

**REPRESENTING AUTISM IN TELEVISION: PERPETUATING THE
STEREOTYPES**

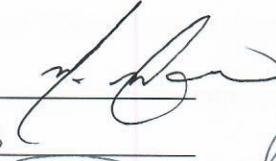
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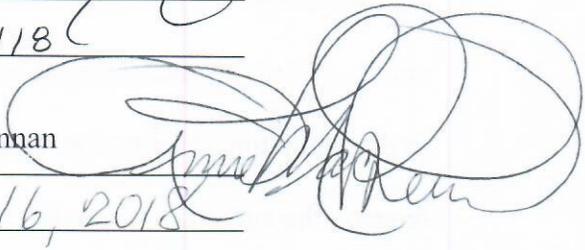
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Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that is increasing in prevalence in North America. The Centres for Disease Control and Prevention (2018) notes that in 2000 the rate of diagnosis was 1 in 150, in 2008 the rate was 1 in 88 and in 2014 the rate increased to 1 in 59. Some traits and needs of persons with autism may include, deficits in verbal and nonverbal communication, difficulties understanding and responding to social situations, restrictive interests and hyper- or hyposensitivity. With the increased rates of diagnosis there comes a need for greater social awareness. This paper will discuss how the media plays a factor in disseminating information about ASD and the implications that portraying stereotypes may have on the autism community.

The focus of this paper will be guided by the following questions:

- I. Do TV shows in North America perpetuate stereotypes of ASD?
- II. If yes, how do they maintain the stereotypes in their portrayal of characters with ASD?
- III. If no, how do their characters with ASD work against the stereotypes of ASD?

This paper will also address a secondary question. Using descriptive statistics based on the characters and TV shows, are there any trends in the portrayal of the stereotypes? For example, are there any links between certain stereotyped characteristics and the individual's gender or age?

In some real life scenarios, the stereotypes discussed in this paper are true to an individual with ASD. This paper does not intend to refute these completely, rather, the aim is to argue for a more inclusive and encompassing depiction of people with ASD in the media. Perpetuating these

stereotypes time and time again will reinforce a singular representation of ASD and neglect to take into consideration other characteristics may exist.

Review of Literature

Autism continues to be a topic worthy of discussion as the rate of diagnosis grows. There is not one common description of autism or how it is developed (O'Dell, Bertilsdotter Rosqvist, Ortega, Brownlow and Orsini, 2016). As many individuals may not interact or know they are interacting with someone with autism, other sources of information are critical in shaping their attitudes towards this disability. The media is influential in educating their audience and can be a useful tool in increasing awareness about autism (Conn and Bhugra, 2012; Draaisma, 2009; Schwartz et al., 2010; Holton, 2013). More public awareness of autism is implied due to the growing number of films that focus on a character with autism (Conn and Bhugra, 2012). There has been an increase in autism depictions in literature and film in North America (Rohr, 2015) assessing these portrayals crucial.

Disability studies scholars continue to note that although the portrayal of autism in media is improving, there is still a lack of truth and meaningful context within character productions (Holton, 2013). This is important to address as the audience's opinions about autism is likely shaped by what they watch. While reviewing recent research surrounding this topic, several themes are noticed. These include current stereotypes of autism, various negative representations of autism in the media, the effects of promoting these stereotypes, and the influence of media on societal perceptions.

Stereotypes of Autism

Links to Autism

There are several false sources of information that state people know how autism is generated, that a cure exists and all people with autism seek this cure in order to become “normal”. Conn and Bhugra (2012) note that a large number of people in society believe there is a cure for autism. In a study using lay people as participants, it was found that there are a variety of opinions on the causes of autism such as genetics, environmental factors, and exposure to vaccines (Huws and Jones, 2010). As these individuals state they do not have experience with autism, it is likely that they received this information from sources, such as the media and opinions from other people. The professional fact is, there is no known cure or cause of autism.

There continues to be the assumption that people with autism seek being normal, however this is not the most accurate viewpoint from those on the spectrum (Jones, Gallus, Vierung and Oseland, 2015). People with autism, who identify with the condition, see autism as a positive part of themselves that does not require a cure (Kapp, Gillsepie-Lynch, Sherman and Hutman, 2013). Some individuals may assume that no one would wish to deviate from “normality” and would thus hope for a cure. However, many individuals who identify with having autism accept their diagnosis, disprove of the search for a cure and avoid any treatments.

Savant Skills

A reoccurring theme in the literature analyzed is that most people with autism having savant skills. People with autism are seen as having gifted abilities, such as increased memory and intelligence (Huws and Jones, 2010; Conn and Bhugra, 2012). In a study by Dillenburger, Jordan, McKerr, Devine and Keenan (2013), the majority of participants stated that they viewed people with autism as being intelligent with a special talent in areas such as art, memory, music or math. O’Neil (2008) notes that people with autism can have deficits and strengths and that only about 30% of people with autism have special skills, such as calculating, memorizing, art

and music. Thus, people may assume that if someone is diagnosed with autism, they must have an extraordinary skill. This can cause people with autism to feel discouraged if they do not have a unique talent.

Savant skills tend to be linked to Asperger's syndrome in most discussions. Asperger's is often associated with unique skills and intelligence, which means less social stigma (Jones, Gallus, Viering and Oseland, 2015). Labelling someone as being a savant is used to expose people with Asperger's syndrome, although most people with autism do not have these types of skills (Draaisma, 2009). Having extraordinary skills is usually linked with a "higher functioning" individual, typically labelled as having Asperger's. This can cause a separation in the autism community as there is a focus on people with Asperger's having more skills than deficits. Thus, people with this label may separate themselves from the term autism as they believe their characteristics are completely different.

Infantilizing Autism

Another theme noticed is the infantilizing of autism. This refers to autism being viewed as a childhood condition that is rarely linked to adulthood. In a study by Huws and Jones (2010), it is noted that people with autism are perceived as deviating from societal norms and age-appropriate developmental expectations. People tend to view autism primarily as a child-like disability only affecting a younger age group (Stevenson, Harp and Gernsbacher, 2011; Conn and Bhugra, 2012). People with autism are also seen as unable to live independently or function at an age they are expected to and are often depicted with inhibited mental and learning functioning (Huws and Jones, 2010). This is an important stereotype to discuss as it neglects the consideration of aging and adulthood in the autism community. Many adults and seniors with autism are deemed invisible as society focuses on autism as a childhood disorder. This can cause an imbalance in

the dissemination of resources of services and supports. It can be argued that many people link autism with childhood as charities often depict a child when referring to treatments and interventions. This is done as a way to grab society's attention and sympathy.

Sexuality and Relationships

Some literature also focuses on the public opinion that people with autism are unable or unwilling to partake in romantic relationships. That all disabled people are asexual has been a myth imposed by society which disability theorists have attempted to debunk (Kim, 2011). It is believed by some that people with autism are not interested or appropriate for sexual relationships (Kellaher, 2015; Gougeon, 2010). This is a crucial myth to discredit as many individuals with autism express they are interested in dating and sexual relations. Maintaining this idea may cause people with autism to have difficulty finding relationships as others perceive them as not interested.

Emotions

Another stereotype that is reinforced is that people with autism are believed not to have feelings (Draaisma, 2009). Gougeon (2010) notes that there is a preconception that individuals with autism are emotionless. Although individuals with autism may have different abilities in social interactions and reading emotions of others, it is not plausible to state that they are unable to portray emotions such as happiness, anger or sadness. This stereotype portrays people with autism as "unhuman".

Violence

The last theme within stereotypes is that people with autism are violent. Participants in a study mentioned that people with autism may be aggressive, withdrawn and unpredictable (Dillenburger, Jordan, McKerr, Devine and Keenan, 2013). In a study by Brewer, Zoanetti and

Young (2017), it is suggested that negative attitudes towards people with autism and violence exists within society. This myth is proven to be wrong in an article by Allely, Wilson, Minnis, Thompson, Yaksic and Gillberg (2017) as they state having autism does not mean an increase rate of violent behaviours. Understandably, this notion can have marked negative outcomes on how people understand autism and interact with those who have the diagnosis.

Media Representations of Autism

One may contemplate how the above mentioned generalizations of autism in society are maintained. While reviewing past research, many studies appeared that focus on stereotypical portrayals of ASD within the media. These reflect the main stereotypes mentioned above: savant skills, violence, links to autism, infantilizing autism, emotions, sexuality and relationships. There is a visible connection between representations of ASD in the media and the understanding of the disability within society. However, it is unclear which influences the other more. Does the media perpetuate these stereotypes and impact viewers? Do societies misinterpretations of autism lead to the creation of stereotypical characters? Or perhaps both society and the media contribute equally to this issue.

Several studies focus on the negative portrayals of autism in different film, television series and news broadcastings. Some individuals with autism continue to be depicted undesirably and incorrectly in the media. In some films, such as *Molly*, autism is depicted as something that can be cured and seek elimination to become more humanlike (Conn and Bhugra, 2012). Some shows such as *House of Cards* have even reinforced the myth of 'refrigerator moms' in which inadequate parenting is used as the cause for autism (Conn and Bhugra, 2012). In *Parenthood*, parents of a child with autism are shown as urgently seeking a cure for their child's disability as to alleviate their distress (Holton, 2013). As stated by Holton (2013), the media portrayal of

autism fixates on the need for preventions, interventions and cures for the condition. As mentioned previously, there is no cure or known causes of autism.

There is an overemphasis of savant skills in people with autism in many TV shows and movies. In a study of the perceptions of individuals of autism, one participant notes that they think back to television and remember the portrayal of children with autism as gifted individuals (Huws and Jones, 2010). In movies, people with autism are either labelled as a “geek” or a savant, there is no in between (Draaisma, 2009). In films analyzed by Rohr (2015), there is a theme of characters being genius, savants and high functioning. Films often use characteristics of autism such as physical movements like rocking and hand-flapping as well as savant skills as an appealing part of their story line (Conn and Bhugra, 2012). Savant skills are often used as an interesting plot to the movie or a way for the producer to show their character has autism. Savant skills may make people interested in what they are watching and invest in the character more. However, this does not represent the majority of the autism community.

The stereotype of autism being a childhood disability is discussed in some literature. People with autism are portrayed as innocent children in the media (Conn and Bhugra, 2012). Within some films analyzed, over half of the autistic characters portrayed were children (Stevenson, Harp and Gernsbacher, 2011). It is evident there is a lack of representation of people of all ages with autism. This reinforces the idea that older individuals with autism are deemed to not exist.

