, Friday spoke to these individual differences being shown in representation to cover more of the spectrum.

Friday - I wish there was variety in autistic people shown as we all are in a spectrum in every sense.

These comments as a whole emphasises to me how important it is to have different forms of representation and encourage autistic counsel to be present when designing these characters. A lot of my participants struggled with the idea of trying to make "THE" autistic character, and instead focused on an autistic character that represents them. It reminds me of a saying I have seen in autistic social media forums that goes "if you've met one person with autism, you've met ONE person with autism". This sentiment speaks to how different everyone who is on the spectrum is. I have personal experience with this, as many people in my friend group identify as autistic and we are all vastly different from one another. I don't represent what autism is to my friends, but we may have overlapping experiences. This is why we need representation of different people on the spectrum, because there isn't a single way to represent us without excluding someone, so building more diverse and nuanced representations like the characters in this paper strives to make representation that speaks to another part of the spectrum that doesn't often get represented. When you work with autistic people, you start to get that individual's understanding of autism that can make a difference in making a character that breaks stereotypical norms.

"Impossible" Not to Design an Autistic Character

It was found that there was difficulty in imagining making a character that was not autistic, because it is not something that relates to the lived experiences of the participants.

Duo - I do not think it would be possible for us to make a character that was not autistic. It shares our flatter affect, inability to read others, strange expressions, lack of ability to grasp at emotion, need for routine, for stims, specific diet, time-blindness, emotional irregularity, sensory-seeking behavior, and so on.

Duo - Difficult to say, because, again, it would be very difficult for us to design a character that was not autistic. We certainly would not have been able to do it during the time of this study. It feels more natural for us to make a character that is autistic.

Maya noted that they realise a lot of their characters not designed to be autistic may still come off as autistic.

Maya - [In reference to character creation] It felt good. I hope to make more (I'm sure a lot of my characters read autistic because I myself am autistic but I hope to make more characters who are intentionally designed to be that way)

But there was also a feeling of indifference with Friday between making an autistic character and a neurotypical character.

Friday - It doesn't feel different from creating an NT character but I suppose that's a matter of perspective for me and my lived experiences.

It makes sense that it is hard to make a character who isn't autistic, because we don't have the lived experience of someone who isn't autistic. I am continually surprised by the neurotypical world- I find that it is hard to navigate and comes with so much invisible red tape. The most common question I ask my neurotypical friends is "Why not just ask?" because one thing I have noticed is asking seems to be a weird thing to do when it comes to social interactions. I imagine that's similar for a neurotypical person with the autistic world. I find comfort and ease navigating the friend groups I have, because we have our own way of understanding one another. I look back on the characters I have made for projects in the past and can't see any one of them passing as neurotypical, or what that even entails.

I have no way of imagining what it is like to be neurotypical. I describe autism as a constant go go in your brain - it can be exhausting. I can't imagine what it'd be like to stop, because my brain has never stopped. I can't fathom what it'd be like to have some peace and quiet in my head, so it's hard to imagine a character like that. The reverse must also be true- non-autistic people will not know what it's like to be autistic and that is important to notice, and why I believe my participants advocate for self-representation.

Positive Emotions and Care

This group expressed a lot of positive emotions to one another and demonstrated a great amount of care and happiness with one another, fostering a group full of care. They would wish me well as I wished them well, and the sharing of resources between the participants organically showed further the comfort levels and how much they wanted to work together.

The following is a dialogue pulled from the chatrooms demonstrating that care amongst the creators. It was just after everyone's characters were revealed, and it was a lovely conversation to witness.

Duo - we just wanted to say: we love everyone's characters that we have seen :)

Link - yeah!! me too!! its so cool seeing how everyone approached the creation differently, and went about expressing themselves and their experiences!!

Alia - I do love seeing how everyone's characters turned out, and especially the differences in our design processes! And the differences in art too!!!!!!! Everyone is so talented hehehehe

Duo - We love your description of your character's sensory experiences and special interest. we may think on this and add some details like this to our own character description

Link - thank you so much duo!

Duo - We really enjoyed reading your character breakdown also, it is very thorough and comprehensive! Very cool!!

Alia - Thank you!!... I think your art is amazing! I really enjoyed looking at what you created visually. I also am a big fan of Ramsey as you know @Maya hehehe ♥ I loved seeing all the new work you've done for them!!

Maya - I'm happy you like them, I've worked hard on them

Duo - It is very cool to see another older character used for this study, as we have also had Logan for many years. Ramsey is really neat, we love your art of them also!

Maya - Thank you! I love drawing them, they're very close to my heart

In the end, these participants are people. This part really demonstrated how they cared for one another. It wasn't just about the project, but building this community to have these conversations and I am really happy and proud of the people who participated and their willingness to be open not only with me, but with one another about their experiences. It made me feel like I was not alone, and I would hope they felt the same.

Stress / Negative Emotions During the Process

Although the group shared these positive emotions, there were also a few negative emotions that should be highlighted. Alia and Friday both express the amount of responsibility or pressure that came with this study and the task to make a character.

