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Autism in the Movies: Stereotypes and Their Effects on Neurodiverse Communities

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ABSTRACT

The 'positive' representation of autism in the film has increased considerably in the past decade. This paper examines the representation of characters with autism in three films to discern the influence on viewers' perceptions of children with autism. Data were thematically analyzed based on the disability studies framework. Findings show that films feature common stereotypes of those with autism that are less representative of the autistic population. These stereotypes can lead viewers to develop false perceptions and beliefs about the real people with autism. The fact that popular autism success stories in contemporary media can be deceiving, there is a need for media literacy for viewers such as educators who have direct interaction with learners with disabilities.

Keywords: Autism, media, savant, disability, perception, educators

INTRODUCTION

The topic of media representation of autism spectrum disorder (ASD) is an important one. With more stories than ever that feature characters with ASD, it is important to revisit and update the literature on how these representations reinforce or challenge stereotypes. This study aims to increase discussion of stereotypes and the contribution of media representation to stereotypical attitudes. The first author is a special education teacher candidate and the second author an instructor of inclusive education. Therefore, this study focused on films to understand how representations of autism may influence neurotypical viewers' perceptions of individuals with autism. The goal is to support positive attitudinal change that embraces neurodiversity.

Perception is the psychological process of meaning making of information that comes through the senses (Alawad & Kambal, 2019). Perceptions affect human interactions and relationships. Individuals who are perceived favorably will certainly be better liked. They might even have access to better opportunities than those who are perceived negatively. Considering that characters with Asperger's syndrome have been vital to the storylines of recent successful programs, it is critical to reflect on the impact of perceptions on viewers as well as the efficacy of this medium for imparting the

appropriate norms to viewers.

Critical analyses of media portrayals of ASD require a thorough understanding of the traits, which have not been well defined. Autism diagnoses are based mostly on the standardized criteria in the American Psychiatric Association's (2013) Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5). The National Institute of Neurological Disorders and Stroke (n.d.) has defined ASD as "a group of complex neurodevelopment disorders characterized by repetitive and characteristic patterns of behavior and difficulties with social communication and interaction" (What is autism spectrum disorder?). Individuals with ASD exhibit varying characteristics (DSM-5, 2013). For example, some may experience socialization issues (Autism Speaks, n.d.). An autism diagnosis does not indicate the severity or the manifestations of the disorder, hence the important notion of a spectrum (Draaisma, 2009; DSM-5, 2013). Individuals with Asperger's syndrome (Montgomery et al., 2016) exhibit autism traits, but are typically higher functioning. Autism is a spectrum disorder; thus, media generalizations are likely to hurt the autism community. Then, knowing how the media representations of individuals with Asperger syndrome affect neurotypical viewers' perceptions of individuals with autism is important for different communities including stakeholders in education such as families of children with autism.

PERCEPTIONS AND STEREOTYPES OF AUTISM

Perception is the ability to process information through the visual (seeing), tactile (touch), olfactory (smell), auditory (hearing), gustatory (taste), vestibular (movement), and proprioceptive (body awareness) senses (Alawad & Kambal, 2019). It is the basic component in the development of a

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concept: in this context, media audiences' ideas and beliefs about individuals with autism. Stereotypes are the expectations of and reactions to prejudice (Draaisma, 2009; Whaley, 2018). Stereotypes of autism are prevalent in the media (Draaisma, 2009; Holton, 2013; McHue, 2018; Poe & Mosely, 2016). In a definitive scale with two extremes, individuals with autism are presented mainly as savants or lacking the ability to live independently (Garner et al., 2015; Prochnow, 2014).

In popular media, autistic characters tend to perpetuate deficit stereotypes (Holton, 2013). They are often portrayed as having savant skills but lacking the ability to fully take care of themselves (Conn & Bhugra, 2012; Poe & Moseley, 2016). They need a nondisabled person to care for them or to advocate for their place in society. Autistic savant charactersin novels, movies, and television shows (Draaisma, 2009) are often used to help people to stop seeing autism as a deficit and instead to see autism persons as having talents that are different from those of neurotypical individuals. Draaisma (2009) wrote: "In stereotypes such as these, the characteristics of autism blur into normal behaviors, contributing to the 'fuzziness' of the concept of autism" (p. 1478). McHue (2018) analysis of the portrayal of autism in television crime dramas concluded that detectives were often portrayed as dysfunctional, and impairment was usually associated with these neurodiverse detective characters. Dr. Temperance Brennan in Bones (2005) and Sonya Cross in The Bridge (2013) are examples (McHue, 2018, p. 539). In these shows, the great detective work is often attributed to their neurodiversity, thereby perpetuating the savant stereotype.