Disabled individuals in general are often viewed in film as either being a victim, a hero, a threat, unable to adjust, in need of being taken care of or someone who should not have survived (Schwartz et al., 2010). Cinema has created characters with autism, who are deemed to be violent and dangerous (Conn and Bhugra, 2012). In some TV shows, individuals with ASD are seen as dangerous and deviant (Stevenson, Harp and Gernsbacher, 2011). There have been media reports

that suggest a connection between autism and violent acts although there is no formal diagnosis or evidence (Brewer, Zoanetti and Young, 2017). This startling depiction can be harmful to those with autism. It creates a negative view of autism to the general public when characters take on a violent persona in film or are blamed for a crime in the media with no proof to back up the claim.

Another interesting point by Rohr (2015) is the observation of a character with autism in a film who do not change their facial expressions throughout the film. This is touching on the myth that individuals with autism are emotionless. Furthermore, the most typical genre of film that uses a character with autism is drama as it brings forth strong emotions from the audience (Conn and Bhugra, 2012). Characters are often seen in supportive roles in order to create a dramatic twist to entertain the audience (Holton, 2013). This implies that autism is not a desirable or liked trait, so people with ASD are put in the background. In one TV show, the individual with autism is aesthetically less attractive than all his siblings and his representation throughout the series is focused on his isolation and fear of the diagnosis (Holton, 2013). Lastly, Kang (2013) states that TV news often focuses on autism with regards to parental hardships and obstacles, symptoms, warnings, hopes, causes, children and personal stories. They also may instill a fear of autism with how it is portrayed.

Effects of Stereotypes

An important discussion point when talking about the false portrayals of autism in society and the media, is the implications they may have on the autism community. The public understands little about autism, which in turn links to other issues such as the limited opportunities for people with autism to obtain and maintain paid employment, the lack of independent living options and difficulty creating and maintaining personal relationships (Conn and Bhugra, 2012). People with ASD may not have success in the workforce if employers are

unaware of supports needed, for example frequent breaks and providing clear instructions of the tasks to be completed. Options for living may be affected by lack of income due to few employment options, as well as society viewing adults with ASD as requiring full support in a group home setting. Stereotypes can also affect how others interact with individuals with autism. When people with ASD are labelled as being aggressive, people are less likely to want to engage with them and support inclusion in mainstream classrooms (Jones and Harwood, 2009). This can prove to be problematic as it hinders the ability for a person with autism to make and maintain friendships. For example, if someone believes people with ASD are violent, they may not make opportunities to engage with them or become friends out of fear.

Viewing people with autism to be child-like has had negative impacts over the course of history such as low employment rates and forced sterilization (Stevenson, Harp and Gernsbacher, 2011). Stevenson, Harp and Gernsbacher (2011) note that an effect of stereotypes is the fear from some individuals of disclosing their diagnosis to others in personal and professional settings. It is evident why individuals may not want to disclose their diagnosis as they are unsure what understanding the other person has of autism.

People with autism have expressed that there is a lack of proper interpretation of their disability in the media and are concerned with continuous discrimination and intolerance in society (Holton, 2013). The concern with reinforcing stereotypes, is that it makes the majority of people with autism invisible if they do not have those reinforced traits and in some cases, it raises high expectations of what they should be like (Draaisma, 2009). For instance, people with autism are only worthy and interesting if they have savant skills.

Advocacy and self-advocacy is crucial in the autism awareness movement as it can help with the formation of one's identity and personal development as well as targeting the

misrepresentations of people with autism in the media (Waltz, Van Den Bosch, Ebben, Van Hal and Schippers, 2015). The Autism Self Advocacy Network (ASAN) became well-known for their work after successfully getting a billboard removed that depicted autism stripping children of their well-being. The ASAN is formed with people on the spectrum whose goal are to empower the lives of people with ASD and end the medicalization of the diagnosis.

Individuals with autism often must deal with difficulties, such as not feeling like they belong, due to the loneliness difference infers (Kapp, Gillsepie-Lynch, Sherman and Hutman, 2013). People with autism may not be included in society, at times, due to the public's skewed opinions about them. For example, they may be believed to be aggressive and thus people will avoid engaging with them. O'Dell, Bertilsdotter, Rosqvist, Ortega, Brownlow and Orsini (2016) note the importance of changing the central assumptions of people with autism to viewpoints that value their skills and abilities. People in the autism community aim for the portrayal of autism as a difference rather than something that needs to be cured (O'Neil, 2008). There can be no complete acceptance of the autism community if the opinions of the general public are not targeted. This can be done by identifying how the media skews the representation of autism and attempting to incorporate a wider range of characters and individuals with autism into the media.

It is evident that current research lacks a comprehensive analysis into TV characters with autism and a discussion surrounding the possible effects these depictions could have on societies understanding of people with autism. Researching how stereotypes are promoted in TV shows will provide more insight into how societies skewed opinions of autism is encouraged in the media. This will allow for future discussions on how to disseminate accurate information about autism.

The Influence of Media

The impact of the media is a well-studied topic. Our society is saturated with media due to readily available outlets such as smartphones and computers. People are heavily dependent on using media sources during their day to day lives as well as for gathering information on many topics, such as the weather (Giles, 2003). The media is a critical component in the day to day lives of many people as it offers people structures for the day as well as opportunities for engagement and disengagement (Silverstone, 1999). We have the opportunity to disconnect ourselves from our lives by watching TV or scrolling through social media. We can also engage ourselves with the world by watching the news and using social media to connect with friends.

Media sources have been found to contribute to viewer's influence. For example, it has been found that beauty and fashion magazines increase the desire of women to be thin (Park, 2005). Models and celebrities in these magazines are worshiped as having ideal bodies which can influence the reader's opinions and behaviours. There is also substantial research that states there is a link between media violence and antisocial behaviour as violence in the media is high in prevalence and often glorified (Giles, 2003). Viewers may consciously or subconsciously imitate the behaviour, become overly excited after viewing violent scenes or even become desensitized to what they see both on and off screen.

In a study by Scharrer (2002), individuals were asked to address presumed influence of TV violence of themselves and others. Many respondents viewed others as being more negatively affected than themselves. Although there is an abundance of research that states the media can impact an individual's thoughts and behaviours, it is evident in this study that a portion of society view themselves as less likely to be affected. This can be problematic as people continue to be consumed with media without considering the negative effects this may have on them. Although the media is often portrayed as having negative outcomes on people, there is also

something called prosocial media which includes educational media, global issue awareness and health awareness (Giles, 2003). For example, *Sesame Street* is an informative TV show for children that educates young people on a variety of topics such as the alphabet and counting. Other TV shows such as *60 Minutes* and *Dateline* focus on informing the public about current issues affecting society.

There has been a substantial rise of youth TV consumption since the early 2000's with its constant availability and the arrival of various new media formats (Jolin and Weller, 2011). Since this study, one can assume the rates have continued to increase as technology becomes more available and common in households. TV shows can now be streamed online and even viewed on smartphones. The abundance of time spent watching TV provides youth with many opportunities to learn from these programs. What children view on TV may teach them more about how to interact in social situations (Giles, 2003). Children may be gaining false information or viewing negative behaviours on TV and inadvertently portraying these in their personal lives. For example, if a child watched a show in which a person with ASD has no friends and is made fun of for their differences, this may influence their next interaction with a peer with autism. They may mimic those bullying behaviours or even refrain from befriending them.

Through its representation of characters with disabilities, the media has the ability to influence and impact how society views disability (Ciot and Hove, 2010). Giles (2003) states that one concern with the media's representation is that the less visible a group is in the media, the more likely it will be represented by a stereotype in the media and people with disabilities are often underrepresented. Jones and Harwood (2009) note that perceptions of autism from the media are typically focused on aggression, unhappiness and the person being a burden to others.

They may be portrayed as either a superhero, sweet and innocent, a sage which includes intuitive ability or an avenger (Giles, 2003). Those who are seen in a positive lens are often depicted as having a savant skill.

Messages from the media undermine the identity disability activists have worked hard to achieve by focusing on pity, tragedy and the medicalization of the disability (Haller et al., 2006). The constant negative perceptions of people with autism in the media take away from the progressive activism that is trying to normalize disabilities within society. Media outlets often do not allow for voices from the ASD community to be heard.

The media not only affect the perceptions of others, but also the self-images of people with disabilities who may internalize the language used (Haller et al., 2006). Through messages from the media, persons with ASD are told that being cured is what will lead them to happiness (Jones and Harwood, 2009). This affects an individual's ability to feel they are living a fulfilled life when they are told that they are not capable of being completely happy until they are miraculously cured and have changed a large part of their persona.

Methodology

Theoretical Framework

Critical Disability Theory (CDT) was used as a framework for conducting and analyzing this research. CDT provides a conceptual framework to discuss relations between disability and society (Hosking, 2008). The researcher is guided by the social model of disability, which puts an emphasis on all things restricting disabled people from fully engaging in society. Aspects that may inhibit full participation in society range from individual prejudices to institutional discrimination (Michalko and Titchkosky, 2012). In this work, the restrictions come from the

power of media portrayals of ASD and the stereotypes that may result from these and affect real people with autism.

CDT encourages voices from disabled people to challenge negative opinions towards the disabled community brought forth by able bodied people and maintained through print and visual media (Hosking, 2008). This research was analyzed by a person, who does not identify with having ASD. Thus, their viewpoints about whether or not this data promotes stereotypes of autism or not is subjective and may not be in line with how people with an ASD would view it. The researcher acknowledges this and attempts not to make assumptions based on the feelings and opinions of those with ASD, however does touch on this in the discussion. Any conclusions brought forth by the researcher are proposed and may not necessarily reflect the feelings and opinions of the ASD community. The researcher's goal of this paper is to add to the discussion of false representations of autism in hopes that it supports the efforts from autism advocacy groups.

Methods

The researcher utilized a quantitative content analysis approach to detect trends and comparisons. A content analysis was determined to be the most effective and efficient in answering key questions due to the vast amount of content that was watched. Content analysis allows for the analysis of a large body of work, in this case several TV shows and episodes (Rose, Spinks and Canhoto, 2015). A qualitative method could also aid in answering the research questions, however it would be more time consuming to analyze conversations and scenes and since the researcher already had predetermined stereotypes to test, a quantitative approach seemed a better choice. A benefit to content analysis is that it is a systematic and replicable

technique for data gathering (Stemler, 2001). This is important in this research to ensure biases of the researcher are less likely to affect the results.

Sample

A non-random sample of 26 characters with ASD were used in this study. The researcher decided to include both characters with a labelled or implied diagnosis. The reason for this is that some characters, although not specifically identified with having autism or Asperger's, were created with the intent of viewers assuming a diagnosis. For example, *The Big Bang Theory* has never been formally announced Sheldon Cooper has Asperger's, however certain traits such as his differences in engaging in social situations and superior intelligence have lead to conversations amongst viewers online questioning whether or not he has a diagnosis. Characters with implied ASD were found using a web search. The researcher found various online forums discussing the potential diagnosis of different TV show characters. Then after observing these characters, the researcher used their current knowledge of ASD to decide if the characters displayed possible traits of ASD.