Alia - I felt good about [creating an autistic character], but like it was also a big responsibility.

Friday - I found that I was rather hung up on making something that at least one person would hypothetically find they could relate to or embody which ended up putting a lot of pressure on myself.

Friday and Link shared sentiments of wanting to do good within this study, and this translated to feelings of being overwhelmed or hesitant to participate. Link in particular describes a feeling of potentially “doing it wrong”.

Friday – [About character creation] Though my thoughts process could be broken down into a series of overthinking spirals that condense to; “I want to do a good job.”

Link - I will say I was a little surprised at how hesitant I felt adding some autistic characteristics because I wanted to make sure I wasn't doing it wrong and that I wasn't being a phoney.

Friday – I was a bit overwhelmed myself with trying to make sure I create something well (purely in my own head) but I enjoy her.

There were further feelings of “not being autistic enough” because of additional circumstances, such as how recent a diagnosis was or a lack of a formal diagnosis expressed amongst some of the study participants.

Link - truthfully this is my first time intentionally making an autistic character, especially since i have started identifying as somewhere on the autistic spectrum

Link - i feel a little worried that i feel like im a faker for calling myself autistic when i think i'm the only one without an official diagnosis, but its nice to know i still share some similar experiences with what i consider an autistic character.

Alia - I only recently found out I am autistic and sometimes I worry that I'm not autistic “enough” to be someone who can talk about representation in this way.

Although the group and I believe autistic representation should be made with counsel or with people with autism, it's important to highlight the heaviness that can come with doing this work. Creating characters from your own experiences is a very nerve wracking thing because you're putting yourself into the work. This is scary because if someone says they don't like your character, it is easy to assume that - by extension - they do not like you because your character IS you in a way. This link can be dangerous to the creators of the character, and is echoed in the participants wanting to do it “right” even though I specify there is no right way to do this work. I think the fact that the participants want to do this work “right” amplifies the care they have for this project.

This group was a mix of undiagnosed and diagnosed individuals who discovered they were autistic at different points of their life. I do hope that none of them felt like this feeling of being “not autistic enough” was amplified through the study, but one has to wonder where this feeling stems from. Link mentions being nervous because they thought they were the only one without an unofficial diagnosis, and Alia had only discovered in recent years that they were autistic. These two members expressed concerns about being “fake” or “not autistic enough” within their comments. These feelings can come from underrepresentation. When discovering one is autistic, finding reference through representation can be daunting because there is little representation of the entire spectrum, and thus may make people not realise the entire spectrum exists. This is similar to what has happened with the underrepresentation on Indigenous peoples (Leavitt et al, 2015). This impact is trying to fit yourself into the representation that does exist and when you can't, the issue goes into the thought of perhaps the label is incorrect. This is a moment where we are witnessing the effects of underrepresentation having an effect, and on top of this the impact of gatekeeping a label behind a diagnosis. Diagnosis is a very hard process to go through and can cost thousands of dollars depending on the routes you go through. This is not feasible for everyone to receive, yet there is discourse within the autistic community on whether or not someone who is not diagnosed can call themselves autistic.

I personally know the feelings that Alia, Friday and Link all touch on. They're things I struggle with as well - A lot of thought went into how this study was set up because I “wanted to do a good job” and a lack of strict guidelines while freeing was also quite the nightmare for me. I had no way to judge if I did a good job, and realised that I wouldn't know until after completing the work and working with these people. I have a lot of reflecting to do. In addition, I have constantly asked myself if I was autistic enough. As a late diagnosed autistic individual, I had my own understanding of what autism was based on the media I consumed told me what it meant to be autistic. When my friend first told me I was probably autistic, I was shocked because I didn't think I fit into the autistic label at all. Over time I have come to accept that I am autistic. Instead of thinking I am not autistic enough, I have shifted the thought to be “I am not the type of autistic that is expected”. This way I am still validating that I am in fact autistic, but also justifying why the expectation versus reality may be different. This is a struggle to change, for the current understanding of autism is so binary that it is hard to not compare yourself to it. I hope that this shift can become more common so that one day, people like Alia, Duo, Friday, Link, Maya and I don't even have to think of the dissonance between expectation or reality and don't have thoughts relating to being “autistic enough” because there isn't any dissonance.

This is why this study exists - If we continue to reduce the dissonance with more diverse and nuanced representation, we can create a setting where autistic people and especially not diagnosed autistic people feel confident in saying they are autistic because they are being represented and validated.

Additional Comments

There were a couple of comments made that did not fit into a larger category but belong and should be recognized as important parts of this study.

Friday points out that their favourite part of their character is something very small, and contributed to how realistic their character was to them. I think it's important to recognize the little characteristics that really bring these characters to life and give them more meaning.

Friday – [favourite part of character] the idea that she picked off the tails of her brows was charming to me bc of how real it was

Duo spoke to it's experience of interacting with mainstream media.

Duo - we see a lot of ableist language being used often and with comedic intent in a lot of mainstream media.

This sort of content is still all over mainstream and social media. I still get items on my social media discovery section that use negative and ableist language for the sake of a joke, or to call out something bad on the internet.