Garner et al. (2015) discussed a study in which a clinical psychologist and an education specialist used the Childhood Autism Rating Scale, 2nd edition (CARS2), to rate the autism severity levels of the characters in 15 films (2015). CARS2 comprises 15 behavioral categories: relating, imitation, emotion, body, object, adapt, visual, listen, taste, fear, verbal, non-verbal, activity, intellect, and overall impression. Each category is rated on a scale of 1 to 4, with 1 referring to normal behavior and 4 to very abnormal behavior. Garner et al. (2015) averaged the psychologist's and education specialist's ratings and assigned them scores in the appropriate CARS2 categories. The results of the study showed that for all but three categories, the median autism severity scores for the movie depictions were higher than those for an actual population with autism. The study provided further evidence of the overrepresentation of severe autism in movies. The two most prevalent stereotypical portrayals were characters with superhuman abilities and those unable to function on their own. In reality, most individuals with autism are somewhere between those extremes. An interesting assertion by Garner et al. (2015) was that some of the characters' behaviors "would not warrant a clinical diagnosis" (p. 421). It is possible for an individual without autism to receive a high rating on the CARS2 scale because of other disabilities or conditions. When a film is billed as having a character with autism, this "suggests for the lay viewer that the representation

of autism in the film is irrefutably present and should be accepted" (Garner et al., 2015, p. 421). In this case, the movies are promoting not only stereotypes but also incorrect diagnoses.

Conn and Bhugra (2012) discussed the portrayal of autism in 23 mainstream films. They argued that autism was used for entertainment with little regard for the accuracy of the portrayals. They stated: "Hollywood tends to exploit the typically dramatic physical response to 'stimulus overselectivity': the rocking, hand-flapping, headbanging behavior of some autistic individuals provides a mesmerizing visual spectacle. Furthermore, the notion of the autistic savant ... has its own attractions" (2012, p. 57). Conn and Bhugra discussed the typical scenario in which an individual with autism is paired with a neurotypical character with psychological problems. In such cases, the character with autism exists to heal their counterpart. Conn and Bhugra also discussed the usual savant stereotype. Both of these stereotypes could give a neurotypical audience the impression that individuals with autism exist to serve a purpose: to either perform superhuman feats or to be emotional healers. In some films, the extreme stereotyping of savants imbues the characters with impossibly absurd capabilities. Thus, the misconceptions about autism are damaging.

Some films (e.g., Molly andSilent Fall) contribute to the misconception that autism can be cured, and others (e.g., Temple Grandin) imply that it is caused by insufficient parental affection (Conn & Bhugra, 2012). This is false because "a diagnostic approach requires features of autism to be present before the age of three is reached" (Conn & Bhugra, 2012, p. 59). Conn and Bhugra observed that of the 23 films analyzed in the study, none discussed the true genetic basis of autism, and accompanying disabilities, such as epilepsy, hearing loss, and stomach problems. Despite the harmful stereotypical depictions of autism in mainstream films, some recent films can be used to educate viewers because they have more accurate representations (Conn & Bhugra, 2012).

DISABILITY STUDIES FRAMEWORK

This study is grounded in the disability studies framework (Danforth, 2014; Davis, 1995; Siebers, 2008). In disability studies, the idea that disability is socially constructed and that society, rather than a disability, classifies individuals as disabled, is explored (Gabel & Connor, 2014). Thus, society is organized for nondisabled and able-minded individuals, and little support is provided for those of a different status. Instead of being perceived as having different abilities, individuals with disabilities are often seen as being less capable (Siebers, 2008). The oft-negative perceptions of the disability community are created by the broader society. The disability studies framework advocates for the normalization of individuals with disabilities to facilitate their access to opportunities in an inclusive community (Danforth, 2014; Davis, 1995; Siebers, 2008).

Critical for disability scholars is the connection of language and perception and how it empowers or disempowers people with disabilities. Person-first language or identity-first language are major language of identity within the disability discourse (National Center on Disability and Journalism [NCDJ], 2018). This paper will use person-first and identity-first language interchangeably because the issues raised on both sides of the debate have value.

Selection of Films About Autism

The media facilitate mass communication, and information can be perceived through the five basic human senses (Mateer et al., n.d.). Thus, media can be visual, audio, or tactile. Media devices include radio, television, and computers. Movies, the internet, newspapers, pamphlets, and books are media. Internet media include services such as email, blogs, and social media sites (e.g., Facebook, Twitter). The term "media" also includes information-sharing behavior (e.g., advertising, singing, talking) and remote and in-person public events.

