Abstract: Considering past evidence highlighting the role of media portrayal in shaping community attitudes towards persons with intellectual and developmental disabilities (IDD), we analyzed depictions of IDD in seven television shows and three movies. Characters with IDD were coded based on categories representing (a) their attributes (demographic, disability-related and personality), (b) the salience of IDD and character with IDD, (c) treatment by other characters, and (d) quality of life. Majority of the characters were white and male, and persons with IDD played characters with visible disabilities. Characters with IDD were often bullied, but most were portrayed as having a strong support system and a good quality of life. Themes are discussed in the context of implications and methodological limitations.
Exploring Media Portrayals of

Individuals with Intellectual and Developmental Disabilities
Abstract

Considering past evidence highlighting the role of media portrayal in shaping community attitudes towards persons with intellectual and developmental disabilities (IDD), we analyzed depictions of IDD in seven television shows and three movies. Characters with IDD were coded based on categories representing (a) their attributes (demographic, disability-related and personality), (b) the salience of IDD and character with IDD, (c) treatment by other characters, and (d) quality of life. Majority of the characters were white and male, and persons with IDD played characters with visible disabilities. Characters with IDD were often bullied, but most were portrayed as having a strong support system and a good quality of life. Themes are discussed in the context of implications and methodological limitations.

*Keywords*: media analyses; autism; cerebral palsy; Down syndrome; media portrayal
Introduction

Media appears to play a powerful role in shaping public attitudes on a variety of health conditions, such as obesity (Pearl et al., 2012), mental illness (Stuart, 2006), traumatic brain injury (Krahn, 2015), and spinal cord injury (Reinhardt et al., 2014). For example, previous studies have found that viewing positive media portrayals of obese individuals, traumatic brain injury survivors, and those with physical disability from spinal cord injury can reduce stigma and elicit more positive attitudes toward individuals living with these conditions (Pearl et al., 2012; Stuart, 2006; Krahn, 2015). At the same time, depictions of physical disabilities rooted in medicalized, deficit-based conceptualizations of disability often reinforce negative stereotypes (Reinhardt et al., 2014). Pirsl and Popovska (2013) argue that the media continues to rely primarily on the medical model of disability, which emphasizes impairment over personhood and individuality. As such, media can influence and potentially contribute to or reduce the stigma people with a variety of conditions and identities experience.

Theoretically, television shows and movies are an effective medium to engage the community and provide viewers with relatable and positive role models to emulate (Bandura, 1977). Related theories such as the cultivation theory and Berkowitz’s priming perspective posit that even short-term exposure to certain scenarios on screen can impact how viewers perceive reality and respond to situations (Berkowitz, 1984; Shanahan & Morgan, 1999). Research based on these frameworks suggests that continually viewing violent content can shape the viewers’ perception of the real world as violent or prime them to respond to social situations with violence (Shrum, 2017). Similarly, Allport’s intergroup contact theory (1954) suggests that indirect contact through media portrayal of minority group members promotes corresponding intergroup behavior and cognitions (Dovidio et al., 2011; Pagotto & Voci, 2013).
Collectively, these findings and theoretical perspectives suggest that media depictions can shape cognitions and behavior, including attitudes and perspectives surrounding inclusion. Thus, insight into these depictions seems especially relevant and timely given the increasingly dominant role that media plays in society today and the ongoing exclusion and segregation of people with IDD (Friedman, 2019). In response, we analyzed media depictions of individuals with intellectual and developmental disabilities (IDD).

**Intellectual and Developmental Disabilities**

Developmental disabilities are physical or cognitive impairments that have an onset during the developmental period and last throughout a person’s life. They often impact a person’s daily functioning (Centers for Disease Control and Prevention [CDC], 2022). Intellectual disability, a common type of developmental disability, is characterized by “significant limitations in both intellectual functioning and adaptive behavior” (American Association of Intellectual Developmental Disabilities, 2023, Intellectual disability, para. 1). People with intellectual and developmental disabilities (IDD) are among the most marginalized populations and continue to face significant health, housing, education, and employment inequities because of negative attitudes, stigma, and discrimination (Ditchman et al., 2013). Given the powerful impact of stigma in contributing to disparities experienced by marginalized communities, better understanding the media’s portrayal of people with IDD and its impact on community attitudes and behavior is important.