Table 1 depicts the TV show and characters chosen along with the show's premier year. Originally, 22 North American TV series were chosen that depict a character with autism. However, as the researcher began the study two new shows aired, *Atypical* and *The Good Doctor*. The researcher decided to include these as it would add insight into how the perceptions of autism may or may not be changing throughout the years. Two shows had more than one character with autism, *Parenthood* and *Criminal Minds*. Thus, 26 characters were utilized in this research.

Table 1: Table 1: List of TV shows and characters used in sample.

Show Title	Character Name	Season Number	Year of Production
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Parenthood	Max Braverman	1-6	2010-2015
Parenthood	Hank Rizzoli	4-6	2012-2015
Boston Legal	Jerry Espensen	2-5	2005-2008
Criminal Minds	Spencer Reid	1-12	2005-2017
Criminal Minds	Sammy Sparks	6	2011
Grey's Anatomy	Virginia Dixon	5 (episode 8,10,14)	2008
Touch	Jake Bohm	1-2	2012-2013
Fringe	Astrid Farnsworth	1-5	2008-2013
Glee	Sugar Motta	3-6	2011-2015
ReGenesis	Bob Melnikov	1-4	2004-2008
Strange Empire	Rebecca Blithely	1	2014-2015
Scream Queens	Jennifer	1	2015
Arthur	Carl	14-19	2010-2015
Degrassi: The Next Generation	Connor Delaurier	8-14	2008-2015
Saving hope	Shahir Hamza	1-4	2012-2016
Law and Order: Criminal Intent	Wally Stevens	2 (episode 14); 6 (episode 21)	2003 & 2007
Elementary	Fiona Helbron	4	2016
Alphas	Gary Bell	1-2	2011-2012
The Bridge	Sonya Cross	1-2	2013-2014
Community	Abed Nadir	1-5	2009-2015
Big Bang Theory	Sheldon Cooper	1-10	2006-2017
House	Adam	3 (episode 4)	2006
Eureka	Kevin Blake	1-5	2006-2012

Girl Meets World	Isadora Smackle	1-3	2014-2017
The Good Doctor	Shaun Murphy	1	2017
Atypical	Sam Gardner	1	2017

The TV series that were used have been produced within the last 15 years. This was to ensure that there is a large number of series to analyze and compare against one another, yet are still relevant in connecting it to the perceptions of society. The 24 TV shows were chosen using a web search for all TV shows premiered in the last 15 years in North America. These are aired on a variety of networks; NBC, ABC, CBS, Fox, CBC, PBS, CTV, Syfy, Disney channel, and Netflix. During the web search, key words were used to seek any show using a character with autism or in which the audience perceived the character to have autism. These key terms include: ASD, autism, Asperger's, TV shows, TV series and characters. Rather than a non-random sample, the search allowed for a selection that matches the full population of autistic characters on television as closely as possible.

The researcher watched several episodes that the character was in, choosing specific episodes that focused the plot on the person with autism. These were chosen using a web search using the characters' names as well as by reviewing episode plot summaries. Individual episodes were viewed and analyzed once using a specific list of questions to assist in answering the research questions. During these viewings, binary and categorical data were taken on whether or not specific elements were noticed with the character. Binary variables consist of two options when taking data. The binary variables used in this research include 'yes' or 'no', 'labelled' or 'implied' and 'main' or 'supporting'. Categorical variables consist of more than two possible values. Categorical variables used in this research include age groups, race and type of savant skill. A non-random judgmental sample of 208 hours of content was watched. Only specific

episodes for each show were chosen which included and focused on the character with autism to ensure proper time management during this research and adequate data taking opportunities.

Appendix A represents the hours watched per TV show.

The questions that were used to answer the research questions have emerged from a review of the literature focusing on stereotypes of ASD within society. These questions targeted six key stereotypes of ASD noted within the literature review: savant skills, sexuality and relationships, infantilizing autism, links to autism, emotions and violence. Within the answer options for the following questions, yes means the stereotype is evident and no means this stereotype is not evident. For some stereotypes, a secondary and/or third question was asked to categorize the stereotype further.

The following were the questions asked to assess stereotypes:

- Savant skills
 - Does the character have a special and unique skill or talent? Yes or No
 - What type: mathematical, memory, artistic, musical, other
- Sexuality
 - Does this character come across as not interested in either dating, romantic relationships, sexual behaviours or starting a family? Yes or No
 - Are they shown in any episode on a date, showing interest in another person romantically or being in a romantic relationship?
 - Do they have children? Yes or No
- Infantilizing Autism
 - Is this character referred to as “innocent” by self/others? Yes or No
- Understanding the Source
 - Does this show mention the cause of autism? Yes or No
 - What type: parenting, vaccines, genetics, other
- Lacking Emotions
 - Does this character come across as lacking in typical human emotions? Yes or No
 - What type: joy, anger, sadness, other
- Violence
 - Does the character engage in any violence towards themselves and/or others? Yes or No
 - Do other characters fear this character with ASD? Yes, No, Unclear
 - Was the violence malicious? Yes, No

The following questions were used to obtain descriptive data for the purpose of answering the secondary research question; using descriptive statistics based on the characters and TV shows, are there any trends in the portrayal of the stereotypes?. These questions have been compiled based on the researcher's knowledge of autism and the literature that has been reviewed. The goal of these questions was to describe the character in more detail and link certain characteristics to the stereotypes portrayed. These assisted in showing trends in the types of characters with ASD in TV shows and creating further discussion as how to make them more diverse.

The following is the descriptive data that was taken from the chosen TV shows:

- What is the gender of the character? Male, female, other
- What is the race of the character? African American, Asian, Caucasian, Hispanic, Native American
- Does the character have Asperger's as stated by themselves or another character? Yes or No
 - If no, do they seem to be depicted as having Asperger's? Yes or No
- Does this character have exceptional intelligence as seen through a prestigious job or academia placement? Yes or No
 - What type: medical, science, artistic, computer, other
- Does this character have friends? Yes, No, Unclear
- Is their diagnosis implied or labelled within an episode?
- Is their diagnosis disclosed by others or self?
- Towards when is their diagnosis labelled in the show? From their first appearance, after several episodes, after several seasons, never
- Does this character have an "odd" interest as defined by other characters in the show? Yes or No
- Is this character a child (0-12), teenager (13-18), adult (19-65) or senior (65+)?
- What genre is this show? Action, adventure, animation, biography, comedy, crime, documentary, drama, family, fantasy, history, horror, music, mystery, romance, sci-fi, sit-com, sport, thriller, western
- Is this character a main character or a supporting character?
- Does this character communicate verbally? Yes or No
 - If no, do they have an alternate method of communicating? (i.e. device or sign language) Yes or No

Analysis

A deductive method involves using research to test a theory rather than using data to generate new theories. This method was used to assess if TV shows depicted stereotypes of ASD by taking pre-determined themes from previous literature. These themes include savant skills, sexuality and relationships, infantilizing autism, links to autism, violence and emotions. The researcher used a structured categorization matrix in which data specifically outlined was taken from the TV shows in order to test the categories chosen regarding stereotypes (Elo and Kyngäs, 2008).

This particular orientation of the work was chosen for this paper as only using a quantitative approach would not allow for a broad range of themes to be observed and analyzed. Using a qualitative approach ensured the researcher was able to pick up a more in depth depiction of ASD across a large variety of TV series.

The data in this research was compiled and organized using Excel. This allowed for easy comparison of various data. The information received was analyzed initially by comparing the frequency or percentage of TV shows depicting each of the stereotypes. The data was separated into different charts on an Excel sheet by the researcher. Next, the researcher linked the descriptive data (e.g. gender and age) to the stereotype data (e.g. savant skills and sexuality) to discover possible trends. The researcher contrasted the data of stereotypes with the descriptive data to see if themes emerged more in certain ones. The aim of this step was to note if certain stereotypes were more prevalent amongst certain groups of people. For example, the researcher was interested in determining whether more characters with savant skills were main or supporting characters, or perhaps whether they had friends or no friends. These findings would help strengthen the discussion surrounding false stereotypes and concerns with inadequate portrayals of persons with ASD.

The researcher also took qualitative data throughout the research process and made notes of dialogue made by or about the character with autism. Notable descriptive words were then highlighted and sorted by year of production, oldest to newest, to note any changes on the attitude towards ASD. These words were highlighted as either positive, neutral or negative in order to observe how, if at all, the general opinion towards people with autism changes.

Results

Demographics

The following represents the findings from the descriptive data taken in this research. From the 26 characters analyzed, binary data determined that 18 were male and eight were female. This is in-line with incidence rates that autism is more prevalent in males. The ADDM Network's (2017) most recent statistics on ASD state that males are five times more likely than females to be diagnosed with autism. Furthermore, it was evident that 65 percent of the characters were adults 18 years old or older, 23 percent were children 12 years old or under, 12 percent were teenagers between the ages of 13 and 17 and zero percent were categorized as seniors 65 years old or older.

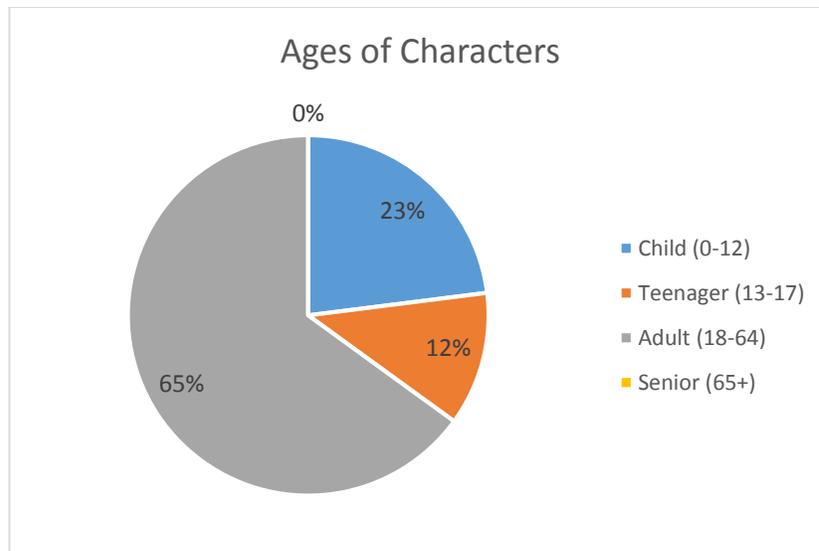


Figure 1: Pie graph representing percentages of characters' age

Categorical data was used to determine that a total of 20 characters were Caucasian, three were African American, two were Asian and one was an animal cartoon that could not be categorized into a racial grouping. There is an obvious underrepresentation of characters with autism with different racial backgrounds. However, assumptions cannot be made on this as there is a larger issue at play, which is the general racial imbalance of actors in the TV shows and movies. In the 2016 comprehensive report on diversity in entertainment completed by USC Annenberg, it was found that 71.7% of all speaking or named characters were white while the other 28.3% were underrepresented racial groups (Smith, Choueiti, and Pieper, 2016).