Duo brought up that for it, the hardest part of telling people about autistic experiences is explaining itself.

Duo - we find it difficult to explain most things without space to ramble aimlessly. we dont like to explain ourself as it is very taxing, so i would say the explanation itself is the hardest part. making sense of what we are experiencing and turning it into words.

I can relate to this. When explaining oneself, you can't simply state that something is an issue because usually if you have an issue with it the non-autistic people do not see why there is an issue. This comes up a lot when talking about scheduling with me. I need a lot of beforehand notice and don't like it when plans change, even if the change would be better for the people who I am scheduling with. This causes conflict, and I find it hard to explain oneself and the justifying of the experience I am going through. I wonder if there is a way to avoid these explanations and reach understanding without feeling the need to ramble or justify as it is a taxing experience.

And even further, Duo mentions some wishes for autistic representation to start to include verbal stims.

Duo - we feel, for many practical reasons, that speech disruptions and verbal stims often form the least-represented parts of autism. In some ways, this can make sense - speaking from personal experience, it is frustrating for all parties to attempt to communicate something and, despite great effort and energy expended, fail to. Stutters, tics, volume

modulation, accents, cadence or unusual rhythm that bring diversity and color to an autistic vocal experience do not land easily in a narrative where an audience expects a story they can understand.

Reflecting on it, there is only one case of unusual rhythm being represented in media with an autistic character and that is Shawn Murphy from *The Good Doctor* (Highmore & Williamson, 2017). These parts of autism don't get represented as often, but appear often within my groups. Something interesting within my friend groups is that we find verbal stims to be something that gets passed around. If I start saying something as a verbal stim because it feels good when I say it, it is likely that my friends will pick up these phrases and also repeat them back to me. This creates an endless echo between us, which brings great joy to all of us, because it is a moment that we are expressing ourselves in a safe and fun way. Sometimes they can be frustrating - sometimes the verbal stimulation is something you cannot stop saying or else you are uncomfortable, or your cadence seems to deter people from talking to you. Either way, like Duo points out I can't think of many ways these are represented and I was wondering why we don't see it in the media.

Most forms of media seem to have the expectation that every line of dialogue that is produced needs to be streamlined. It makes predicting most TV shows quite simple, because there are little red herrings or other bits given to you than what is necessary. Removing things like stutters, tics and echos like my roommates and I is another example of "streamlining" this media, but it also removes important representation. The only times I imagine a show would show these things is when it is heavily needed for the plot and then not talked about again, meant to be a moment of education for the main characters, or is so small that it can be glossed over without a second thought.

I wonder if we can reduce this "streamlining" in our media, and how we can do that. Perhaps that's where games can really shine. In games, unlike TV or movies, there are ways to make certain interactions optional, or go at whatever pace the player wants. Time is less relevant in story games because the player controls how fast the text goes by most of the time, where TV and movies are on a strict deadline of however long their runtime is meant to be. But what does it say if we implement these sorts of representations and give players the chance to skip over or avoid these representations as well? Who is the representation really for?

Reflections

Returning to my research question: How might the autistic community be represented in video games in terms of character design through self-representation? I think that I have danced around the topic a lot with my participants, especially in conversations about self-representation, character design and autistic representation.

With the results of the research, some items appear to be contextual or individualised while other items seem to have overlap, just like autism itself. There is this overarching narrative that the experience and the representation of autism is highly dependent on the people making the representation and the context the representation is made in.

This contextual component of representation was especially evident in discussions about intended autistic representation and autistic interpretation. There were discussions on whether autistic representation should include the explicit mention of autism, and there was a varied response. Duo brought up the point that if it is made well and is communicated through other language, actions and interactions, the direct statement of a character being autistic might not be needed. This leaves it up to viewer's interpretation and thus may lead to less people being aware of this representation, but Duo brings up that stating it explicitly within the form of media can bring up issues of it falling onto stereotypes once it is stated. In contrast, Maya mentioned that if a character isn't explicitly said to be autistic, many people will choose to ignore this representation because the media did not state it explicitly. But explicit stating of autism in a media needs to be organic, and thus the form of media needs to have some sort of moment where it naturally comes up, which is not always worked into the content.

Each participant created their own context for their character - Alia developed a general idea of game mechanics such as solving puzzles, lying and cheating. Duo had an entire species and context including stories and culture already designed for Logan and was more concerned about adjusting Logan to the current context than developing a new one. Friday created context through choosing to develop their character for the world they were already building and choosing to pull from the Ghanaian heritage. Link chose to build context around the Pokemon Concierge (The Pokemon Company, 2023) universe and built the character within the rules of that universe. Maya had their character who has been featured in stories they've made with its own context and Duo adjusted their character to the context of this research rather than developing their own context.

The fact that these characters came from different contexts and were developed differently from one another led into the vast differences between one another. While the characters have overlapping experiences - such as "special interests" where they know a lot about a particular topic or are drawn to those topics, or "sensory issues" that they experience that the average

non-autistic person does not have to process -these characters don't have overlap in what those special interests are or the sensory issues they face. Their experiences, much like the experiences of the participants, are completely unique and have found their own ways to exist within the world they are a part of.