This study focused on film characters that could influence the perceptions of autism: Rain Man (Johnson & Levinson, 1988), Extremely Loud & Incredibly Close (Rudin & Daldry, 2011), and Salmon Fishing in the Yemen (Webster & Hallström, 2012). The three films have characters with autism or autistic traits (i.e., fictitious characters with autism played by neurotypical actors). We selected the films we had watched over four times before the study. Our familiarity with the storyline made examination of the content using Disability Studies relevant. The film selection was also influenced by time, the rise of online learning because of the COVID-19 pandemic, and the possibility of visual media being used in online and remote teaching and learning in teacher preparation programs (Mateer et al., n.d.). Another goal was to increase the understanding of the continuum of film portrayals of individuals with autism and their possible effects on autistic individuals and society as a whole. Thus, popular past and current films were chosen to highlight the changes in the portrayals and possible perceptions of individuals with autism.

Media Analysis

Stereotypes exert a great influence on perceptions (Draaisma, 2009). An individual's knowledge of a topic could be based entirely on a stereotype. The study used thematic analysis (Braun & Clarke, 2006), which involved watching each film three times. During each viewing, the phrases, actions, and scenes that captured elements of disability stereotypes and stigma were noted. The data were then coded using Nvivo software to identify the phenomenon of disability. Instances of stereotypes, shame, discomfort, or awkwardness as manifested in the images, spoken language, or body language (e.g., facial expressions) were considered in deciphering the possible perceptions and their effects. Language can influence perceptions, thoughts, and emotions. What, how, when, and where an idea is expressed actively shapes perceptions, i.e., the understanding of how an autistic character should be viewed. The role of each element in the positive or negative perceptions of autism and the implications of these perceptions are discussed. The disability studies framework guided the media analysis. The presence and presentation of autism in the films and the frequency with which the characters are portrayed as

heroic were observed. Last, the disability studies framework guided the comparison of the opportunities afforded the autistic characters and those available to their neurotypical counterparts. The next section discusses the film portrayals of autism.

Authors' positionality

The authors are educators in the field of special education and work with individuals with disabilities including children with autism. The first author is a special education teacher candidate and the second author is an instructor of inclusive education and teacher education. Therefore, analysis of the films is skewed towards understanding how portrayals of ASD can create awareness of autism and enhance inclusion of individuals with autism, or how they can also reinforce stereotypes that negatively affect, for example teacher and student relationships.

REPRESENTATIONS OF AUTISM

The analysis of the three films featuring autistic characters revealed the following representations: autism as superhuman abilities, autistic individuals as being dependent and posing a burden, autistic individuals as childlike, and autism as a medical condition. The findings are presented below.

Autism as Superhuman Abilities

In all three films, the characters with autism or autistic traits were endowed with superhuman abilities. In Rain Man, Raymond has several savant traits. He has an amazing memory. While staying at a hotel for just one night, he memorizes half of the telephone directory. At a diner the next day, he recalls the waitress's telephone number upon reading her nametag (Johnson & Levinson, 1988, 38:10). Another instance of Raymond's great memory is his recall of the number of plane crashes and fatalities in the previous year as Charlie tries to persuade him to get on an airplane. Raymond's mathematical skills are also amazing. He can count quickly, and he acts as a human calculator. When a box of toothpicks is dropped at the diner, Raymond counts 246 toothpicks in just seconds (Johnson & Levinson, 1988, 42:21). Because of Raymond's mathematical skills and photographic memory, Charlie realizes that he can teach him to count cards, and this allows them to make an enormous sum of money at the casino.

These savant characteristics make Charlie more appreciative of and patient with Raymond. At the beginning of the film, there are many moments when Charlie calls Raymond an idiot or the R-word. This starts to change when he realizes Raymond's brilliance. At one point, Charlie takes Raymond to the doctor's office to try to understand his behaviors. The doctor asks whether Raymond has unique abilities. He then gives Raymond complicated mathematical problems, which he (the doctor) enters into a calculator. After Raymond answers all the questions correctly, Charlie says, "That is amazing! He should work for NASA" (Johnson & Levinson, 1988, 1:02:51). The doctor diagnoses Raymond as high-functioning. Before Raymond and Charlie leave the office, the doctor asks Raymond whether he considers himself autistic. Raymond responds, "I don't think so. No. Definitely not" (Johnson & Levinson, 1988, 1:03:47). Raymond is unable to understand his diagnosis.

In Extremely Loud & Incredibly Close, Oskar is portrayed as having high-functioning autism. He says, "I got tested once to see if I had Asperger's disease. Dad said it's for people that are smarter than everybody else but can't run straight. Tests weren't definitive" (Rudin & Daldry, 2011, 29:56). Oskar says that his favorite activities, which include doing puzzles, counting, and hearing the sound of his tambourine, help to calm him. He is also excellent at mathematics. The first clue Oskar uses to find the matching lock is the last name "Black," which is written on the envelope that held the key. He then picks up the New York City telephone directory and calculates the time it would take to find and visit every person with the last name Black.

Salmon Fishing in the Yemen is the story of a wealthy Sheikh who tries to introduce salmon fishing to his country, Yemen. He enlists the help of Harriet Chetwode-Talbot, a financial advisor, and Dr. Alfred Jones, a fisheries expert, to make his dream a reality. Alfred is confirmed as having Asperger syndrome. In addition, he is an expert with a doctorate in his discipline.

