

5-2013

# Factors determining efficacy with the use of pharmacotherapy in children with ASD and other disorders

Miranda Small

*University of Arkansas, Fayetteville*

Follow this and additional works at: <http://scholarworks.uark.edu/rhrcuht>

---

## Recommended Citation

Small, Miranda, "Factors determining efficacy with the use of pharmacotherapy in children with ASD and other disorders" (2013).  
*Rehabilitation, Human Resources and Communication Disorders Undergraduate Honors Theses*. 5.  
<http://scholarworks.uark.edu/rhrcuht/5>

This Thesis is brought to you for free and open access by the Rehabilitation, Human Resources and Communication Disorders at ScholarWorks@UARK. It has been accepted for inclusion in Rehabilitation, Human Resources and Communication Disorders Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu), [cmiddle@uark.edu](mailto:cmiddle@uark.edu).

Running Head: REPRESENTATIONS OF AUTISM

Representations of Autism in the Media:  
Perspectives in Popular Television Shows

Katie Dowdy

CDIS Honors Thesis

University of Arkansas

May 2013

### Abstract

The purpose of this study was to examine how accurately autism was depicted in the media (specifically in television) when compared to the scientifically accepted definition. Data for this study was gathered using coding sheets that outlined the definitive and secondary characteristics of autism. While watching six episodes of the television show *The Big Bang Theory* and six episodes of the television show *Parenthood*, examiners evaluated scenes involving the character with autism using a separate coding sheet for each designated scene. Examiners used the continuous coding method, identifying each instance of particular trait observed throughout the scene. Fifteen different traits were analyzed. Traits were recorded on a coding sheet. Results were analyzed qualitatively then compared to scientific definitions of autism to assess the validity of each show. Characteristics of autism were present in both the adult with autism in *The Big Bang Theory* and the child with autism in *Parenthood*. Both shows focused primarily on the DSM-IV features to represent the character with autism. Secondary characteristics were also exhibited, but were not as prominent. Differences between the adult character and the child character were also noted.

### Representations of Autism in the Media: Perspectives in Popular Television Shows

The media, specifically in film, has cast characters with disabilities since the early 1900s (Safran, 1998). Although these types of characters have been seen in a variety of roles overtime, there are three main sliding scales that describe how characters with disabilities are typecast to their viewers which have been outlined by the literature. They can range from negative to positive, authentic to unreliable, and informative to untruthful.

Many sources cite instances where disabilities and disorders are revealed negatively in the media through a variety of characteristics. For example Johnson (2008) effectively argues how media outlets use stuttering to present “humor, nervousness, weakness, or unheroic/villainous characters”. He found that in those films, shows, and comics that include a person with a stutter, almost 100% of the time their stutter disallows them to be a favorable individual, unless (or until) they can overcome their impediment. By using examples from dozens of popular television shows and movies, it is easy to visualize the scenes Johnson is referencing, allowing his points to be clearly understood. Other authors have examined similar patterns in studies relating to the depiction of mental illness in the media. Diefenbach (1997) conducted a study analyzing mentally ill characters seen in 58 programs on network television over the course of three months. His results complement Johnson’s, concluding that most of these characters are seen as violent, having a low quality of life, and/or having a negative effect on society (Diefenbach, 1997). One thing Johnson and Diefenbach failed to discuss was the consequences these negative stereotypes have on the millions of people who view these media channels. While these authors did not address the repercussions of negative stereotypes on the

general public, Signorielli (1989) illustrates how devastating the effects of these stereotypes can be on television viewers. She finds that those who receive information about mental illness primarily through television are more likely to exhibit thoughts of “ignorance and neglect” even if they are otherwise well-informed viewers (Signorielli, 1989). This statement is extremely powerful because it highlights the amount of people who are truly misinformed about the reality of mental illness, and the harmful effects their views can have on society. Mental illness and stuttering are just two examples of the hundreds of disabilities that are portrayed negatively in the media.

Varma (2001) uses a similar style to Johnson by choosing the Hollywood blockbuster *I am Sam* to analyze the ways in which the main character Sam’s developmental disability is presented in the movie. While both Johnson and Varma use examples from major films, Varma lacks the intellectual voice demonstrated by most peer-reviewed authors. The author uses this article to not only recount scenes from *I am Sam* that she thought were interesting, but to also share her personal commentary about her absence of reflection regarding disability in general. This is apparent when she writes that although Sam has multiple layers in the movie, “it is his identity as a ‘retard’ that stands out in the movie” (Varma, 2001). Despite the fact that the author puts quotation marks around the word retard, her failure to explain her word choice and the repetition of the word throughout the article clearly demonstrates her insensitivity to people who are mentally handicapped. Thus, by using language that is not politically correct, Varma reinforces negative stereotypes by dehumanizing people with disabilities to their disorder. This illustrates how unfavorable portrayals should be viewed through a skeptic’s lens with the contingency that most representations lack authenticity. Although there are countless disabilities that are presented negatively and/or inaccurately in the media, autism, in particular, is frequently

misrepresented due to the continual exaggerated depictions of autism in film, television, and books.

Autism affects about 1 in every 110 children. With such a high prevalence, it is unbelievable that so many people are misinformed about the disorder, making it absolutely imperative that these misconceptions be corrected. People with autism spectrum disorder (ASD) face challenges in three main areas: communication, social interaction, and the occurrence of stereotypic and repetitive behaviors (DSM-IV-TR; American Psychiatric Association [APA], 2000). Individuals with autism predominantly have difficulties with the pragmatics and semantics of language while their syntax, morphology, and phonology are usually unaffected. Although some individuals are nonspeaking or mute, many with autism can use speech and language (though they might choose not to). Conversational turn taking, initiating conversation, topic maintenance, and frequent repetition, represent some pragmatic issues they might face. People with autism can be very literal, making it hard for them to interpret gestures or understand figurative language. Use of repetitive or automatic phrases are common, even though utterances may not fit into the natural flow of communication. Communication deficits help illustrate why social interaction proves to be extremely taxing for individuals with autism. Because they have a poor theory of mind, it is hard for these individuals to correctly perceive situations due to missed social cues or misreading a response. This makes relating to others very challenging, often reducing interactions to times when they need or want something. Finally, in people with autism, there is usually a presence of stereotypic or repetitive behaviors that may include self-stimulatory actions or preoccupation with engrossing interests. These behaviors tend to range from mild to severe, but may also be nonexistent entirely. Although all people with autism experience similar obstacles and behaviors, it is essential to understand that autism is a

broad and diverse term that encompasses “individuals with a wide range of functional needs, strengths and challenges” (Ne’eman & Badesch, 2012) With an incidence of almost 1%, it is critical that members of society learn the facts of autism through accountable and reliable resources.

Frequently, certain “defining” characteristics are attributed to people with disabilities based on deceiving stereotypes seen in movies and on television. Safran (1998) and Draaisma (2009) successfully assert that interpretations of individuals with autism are frequently exaggerated in the media as a way of captivating audiences rather than providing authentic portrayals of the disorder. Both Safran and Draaisma explain how directors commonly use savantism as an established feature of autism. Although the authors both comment on the media’s fascination with savant skills, Draaisma’s analysis is superiorly stated by fixating not just on examples of savant skills in film, but also on the harmful effects that coincide with the savant/autism stereotype. He describes how this skill is associated with autism based on its presence in popular movies like *Rain Man* and *Mercury Rising*. Draaisma argues that these types of movies mislead people to believe that all individuals with autism express some type of a savant expertise, when in reality only about 10% of people with autism have savant skills (Pring, 2005). By accepting these stereotypes as the norm, people will expect individuals with autism to manifest some type of “special skill” during their encounters. By not living up to the idealized image, the people with autism become a “diminished capacity” (Draaisma, 2009) in the eyes of the typical developing person.