Each participant also discussed that the characters that they've made were extensions of themselves in many different ways, such as a way to process certain emotions and sensations, to imagine themselves experiencing sensations, or as a self-insert into a universe. These characters are not just fictional characters, but bits of the participants who joined this research study. There was little ability to detach oneself from one's character, a point that Alia highlighted as they described making their character and their struggle to separate themselves from AJ and the common pitfalls they could fall into. Maya also has strong emotional attachment to Ramsey and how personal Ramsey's experiences are to Maya having a strong impact on their emotions. These make the characters more realistic, they are built with bits of human embedded in them as the representations are based on experience rather than stereotypes. This potentially happens for other characters that the group develops as well - Duo because it uses its own experiences to make a character describes it being hard to imagine making a character who isn't autistic. Maya is aware that most of their characters may come off as autistic because she is autistic. These characters and their contexts speak to the fact that they need to be made by autistic people. I think that these characters if designed by someone non-autistic would not have been done justice, or even thought of. I have said it multiple times- these characters are not just characters but also extensions of each person who made them. This adds depth to the character that you cannot get from someone detached from their work or making a character that has a disability that the person does not have.

I kept returning to the question of "who is this representation for?" while working on this project. If we make representation implicit or optional, those who don't want to seek out further understanding about people with autism do not learn about them, yet they are the group of people who should be learning about them because the representation that is the more noticeable and explicit representation of autism is also mostly born of stereotype and designed for a non autistic audience. I wonder if there can be a representation made that pleases both an autistic and non-autistic audience fully - one that doesn't sound too forced or out of place, explores lesser talked about autism traits, and still captures a non-autistic audience.

I then thought about "does autistic representation need to be made for non-autistic audiences?" and this sat uncomfortably with me, because I kept thinking that it really needed to be. Not because we need to cater to a non-autistic audience, per se, but because the more we make representation for a group that needs it and cater it specifically to the group being represented, the more we could potentially alienate people who want to learn and cause a division. I think that it isn't a clear line at all - we need representation made for autistic audience, because it provides

validation and community to those on the spectrum, but we also need autistic representation for those who are not on the spectrum because if they don't see these figures in the media it is likely that this group will not seek information about autism in their own time. Is there a way to satisfy both groups with one form of representation? I don't think that is an answer to easily come across, but instead building a diverse set of casts over time can start to approach this dynamic.

Video games have a unique chance to get viewers involved through player agency. The fact that these characters are so fleshed out makes it so interacting with them or as them would be rich and in depth. The conversations that you could have with any one of these characters within their context would provide so much information, and playing as these characters would bring up unique abilities and challenges that speaks to who they are as a person. This addition of player agency could also start filling in the gaps that seem to appear when thinking of making a representation for an autistic audience versus making a representation for a non-autistic audience. It also allows players to take breaks and explore as much as they are comfortable with a topic, and allows them an active role in their potential education.

In addition, the fact that these characters can be player characters and in some cases were player characters were interesting to me. It made me think about what playing with these characters would be like. What would change between playing as a neurotypical character and an autistic character? Should it change? How would it affect the sensory experience? How would it affect any sort of social interaction? If we design games to talk about social interaction as an autistic person, how would we avoid the pitfalls that can come with representing conversations between autistic and non-autistic people? It's a very thin line, and I believe the only way we can start to represent these aspects of being on the autistic spectrum is through games made with or by autistic people.

This research has brought me great joy to do and has opened my eyes to my biases. I had a lot of assumptions I had made about my own experience being universal, but I now realise that the talk about autistic representation goes far beyond my own viewpoint. The research I had set out to do, about making autistic non-playable characters, made a lot of assumptions and I am glad that my participants seemed to not interact with that part of the prompt. We deserve to be the main characters of stories. We can make "typical" stories interesting in a brand new light. Our stories deserve to be interactable.

Through the exploratory nature of this project, the work starts to expand the conversation on autistic representation and autistic self-representation in video games. The characters here and the conversations point to individualised and unique ways of making autistic characters that depend on the context and the person making the representation. I believe that this research actively starts to explore and expand on the question I asked, and also defy some of the implications that the question has in a way that is refreshing.

As a final and more personal note about my study, I wanted to comment on how this research made me feel. When I was first getting into these topics surrounding autistic representation, I felt like I was alone on an island. Not necessarily that nobody else thought like me, but rather that the other people who were talking about representation and autism were too far away. Through this study a lot of my beliefs were challenged or affirmed, and a great amount of comfort came from this. I didn't feel alone in the conversation anymore, and it has built confidence in me to talk about how these conversations do matter. I understand that a lot of people may not care about this cause, but for the people who do and want to see this change I hope this research uplifts them the same way I feel uplifted.