Autistic Individuals as Being Dependent and Posing a Burden

Movie characters with autism are often portrayed as being dependent and posing a burden to their families and the broader community. In *Rain Man*, Charlie learns that he has a brother with autism when his father dies and leaves his fortune to the mental institution in which Raymond resides. This would foreshadow Charlie's getting Raymond discharged from the mental institution in Cincinnati, Ohio, to get custody of him and, thus, to gain control of his inheritance. After Raymond is discharged, Charlie needs to get to Los Angeles to settle urgent work-related business. Citing multiple plane crashes, Raymond refuses to fly on an airplane. This is the start of Raymond and Charlie's long road trip from Cincinnati to Los Angeles.

In Extremely Loud & Incredibly Close, the young boy Oskar, who finds a key in his deceased father's closet, believes that his adventure to find the matching lock will help him to stay connected with his father in the year following the death. Oskar's adventure ends when he finds the original owner of the key. He is sad that it is not really one of his father's possessions. It had mistakenly fallen into his father's hands before he died. Instead of leaving after he returns the key, Oskar reveals that his father was killed in the 9/11 terrorist attacks and that he was sharing this secret for the first time. Oskar reveals that he had been home alone when his father called him for the last time and that he was too scared to pick up the telephone to listen to his father's final message, which had ended abruptly.

In Salmon Fishing in the Yemen, Alfred is presented as being dependent and posing a burden to Harriet, a partner on the fishing project. After Harriet's boyfriend is reported missing in action in Afghanistan, Alfred calls her to urge her to get back to work. He would later show up at her apartment. Assuming that he is there to press her to return to work, Harriet says, "Anyone with a shred of understanding, or humanity, or simple feeling, who, frankly, wasn't suffering from some kind of Asperger's, would know that the last thing that I need is your bullying" (Webster & Hallström, 2012, 46:38). It turns out that Alfred is

there to bring her a sandwich. Knowing that she is sad, he assumes that she has not been eating.

Autistic Individuals as Childlike

Despite being adults, the film characters with autism are all reduced to the state or status of infancy. Raymond, Oskar, and Alfred are frequently treated as young children by family members, colleagues, partners, or other individuals. In *Rain Man*, Raymond is first infantilized by his parents, who put him in an institution after he had accidentally hurt his younger brother Charlie. They perceive him as incapable of ensuring his own and others' safety. This theme recurs when Charlie tries to get Raymond discharged from the institution. The doctor overseeing the institution insists that Raymond cannot leave because of the negative consequences from the interruption of his routines. He also mentions that Raymond is incapable of expressing himself, thereby further infantilizing Raymond.

In most of Extremely Loud & Incredibly Close, Oskar is portrayed as being independent as he travels around New York City in search of the lock that matches his father's key. This point is almost invalidated with the revelation near the end of the film that Oskar's mother had learned of his plan to visit every person in New York City with the last name Black. She calls on these citizens to tell them about her son's impending visit. She tells Oskar that she was only trying to ensure his safety. However, this suggests that any perceptions about Oskar's being independent were inaccurate.

In Salmon Fishing in the Yemen, Alfred is treated like a child by his partner and some of his supervisors and colleagues. When Harriet's boyfriend is reported missing in action, Alfred calls her and later brings her a sandwich because he assumes that her sadness has prevented her from eating. Upon his arrival, Harriet, who is aware of his Asperger's condition, accuses him of being selfish. When she tries to apologize for her earlier statement, Alfred replies, "The great thing about people with Asperger's is it's very difficult to hurt their feelings" (Webster & Hallström, 2012, 48:22). In this example, Harriet assumes that Alfred is incapable of feeling sympathy as a neurotypical adult in this situation. Alfred also exhibits traits that could be perceived as childlike on the basis of neurotypical adults' perceptions of their inappropriateness. For example, he interrupts conversations and argues with his employer.

Autism as a Medical Condition

Autism is presented throughout the three movies as a disease. The characters with autism or autistic traits are constructed around the *DSM-5* criteria, which label autism as a psychiatric disorder. In *Rain Man*, Raymond exhibits many autistic habits. On the first night away from the mental institution where he has been living, Raymond rearranges the furniture in his hotel room to closely represent his room at the institution. At a restaurant, he wants maple syrup placed on the table before his pancakes are served (Johnson & Levinson, 1988, 39:36). The doctor overseeing the institution describes Raymond's condition to Charlie. He says that Raymond cannot express himself. Thus, his routines and rituals "are all he has to protect himself ... any breaks in the routines, and it's terrifying" (Johnson & Levinson,

1988, 21:14). Throughout the movie, Raymond exhibits many habits that are related to his autism. He dislikes others' touching his belongings. He does not like breaks in his routine. He has violent panic attacks when he is scared or recalls a stressful memory. He also does not follow society's rules or expectations, such as respecting others' privacy. When Raymond's brother is having an intimate moment with his girlfriend in the adjacent room, Raymond's curiosity about their noises guides him to their room, thereby invading their privacy (Johnson & Levinson, 1988, 33:17). Another of Raymond's characteristics is repeating what others, including those on the radio or television, say.