**Media Representation and IDD**

Despite people with disabilities comprising the nation’s largest minority group, only 4.1% television shows featured disability themes and content. People with IDD are likely even more underrepresented in mass media, including television and film (Devotta et al. 2013;
Beyond underrepresentation lies the issue of accurate and holistic representation. Historically and currently, media representations of IDD have frequently reinforced stigmatizing messages based on negative stereotypes of disability (Renwick et al. 2014). Similarly, the complexity of the lived experiences of people with IDD are rarely accurately portrayed, often reinforcing an oversimplified experience of IDD that fails to consider the impact of stigma and discrimination (Callus, 2019). According to one survey, 52% individuals with disabilities felt misrepresented in on-screen media, and 46% felt underrepresented (Nielsen, 2022).

In their exploration of representations of people with intellectual disabilities in mass media, Renwick (2016) identified several recurring themes. Specifically, characters with intellectual disability were often portrayed as simplistic and described as, “childlike innocents who lack capabilities and are vulnerable, needy, passive, a burden to others, dangerous, and problematic” (p. 68). In addition, these characters were presented with little complexity, such that their disability was the major focus of their individuality with no attention to social roles.

Callus (2019) observed consistent themes from a character analysis of four movies featuring a protagonist with IDD (e.g., *Rain Man*, *I Am Sam*, *Forrest Gump*, and *Being There*). Callus (2019) and noted that characters with IDD were often presented as childlike, asexual, poorly coordinated, and wearing odd or unusual clothing. These characters were often centered in a plot that provided the people around them with the opportunity to become better, thereby reinforcing disempowering and dehumanizing depictions of disability. They assert that people with IDD are more often featured as “props” as opposed to “persons in their own right” (p. 7). Further, they are often featured as *supercrips*, or depicted as more desirable and acceptable on
account of having an extraordinary ability. Such portrayals fail to depict the very real challenges faced by people with IDD and the way in which disability is socially and culturally constructed.

Similarly, the few studies that have examined portrayals of autism have found that fictional depictions often portray individuals with autism as “savants”, thereby reinforcing the myth that all individuals with autism have a special talent or skill (Draaisma, 2009; John et al., 2017). Similarly, Prochnow (2014) found that media portrayals of autism failed to show the full range of lived experiences of autism. Interestingly, the analysis found that “most representations in mainstream media are hyper positive to the point that they are unrealistic. There were no representations of characters with severe autism nor were there any depictions of extreme hardships or struggles (Prochnow, 2014, p. 147).

Conversely, Holton et al. (2014) found that much of what was conveyed in news media surrounding autism focused on negative outcomes, labeling, and othering of individuals with autism. More recently, Holcomb et al. (2022) analyzed 20 of the most current (i.e., 2008-2018) animated films from Walt Disney Animation and Pixar Animation Studios. Using thematic content analysis, a combination of pre-identified and emergent disability- and illness-related themes were described. Overwhelmingly, characters with disability more broadly were rooted in outdated portrayals, such that disability was used to elicit humor or pity from the viewer. Further, such characters were frequently portrayed as old or evil. Unfortunately, these representations continue to reinforce and reproduce the stigmatization and marginalization of IDD.

Media, Attitudes, & IDD

Both underrepresentation and inaccurate, stigmatizing representation have considerable potential to negatively affect the IDD community. Film watching is an opportunity to gain exposure to different experiences and expands personal perspectives (Tenzek & Nickels, 2017).
Films can also be helpful in facilitating empathy and compassion for others (Walker, 2014). In fact, Stern and Barnes’ (2019) randomized controlled study on media and autism found that relative to an educational lecture, exposure to the media condition was associated with more accurate knowledge and more positive characteristics associated with autism, as well as increased desire to learn about autism. Furthermore, among children and adolescents with disabilities, exposure to positive representations of disability in the media can improve self-esteem and decrease internalized stigma (Dill-Shackleford et al. 2017).