Limitations

There were a few limitations to the study. The first one is that this study was short, online and asynchronous. Although this made the research more accessible to the group who participated, it removed additional collaborative experiences that could have come out from the study. Better dialogue about autistic representation could have been produced in a synchronous scenario, because participants would know when to expect a response (near instantaneous) and be able to have more of a back and forth. The study being online also provided participants the ability to interact with one another despite being a great distance apart from one another, but also removed key interactions that having this study in person would enhance. The participants had a total of two weeks, which to some was not enough time. This was expressed in the feedback and more time would help the participants gather more of their thoughts.

In addition, there were several channels that refused to have the research advertised within them, so the study was limited to smaller and more personal channels and whomever the people on the servers I advertised the research on felt comfortable advertising to. There were two larger Discord servers that were asked, but both said no - Neuroqueer, a server dedicated to people who were neurodivergent and LGBTQ+, refused to have any research advertised because they were worried about it infringing on the "safe space". The other server, titled Aspiefriends, said yes, however said I could not advertise collecting any sort of personal information including discord and email information and I could not move forward with the advertising without those items. I do not blame them- although I attempted to build rapport, the word "research" comes with its own implications and fears, and it is the job of the admin to keep the people on these servers safe.

A further limitation was myself - I struggled to figure out who I was in the process. I did not want to impose myself too hard in case it made others uncomfortable, but also knew I had to prompt further discussion. I didn't know how personal I could be with the participants either. A lack of guidelines made a lot of invisible red tape as I tried to conform to what I thought research

was, while also trying to dismantle my view of research as a whole. This made me feel distant from the participants while they were talking, and I wonder if this had an effect on how the participants saw me and how they could use the space to express themselves.

Future Works

One part of the project that I did not get to complete within the timeframe was a video essay component. The intention behind this was to make this document accessible through video essay format for a larger audience, to help those who may not know about this research learn about it and contribute to the conversation. It will have the same title as this paper and would feature me talking to the camera. I plan to continue this work after the completion of this paper.

In the future, I hope to continue this research again. This sort of character development is just scratching the surface, and I would like to explore more on how these characters would interact with the player character or avatar, and what that relationship between the person engaging with a game and this character would be.

There are some questions I pulled away from the research that I would hope to expand on more in the future. I have compiled a list here:

- What is unique to the video game medium that makes representation so important?
 - How does player agency play into representation?
- What is autistic representation for different crowds look like?
- What would it look like if we put these characters into a game?
- What would a game with an autistic main character look like? How would autism influence the mechanics, if there were changes to be made?
- How can we navigate the idea of stating a character is autistic explicitly or implicitly?
- How would verbal stims make their way into representation in greater media?
- How valid is autistic interpretation (and to whom is it valid or invalid to)? What are the goods and harms?

Further, reflecting on how this project was done, I would want to change the way things are done. I think this research would benefit from being even less formal, and in a more relaxed and casual state so that participants felt more confident and were willing to be casual about the work. Further, I realise now that the set up of the platform we used may have implied certain ways of navigating the space. In the future, building with the community from the ground up the space that we talk within would be great for participant agency.

I would also want to expand the scope of this research and gather more participants to join in creating and exploring autistic representation in games. This would include making more characters, but also going into deeper conversations about representation.

Finally, I want to encourage autistic game designers to start making games that feature autistic characters and experiences, and build a community where autistic game designers can collaborate and learn from one another in an encouraging and safe atmosphere.

Conclusion

The showcase of these characters exemplifies the importance of self-representation and autistic-made representation in media- including video games. We are at the point of our media consumption where we need to be critical of the games we play and what the inclusion or exclusion of certain characters and narratives say. I am not trying to say that every narrative should include an autistic character, but from this research we can recognize that autistic characters can add a lot of interesting substance to the unique worlds that games build and we should encourage these narratives to come forth where they may appear organically.

The current representation of autistic individuals lacks nuance and is often made without autistic people in the process. What we can move towards as creators and game designers is this inclusion of autistic voice and agency in the representation we make, and to avoid the pitfalls of making a character that is infantilized or used as a way to make the non-autistic cast and audience feel better about themselves. The way we can do this is employ autistic people to make the representation we need in our games.

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Appendixes

Appendix A: Questionnaires & Interview Scripts

Screening Form (Online Form)

This set of questions was used for participant selection.

“This set of activities is centred around talking about and creating characters for video games with autistic representation in mind. There will be group discussions, using twine to create dialogue and sharing our characters with one another and these characters and observations will be what the project’s end product consists of. This is not a completely anonymous project that focuses on crediting your participation by name or by alias.

The project will be based out of Toronto, Ontario, Canada (Eastern Standard Time) and will have options to participate in person or online on discord. “

1. Name
2. Pronouns
3. Are you over the age of 18?
4. Formal diagnosis with autism is not required for this study. However, your relationship with diagnosis may be important to the data. How would you describe your relationship with formal diagnosis? [I have been formally diagnosed, I am in the process of diagnosis, I have not been formally diagnosed, I was denied diagnosis due to other circumstances, other]
5. Location (Country + Province / Territory / State)
6. Email address
7. Preferred Method of Participation (online or in person)
8. Do you like video games? What are your favourites?
9. Why are you interested in participating?

Intake Questionnaire (Online Form)

This set of questions were sent to participants who signed the consent form and intended to participate.