Huws and Jones (2010) also researched stereotypes in disabilities, by using newspaper articles to examine autism stereotypes. Using over 250 different articles, they qualitatively analyzed articles from British newspapers that covered stories relating to autism over a 10-year

span. Like Johnson, Diefenbach, and Signorielli, these authors found that sources had mostly pessimistic opinions with many of them using condescending terminology with describing a person with autism. The authors classified their findings into three main themes, which included *missing voices*, the lack of first-hand accounts of individuals with autism; *the burden of autism*, marginalizing and dehumanizing those with autism; and *sensationalizing, misconceptions and misuse of a label*, expecting people with autism to have certain abilities strictly due to their autism (Huws & Jones, 2010). These fallacies are significant because of the impact they have on society. With journalists producing works containing such generalizations, it's easy to comprehend why so much of the general public has misconceived perceptions of autism. These stereotypes negatively affect the autism community as well by creating yet another barrier in their lives; a barrier from both society, and from themselves.

While the media has distorted how autism is perceived, one outlet of expression that provides the most accurate depictions of autism are personal narratives. Since the release of YouTube in 2005, users have uploaded millions of videos sharing everything from musical concerts, to a baby's first steps. Video blogs have also become increasingly popular on the site, with users presenting personal thoughts and feelings regarding a specific topic. Individuals with autism are no exception to this phenomenon. Bromley (2008) discusses a study she conducted about the prevalence of disability-related videos in various formats on YouTube over a one-week span. The three most popular types of videos were vlog (video blog), personal story-parent, and personal story-individual. Out of 58 videos from the autism group, 24 of them fell into one of these three categories (Bromley, 2008). The significance of the popularity in these three categories is not lost to the author. The desire to share one's own thoughts and feelings with others is extremely noteworthy, especially within the autism community. With social interaction



and communication being major difficulties in those with autism, it is highly remarkable that these individuals are willing to openly express themselves to the entire world through the World Wide Web.

Bromley asserts that YouTube provides a safe haven for individuals with autism to go and speak their minds without having to deal with the social repercussions of everyday face-to-face conversation. It provides an outlet for them to convey personal thoughts and feelings that may otherwise be suppressed. While individuals with autism can communicate freely about topics of their choice, one subject matter that is extremely beneficial to the general public is personal stories, particularly in regards to those describing what it is like to have autism. As discussed, the major restriction concerning the public's perception of autism is where they receive their information. "This effect is salient when direct experience is limited, and particularly so when the mass media account is the principal source of information" (Huws & Jones, 2010). With the growing number of people with autism posting personal reflections on YouTube, the public can become enlightened about their true self in ways previously unavailable. Insight into their true beings is no longer limited to how the media *projects* what individuals with autism think and believe; we are now able to see a personal side to autism that was once controlled by movie and television representations. This is exceedingly beneficial to those with autism not only because their voices are no longer stifled by popular media depictions, but also because it gives them a chance to educate those who are otherwise misinformed. Although autism stereotypes continue to perpetrate our everyday lives in movies, newspapers, and television, individuals with autism are starting to break down the barriers by expressing their true selves through video narratives on YouTube.

*Summary & Questions of the Study*

Disabilities have been present in the media since the early twentieth century. These characters have been involved in an assortment of roles primarily ranging from negative to positive, authentic to unreliable, and informative to untruthful. Many authors have commented on the negative portrayals of disability in the media, including Johnson, who focused on stuttering, and Diefenbach, who focused on mental illness. Both authors reviewed several popular television shows and movies containing individuals with their respective disability and found depictions to be largely negative. Other authors found similar findings to Johnson and Diefenbach, revealing that stereotypes in the media have a damaging effect on the people who consume these sources. Those who receive information regarding disability primarily through media outlets, tend to have more negative views of people with disabilities because of reinforced stereotypes. Several other authors including Draaisma, Huws and Jones, discussed the media's fascination with autism. They described how the media avoids authentic representations by focusing on certain "defining" characteristics, such as savantism, in order to entertain viewers rather than provide them with accurate information. While most portrayals of autism in the media are negative or inaccurate, one outlet of expression that tends to be more positive is personal video blogs that are recorded to YouTube. Through YouTube, individuals with autism can openly express themselves without having to directly face a conversational partner. This is ideal for people with autism because of their difficulties with social interaction and communication. Although accurate perceptions of autism are becoming more available through self-expression videos by individuals with autism, many negative autism stereotypes continue to consume our everyday lives through the television and other media outlets.

The purpose of this study was to examine how accurately autism is depicted in the media (specifically in television) when compared to the scientifically accepted definition. The literature clearly defines the major characteristics of autism; demonstrated that there is an increase in the portrayal of disabilities in media; and that television is one venue for this. The specific questions of this study are as follows.

1. Do the portrayals of characters with autism in television coincide with scientifically accepted definitions of autism?
2. Are certain features of autism selected and used more often?
3. Are there differences between the portrayals of adults and children?

## Methods

### *Participants*

No participants were used in this study.

### *Materials*

Six episodes from the first season of television shows *The Big Bang Theory* and *Parenthood* were used to help gather data. The examiners watched the first three episodes, and three episodes spanning from the middle to the end of season. A coding sheet (see appendix A) listing the classic and secondary autism characteristics were used to record data.

### *Procedure*

The examiner watched six designated episodes of television show *Parenthood*. While viewing each episode, a coding sheet was filled out only for the scenes in which the character with autism was present. In the Social Interaction section, it was first determined if a behavior was required. If so, examiner circled Y for yes. If not, N was circled for no. It was noted if there was a regular

opportunity for the behavior to be presented by circling Y for yes there was a regular opportunity or N for no there was not a regular opportunity. The amount of times the behavior should have been present was recorded under the number of observations possible. The amount of times the behavior was actually observed was recorded under Yes (behavior observed). In this section, the behavior refers to the negative action (e.g., *avoids* eye contact, *lack of* facial expression, etc.) No opp was marked if there was no opportunity for the behavior to be presented. The Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section determined if the character used their behavior in the following three ways: in an intrusive manner, a way to avoid what was happening, or if the behavior was self-contained/used for self-stimulation. The appropriate box was marked. The Secondary Characteristics section noted if any of the given characteristics were observed and/or referred to. Y was circled for yes it was observed/referred to, and N was circled for no it was not observed/referred to. If characteristic was observed and/or referred to, by whom it was observed/referred to was noted. The same steps were repeated for television show *The Big Bang Theory*. To establish interrater reliability, another individual filled out coding sheets for 10% of the episodes used in the study.

### *Analysis*

The analysis consisted of comparing results of coding sheets between the two shows targeted in the study. Differences between the show involving an adult with autism (*The Big Bang Theory*) and one involving a child with autism (*Parenthood*) were evaluated.

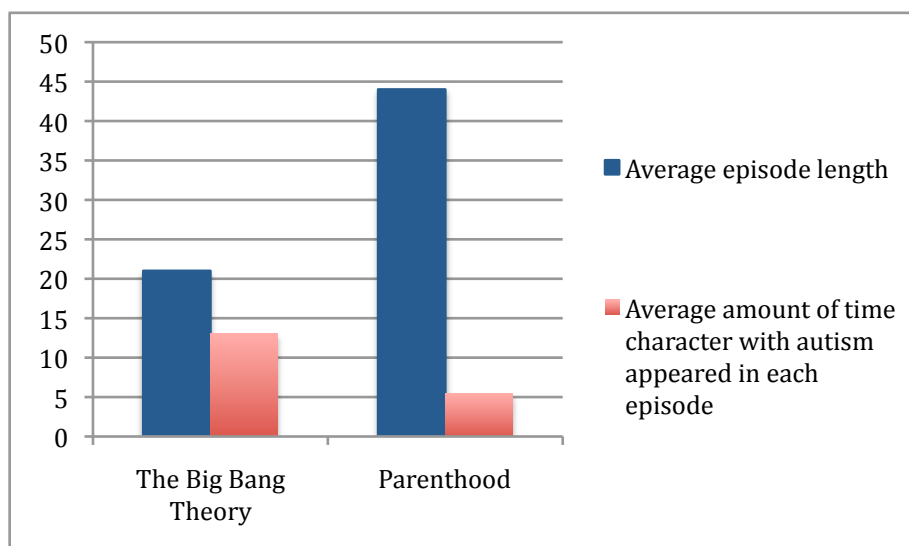
## Results

A total of twelve episodes were from television shows *The Big Bang Theory* and *Parenthood* were used in this study. A second person outside of the study coded for 10% of the episodes viewed and conducted an interrater reliability score of 86%.