Recent findings also suggest that how persons with disability are portrayed in the media shapes attitudes and perspectives surrounding disability and persons with disability (Lorenz & Frisby, 2022). For example, one study analyzed the effects of a humorous film regarding an individual with a disability and it was found to have a more positive effect when compared to a serious film or no film at all (Smedema et al., 2012). Even after controlling for demographic factors and previous contact with people with disabilities, participants who watched the humorous film reported significantly more positive attitudes toward people with disabilities. Humor may provide an opportunity to communicate disability information in a less threatening way (Smedema et al., 2012). Similarly, Walker and Scior (2013) carried out a study exploring the impact of film on public stigma towards people with intellectual disabilities, and found that a protest film showing inequities had a stronger impact on inclusion attitudes and elicited stronger emotional responses among participants relative to a film showing individuals with and without IDD working collaboratively toward a common goal. Based on these findings, Walker and Scior (2013) note that protest approaches may be particularly powerful tools at facilitating stigma change.
Other studies also have shown that participants demonstrate more positive attitudes toward individuals with disabilities after watching Paralympic coverage (Bartsch et al., 2018; Ferrara et al., 2015). Additionally, Lorenz and Frisby (2022) found that among “Glee” viewers, the viewing frequency alone did not predict more positive attitudes about individuals with disability, such that one viewing positively impacted attitudes, even after controlling for personal experience with disability. Identification with a character with a disability- in this case a character named “Artie” who uses a wheelchair- was positively associated with viewing frequency and more positive attitudes toward persons with disability, thus reinforcing that media portrayal does matter. Finally, Lu and colleagues (2018) found that watching short videos of non-fictional stories of lived experience from individuals with ‘visible disabilities’ (e.g., Stella Young, Rick Hoyt) had a positive impact on attitude change. They assert that the media often fails to explore people with disabilities’ personal accounts, thereby often failing to represent the full range of their experiences both positive and negative. They emphasize that these personal accounts are “crucial to attitude change… By watching person-centered videos, viewers can experience people with disabilities’ self-perceptions. This perspective taking opportunity may help viewers refute their preexisting misconceptions about people with disabilities, therefore leading to a better understanding” (p. 183).

Collectively, these findings point to links between various aspects of media portrayal and audience members’ attitudes and perceptions surrounding disability, and persons with disability. Given these insights and preliminary evidence on the nature of media portrayal in influencing attitudes, we conducted a media analysis of characters with IDD in seven television shows and three movies. Through our analyses, we aimed to address an overarching research question: How do television shows and movies portray individuals with IDD?” However, through an iterative
process, the focus of our analyses shifted to specific aspects of IDD portrayal, including: (a) How are characters with IDD depicted in terms of their characteristics and attributes? (b) How prominent are IDD and the character with IDD to the storyline? (c) How are they treated by other characters? and (d) How is their quality of life portrayed?

**Method**

**Sample**

**Inclusion and Exclusion Criteria**

Our analyses included only television shows and movies that explicitly mentioned a character’s IDD (e.g., Down syndrome, autism). Furthermore, we restricted our analyses to fictional media, but included television shows that were loosely based on real life (e.g., *Speechless* and *Special*). We excluded documentaries and docuseries (e.g., *Born this Way* and *Intelligent Lives*), movies and television shows released prior to year 2000, and media produced in countries outside the United States.

**Search Process**

The television shows and movies were identified through searches on Google and the Internet movie database (IMDb,) using key phrases such as “TV shows and movies,” “character with intellectual disability,” “autism,” “Down syndrome” or “cerebral palsy.” After applying the inclusion and exclusion criteria, we had a list of 17 movies and television shows. Since media units depicting autism were overrepresented in this initial list, we purposively sampled three out of the 10 media items based on demographic diversity in terms of characters’ race and gender. The remaining seven media items included movies or television shows with either a character with Down syndrome (n = 3), cerebral palsy (n = 3), or IDD (n = 1) without an etiological condition, and they were all included in our sample. Our final sample provided diverse coverage
of IDD and consisted of (a) Sam in *Atypical* (Rashid et al., 2017), Billy in *Power Rangers* (Israelite, 2017), and Violet, Harrison, and Jack in *As We See It* (Katims et al., 2022) for depictions of autism; (b) Walter Junior in *Breaking Bad* (Lyons et al., 2008), JJ in *Speechless* (Gernon et al., 2016), and Ryan in *Special* (Dokoza et al., 2011) for depictions of cerebral palsy; (c) Rebecca in *Never Have I Ever* (Kaling et al., 2020), Becky in *Glee* (Woodall et al., 2009), and Zak in the *Peanut Butter Falcon* (Nilson & Schwartz, 2019) for depictions of Down syndrome; and (d) Sam in *I am Sam* (Nelson, 2001) for depiction of intellectual disability.

**Coding Procedure**

Our coding procedures aligned with the directed qualitative content analysis approach (Hsieh & Shannon, 2005). In line with this approach, we first identified and operationalized coding categories. Since we could not find any previous studies to draw on for a comprehensive coding system to analyze IDD portrayals in movies and television shows, we utilized an inductive approach to develop our coding categories. Two members of the research team independently watched two episodes of *Parenthood*, a show we used solely to develop our coding system, and did not include in our final analysis. We selected this show because it met our various inclusion and exclusion criteria, and featured a key character with autism (Young, 2012), who appeared in multiple episodes, and would thereby guide us in developing a comprehensive set of coding categories.