In Extremely Loud & Incredibly Close, Oskar mentions that he was "tested once to see if I had Asperger's disease" (Rudin & Daldry, 2011, 29:56). His condition is equated to an ailment. However, his behavior could be characteristic of Asperger's or post-traumatic stress disorder because his father died in the recent 9/11 terrorist attacks. His hypersensitivity to loud sounds could be related to either condition. Oskar's defects are also revealed in his dislikes, which include swing sets, bridges, overstimulation, public transportation, and talking to strangers. Oskar says, "It's an obvious target. All public transportation is. You can get blown to pieces by people who don't even know you" (Rudin & Daldry, 2011, 1:03:45). Regarding overstimulation, Oskar becomes very shaken in loud, busy environments. He says that he is troubled by certain things: a list that grew with his father's death on 9/11. Oskar's list is as follows:

old people, running people, airplanes, tall things, things you can get stuck in, loud things, screaming, crying, people with bad teeth, bags without owners, shoes without owners, children without parents, ringing things, smoking things, people eating meat, people looking up, towers, tunnels, speeding things, loud things, things with lights, things with wings. (Rudin & Daldry, 2011, 23:35)

Another unusual trait is not always noticing the verbal cues that a neurotypical person would. Oskar asks, "Is that any of your business?" (Rudin & Daldry, 2011, 27:57). He then needs confirmation that it was a rhetorical question.

In Salmon Fishing in the Yemen, Alfred exhibits many of the social deficits that are described in the DSM-5. Some of the quirks that could be associated with Asperger's are his being hyper-focused, inappropriately inserting himself conversations, arguing with his employer about his beliefs, and being strict with himself on things such as alcohol consumption. Alfred's quirks make him vulnerable to being bullied and misunderstood. Sometimes the other characters taunt him about his quirkiness. For example, Harriet directly critiqued him on his Asperger syndrome. Alfred's boss once accused him of not learning Harriet's first name. He always called her Ms. Chetwode-Talbot out of politeness. Clearly within earshot of Alfred, the boss makes a rude remark to Harriet: "Bet he doesn't even know your first name, does he?" (Webster & Hallström, 2012, 40:50). After work begins on the salmon fishing project, Harriet discovers that her boyfriend, who had been deployed in Afghanistan, has been labeled missing in action. The project came to a halt. After Harriet spends some time at home waiting for an update on her boyfriend, Alfred calls to urge her to return to work because of the looming deadline. This can be perceived as insensitive, especially when Harriet hits the telephone as Alfred's message is played.

Despite Alfred's idiosyncrasies, he does display the traits of a neurotypical person. He makes jokes, occasionally exhibits sarcasm, and, despite his earlier remarks, experiences hurt feelings. By the completion of the salmon fishing project, Alfred has fallen in love with Harriet, and Harriet's boyfriend is no longer missing in action. He comes to Yemen to be reunited with her. Alfred is disappointed by this turn of events. Eyes watering and voice choking with emotion, he says goodbye to Harriet. At the end of the film, Harriet and Alfred elope.

UNDERSTANDING OF THE EFFECTS OF THE REPRESENTATIONS OF AUTISM

This study aimed to increase the understanding of the effects of the representations of autism in the films on neurotypical viewers. The analysis revealed four dominant stereotypes that might influence viewers perceptions: autism as superhuman abilities, autistic individuals as being dependent and posing a burden, autistic individuals as childlike, and autism as a medical condition.

Autism as Superhuman Abilities

The main characters with autism are portrayed as having savant traits. They do extraordinary things that their companions cannot fathom. They are good at mathematics, they make many discoveries through the visualization of their surroundings, they are intuitive, and they are critical thinkers. They are also caring; thus, they save family and friends. Because of their extraordinary powers, they succeed (except in the social arena) despite the odds.

Previous studies have discussed the prevalence of the savant stereotype even though only a small percentage of individuals with autism have savant skills (Draaisma, 2009; Howlin et al., 2009; Prochnow, 2014). While this stereotype is often positive, it is unrealistic. This overrepresentation could cause neurotypical viewers including educators to expect individuals with autism to have savant skills even though this is not the reality. This expectation of the presence of savant skills could lead neurotypicals to have unrealistic expectations. For example, when Rain Man shows Raymond counting numbers at inhuman speeds or being so good at mathematics that he is like a human calculator, teachers could have these expectations for their neurodiverse students. Thus, it is crucial that educators understand that not all individuals with autism have savant traits. Each person is unique. As is the case with neurotypical population, individuals or students with autism will have varying skills.