The researcher wanted to address the spectrum of ASD and categorized characters with Asperger's or autism. Within the shows, 46 percent of the characters were labelled to have Asperger's by themselves or other characters. Another 39 percent were portrayed with Asperger's-like qualities, such as savant skills, intelligence, and deficiencies in social skills. A total of 15 percent of all characters were either not labelled or portrayed as having Asperger's. These characters were categorized as having autism. Thus, the majority of the sample, a total of 85 percent of characters, portrayed as having Asperger's. This trend is crucial in understanding

how autism is portrayed as there is clearly a specific image of autism, Asperger's, that continues to be replicated. These TV shows neglect to represent individuals across the autism spectrum, but instead focus on those with Asperger qualities.

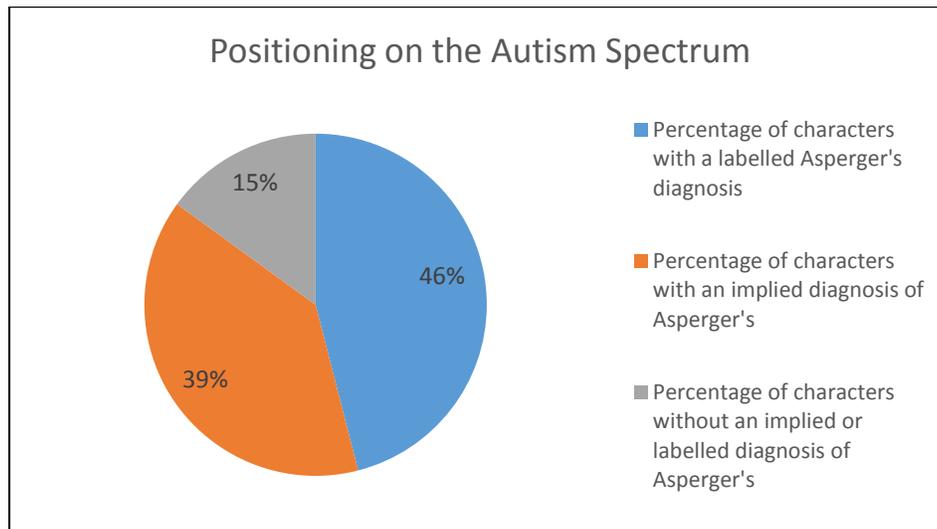


Figure 2: Pie graph representing total percentages of characters with Asperger's syndrome

In this data, intelligence was determined as either having a prestigious job position or school placement. Some characters were in the field of medicine, science or law. A total of 58 percent of all the characters were depicted as having superior intelligence through their job or educational status. This is a significant amount as it links having autism to having superior intelligence.

A total of five characters were depicted as not having any friends, eight were shown to have friends and it was evident that 13 characters experienced difficulty making and maintaining friendships. These 13 individuals were often portrayed as outsiders who were bullied by others. They did however have friends or make friends throughout their representation in the show.

The researcher included characters whose diagnosis was not labelled in the show but their representation of autism was evident. 77 percent of the characters' diagnosis of Autism were labelled in the TV shows while 23 percent were implied using typical ASD characteristics, such

as social awkwardness and rigidity of maintaining routines. Of the characters whose diagnosis was labelled, 45 percent disclosed their own diagnosis while 55 percent had their diagnosis labelled by another character.

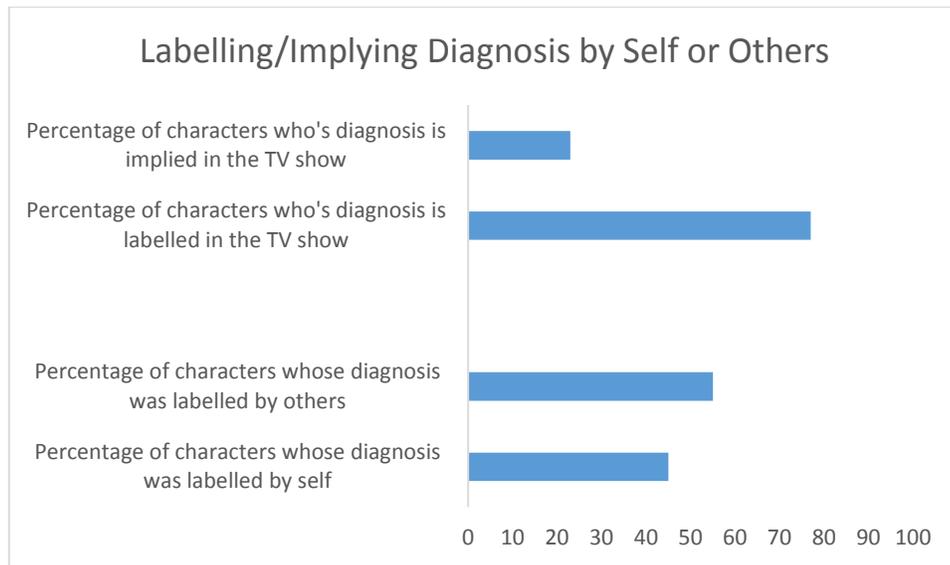


Figure 3: Bar graph representing characters whose diagnosis was implied or labelled by self or others

Approximately 33 percent of the characters with an implied diagnosis were shown to have friends, 67 percent had few friends and zero had no friends. From those whose diagnosis was labelled in the shows, 30 percent had friends, 45 percent had few friends and 25 percent had no friends. The rates of having friends were similar between groups with either an implied or labelled diagnosis, however more characters with a labelled diagnosis had difficulty making and maintaining friends. It may be that characters whose diagnosis was labelled had difficulty making friends because their diagnosis was a barrier. Others may not want to befriend someone with a neurodevelopmental disability or perhaps their traits made it difficult to connect with others. These findings may also suggest to viewers that hiding your diagnosis increases the likelihood of making friends.

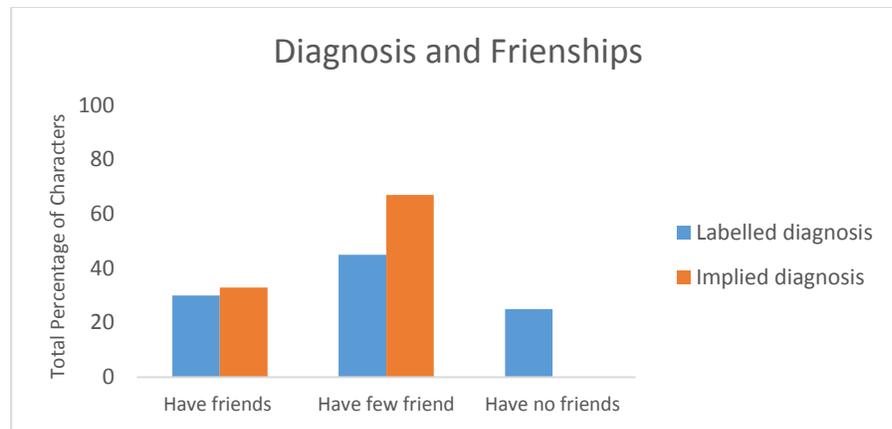


Figure 4: Bar graph comparing friendships of characters with either a labelled or implied diagnosis

Some characters were deemed to have a deep fascination with odd interests as described by other characters in the show. Categorical data found that a little more than one third, 35 percent, of the characters heavily engaged in odd interests such as bugs, penguins and candles. Heavily engaging in these interests means the topic was brought up frequently in conversations and story lines. For example, Max from *Parenthood* would want to talk about bugs often with his family members and peers.

The TV shows used in this research were categorized into various genres. Of the three highest ranking genres, 21 percent of the TV shows were science fiction or fantasy, 21 percent were sitcoms and 21 percent were crime or legal dramas. 17 percent were considered to be medical dramas and eight percent were teen dramas. Of the lowest ranking genres, four percent were western dramas, four percent was a family drama, and four percent were an animated children's comedy. It is important to note that of these lowest ranking genres, four percent is equivalent to one TV show as the sample involves 24 shows. It is important to note the types of roles the characters had in their respective TV show. 52 percent of the characters were main characters while 48 percent were supporting characters.

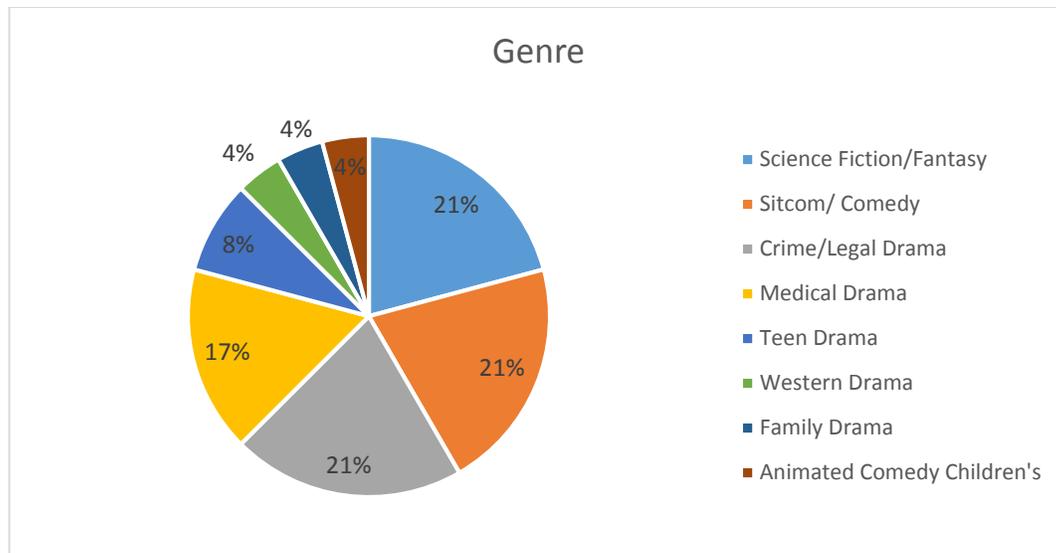


Figure 5: Pie graph representing percentages of genres used in sample

Stereotypes

Savants

Amongst the characters included in this research, 42 percent of them were depicted as having a savant skill such as enhanced artistic, musical or analytical abilities, exceptional memory and skills in reading patterns. This percentage represents close to half of all the characters. This is an interesting finding to note as it implies savant syndrome is common amongst persons with ASD. In a study focusing on autism and savant skills by Howlin, Goode, Hutton and Rutter (2009), 26 percent of the sample of participants with ASD were identified as having at least one savant skill. Thus, there is a higher representation of savant skills within TV shows than the actual representation within society.