Six episodes from *The Big Bang Theory* were viewed, each episode ranging between 20 minutes, 8 seconds to 22 minutes, 55 seconds for an average episode length of 21 minutes, 26 seconds.

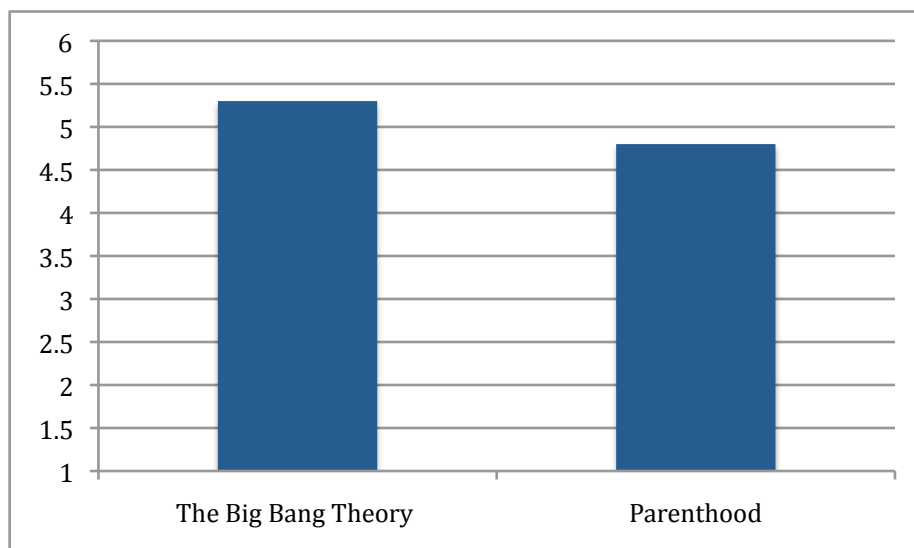
Six episodes from *Parenthood* were viewed, each episode ranging from 43 minutes, 9 seconds to 50 minutes for an average episode length of 44 minutes, 41 seconds. Out of the six episodes analyzed in *The Big Bang Theory*, the average length of time the individual with autism was present per episode was 13 minutes, 2 seconds, with a maximum screen time of 16 minutes, 24 seconds and a minimum screen time of six minutes, 52 seconds. Out of the six episodes analyzed in *Parenthood*, the average length of time the individual with autism was present per episode was 5 minutes, 48 seconds, with a maximum screen time of 8 minutes, 29 seconds and a minimum screen time of 3 minutes, 41 seconds. See table 1. A second person outside of the study coded for 10% of the episodes viewed and conducted an interrater reliability score of 86%.

Table 1: Average Episode Length Compared to the Average Amount of Time Character with Autism Appeared in Each Episode



Out of the six episodes analyzed for *The Big Bang Theory*, the adult character with autism, Sheldon, was in every episode, appearing in five to seven scenes per episode, averaging 5.3 scenes per episode. In *Parenthood*, the child character with autism, Max, was in every episode, appearing in three to seven scenes per episode, averaging 4.8 scenes per episode. See table 2.

Table 2: Average Number of Scenes in which Individual with Autism was Present Per Episode

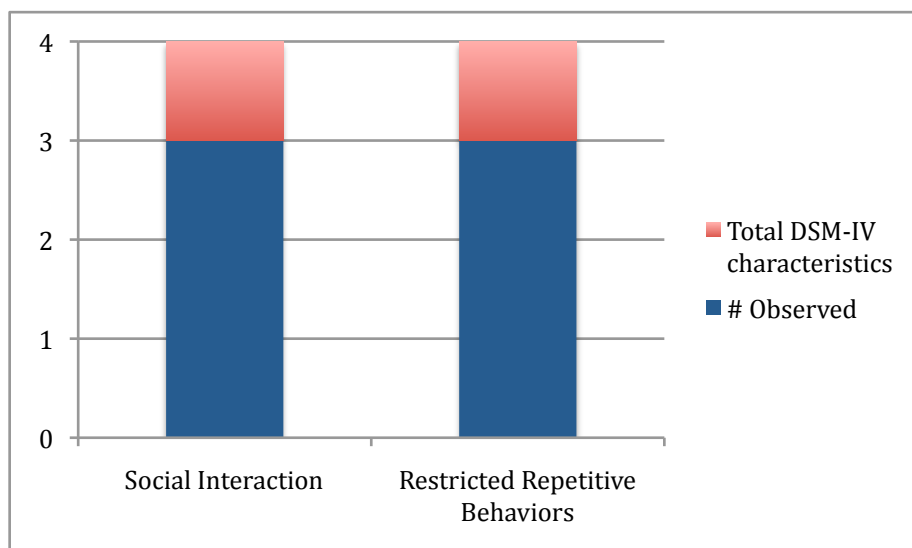


*Question One*

The first questions of this study asked if the portrayals of characters with autism in television coincide with scientifically accepted definitions of autism. To answer that question items from the coding sheet were matched with DSM-IV classifications. Those selected items were in the Social Interaction and Restricted Repetitive and Stereotyped Behavior, Interests, and Activities sections of the coding sheet (see appendix A).

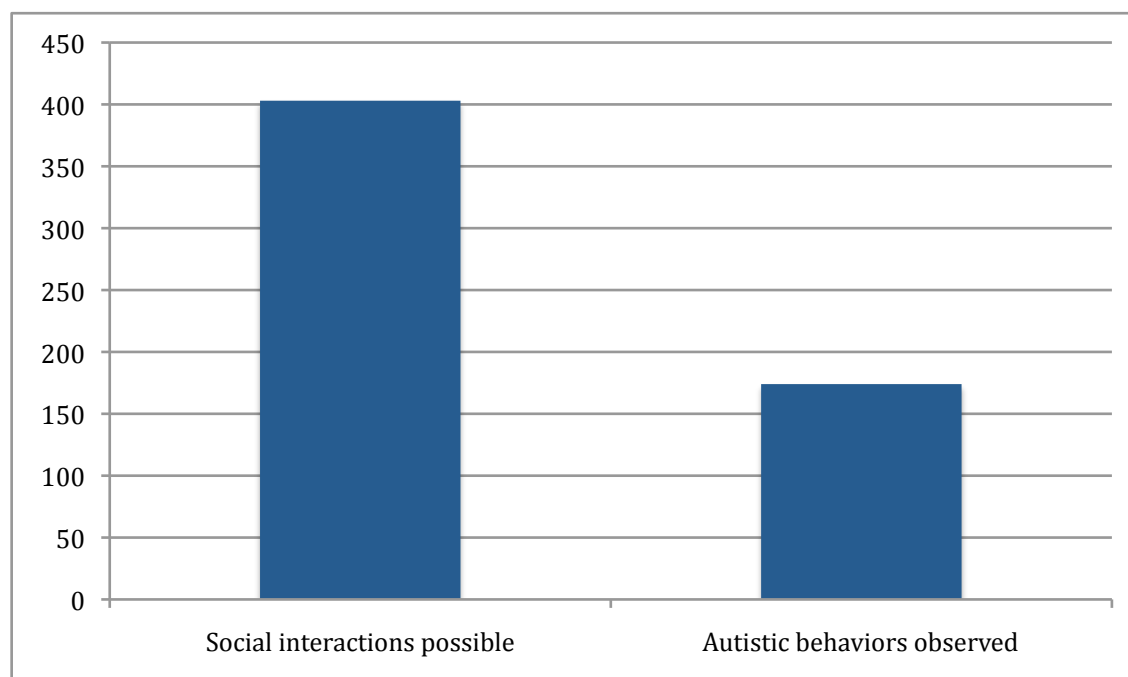
Throughout the 32 scenes in which Sheldon was present in episodes of *The Big Bang Theory*, six out of eight of the characteristics from the coding sheet relating to the DSM-IV were observed at least once. Three out of four of the autism characteristics noted in the Social Interaction section were observed at least once and three out of four of the autism characteristics noted in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section were observed at least once. See table 3.