Garner et al. (2015) and Prochnow (2014) identified the main media stereotypes of autistic individuals. Garner et al. (2015) listed two stereotypes: individuals who have superhuman capabilities and those who cannot function on their own.

Prochnow (2014) listed four stereotypes: "the magical/savant, the 'different'/quirky individual, the character with undiagnosed/unlabeled behaviors, and the autistic person whose portrayal is more realistic or even based on a real-life person" (p. 134). For a film to be successful (i.e., pleasant to neurotypical viewers), autistic characters must be at the extremes of the spectrum.

The media often portray individuals with ASD as superheroes or, what disability studies scholars have dubbed, supercrips (Schalk, 2016). The common supercrip stereotype presents individuals as overcoming their disability and earning the inspiration of nondisabled individuals. Those who perform dayto-day tasks successfully are perceived as heroic or inspirational. This supercrip notion could translate negatively into public spaces including classrooms with neurodiverse individuals or students with any disability. Neurotypicals including educators could consciously or unconsciously pressure individuals to overcome their disabilities. This could be viewed as not providing the appropriate, or any, support for neurodiverse people. For example, in a classroom, if they are somehow perceived to have overcome their disability, a teacher might direct the other students' attention to the neurodiverse students because of this achievement. Despite the teacher's good intentions, a student with a disability could experience embarrassment or, at least, self-consciousness. Furthermore, the idea of the supercrip is ironic and hypocritical given that the failures experienced by many autistic individuals are the result of marginalization and segregation. Society is generally unkind to a neurotypically diverse population. The assumption is that everyone is neurotypical. The superhero trait, the basis for judging individuals with autism, has several manifestations. A hyper-positive media portraval of autism can result in unrealistic perceptions of autism (Prochnow, 2014); however, it can also show the options available to individuals with disabilities (Conn & Bhugra, 2012).

Sometimes autistic characters are portrayed as inspirations to and healers of their neurotypical counterparts. Their dependence also brings out the benevolent traits of neurotypical individuals. Some family members or professionals who help individuals with autism are chiefly concerned with themselves because of their deficiency (e.g., when Charlie in Rain Man abuses Raymond's ingenuity to make money at a casino). At other times, despite having ulterior motives, neurotypical characters are considered caring, patient, and dedicated because of the virtue and altruism of the autistic characters. Thus, individuals with autism are judged on the basis of their altruism. Draaisma (2009) argued that in the media, an autistic person's worth is defined by their savant skills. Basing human value on the scale of productivity and contribution to the larger society is defeatist considering the odds faced by the autistic community. The materialistic and capitalistic lens is likely to construct autistic individuals that lack superhuman qualities mysterious and alienlike being. Therefore, the inspirational stereotype is detrimental to the neurotypical perceptions of individuals with autism. Only a small percentage of people with autism have savant skills

(Howlin et al., 2009). In addition, there is no reason for savants to have any more value than their more average autistic counterparts.

Autistic Individuals as Being Dependent and Posing a Burden

The prevalent perceptions of dependence and posing a burden are based on the social misfit stereotype advanced by the three films. The medicalization and juxtaposition of autistic traits, i.e., genius and defect, create the impression that autistic individuals need the assistance of neurotypical individuals to manage their lives and to provide support for the necessary daily routines and rituals to ensure that they are not overwhelmed by their deficits. Garner et al. (2015) juxtaposed the savant capabilities with the inability of autistic individuals to lead an independent life. Conn and Bhugra (2012) found that *Rain Man* tends to feature Raymond's dramatic physical responses, such as rocking and head banging, to stimuli.

The media depictions of autism as a disability that poses burdens for others have consequences in the classroom. Amongst educators and teacher candidates, there is an ongoing debate regarding special education versus inclusive education in which students with disabilities are included in the general education classroom and curriculum. If autism is seen as burdensome, teachers may want their neurodiverse students to learn in special education classrooms. This would prevent students with autism from being in the same classes as their neurotypical counterparts. Therefore, autistic students would not be able to make interabled friendships or to learn from the same material as general education students. This further sets the neurodiverse apart from the neurotypical. In addition, the notion that students with autism pose a burden could make teachers less likely to want to teach and to support them.