Of the characters with savant skills, 91 percent were male while only 9 percent were female. Furthermore, 73 percent of those with a savant skill were also labelled or depicted as having Asperger's. It was noticed that 45 percent of characters with a savant skill were a main character while 55 percent were deemed as a supportive character.

Approximately 46 percent of savant characters had friends, 36 percent has some friends with a noticeable difficulty in making and maintaining friends and 18 percent did not have any evident friends. This is comparable to the characters, who did not have a unique skill in which only 20 percent had friends, 60 percent had few friends and 20 percent had no friends.

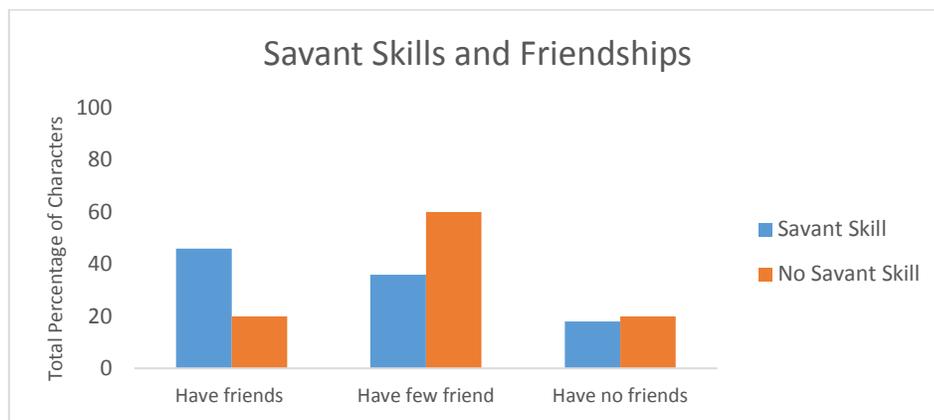


Figure 6: Bar graph representing characters with/without savant skills and friendships

Savant skills portrayed varied in each show and with each character. In *Criminal Minds*, Spencer Reid was portrayed as being gifted with eidetic memory while in the same show, Sammy Sparks was skilled in piano playing. In *Touch*, Jake Bohm is seen with a savant skill of seeing and arranging patterns. Wally Stevens from *Law and Order: Criminal Intent* is talented in playing the piano along with having advanced analytical skills. In the show *Arthur*, Carl is gifted with many skills including artistic and musical abilities as well enhanced memory. The frequency of examples of characters with ASD portrayed with a savant skill in this research sets an unrealistic expectation that someone with a savant skill has autism or someone with autism has a savant skill.

Sexuality and Relationships

To determine the character's romantic interests, data was collected regarding portrayal of a romantic interest in another individual. It was found that 72 percent of characters with autism

were seen in the TV shows as either being in a relationship or showing romantic interest in another individual. While, the other 28 percent of characters showed no interest in sexual or romantic relationships. It was observed that only 12 percent of adult characters have a child.

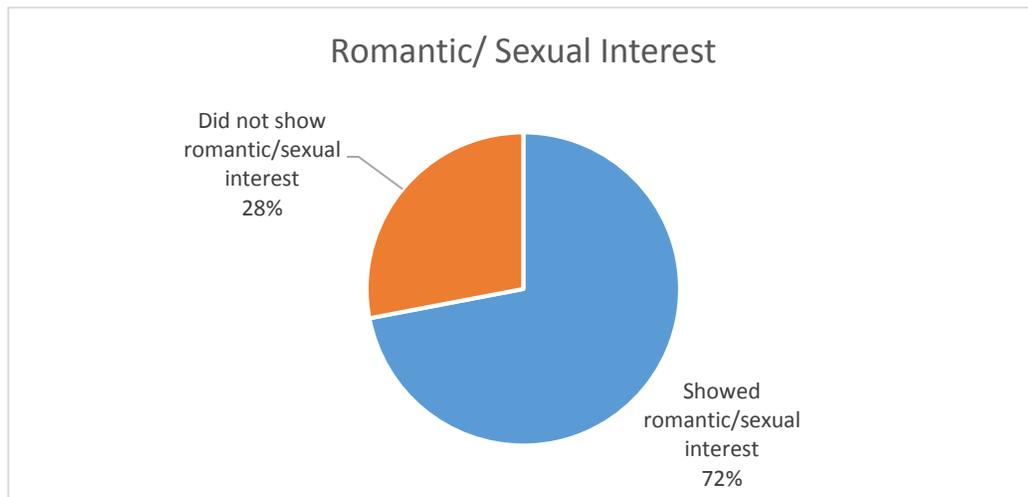


Figure 7: Pie graph representing percentage of character showing and not showing interest in romantic or sexual relationships

Only two adults were seen to have a family. These were Hank Rizzoli from *Parenthood* and Wally Stevens from *Law and Order: Criminal Intent* . Of the five adults, who were portrayed as not being interested in or having a romantic interest or relationship with another character, two were male while three were female, three showed a high level of intelligence while the other two had average intelligence, three had no friends, two had few friends and none had friends and four characters had their diagnosis labelled while the other one was implied to have autism.

Infantilizing Autism

Amongst the adults represented in this data set, only four (out of a total of 15 adults) of them were deemed as innocent by others. This is not a significant number of adults who were seen as innocent. Characters depicted as being innocent include Rebecca in *Strange Empire* as other characters called her innocent and made comments about her sexual inexperience. In *Alphas* , Gary's colleagues refer to being with him as babysitting. Gary is not given autonomy by others,

including his mother, to do tasks such as drive and pick out his own clothes. In *The Good Doctor*, Shaun's colleagues are surprised to find out that he watches porn, which implies their view of his innocence.

Of all the characters, who were referred to as innocent, all were male. Also, all of these characters were deemed to have a high level of intelligence based on their education and employment status. Also, 75 percent adults seen as innocent had few friends while 25 percent had several friends and zero percent had no friends. This is comparable to the other adults in which 64 percent had few friends, 18 percent had no friends and only 18 percent had several friends.

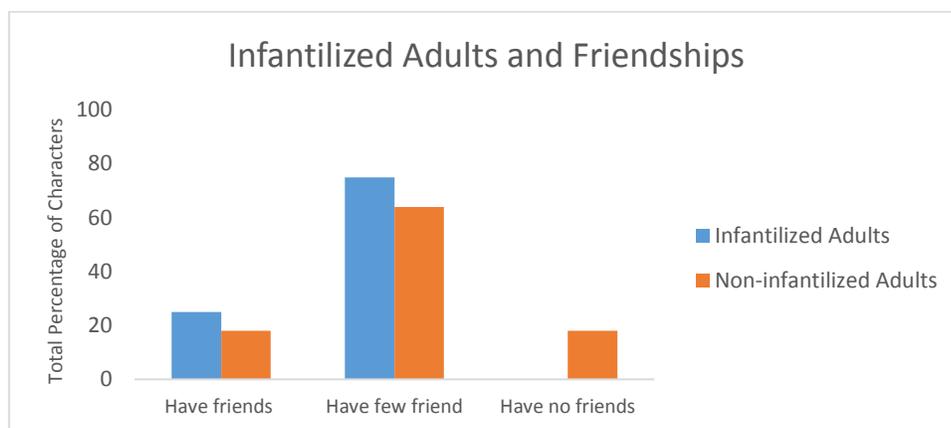


Figure 8: Bar graph representing infantilized adults and friendships

Links to Autism

Only one TV show, *Parenthood*, stated a connection to autism, that being gluten. The parents of a supporting character with ASD informed the parents of Max Braverman that they use a gluten free diet and that Max should too. Max's father is also seen in one episode googling 'Asperger Cure'. Thus, this provides an example demonstrating that TV shows do not perpetuate the idea that there is a known cause and/or cure to autism.

Emotions

Half of all the characters were portrayed as lacking in a certain emotion. Of all the emotions lacking, 46 percent were joy, 31 percent were sadness, 15 percent were anger and eight percent were nervousness. It is expected that anger has a low percentage of not being evident in these characters as it links to the stereotype that people with ASD are violent. Anger and violence often go hand in hand together and this could be why it was seldom seen as missing in these characters. An interesting trend to note is that of all the characters lacking in at least one emotion, 77 percent were portrayed with Asperger's while only 23 percent had ASD. Although the total sample was largely represented with characters with Asperger's or Asperger's like traits, this is still crucial in exploring as it may imply people with Asperger's have more difficulties in portraying emotions.

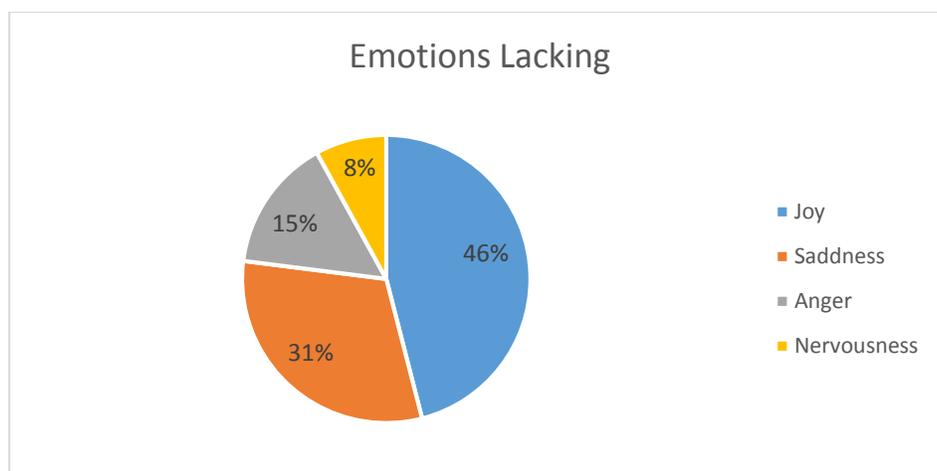


Figure 9: Pie graph representing emotions lacking amongst characters

In the show, *Girl Meet World*, Isadora Smackle expresses to her peers that she does not have emotions. She often speaks in a monotone voice and does not physically portray the way she says she is feeling. For example, she states that she is sad but her facial expression remains neutral. In *Touch*, Jake Bohn does not depict sadness even when faced with difficult situations such as separation from his father. Max Braverman from *Parenthood* and Astrid Farnsworth

from *Fringe* are both portrayed in a serious demeanor and do not physically depict feelings of joy.