1. Your name
2. Your alias (optional)
3. Have you ever designed a character before? What for (for fun, for TTRPGS like dungeons and dragons, etc)?
4. Are there any accommodations that you wish to bring up now that you may need?
5. How would you like to be credited for your work? Are there any links to social media or other platforms you would like to be included in your credit?

Appendix B: Discord Prompts

Discord Discussion Prompts

Conversation prompts for Discord for community discussion over the course of the activities to guide conversation. These are just guiding prompts and may not all be used if the participants take the conversation over themselves. Participants are allowed to use memes to communicate.

1. What makes a character autistic?
 - a. What are your favourite examples of characters that are autistic (canon or not)?
 - b. What makes non-canon autistic characters autistic?
2. How do you think the media does in portraying autistic characters?
 - a. Are there any stereotypes that arise?
 - b. What language is used? What language do you think should be used?
 - c. Do you have any examples of autistic characters in media (movies or shows, games)? How do you feel about them?
 - d. Are there any parts of autism that haven't been represented in media? If so, what are they?
 - e. Is there a difference designing autistic characters for non-autistic individuals than designing autistic characters for the autistic community? What is that difference?
3. Is it important to state outright that a character is autistic or not?
 - a. How would you like it to be stated if so? (in the media, outside the media, explicitly or implicitly)
4. How does being autistic affect your daily life?
 - a. What is being autistic mean to you?
 - b. What is the hardest part of autism to explain to others?

Discord Presentation Prompts

Prompts to help presenters determine what to talk about their character. They can also use the Post-Event Survey to help them determine what they want to present.

- Briefly describe what you made and why.
- What was your creative process?
- How does this character interact with the player?
- What kind of world do you imagine this character in?
- What did you want to capture most with your character / if someone interacting with your character were to pull one message away from your character, what would you want it to be?

Post-event survey (Online Form)

To be completed once by each participant at the end of their character creation but before the presentation of characters and the final product is produced. This is also to help them determine what is important to present in their presentations if they are struggling.

1. Name / Alias
2. How do you feel about your character?
 - a. How did you design your character?
 - b. What is your favourite part of your character?
 - c. If you had more time to work on your character, what would you change?
 - d. Do you feel a connection to your character? What is your relationship to your character?
3. How do you feel about autistic representation?
 - a. Do you feel like your character represents some of or all aspects of what autism is to you? How?
 - b. What did it feel like to design an autistic character?
 - c. How should companies design autistic characters (in your opinion)? Are there any guidelines you would put on designing an autistic character?
 - d. Are there any stereotypes you see emerging in autistic representation?
4. How are you feeling after creating the character?
 - a. Did you have any surprising emotions or thoughts while working on this project?
 - b. How did you feel designing a character that was intentionally autistic?
5. Has how you want to be credited changed since before participating? If so, please inform me below how you would like to change how you are credited.
6. Any final thoughts at this point?

Post-presentation and discussion (Discussion prompts)

- What did you think were common themes with the characters?
 - What did you think were important differences with the characters?
 - Did any characters surprise you? If so, what character and why?
 - How did you feel after presenting your character?
 - How did you confront having to design specifically an autistic character?
 - Did you have any strategies?
 - Do you have any last comments you wish to make on this process?
 - On autistic representation?
 - On representation in video games?
-
- Screening Questionnaire
 - Prompts
 - Discord setup
 - Images with alt text

Appendix C: Initial Information Post

Hello! And Welcome!

If you are reading this then welcome to Self Impression: Exploration of Autistic Representation in Video Games through Self Advocacy!

If you currently aren't assigned any roles, then most of the discord is unavailable to you right now. Before you are given a role, please adjust your name to be your first name or the alias you chose. Once you're ready to be formally put into the discord, please react to this message with any reaction.

There are a few roles that you can have- Group roles and Pronoun roles. To request specific pronoun roles, please message me but when I assign you a group role I will also be assigning your pronoun roles that you put on your survey.

Please don't take screenshots or other items outside of the discord. This isn't because this is top secret, but for privacy sake taking things outside this discord can be unsafe for other Participants.

Some notes on how this discord is set up:

#schedule Has the rough schedule for all groups, and the proposed topics within the meetings!

#discussion-topics Has the questions that I am proposing are discussed, just so you know what is going to be coming up.

#resources is where you can find resources for mental health, twine, and other character creation resources.

Your group has certain chatrooms to discuss the topics we will be going over during this study.

You will be in a group of 3-5 people (just to make it easier to contribute to a smaller group than a larger group that may cause anxiety). You also have some collaborative chat rooms in case you want to work with others on your characters!

Each participant will be assigned their own room to put the items they make for their characters (these chats will be what others look at eventually to see your characters).

The all participants chats are for everyone. Most of the time this will be for chatting with others. This can include mingling! Most of your participation is going to be within your group. In the end

we will open the created character chats up to all groups to take a peek and add commentary!