Table 3: *Number of Characteristics Observed in at Least One Scene out of the Total Amount of DSM-IV Characteristics for Social Interaction and Restricted Repetitive Behaviors in The Big Bang Theory*



The data from the 32 scenes for the adult indicate there were 403 possibilities for social interaction. Out of the 403 possibilities for social interaction 174 autism behaviors were observed. See table 4.

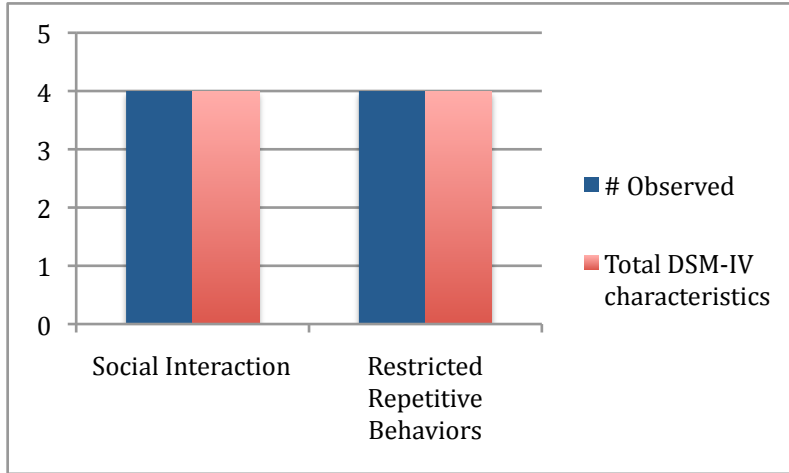
Table 4: *Number of Possibilities for Social Interaction Compared to Number of Behaviors Observed in The Big Bang Theory*



Throughout the 29 scenes in which Max was present in episodes of *Parenthood*, eight out of eight of the characteristics from the coding sheet relating to the DSM-IV were observed at least once. Four out of four of the characteristics noted in the Social Interaction section were observed at least once and four out of four of the characteristics noted in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section were observed at least once. See table 5.

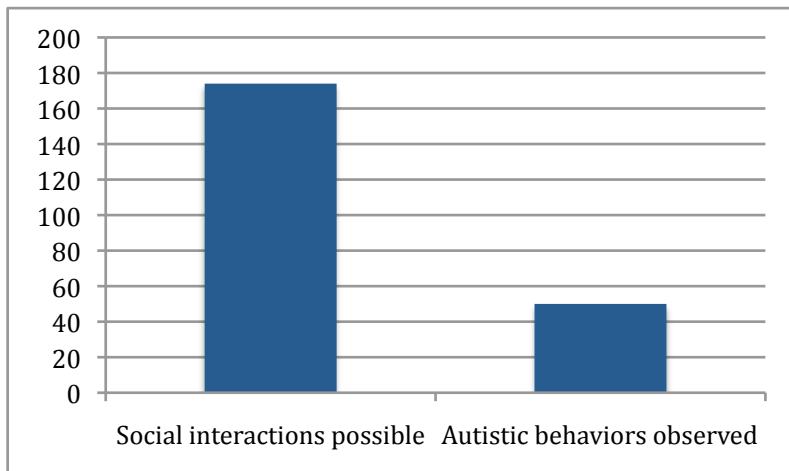


Table 5: *Number of Characteristics Observed in at Least One Scene Compared to the Total Amount of DSM-IV Characteristics for Social Interaction and Restricted Repetitive Behaviors in Parenthood*



Four out of four of the autism characteristic noted in the Social Interaction section was observed at least once in the six episodes of *Parenthood*. The data from 29 scenes for the child indicate there were 161 possibilities for social interaction. Out of the 161 possibilities for social interaction, 50 autism behaviors were observed. See table 6.

Table 6: *Number of Possibilities for Social Interaction Compared to Number of Behaviors Observed in Parenthood*

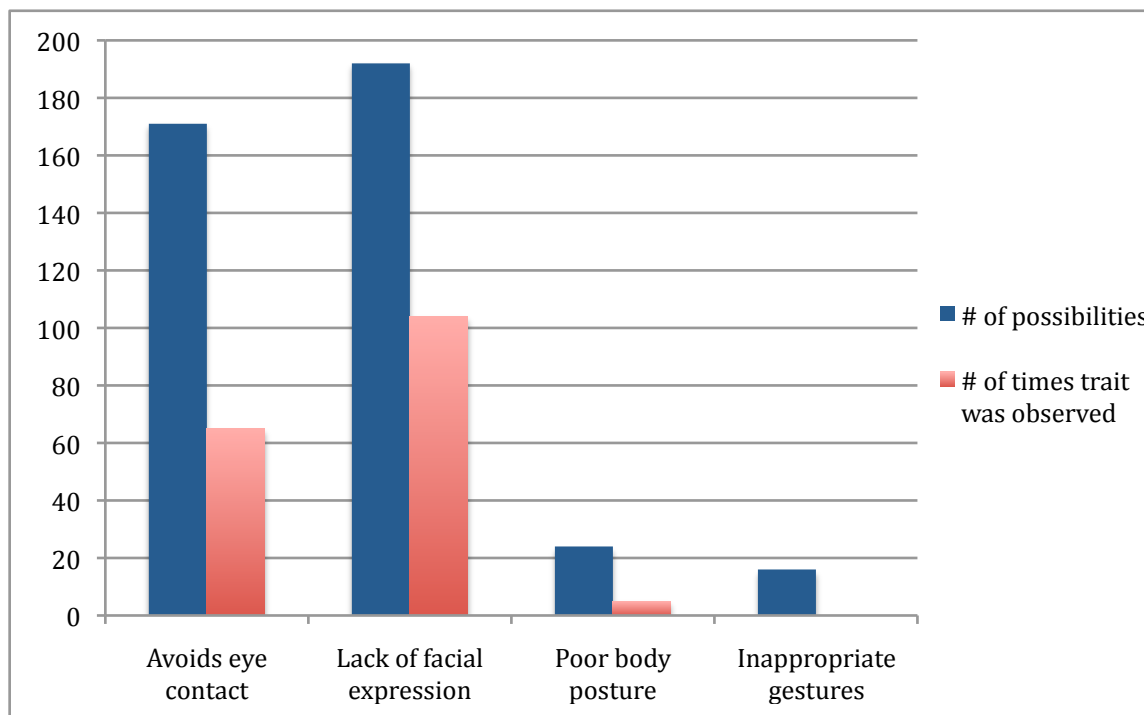


*Question Two*

The second question of the study asks if certain features of autism are selected and used more often. To answer this question observations from the coding sheet were analyzed to determine if a trait was used more frequently as compared to other traits.