Violence

The researcher discovered that 31 percent of the characters engaged in some violence towards others or themselves. Of these characters, half of their violence was malicious while the other half was either self-defence or instinctual.

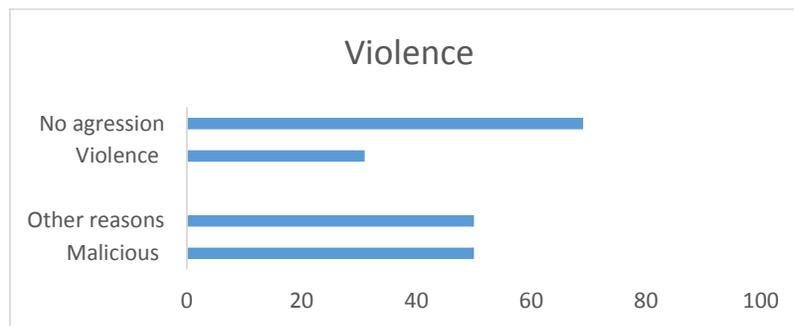


Figure 10: Bar graph representing percentage of violence amongst characters and maliciousness

Only one of the characters that engaged in violence was feared by other characters. In *Boston Legal*, Jerry Espenson engages in several violent behaviours throughout the show. In his second episode, he holds a knife up to his boss after not making partner and being made fun of by his colleagues. After this, he is feared by others, but manages to change others perception of himself at the end of the season by undergoing behaviour modification. Several seasons later, he purposefully throws a muffin at a man in a coffee shop and punches him because he teased him. In *Parenthood*, Max Braverman is seen breaking a fish tank in school, throwing furniture at home and fighting with a peer at school, who is seen with the girl he likes. However, he is not depicted as being feared by others in the show possibly due to his age as he was a youth.

Amongst the characters who engaged in violence, 75 percent were male while 25 percent were female. Just over half of the characters, five out of eight, had a labelled or implied

diagnosis of Asperger's. It is interesting to note that the majority of the characters, six, had few friends while two had notable friends and none had no friends.

Other violent actions include Rebecca Blithely killing a man as self defence in the show *Strange Empire*. In *Degrassi: The Next Generation*, Connor Delaurier is seen pushing a peer after she calls him a freak and breaks his pencil on purpose. Sam Gardner in *Atypical* slaps an employee at a store, because he experiences sensory overload. In all of these examples, these characters are not depicted as being feared by other characters as the violence is isolated to only a few incidents and are either not malicious or are provoked by the actions of others.

Terminology Used:

While analyzing the various North American TV shows portraying characters with autism, the researcher took note of an assortment of descriptive words that were used by or to describe the character with autism. These words were then categorized onto a chart into groupings based on the year the episode first aired (see figure 11). The aim of this is to determine if there is any correlation based on the year and how an individual with autism is described by self or others.

When reviewing figure 11, there are noticeably several key words that continue to be chosen within North American TV scripts to describe persons with ASD. These include: 'weird', 'different', 'genius', 'geek', 'freak' and 'strange'.

The ratio of positive descriptive words (i.e., capable and genius) to negative descriptive words (i.e., weird and freak) observed in this chart began high or equal between the years or 2003 to 2007. However, this changed in 2008 when the majority of words being used shifted to negative. More positive words appear to be used again in 2016 and 2017 with a higher ratio of positive words being observed, indicating a hopeful upward trend.

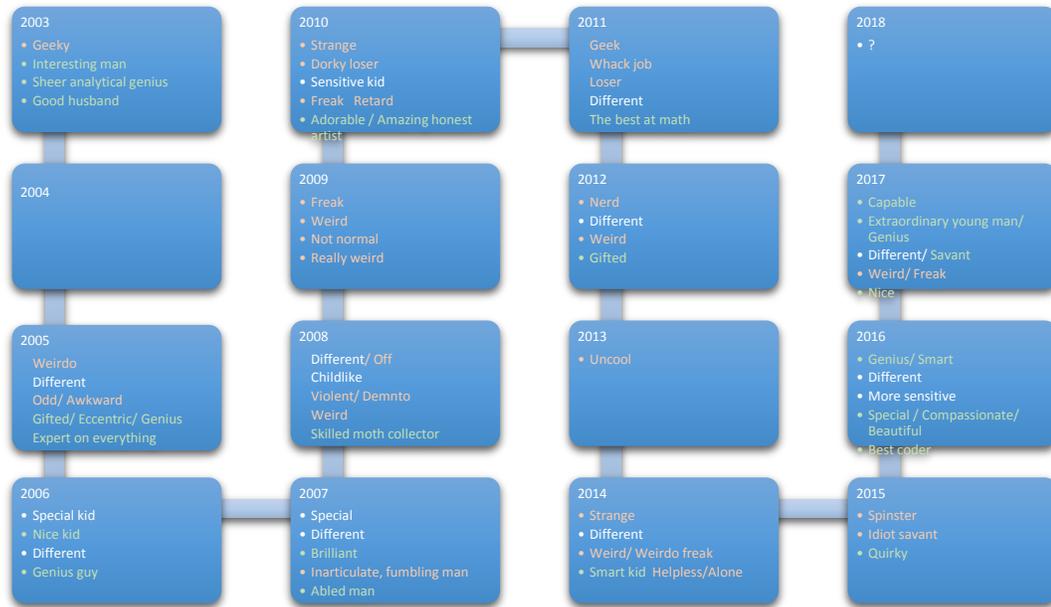


Figure 11: Chart representing terminology used towards characters with ASD categorized by year

In figure 11, the words are colour coded to reflect positive, negative and neutral viewpoints. Orange reflects negative descriptive words and green indicates positive viewpoints. The neutral words, in white, are left for interpretation as there can be opinions on both sides indicating that it is meant to be positive or neutral.

The most common word used consistently throughout the years is ‘different’. This is considered a neutral word. The researcher leans towards this term being negative rather than positive as it separates people with ASD from society. However, some individuals with autism may appreciate this label.

Normalcy:

Another common theme within the body of content reviewed is the idea of normalcy. Characters with autism in the TV shows examined are often referred to as ‘not normal’. Some characters identify that they do not feel normal and some express that they wish they were. Many characters were observed to be participating in therapy or suggested by others that therapy is an option that should be considered. Characters were often viewed as there being something wrong

with them and that they needed to be fixed by learning new skills or changing parts of their persona. As previously discussed, many characters are viewed as being different which implies that they are separate from the majority of society.

It is also observed that in many TV shows, after the character with autism participates in therapy or makes a change in their identity, they begin making new friends or appear to be happier. Carl, the character in *Arthur*, was mentioned as using a social skills coach. It is then observed that Carl begins making friends easier. Isadora in the show *Girl Meets World* and Connor from *Degrassi: The Next Generation* both undergo makeovers assisted by peers in order to fit in better. Following both of these transformations, the characters seem happier, are able to make more friends and receive positive attention from others.

Other characters are observed as receiving unsolicited comments and advice regarding their autism and personality. In *Degrassi: The Next Generation*, comments are made to Connor telling him to try to be normal and that counselling will help him lead a normal life. In season 11, episode 45, Connor mentions that he does not like when people do things for his own good. Max's parents in *Parenthood* state that something is wrong with him and begin seeking cures online and from others. Shaun from *The Good Doctor* is given advice to use a support worker even after insisting that he is not interested in having an aid. Abed in *Community* is labelled as not normal by his friends and begins taking therapy sessions from one of them. For some characters, they are the ones who state that they do not fit in and wish that they could. Sam from *Atypical* says that sometimes he wishes he was normal and Jerry from *Boston Legal* tells co-workers that he is working hard on his autism.

Empathy:

Empathy was another theme that emerged from this research. It is not included as an emotion; however, it is important to highlight as it was predominantly lacking amongst many of the characters. For example, Virginia Dixon in *Grey's Anatomy*, shows no empathy when referring to a recently deceased 16-year-old patient as an excellent donor to the family. Rebecca Blithely from *Strange Empire*, talks about how she killed a man with no emotion, but rather focuses on the science of how she did it. In *Boston Legal*, Jerry Espenson begins to dance and cheer after punching someone in the face and calls it “fun”. Sonia Cross in *The Bridge*, shows no empathy towards a woman, who is trying to cross a crime scene to reach her husband who has just had a heart attack. Sonia is rigid with rules such as not allowing others to cross a crime scene and does not sympathize with others. She is also aware of her difficulties with empathy and she apologizes to a colleague if she does not ‘exercise empathy’. Max Braverman does not show empathy towards his mother who was diagnosed with cancer in the show *Parenthood*. Shaun Murphy from *The Good Doctor* smiles when talking about or two patients with serious conditions. In *Saving Hope*, the colleagues of Shahir Hamza say he has “bad bedside manner” as he does not treat patients like they are human.

Within these TV shows, there are few concrete examples of empathy in someone with Autism. In *Eureka*, Kevin Blake is shown with super powers and in one scene is healing his mother. During this time, he is visibly worried for her safety. Bob Melnikov in *Regenesis* becomes emotional over having to euthanize his dog who he states “is better than people”.

Sympathizing the Diagnosis of Autism

Another evident theme within this data is the sympathy exhibited towards characters with autism because of their diagnosis or towards parents and caregivers who raise a child with ASD. In *Boston Legal*, a colleague of Jerry Espensen states that the character has ‘suffered his whole

life' due to his Asperger's. In the show *House*, the conversations between Dr. House and the parents of Adam imply that parenting this child with autism is difficult and costly. Connor Delaurier's father in *Degressi: The Next Generation* tells a peer of his son that Connor has recently been diagnosed with Asperger's, which is 'scary'.

Discussion

Demographics

In the cohort of characters used in this research, it is evident that there are more males versus females represented with autism. Currently, research on ASD states that the disorder is more prevalent in males than females. Thus, North American TV shows seem to be mirroring this data. It would be valuable to determine if changes in these statistics continue to be represented in the media through characters with ASD in the future. This may demonstrate that research is taken into account when developing characters and story lines.

The majority of characters were adults, aged 18 to 65, while some were deemed to be children or teenagers. This may be dependant on the genre of TV show and target audience. An equal percentage of TV shows were either science fiction, sitcom or crime or legal drama. There were also some medical dramas and a few teen dramas geared towards young viewers. As the majority of TV shows were intended for adult viewers, this may be why there is a disproportionate number of adult characters represented versus youth.