Please try to refrain from deleting comments. if you want something removed from the study, instead edit the message use the strikethrough like this !

to use the strike through, you need to use two ~ on either side of the text. ~~like this~~

You are free to use any form of expression you see fit while participating. This can include images, gifs, informal language, voice notes etc. Just try to be mindful of the other participants (for example, please no flashing gifs that may hurt other's eyes, or harmful words, inside jokes that may go over other's heads, etc.).

In addition, you are free to back away from these talks whenever you need to. There will be times when the group is "scheduled" to talk about certain topics, however you can also talk about the topics outside these times. The main purpose of the schedule is to allow for better collaboration and discussion, and also to give structure to this project. The last day for contributions will be January 20th.

Some final and more personal notes: There is no expectation of you to create or talk a certain

way. This project does not have a hypothesis that I am trying to prove, and you are an expert in your experience and that is very very valuable. Please if you wish, question what we are talking about, call out issues with questions if you see it and lend your knowledge to all of us. It's totally okay to not agree with the group or have a different viewpoint. We are not trying to reach any sort of consensus, we are just here to talk and explore the topic. Take care of yourself, step away if you need it, and if you at any point no longer want to participate, let me know and I will start the process of removing your contributions as safely as I can.

Most of all: Be you, because you are great!

Thank you,

Nedward

Appendix D: Initial Resource Post:

Resources

Mental Health

Please remember to take some time for yourself. Here are some articles specifically on autistic mental health:

<https://neuroclastic.com/safe-and-inclusive-advocacy-in-the-autistic-community-unique-minds-and-challenges/>

<https://neuroclastic.com/ask-myk-on-self-love-in-an-ableist-world/>

Here is another resource about mental health in general.

<https://www.mind.org.uk/need-urgent-help/what-can-i-do-to-help-myself-cope/relaxing-and-calming-exercises/>

Twine

Twine is a user-friendly text based game maker that you can use to model a conversation with your character! It is optional to use. To find the browser version or the downloadable version, please check out this link:

<https://twinery.org>

There is a user manual for twine found here: <https://twine2.neocities.org>

Here is a youtube video on how to use twine as a beginner! There are a few tutorials like this on youtube <https://www.youtube.com/watch?v=lh39SPETMM>

I hope to also do a stream of me working through twine and recording it for you to access.

Character Creation

If you're feeling stuck, feel free to check some of these resources! Most of them are from a writer's perspective. You don't have to use these to make your characters, but can give more ideas on what you could add to your characters.

Character template: <https://www.dabblewriter.com/articles/character-template>

Character generators:

<https://writershelpingwriters.net/2019/04/5-character-tools-you-absolutely-need-to-know/>

More character sheets and character development resources:

<https://fuckyeahcharacterdevelopment.tumblr.com/post/50825149893/character-sheets-and-character-creation>

<http://www.sandragulland.com/developing-character-resources/>

Character questionnaire: <https://www.novel-software.com/character-questionnaire/>

These are picrews! Picrew is an image making platform. These picrews have been chosen out because of their standards for sharing (they allow commercial use), and any picrew used to make a character will be credited in the final presentation.

https://picrew.me/en/image_maker/2212965

https://picrew.me/en/image_maker/701767

https://picrew.me/en/image_maker/100365

https://picrew.me/en/image_maker/59454

https://picrew.me/en/image_maker/2139284

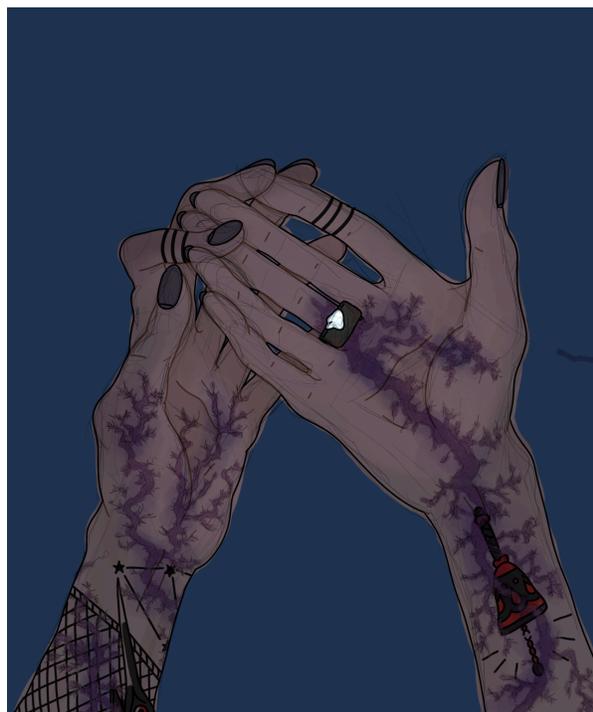
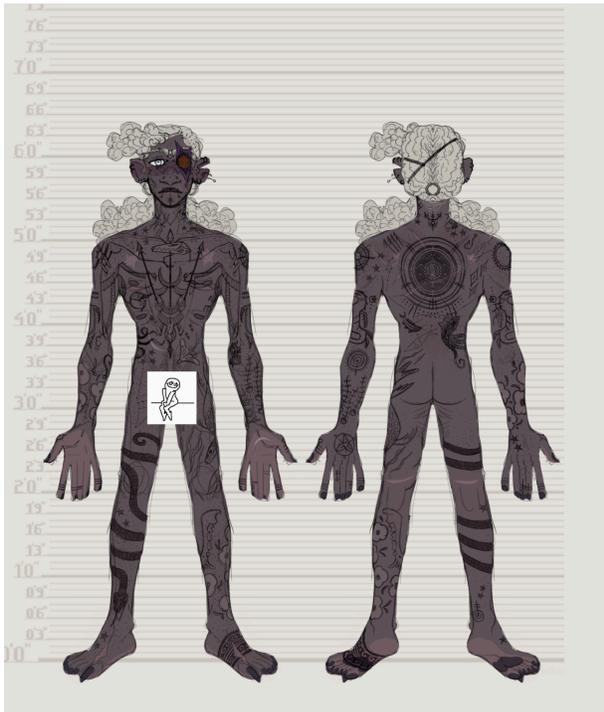
https://picrew.me/en/image_maker/2225637