Autistic Individuals as Childlike

Adults with ASD are often represented as immature or childlike. The actions and feelings of characters with autism could contribute to a neurotypical audience's perceptions of individuals with Asperger's as insensitive. Another misperception is that it is difficult to hurt the feelings of individuals with Asperger's. This is very misleading. Indeed, there is no proof of this. Such falsehoods contribute to inaccurate perceptions of individuals with autism as being apathetic or incapable of the empathy of a neurotypical adult. When this perception of infantilization seeps into classrooms, educators or teacher candidates have lower expectations of children with autism. They might perceive them as incapable of doing the same coursework as the neurotypical students. They might also treat them as if they were very young or provide them with non-age-appropriate learning materials, thus possibly overlooking inappropriate behaviors that are not excused in neurotypical students. Double standards are likely to cause confusion and to be harmful to the whole class (Danforth, 2014; Schwarz, 2006). Therefore, all students, including those with disabilities, should be held to the same discipline standards to avoid misperception and to facilitate learning.

Autism as a Medical Condition

Autism spectrum disorder is an important public health concern, and a close scrutiny of the media representation and suggestions for better ways to convey the condition and health messages is a unique and important contribution of media researchers. Despite improvements in the representations (Conn & Bhugra, 2012), contemporary films still portray autism as a disease requiring treatment rather than a natural difference, condition, or identity (Holton, 2013). Some characters exhibit undiagnosed or unlabeled stereotypical behaviors that have been associated with autistic individuals (Prochnow, 2014). This includes socially awkward behavior. Using the DSM-5 characteristics of Asperger syndrome, such as repetitive actions, intense persistence, social struggles, hypersensitivity to touch, and difficulty with change, the media have blurred the distinction between social awkwardness and autism (Draaisma, 2009). This presentation predisposes viewers to perceive that autism does not exist or everyone is on the spectrum. With this belief permeating public spaces such as classrooms, neurodiverse people including students would not get the necessary support and may be susceptible to punishment. Individuals with different abilities need different kinds of support. If autism is perceived as non-existent, service providers such as educators will not be able to help these individuals to succeed in life.

The media portrayals of autism predispose audiences to view individuals with ASD through a medical lens. The test for Asperger syndrome is inconclusive. Therefore, the one-sided narratives promote the misconceptions that guide many family and professional decisions about individuals with autism, often to the hurt of the latter. This includes parents trying to find therapists to treat their children for their disabilities. In a class setting, teachers who believe that autism can be cured would perceive the media representations negatively, possibly deeming them incorrect or inappropriate. This could be humiliating for a student with a disability and may cause mental stress especially when autistic students believe their identity cannot be changed by some form of therapies. Since the cure idea is detrimental to individuals' self-esteem and their normal growth and development, it is essential that viewers know that autism cannot be cured (Brown, 2011; Danforth, 2014; Siebers, 2008).

The differences that result from superhuman abilities can lead to identification, appreciation, and recognition; however, social deficits can result in labeling and devaluation (Danforth, 2014; Siebers, 2008). For example, in *Extremely Loud & Incredibly Close*, Oskar conforms to Prochnow's (2014) stereotype of an autistic character with undiagnosed or unlabeled behaviors. The perception is that such individuals occupy a liminal zone where they are not accepted by the autistic group or the neurotypical group. Being in a liminal zone makes an individual susceptible to invisibility and bias especially in a world where collective bargaining is the norm. Moreover, Oskar's condition is unclear. He has either Asperger's or post-traumatic stress disorder as a result of his father's death in the 9/11 terrorist attacks. Some of Oskar's behaviors, such as his difficulty with conversation and

strong persistence and focus on finding the lock to match his father's key, are more characteristic of Asperger's (Autism Speaks, n.d.). In addition, having Asperger's provides Oskar greater access to opportunity. It facilitates his persistence in finding the lock to get closure after his father's death. The various abilities and disabilities manifested by Oskar could confuse the viewer. The confusion could lead to inaccurate perceptions of Asperger's because the reasons for Oskar's anxieties and mannerisms are not clearly defined. Audiences need to see individuals with autism having access to opportunities so that disability is not equated with limited access.

The media's medicalization of autism has led to another misconception: Individuals with autism are incapable of experiencing hurt feelings. At the beginning of Rain Man, Charlie uses derogatory language to his brother. This language is indicative of the era in which the film was made. Not much was known about neurodiverse individuals, and this ignorance undergirded the behaviors and assumptions of those who were neurotypical. The awareness of ASD has dramatically increased since the film's release (Deisher & Doan, 2015). The result is the understanding of another's feelings that this language now elicits. Charlie's calling Raymond an idiot or the R-word is no longer funny. The audience feels bad for Raymond and considers Charlie mean. The language in the film is not just indicative of the time; it is also a tool to show Charlie's increasing empathy toward Raymond. As Charlie starts to see more worth in Raymond, mainly because of his savant skills, his use of derogatory language decreases. This might not be apparent to neurotypical viewers; thus, the language could create confusion and perpetuate the negative traits of individuals with autism.