The fact that no characters were depicted as being seniors brings up an important discussion point. This finding supports the idea that people with disabilities become invisible as they age. This means that there is little discussion and focus surrounding the aging disabled person within research and community supports. Most supports are offered to children, youth and young adults. The lack of senior citizens with autism showcased within TV shows can cause people to view

ASD as an impairment only affecting youth and adults. They may also assume that the life expectancy of people with ASD is shorter than a neurotypical individual.

Over half of these characters are depicted with high levels of intelligence by either having a prestigious job or school placement. These findings can be problematic with regards to how society develops expectations towards people with ASD. The portrayal of superior intelligence amongst this population can lead to an assumption that someone diagnosed with ASD should possess high aptitude in their school or work placement. Although this portrayal may be interpreted as being positive, it can also cause people with ASD to put more pressures on themselves to succeed in school and work.

A significant finding in this research is the disparate representation of characters with Asperger's versus autism. As mentioned, only 15 percent were perceived to have autism, rather than Asperger's. This is a significantly low finding. Autism is a spectrum disorder with Asperger's representing a portion of individuals who are deemed "higher functioning" and more capable of being independent. The results in this data may reinforce a false idea that Asperger's and autism are different or that most individuals with ASD have Asperger-like qualities. This data also neglects to educate and display individuals from all across the spectrum. Most of these TV shows have chosen a specific type of person with ASD, a verbal, intelligent and independent individual with social difficulties. When in actuality, there is an abundance of characterizations that could be used to portray a person with autism.

Within this research, it was noted that half of the characters had noticeable difficulty making or maintaining friendships while another large portion had no difficulties and some had no friends at all. These findings are not surprising as a main characteristic often connected to autism is difficulty relating to others and engaging in social situations. This is evident in the data

through the many characters not shown with friends or experiencing difficulty making friends. In *Arthur*, Carl is described by a classmate as being ‘strange’ and others not knowing if Carl liked them or not. In *Girl Meets World*, a classmate of Isadora Smackle talks about not wanting to be Isadora’s friends as they ‘already have a weird friend’. Isadora admits out loud that she is not good at having friends, but does not divulge into details as to why. Many of these characters show the desire to make friends, however the difficulty is feeling accepted and connecting with others. They often try to fit in, however may lack certain social skills such as reading cues. For example, *Gary Bell* from *Alphas* has difficulty understanding sarcasm and jokes which could make it difficult to make friends with those that make sarcastic remarks or humor in conversations.

An interesting finding in this research is the ownership of one’s diagnosis. Just over half of the characters’ diagnosis were labelled by another character. *Carl’s* mother in *Arthur* tells another student that he son has Asperger’s and this is why he may get upset in unfamiliar situations. *Kevin Blake’s* mother in *Eureka* tells someone that her son has autism and barely speaks to those he knows. *Abed Nadir’s* friend labels Abed with having Asperger’s as a teasing comeback. This theme emphasises the idea that autism is a disability and still often shamed in society. Instead of empowering many of these characters by owning their diagnosis, other characters are given the occasion to label someone with autism either as an explanation for their behaviours, or to elicit empathy from others or as a comedic moment. It could be empowering to the ASD community to see more characters take pride in their diagnosis and label it as a positive attribute rather than as an excuse for certain deficits.

Savants

Character savant skills were prominently featured in the TV shows studied. Almost half of the representation of characters with autism were shown to have a savant skill which is a large proportion of individuals to be represented in this category. This stereotype may influence society to think that those with autism should have a savant skill or that people with a savant skill may have autism. Many people may begin to identify savant syndrome as a trait of autism and falsely identify people as having the disorder. These findings could also impact the feelings of self worth among the ASD population, if they are taught that having autism means there is a high chance of having a unique skill, but they do not have any. These individuals may search for their savant skill and feel defeated if they do not find one.

Another interesting point regarding the savant skills data was the gender discrepancy in that there were fewer females with these skills versus males. However, the initial cohort of characters has fewer females to begin with, thus this data cannot be interpreted accurately. It is not surprising, however that those with a savant skill also had Asperger's. People with Asperger's are often depicted or labelled as being 'higher functioning', meaning they have a lot of daily living skills and come across as mostly 'neurotypical'. Savant skills emphasize the capacity of this population and make the individual appear more intelligent, successful and skilled in daily life. Again, this idea that people with Asperger's are linked to also having savant skills can cause expectations from society as well as from the individual with Asperger's that they should acquire a unique skill or talent.

It is fascinating to see that most characters with a savant skill had friends, while those without a savant skill had difficulty making friends. It is possible that those with a unique skill appeared more interesting and other people desired to befriend them in these portrayals. Those without a

skill may not have had anything obvious that enticed people to get to know them. This data is problematic as it shows that if you having a savant skill makes it easier to make friends.

Sexuality and Relationships

The data taken on a character's sexual interest in others dismissed the assumption in literature that people with autism are not interested in sexual or romantic relationships with others. The majority of characters were depicted as either being in a relationship or showing interest in someone. This is significant in showing society that people with autism are interested and able to be in relationships and have sexual desires.

A small percentage of adult characters had a child. This could be linked to the stereotype that people with autism are typically childlike or deemed as innocent, and thus incapable of being parents. Of the two characters represented who had children, one parent was shown to have a troubling relationship with their child. Hank Rizzoli from *Parenthood* was often depicted in a disagreement with his daughter, who did not want to spend time with him. It was evident that he was experiencing difficulty in parenting, which if linked to his diagnosis could negatively impact how society views the capacity of parents with autism.

Infantilizing Autism

A portion of the adults in this research were depicted as innocent by others through judgemental and paternalistic comments such as referring to their sexual inexperience and the inability to take care of themselves or be alone. A small amount of characters were deemed as innocent, 'child-like' adults. Although this data is not significant, it can negatively impact the perception towards persons with ASD as well as minimize their autonomy. Paternalism is evident here as many characters were deemed incapable of doing typical adult tasks like drive a car or pick out their own clothes. These scenes imply that whomever is restricting their

independence is doing it for their “own good” as if the individual is incapable of making any decisions. This is problematic as it insinuates people with ASD are in need of constant care by others and cannot succeed independently in society. This can lead to the inability of parents to allow their child with ASD to be independent in various aspects of their lives and to allow them make life decisions as they reach adulthood.

As identified in the results, all adult characters seen as innocent were male while few were females. As discussed previously, one cannot accurately interpret this data as there were few female characters in the representation to begin with. However, it is possible that females are typically considered to be more ‘mature’ when compared to males and this is why the data is represented in this way.

It is interesting to note that the majority of adults who were seen as innocent had few friends while the rest had several friends. This data is not drastically different to the adults not seen as innocent, but one might ask why the innocent deemed adults had less difficulty making friends than the adults did. This may be for several reasons. Innocent adults with ASD may seem approachable and unthreatening when compared to other adults with ASD. They may come across as non-threatening and easy to get-along with.

Links to Autism

Only one TV show depicted a link to autism, *Parenthood*. In this show, Adam Braverman, the father of Max Braverman who has autism, is seen researching ‘cures’ for the disorder. This may be to emphasize the unsureness of the family after being given the diagnosis. Autism advocates may argue that this scene is negatively showcasing ASD by making it seem like a disease that needs curing. The topic of gluten free diets to help manage behaviours also come up in this show. The connection between gluten and autism is prominently discussed within society.

Gluten free diets are often used a “treatment” for ASD mainly to reduce behavioural issues. It is evident that this research does not perpetuation the stereotype of links to autism.

Emotions

A significant number of characters was portrayed as lacking in emotions or half of the total cohort. Of these characters, most of emotions that were lacking was joy, then sadness, anger and nervousness. By portraying some people with autism as having fewer emotions, they may be viewed as robotic or unhuman. This is highly problematic as persons with ASD may be treated differently in society and have difficulty making connections with others due to this stereotype. These individuals could be become more isolated and seen as ‘different’, which could cause self-worth issues. Also, linking people with autism to a lack of feelings of joy implies that these individuals may not be happy due to their “circumstances”. Autism may be seen by society as the reason they are unhappy. This negatively portrays autism and what it may be like to have the disorder.

Furthermore, if society view people with ASD as not having certain emotions, it may be assumed that someone with the diagnosis has fewer emotions, or is lacking in a certain emotion or does not feel. If they do not visibly react the way society is used to with certain emotions, for example crying when sad or smiling when happy, they are assumed to not be feeling that way. People with autism may have difficulty expressing their needs and wants or communicating with others, however this does not mean they are unable to feel different emotions. They may just internalize it or express it in other ways such as through activities like art.

In this cohort of persons with ASD depicted as lacking in emotion, the majority of characters, had Asperger’s or Asperger-like qualities. The reason why Asperger’s may be liked to lacking emotions more than autism, is perhaps the idea that people with Asperger’s are also seen as

intelligent and fixate less on social interactions with others. Thus, to create an interesting character, they are turned into a “robotic” like individuals with few emotions, who focus on fact focused topics such as the sciences and math.

This is an interesting theme and can cause negative perception of the Asperger’s community. Portraying people with Asperger’s as emotionless leads to the possibility of being seen as cold and detached from society. This may negatively depict people with Asperger’s as being always serious and incapable of joy, when in fact this is not the true representation from society. This is a false representation as humans may depict their feelings in different ways. While someone may smile and laugh when they are happy, another will choose not to express what they are feelings through their facial expressions.

Violence

The stereotype that people with autism are violent is slightly supported by the data within this research. Almost one third of characters depicted some violent behaviour. Of these characters, half were malicious acts and had negative intent with their actions while the other half may have acted violent as self-defence or due to a reaction to stimuli (i.e., sensory overload). This may promote a false idea that people with ASD are unpredictable and may react quickly and inappropriately to their surroundings. This in turn can cause people with autism to experience isolation and prejudgment from society.

There is an evident link to the notion that people with autism are often violent, however the fact that half of the acts of violence were not malicious changes how this information may be perceived by others. Instead of labelling the character as someone to be feared, they may be seen instead as someone trying to deal with their emotions and sensory overload. They may still be seen as unpredictable, but their actions are more likely to be forgiven or understood.

It is interesting to note that only one character, Jerry Espenson, was feared due to his violence. It may be that the other characters were not feared as they were seen as 'innocent' or their actions had merit due to a situation they were experiencing. For example, Rebecca Blithely from *Strange Empire* was not feared by others as she only acted in violence for self defence.

Most of the characters, who engaged in violence, had few friends. Characters, who engage in violence, may have difficulty making friends as they may be seen as threatening. One might make an assumption that someone who engages in violence would have either few or no friends, thus it was interesting to notice that there were no cases of a character engaging in violence having no friends. This is a positive message as it shows that people with autism do not need to be feared and isolated.