https://picrew.me/en/image_maker/1073715

https://picrew.me/en/image_maker/188948

Appendix E: Duo Additional Images

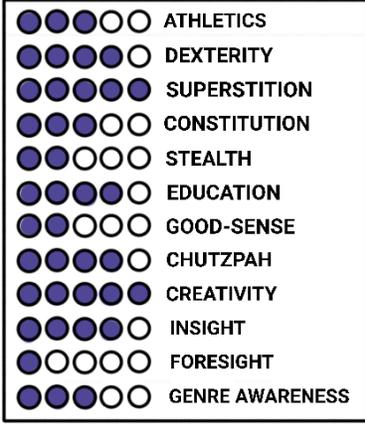
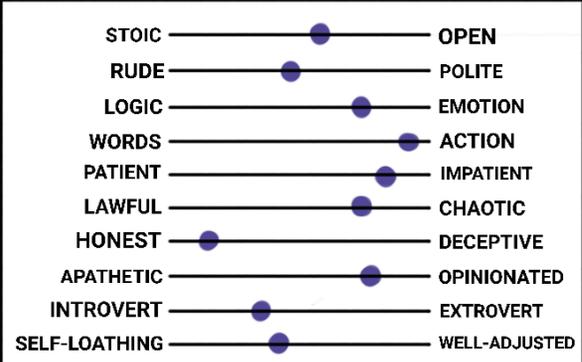
There were several additional images provided by Duo.





loQ'a'
or
Logan

NAME: _____
 HEIGHT/WEIGHT: 6'3" 131 lbs
 AGE: ~25, Relative GENDER: agenders it/its
 SPECIES: ghotQa' / h?man of the Domicile
 CLASS/JOB: _____



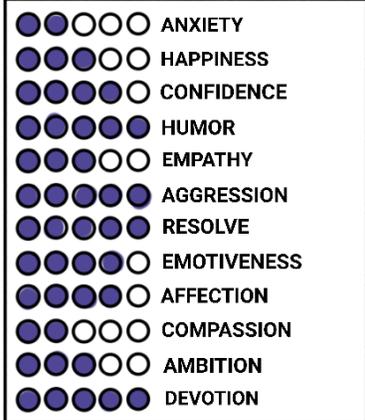
HOMETOWN: juh'hagh / Dragonhome

CULTURAL IDENTITY: chuqwi / Shredder

DEITY: Micthua, M

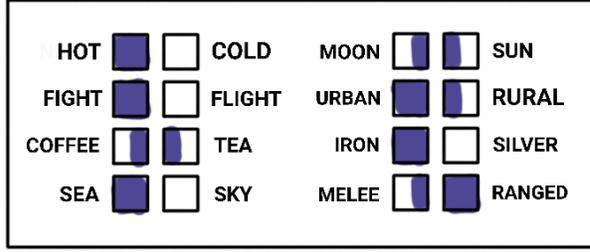
NATURAL HABITAT: Volcanic Island

LOVE INTEREST(S): many (Olin currently)
 SEXUALITY: polysexual
 CLOSEST ALLY(S): Chorus, Ariet, Thurons, Foxel
 GREATEST ENEMY(S): Woura



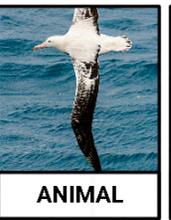
NARRATIVE THEME: loss

LEIMOTIF: "you're not supposed to be here."



KEY ITEMS:
 - alleywitch's Carpetbag
 - Logan's Lucky Marbles
 - Medicine Box
 - thawDi's cane
 - DaneqIn's scarf
 - I'QaHr's coat
 - Fe'arghud's Harpoongun

eye of the 

Appendix F: Duo's Game

Duo's Twine Game was included as an additional file. This game can be played with a browser.

Title: HeghlaHbe __yIHem-loQ_a_wI_

Description: Duo's Twine Game, as described in Duo's character section (see figure 7.4 for appearance of game upon opening).

Date: created January 10th, uploaded April 30th

File Type: .html

Appendix G: Maya Additional Images

There were several additional images provided by Maya.