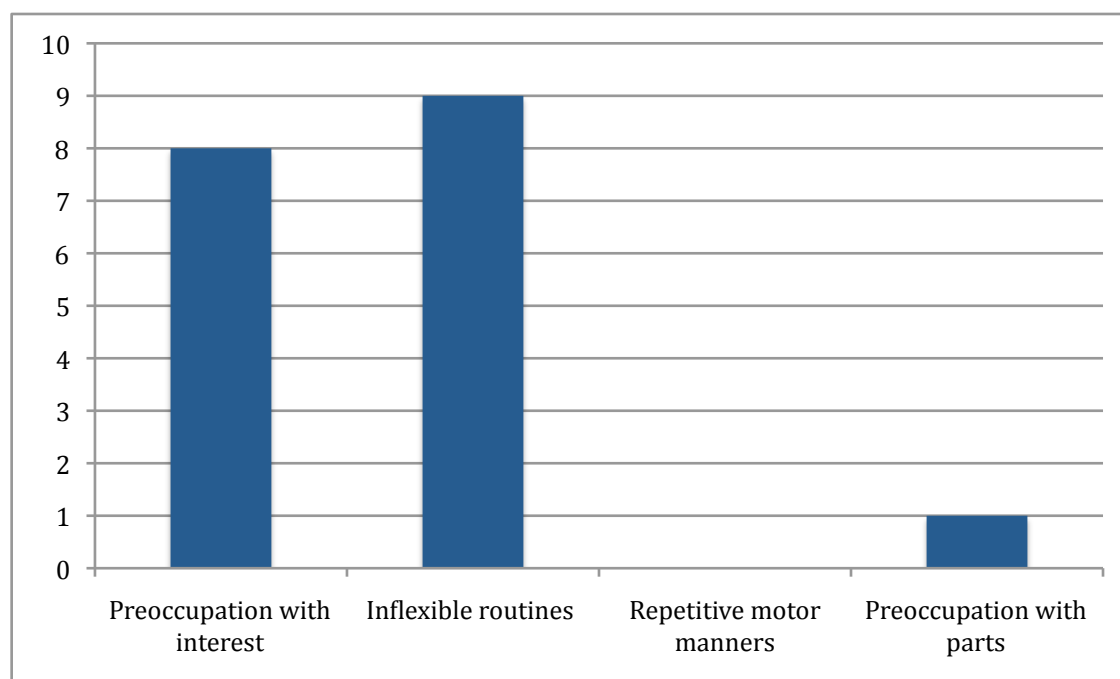
Over the course of 32 scenes in *The Big Bang Theory*, Sheldon avoided eye contact 65/171 times. He lacked facial expression 104/192 times. Sheldon had poor body posture 5/24 times. Sheldon used gestures 16 times and never used those gestures inappropriately. In the Social Interaction section, the amount of autistic behaviors observed was compared to the amount of observations possible. See table 7.

Table 7: *Characteristic Observed Compared to the Amount of Observations Possible in The Big Bang Theory*



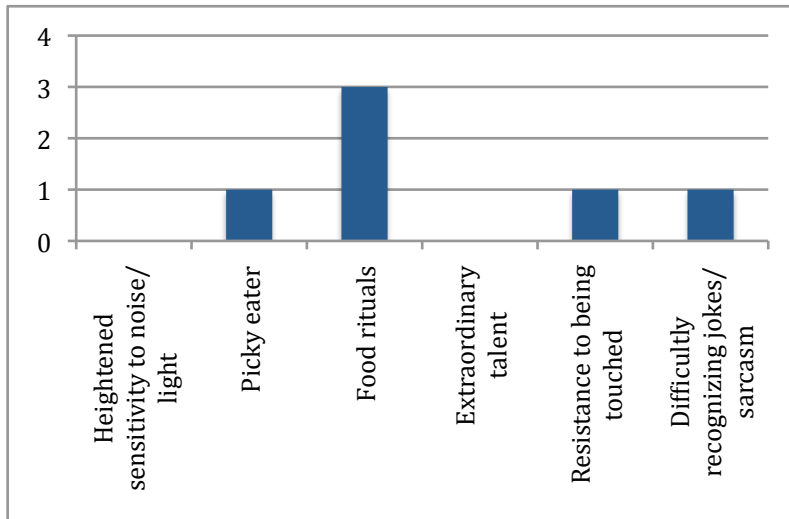
The Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section had at least one instance of occurrence in 18/32 scenes. Out of those 18 scenes, Sheldon had a preoccupation with one or more area of interest that was either abnormal in intensity or focus 8 times, he had an inflexible adherence to specific, nonfunctional routines or rituals 9 times, and there was one instance when Sheldon had a persistent preoccupation with parts or objects. See table 8.

Table 8: *Number of Behaviors Observed in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities Section in The Big Bang Theory*



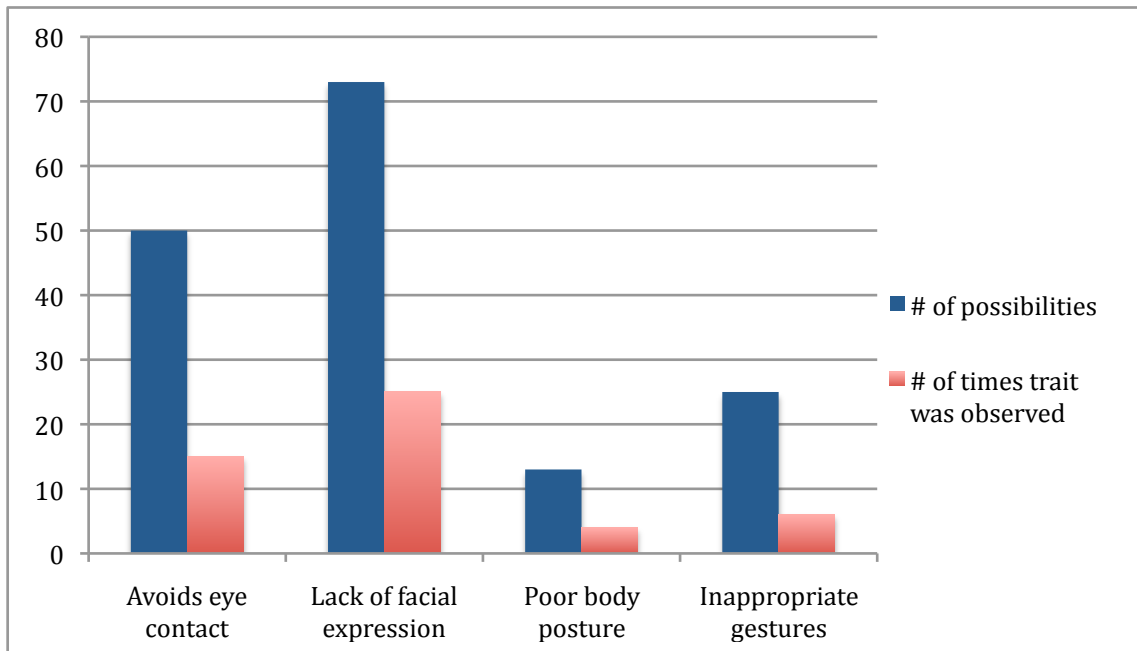
Four out of six of the secondary characteristics from the coding sheet were observed in the 32 scenes from *The Big Bang Theory*. Sheldon demonstrated habits of a picky eater once, he displayed food rituals three times, he was touched twice, but showed resistance to it twice, and he had difficulty recognizing jokes or sarcasm one time. See table 9.