Terminology Used

When looking at figure 1, there is a notable shift in terminology used in North American TV shows to describe persons with autism. In 2016 and 2017, there has been a general increase in positive versus negative words used. The increase in positive wording being used in TV to describe people with ASD, may be linked to more awareness of autism within society. As 2018 is left blank, the researcher anticipates a larger variety of descriptive words used towards characters with ASD and a move away from typical ostracising perceptions such as 'odd' and 'freak'.

The various negative words observed within this cohort of TV shows indicate that people with ASD are often referred to as outsiders and outcasts with terms such as 'weirdo', 'freak' and 'different'. Intelligence is often highlighted within characters with ASD and tends to be the main focus within their positive traits. In many instances, characters were described with both positive and negative words either by self or others.

Words have a lot of power in society. They can influence the perceptions someone has on another person or an individual's confidence and self worth. For instance, if someone is called 'stupid' time and time again, they may begin to internalize this and view themselves as unintelligent. Or if someone is talking about their friend to someone who does not know them, if they use positive words such as 'kind' and 'helpful', the person hearing all of this will begin to formulate an opinion of this friend and have judgements about them before even meeting them.

Normalcy

Within the group of TV shows used in this research, the words normal and different are used frequently within dialogues regarding characters with autism. These terms are often debated in society as it is difficult to create a concrete definition for a "normal" human being or what constitutes being different. One may argue that defining someone as different due to their disability or diagnosis is problematic because every person in society is different in some way. We all have different backgrounds, experiences, skills, desires, etc. This term also aids in isolating people from the community by emphasising that they are not like the majority and perhaps neglecting to see anything else aside from the difference in abilities.

The topic of 'normality' is persistent in this research. Several characters are described by others as not being normal or by themselves as wanting to be considered normal. The idea of normalcy is ever changing in society with more acceptance and inclusion noticed towards groups of people who have been marginalized. However, by using this terminology in dialogue regarding the ASD population, it negates the continuous progress of autism awareness, acceptance and advocacy that is brought out by various people, groups and organizations. These advocacy groups work to have persons with ASD be treated as equal members of society and to create the same opportunities available for all. Ostracising terms towards persons with ASD is

inevitably affecting the way people are integrated into society by creating preconceptions about autism.

This notion of normalcy perpetuates a medical model of disability, the idea that there is something wrong with the individual and that they need to be fixed. This can be problematic as society learns from these depictions that people with autism require rehabilitation to integrate better into society. This also implies that people with autism are not happy and cannot function well unless they try to improve their skills and behaviours. Power is placed on the medical community, i.e., therapists and doctors, who are viewed as having the skills and resources to “cure” autism.

Rather than reinforce the idea that people with ASD want to be considered ‘normal’ or that they are outcasts in society, it would be empowering if the media chose to celebrate and accept characters with autism and their skills. Highlighting some of their difficulties in navigating the world is important to depict, however these difficulties come from the fact that society is created by and for able-bodied and neuro-typical individuals. Autism is an impairment that has become a disability due to the lack of adaptation from society. There is a neuro-typical way to do things, and anything that does not fit into this category is labeled as different and separate. TV shows should begin to showcase people with autism as having an insightful way at looking at and engaging with the world. They have many needs and wants that are the same as everyone else.

Empathy

People with autism have been described as lacking empathy towards others. However, this is overgeneralized within the TV shows studied. There are several examples of characters lacking empathy towards others and in turn seeming disliked by others. Although empathy may be

difficult for some people with autism, the examples used within the TV shows are harsh and extreme. Most of these examples include others who have been hurt or killed, some even by the character.

People with autism may sometimes seem to lack empathy due to how they react in social situations. They may not fully understand the nonverbal communication or the emotions of others, however labelling this as always being unempathetic can be damaging to how people with ASD are perceived. The problem with this portrayal is it can affect how people view individuals with autism as friends, community members and employers. If people believe this portrayal exists amongst all persons with ASD, it may affect whether or not they befriend someone with autism, hire them or even date them. Lack of empathy often leads to the assumption that the individual does not care about other people around them and may intentionally disregard their feelings.

Limitations

There are some limitations to this research regarding data collection and interpretation. Due to the large amount of characters and TV shows analyzed, the researcher was unable to watch every episode featuring the character with autism. Instead they chose notable episodes that the focused on the chosen character or featured them. As not every episode was viewed, some key moments may have been missed which would have added to the findings. Furthermore, some TV shows continued to air after the researcher completed taking data. For example, *The Big Bang Theory* and *The Good Doctor* are both shows that continue to air. This may affect some of the results from the study as the researcher may not have observed certain traits of the characters.

Although a significant amount of characters was identified in TV shows and used in this research, there may be some characters that have been missed, particularly those that are implied

to have autism. The findings of this research may slightly change if this were the case. However, this sample encapsulates a wide range of characters and TV shows which provides a comprehensive outlook on stereotypes of autism in North American TV shows.

Another consideration to take into account with this research is that Asperger syndrome is no longer diagnosed within Canada based on the DSM-5. However, it is referred to in this research as it is still used in the media and many people in society identify with having this diagnosis. It will be interesting to note how TV shows use this change in diagnostic criteria as the years go by.

Future Research

If this researcher had the means to add to this current study, the data from this research would be compared to statistics from the general public. To do this, the researcher would recruit a randomized group of participants with autism and obtain data based on the questions used in this research. Thus, the researcher would be able to compare frequency of stereotypical traits evident amongst persons with ASD in society to frequency of these traits in characters with ASD in TV shows. Although it would be difficult in ensuring the group was diverse, this would greatly strengthen the argument in this paper. Comparing the frequency and percentage of individuals and characters with the chosen stereotypes would bring forth confirmation that false stereotypes exist and can be harmful.

Furthermore, it would be insightful for an individual identifying with having autism to take leadership in this research and provide their opinions of the representations of characters with ASD. This research would benefit from a person with ASD creating the questions that would determine whether or not stereotypes exist in TV shows. They would also be valuable when

analyzing the data as they could refer to their personal experiences when discussing the terminology used, emerging themes and story lines that occur in the TV shows.

Conclusion

As the rate of diagnosis is increasing yearly, the general awareness of autism will increase and thus the information received by the public from the media will aid in educating the public about ASD. As discussed in this paper, media plays a large role in the dissemination of information and educating society on a variety of topics. It has been found that TV shows portraying characters with autism, provide some accurate and some inaccurate representations of the disorder. Six popular stereotypes of ASD were used to guide this research: savant syndrome, sexuality and relationships, infantilizing autism, links to autism, emotions and violence. The results were mixed. Some of these stereotypes were evident among the TV shows used in the sample, a few were somewhat evident and some were not apparent at all.

This research found that people with ASD were stereotyped as having savant skills. Although this may be seen a positive trait, it also leads to an unrealistic expectation towards persons with autism that they should possess a savant skill. It may also lead to the assumption that people with savant syndrome have autism. These findings do not match up to the actual representation of people with autism and savant skills in society, as the rate is actually lower.

Another stereotype evident was the lack of emotions depicted amongst the sample. The majority of characters seemed to lack feelings of joy. This is troubling as it suggests people with ASD are not happy and often come across as robotic like.

Infantilizing autism was somewhat supported in this research as the findings were limited, however still evident. This leads to the paternalism of autism and thus the lack of autonomy

given to persons with ASD. This can become problematic as individuals with autism become adults and are not given opportunities to learn to be independent.

People with ASD being violent was also somewhat supported as a stereotype in this research. There was a handful of individuals who exhibited violence, however only some of these acts were intentional and malicious. By making some acts of violence unintentional and caused by internal reasons, the majority of these characters were not feared. However, by depicting some characters as being aggressive, the stereotype of violence is evident and can cause society to fear people with ASD due to the possibility of them being “unpredictable”.

The stereotype of different links to autism was not evident in this research. There was only one connection made to seeking a cure for the disorder and looking into gluten free diets. This does not seem to pose a problem as there are many discussions surrounding gluten and autism and there is currently no consensus on the matter.

The stereotype that people with ASD are not interested in having sexual or romantic relationships was not supported in these TV shows. Characters were often seen as interested in another person romantically or sexually and there were many instances of a character being in a relationship. Although, very few characters were depicted as having children which can become a problematic assumption as people with ASD may be seen as incapable of being a parent.

This research also brought forth other issues of representation. There was a noticeable lack of seniors with ASD. By making the aging autism community invisible in the media, there is the implication that the disorder does not affect the elderly or that persons with ASD do not reach this age group. Also, the majority of characters had Asperger syndrome as well as superior intelligence as seen through prestigious school and job positions. This only represents a small fraction of the actual population of the ASD community. Findings show that TV shows have a

narrow field of representation and do not include people on the opposite side of the autism spectrum, those that may exhibit characteristics such as challenges in communication and sensory sensitivities.

It is evident that TV shows have a history of using negative terminology such as “freak”, “weirdo” and “loser”. However, since this has slowly begun to shift since 2016 to more positive terms focusing on an individual’s strengths, the hope is that this trend continues. The idea of normalcy is still a focal point however, with an emphasis on both characters hoping to be considered “normal” as well as other characters pointing out that the person with ASD is different. There is a strong focus on a diagnosis of autism being something to be sympathetic towards. This implies to viewers that autism is a bad thing that takes over someone’s happiness and quality of life.

Overall there was a mix of positive and negative portrayals of autism in this research. With the constant increase in research and emphasis on using the voices of people in the autism community, the hope is that the media focuses on the strengths and positive aspects of autism, does not separate people on the spectrum from others by emphasising differences and also for there to be a wider array of representations, not just the savant individual with Asperger’s. The media’s portrayals of autism can continue to improve by turning to the autism community to seek feedback and a greater understanding of their experiences and characteristics. Keeping the social model of disability in mind, people with ASD should be given the opportunity to consult with writers and producers who are interested in creating a character with ASD. The media has a lot of power to do both good and bad. To do good, they must work towards accurately representing all disabilities in order to help educate viewers and encourage positive opinions.

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Appendix A

Table 2: Total hours watched per TV show

TV Show	Hours watched
Parenthood	39h37min
Boston Legal	27h11min
Criminal Minds	12h5min
Grey's Anatomy	2h15min
Touch	19h16min
Fringe	44min
Glee	10h50min
ReGenesis	7h30min
Strange Empire	9h31min
Scream Queens	2h53min
Arthur	1h35min
Degrassi: The Next Generation	38h51min
Saving hope	3h35min
Law and Order: Criminal Intent	1h23min
Elementary	2h49min
Alphas	6h36min
The Bridge	4h45min
Community	2h32min
Big Bang Theory	1h5min
House	43min
Eureka	4h16min
Girl Meets World	5h54min
The Good Doctor	3h30min
Atypical	4h40min