Another conventional conception is autistic individuals' preference for quarantined life because of their medical condition (Holton, 2013). For the neurotypical audience, this can contribute to the false perception that individuals with autism are antisocial, thus perpetuating the notion that autistic behaviors need to be cured (Conn & Bhugra, 2012). If viewers such as teachers think that their students with autism are unfriendly, they could be less likely to help them to form friendships with their neurotypical classmates or to create a classroom culture of acceptance of everyone's differences. This is contrary to the ideas of many disability rights activists who believe in inclusion of people with disabilities in their communities (Danforth, 2014; Davis, 1995; Gabel & Connor, 2014; Siebers, 2008). It also goes against the autism community that considers autism to be their identity and desires to be treated humanely (Brown, 2011). Autism rights activists believe disability is a defining trait of an individual and so there is no reason for an individual to be separated from their disability nor to be separated from their community (Brown, 2011; Crocker & Smith, 2019). Brown (2011) of the Autistic Self Advocacy Network has argued that it is not unfortunate and an accident that a person is autistic, and therefore calls on the society to recognize the value and worth of individual with autism.

CONCLUSION

This enquiry of three films featuring characters with autism has confirmed themes identified in past research (e.g., Conn & Bhugra, 2012; Draaisma, 2009; Garner et al., 2015; Poe & Moseley, 2016; Prochnow, 2014). The prevalence of stereotypes in almost every representation of individuals who are neurodiverse in contemporary films. Consequently, there are risks. The popular savant stereotype, which is often an aspect of the superhero narrative, contributes to false beliefs about individuals with autism. The representation of autistic characters with savant abilities in these three films is at odds with reality. It overrepresents the proportion of autistic individuals with savant characteristics. However, the deficit narrative can also have negative consequences. Viewers especially educators might believe that individuals with deficits are less worthy or less deserving of opportunities than their neurotypical counterparts. Viewers must disabuse themselves of the autism misconceptions. So, there is need for media literacy to help viewers such as educators critically decipher consumed information to avoid perpetuation of the deficit culture about autism.

The authors are educators in special education and so we were interested in a thematic analysis of film portrayals of characters with ASD and how that depiction may be understood through the disability studies lens. As neurotypical educators we realize that perceptions of people with autism especially learners can be influenced by media representations besides the literature and research about autism. Like many viewers, educators often teach and learn about neurodiversity through media. A bombardment of autism information from different media can leave one confused if they do not have the skills to sieve out or merge or discriminate right information from fake one. Since school closure in early March 2020 and the introduction of distance learning (mostly in global north countries with good energy and digital infrastructures) to control spread of COVID-19, there has been an increased use of digital media teaching tool in schools. For example, higher education institutions have relied heavily on various media to prepare their professionals including teachers. Then, having educators and learners develop critical perspectives of media with people with autism is important in taming the culture of deficit that marginalize the disabled people (Danforth, 2014; Goodley, 2017; Siebers, 2008).

Limitations and Recommendations for Future Research

This study has limitations. Characters with autism are often featured in the media; however, only three films were analyzed. So, more media of various genres and from different sources, especially with real individuals with autism, should be analyzed to explain the changes in the media representations of autism over time. In addition, there is need of a study with neurotypical teachers to understand how the representation of neurodiverse people affect their perceptions of learners with autism and therefore service delivery. Also, interviews with autistic and neurotypical individuals could increase the understanding of the perspectives of autistic characters in the media. Nonetheless, the

findings provide a holistic view of contemporary film portrayals of autism. This research has highlighted the stereotypes and possible perceptions that viewers must consider in order to genuinely support inclusion of people with autism.

Implications

The prevalence of stereotypical movie depictions of autism requires that these films be viewed through a critical lens. Currently, there are many film portrayals of individuals with autism; however, they are not all accurate. Almost all contain positive and/or negative stereotypes. Culture, language, and perception are entwined. Images and language directly affect audiences' perceptions of individuals with autism. Negative stereotypes and unrealistic discourse contribute to false impressions about the capabilities of autistic individuals. Beliefs that autistic individuals are low- or high-functioning could contribute to their being held to a higher standard simply because they are different, or they are considered to have superhuman abilities. In reality, each person is unique; nevertheless, human beings have many commonalities. So, audiences need to critically analyze media content so that they can make appropriate judgments of individuals with autism. Especially educators need to understand that the autistic community consists of people with an array of abilities and so, supports should be tailored to the needs of each autistic child or youth. It is also important that the media be held accountable to avoid the perpetuation of the deficit or supercrip culture that marginalizes the disability community. A balanced presentation of individuals with autism would also allow them to receive the appropriate support for leading successful lives.

DECLARATION OF COMPETING INTEREST

I declare that I have no conflict of interest and had no funding for this study. Also, all procedures performed in this study involvinghuman participants were per the ethical standards of the institutional review board. Informed consent was obtained from all individual participants included in this study. In addition, student assent and parental/guardian consent were obtained for student participants.

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