Table 9: *Secondary Characteristic Use in The Big Bang Theory*



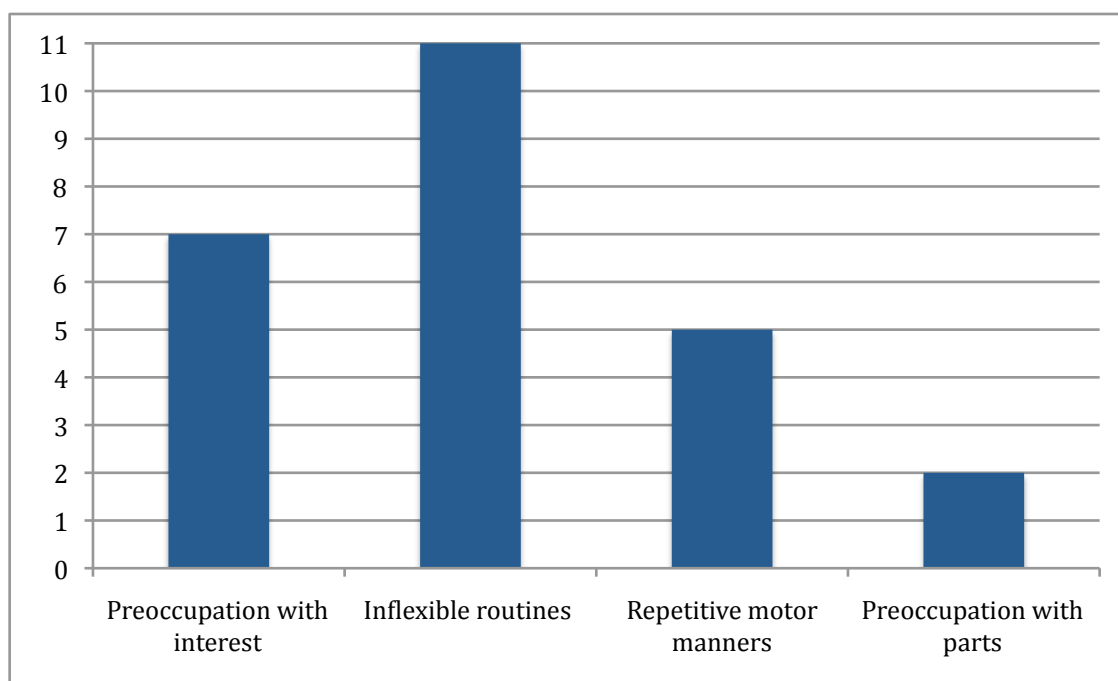
Over the course of 29 scenes in *Parenthood*, Max avoided eye contact 15/50 times. He lacked facial expression 25/73 times. Max had poor body posture 4/13 times. He used inappropriate gestures 6/25 times (2 lack of gestures and 4 overuse of gestures). See table 10.

Table 10: *Social Interaction Characteristic Observed Compared to the Amount of Observations Possible in Parenthood*



The Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section had at least one instance of occurrence in 18/29 scenes. Out of those 18 scenes, Max had a preoccupation with one or more area of interest that was either abnormal in intensity or focus 7 times, he had an inflexible adherence to specific, nonfunctional routines or rituals 11 times, he had stereotyped and repetitive motor manners 5 times, and there were 2 instances when Max had a persistent preoccupation with parts or objects. See table 11.

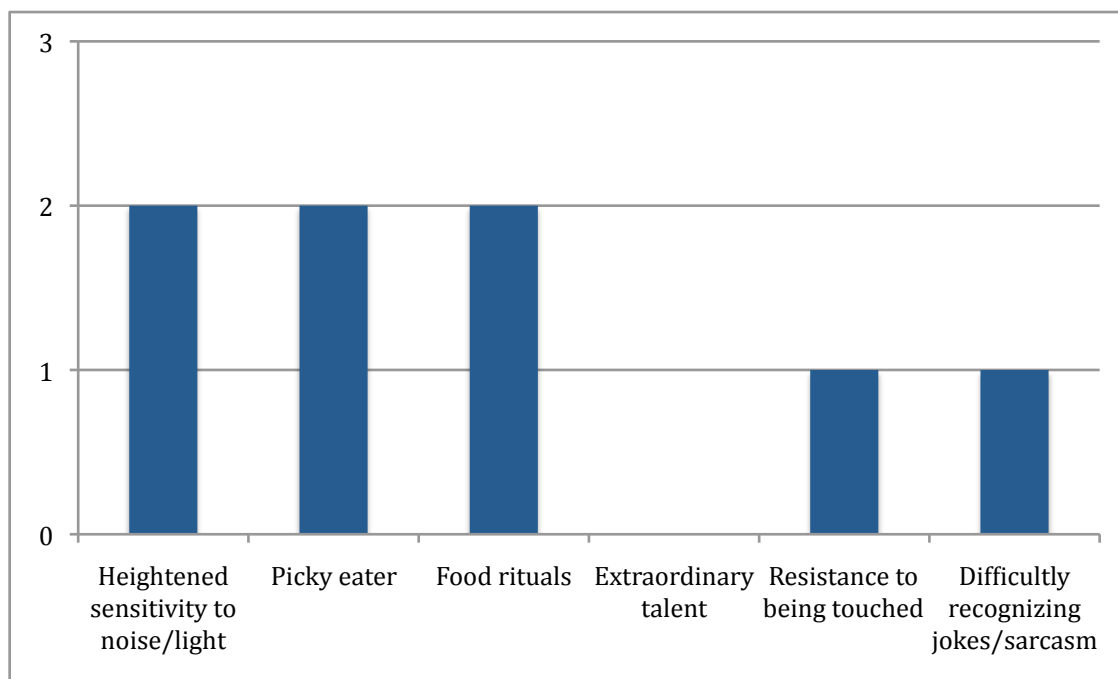
Table 11: *Number of Behaviors Observed in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities Section in Parenthood*



Five out of six of the secondary characteristics from the coding sheet were observed in the 29 scenes from *Parenthood*. Max had a heightened sensitivity to loud noises or light two times. He demonstrated habits of a picky eater twice, he displayed food rituals two

times, he was touched 10 times, but showed resistance to it once, and he had difficulty recognizing jokes or sarcasm one time. See table 12.

Table 12: *Secondary Characteristic Use in Parenthood*

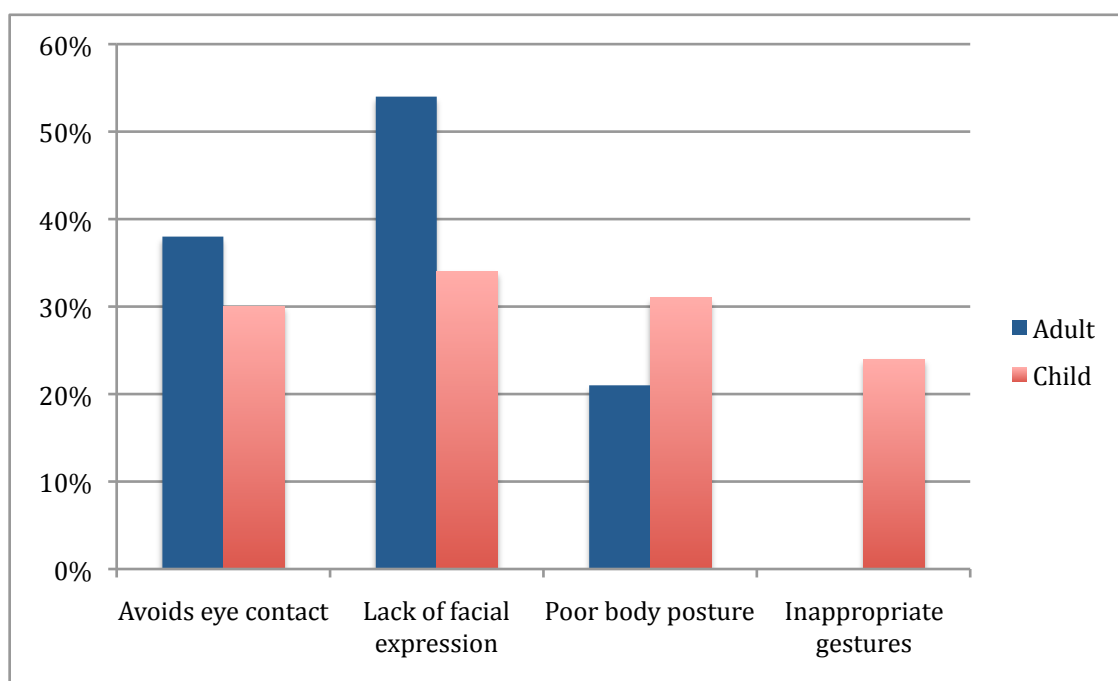


*Question Three*

The third question of the study asks if there are differences between the portrayal of adults and children with autism in television. To answer this question items from the coding sheets from both the adult and the child characters with autism were analyzed and compared to one another. The presence of specific Social Interactions from the coding sheet were converted into percentages and compared between Sheldon from *The Big Bang Theory* and Max from *Parenthood*. For the scenes in which eye contact was required, the adult character with autism (Sheldon) avoided eye contact 38% of time, where the child character with autism (Max) avoided eye contact 30% of the time. Sheldon had a lack of a facial expression 54% of the total

opportunities for facial expression and Max lacked a facial expression 34% of the total opportunities. Sheldon had poor body posture 21% of the times in which he should have had good posture, where Max had poor body posture 31% of the time. Sheldon never made inappropriate gestures (overuse or lack of) where 24% of the gestures Max used were inappropriate. See table 13.

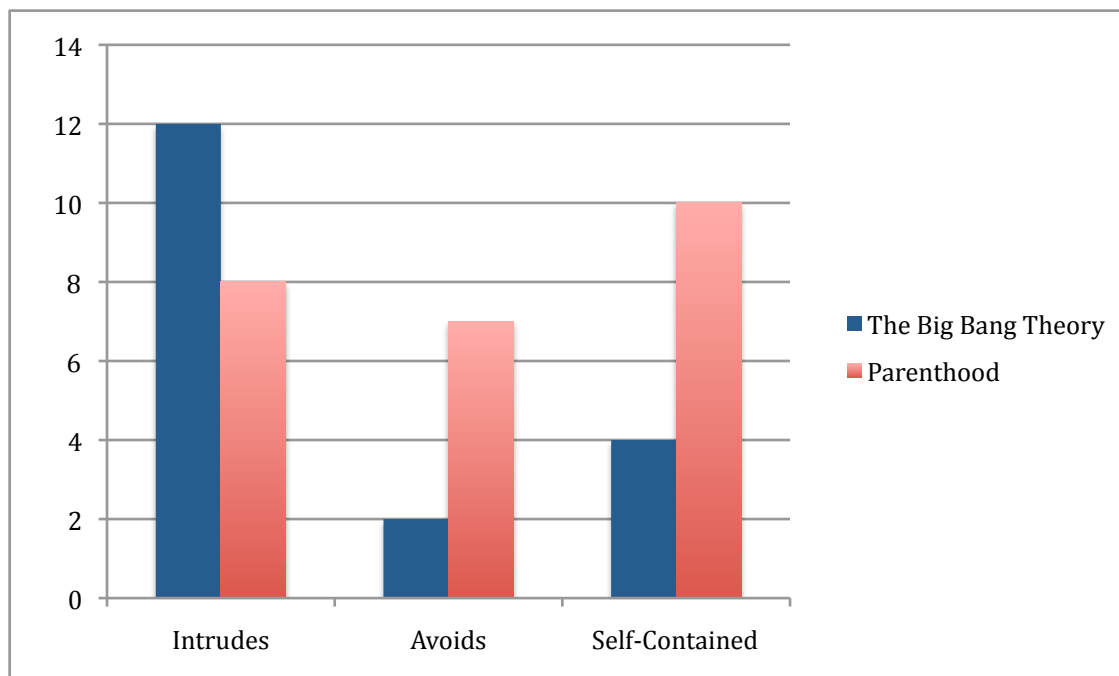
Table 13: Occurrence of Social Interaction Behaviors (in percentages)



The adult and child both had several instances of occurrence in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section. In *The Big Bang Theory*, Sheldon had 18 instances, and in *Parenthood* Max had 25. Out of the 18 times Sheldon’s behavior qualified in the Restricted Repetitive Behavior section, 12 of those times it was intrusive to others, twice his behavior was avoidant, and his behavior was self-contained/self-stimulated 4 times. Out of the 25 times Max’s behavior qualified in the Restricted Repetitive Behavior

section, 8 of those times it was intrusive to others, his behavior was avoidant 7 times, and it was self-contained/self stimulated 10 times. See table 14.

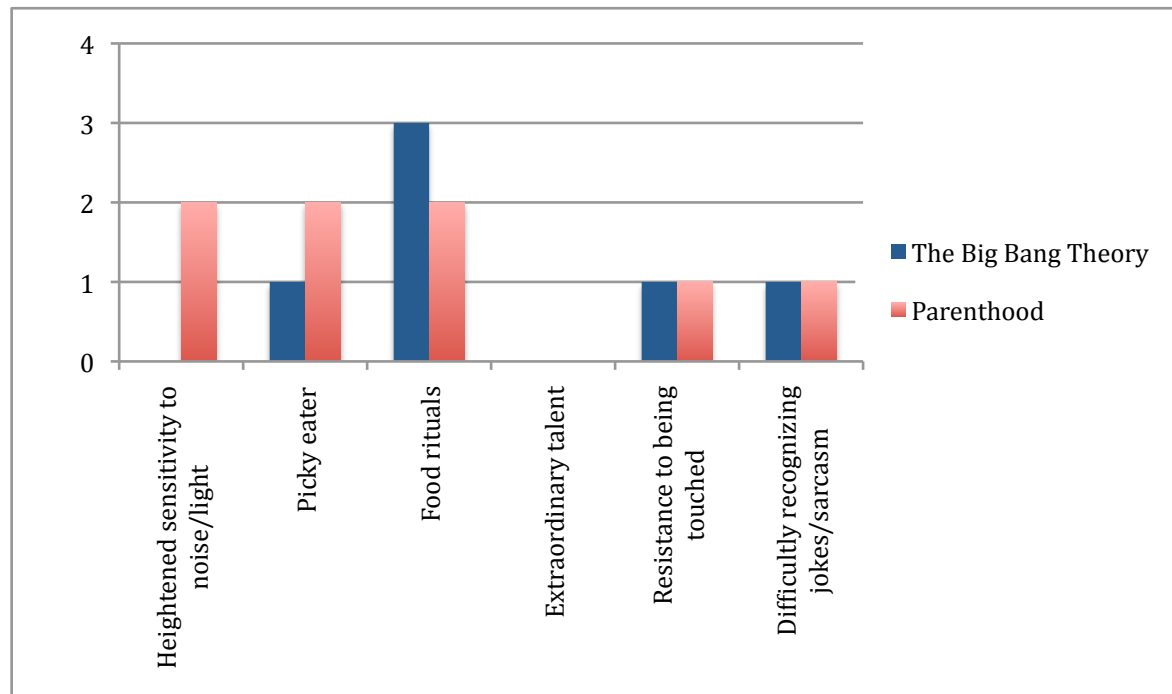
Table 14: *Behavior Type in Restricted Repetitive and Stereotyped Behavior, Interests, and Activities*



Most, but not all, of the secondary characteristics were present in both the adult and child character with autism. Max had a heightened sensitivity to loud noises or light two times. Sheldon was a picky eater just one time, while Max was observed as being a picky eater twice. It was revealed three times that Sheldon had certain food rituals, and it was only displayed two times for Max. Although Max was physically touched 10 times, he only resisted it once, where as Sheldon was only touched twice, he also resisted it both times. Both Sheldon and Max had difficulty recognizing jokes or sarcasm one time. See table 15.



Table 15: Comparison of Secondary Characteristic Use in Parenthood and The Big Bang Theory



### Discussion

The purpose of this study was to examine how accurately autism was depicted in the media (specifically in television) when compared to the scientifically accepted definition. It was clear that characteristics of autism were present in both the adult with autism in *The Big Bang Theory* and the child with autism in *Parenthood*, but not to the extent of what was anticipated. Most of the literature focused on the negative portrayals of autism in the media, using certain “defining” characteristics, such as savantism, to identify a character as having autism. It was expected for those widespread interpretations to be present in the two television shows, but both *The Big Bang Theory* and *Parenthood* focused primarily on the DSM-IV features to represent a character with autism. While not all behaviors were present in the Social Interaction section for both the adult and the child, at least 75% of them were observed in *The Big Bang Theory* and

*Parenthood* at least once. Similar findings were noted in the Restricted Repetitive and Stereotyped Behavior, Interests, and Activities section of the coding sheet. Once again at least 75% of actions were exhibited at least once in each of the two television shows. Although most of the traits from Secondary Characteristics section were also present in both the adult and child, the results illustrated that they were not the focus of the characters actions or behaviors. Most notably, having some kind of extraordinary talent (a feature that has been used to define autism in many media outlets) was neither displayed in the adult or child. While the adult was definitely talented and extremely intelligent, his behavior was not uncommon in relation to his environment. He worked as a physicist in the same lab as his (only) three friends who were also very smart and gifted. Because the adult was usually surrounded by his equally brilliant friends, he never appeared to have some extraordinary talent; especially in the way it is observed in most movies and television shows involving a character with autism.

It was apparent that the writers/developers of each television show tried to have the most accurate depictions of autism in order for their show to demonstrate a truthful portrayal of autism, an outlook that has not been frequently administered in the media. One major difference between *The Big Bang Theory* and *Parenthood* was the genre of each of the television shows. *The Big Bang Theory* can be described as a sitcom or comedy, while *Parenthood* is in the family drama category. The different genres of the two shows definitely played a difference in the way autism was used and displayed in the show. Although the adult's behaviors were fairly consistent with the scientifically accepted definitions of autism, due to the humorous nature of *The Big Bang Theory*, many instances in which the adult demonstrated signs of autism were for a comedic purpose. Many of the jokes in the show revolved around his reluctance to change as well as his tendency toward blunt (sometimes awkward) social exchanges with other characters

in the show. This was a major difference between *The Big Bang Theory* and *Parenthood*. In *Parenthood*, the writers/developers used the child's autism as a central aspect of the plot; traveling from the initial diagnosis, to work with a behavioral specialist, to challenges at school and with other family members. Though there were significant differences in content, many of the actual behaviors and traits observed were the same in both of the television shows.

Another surprising result included the perception of the characters with autism through the lens of other major characters in each of the television shows. For example, the adult's roommate and friends were constantly subject to his inadvertence to change, his eating habits, and his inability to recognize sarcasm. Because the adult's autism was established, and though it was definitely observed (and sometimes referred to), his friends seemed accustomed to his particular behaviors. Although they didn't always understand it, it was clear that his behavior was something they were used to. There was a significant difference with child with autism and his family in *Parenthood* compared to the adult in *The Big Bang Theory*. In *Parenthood*, the child's diagnosis and how it affected his family members was a prominent aspect of the initial plot. Reactions from siblings, parents, extended family, teachers, classmates, team members, family friends, etc. were all examined throughout the series. *Parenthood* provided a more comprehensive view of how autism can have an effect on so many different people, and on so many different aspects of life.

#### *Limitations of the Study*

The study was first limited by the subjective nature of how it was conducted. While interrater reliability was established, much of the coding and interpretation was left to one examiner.

Establishing what behaviors were truly present within scenes, and if behaviors were indeed observed proved to be challenging at times. Because entertainment is ultimately the primary objective of all television shows, the way scenes were set up was not always ideal for coding characteristics of autism.

A second restriction was the limited number of secondary behaviors coded for. After several episodes it was clear that there were several behaviors not included on the coding sheet that the writers/developers of the shows were using to “define” their characters with autism.

#### *Future Directions*

It is suggested that the study be expanded to include several others seasons of both *The Big Bang Theory* and *Parenthood* to consider if there are notable changes in behaviors over time. It is also suggested that the coding sheet be expanded to include more features in the Secondary Characteristics section to incorporate all autism characteristics present in the television shows.

Finally, as noted in the literature, a developing trend in individuals with autism is posting personal-reflection video blogs on YouTube as a way for their voices to be heard without the physical constraints of everyday communication. It is suggested that a study be conducted to analyze the self-depictions of people with autism through personal video blogs as compared to the representations of autism in television shows *The Big Bang Theory* and *Parenthood*.

## References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Revised 4<sup>th</sup> ed.). Washington, D.C: Author.
- Bromley, B. E. (2008). Broadcasting Disability: An Exploration of the Educational Potential of a Video Sharing Web Site. *Journal of Special Education Technology*. 23(4), 1-13.
- Diefenboche, D. L. (1997). The Portrayal of Mental Illness on Prime-Time Television. *Journal of Community Psychology*. 25(3), 289-302).
- Draaisma, D. (2009). Stereotypes of autism. *Philosophical Transactions of the Royal Society*. 364, 1475-1480.
- Huws, J.C. & Jones, R. S. P. (2010). Missing voices: representations of autism in British newspapers, 1999-2008. *British Journal of Learning Disabilities*. 38, 98-104.
- Johnson, J. K. (2008). The Visualization of the Twisted Tongue: Portrayals of Stuttering in Film, Television, and Comic Books. *The Journal of Popular Culture*. 41(2), 245-261.
- Ne'eman, A., & Badesch, S. (2012). *The joint statement of the autism society and autistic self advocacy network on the dsm-5 and autism*. Retrieved from <http://www.autism-society.org/news/in-the-news/the-joint-statement-of-the.html>
- Safran, S. P. (1998). The First Century of Disability Portrayal in Film: An Analysis of the Literature. *The Journal of Special Education*. 31(4), 467-479.
- Signorielli, N. (1989). The Stigma of Mental Illness on Television. *Journal of Broadcasting & Electronic Media*. 33(3), 325-331.
- Varma, S. (2011). Disability through the Lens of the Movie 'I am Sam', Hollywood Productions, 2001. *Psychology and Developing Societies*. 23(2), 297-305.

Appendix- A

Social interaction	Required?		Regular Opp?		# of observations poss	Yes (behavior observed)	No Opp
	Y	N	Y	N			
Eye contact (avoids)	Y	N	Y	N			
Facial expression (lack of)	Y	N	Y	N			
Body posture (poor)	Y	N	Y	N			
Gestures (Inappropriate)	Y	N	Y	N			
Overuse							
Lack of							

Restricted repetitive and stereotyped behavior, interests, and activities	Intrudes?	Avoids?	Self-contained/ Self-stimulated
Preoccupation with one or more area of interest that is either abnormal in intensity or focus			
Inflexible adherence to specific, nonfunctional routines or rituals			
Stereotyped and repetitive motor manners			
Persistent preoccupation with parts or objects			

Secondary characteristics	Observed?		If yes, by who?	Referred to?		If yes, by who?	No Opp
	Y	N		Y	N		
Heightened sensitivity to loud noises or light	Y	N		Y	N		
Picky eater (food itself)	Y	N		Y	N		
Food rituals	Y	N		Y	N		
Extraordinary talent	Y	N		Y	N		
Resistance to being touched	Y	N		Y	N		
Difficulty recognizing jokes or sarcasm	Y	N		Y	N		