*Parenthood* focuses on the lives of four grown siblings, one of whom has a son with autism, named Max. The team members noted down all salient details around Max’s portrayal and condensed their notes into a list of categories to code the characters in our analyses. Categories created by the two team members were combined to create the final list of categories, which included: (a) character’s disability and disability related traits (e.g. physical impairments,
behavioral characteristics), (b) their demographics (gender, age, race, and social class), (c) their personality attributes (friendly, shy, etc.) based on how they acted toward other characters, (d) the importance of the disability to the storyline (e.g., whether the plot centers around disability or is peripheral to the storyline), (e) whether the character with IDD was a major or minor character, (f) how they were treated by their non-disabled counterparts (e.g. with compassion, pity, ridicule), and (g) overall quality of life of the character with IDD based on Schalock and Verdugo’s (2002) multidimensional model, which includes indicators such as physical and emotional wellbeing, personal development, and interpersonal relationships. These categories also informed the framing of our specific research questions.

Consistent with the directed qualitative content analysis approach, two members of the research team coded each character based on the aforementioned pre-determined categories. The primary coder watched entire movies and three or more episodes of each television show, spread across various seasons. The secondary coder also watched full movies, but only the pilot episode of each television show or the first episode in which the character with IDD was featured. Both coders completed a coding table for each character in a Microsoft Word document, where they documented detailed content in each coding category. Using the investigator triangulation approach, the coding tables of both coders were compared (Carter et al., 2014). This comparison indicated similarities between information coded for the characters with IDD in various categories, including objective categories (e.g., demographic characteristics), as well as more complex categories (e.g., quality of life and how the character with IDD was treated). Given the results of this triangulation, the second coder did not code additional episodes.

Results
Table 1 illustrates analyses across the coding categories for characters with IDD in the 10 media units. The analyses yielded several themes, which are discussed in the following sections.

**Character Demographics**

A key theme pertaining to demographic characteristics was that seven out of the 10 (70%) characters with IDD were white and male, and majority of them were teenagers or young adults. Only one movie, *Power Rangers*, featured a character with autism who was Black. Similarly, one of the three characters with autism in the television show, *As We See It*, was an Asian American female. Notably, seven of the characters with IDD were portrayed by an actor living with the specific disability. The exceptions were characters with IDD in *I Am Sam*, *Atypical* and *Power Rangers*, which were played by neurotypical and non-disabled actors.

**Disability Related Attributes**

The characters with autism were depicted as having pronounced behavioral characteristics such as single-minded interest in specific topics, trouble expressing emotions and being direct and straightforward. For example, Sam in *Atypical* knew all the trivia on Antarctica, birds and penguins, while Harrison, Jack, and Violet in *As We See It* always spoke their mind. Characters with other IDD conditions were portrayed as having speech and motor impairments. For example, Becky had trouble participating in cheer in *Glee*, and the three characters with cerebral palsy had mobility restrictions, ranging from an atypical gait to using a wheelchair.

**Character and Storyline**

Another prominent theme apparent from our analyses was that the character’s disability was a major plot point to the storyline in six out of 10 (60%) media items, and the character with IDD was the main character in seven out of 10 (70%) media items. Where characters with IDD had lead roles, they were portrayed as protagonists and the narratives focused on their struggles.
and triumphs, as well as the social support that scaffolded their accomplishments. For instance, in *Atypical*, Sam’s autism was central to the storyline with in-depth representation of character’s thoughts and feelings, as well as how the disability affects him and those around him. Similarly, *As We See It* revolves around the lives of the three characters with autism – Violet, Harrison, and Jack – who are attempting to live independently in a shared apartment. Similarly, much of the storyline in *Speechless* is around JJ’s family’s efforts to find best opportunities for him and cheering his accomplishments, and in *Special* is around how Ryan navigates his work life, with and despite his cerebral palsy. In *I am Sam*, Sam, the protagonist, lives with an intellectual disability and is a single parent, and comes close to losing his daughter’s custody because of his disability. However, with the help and support from other characters, including his lawyer, he is able to regain custody.

*Power Rangers* is an exception in that Billy is the main character, but autism is not central to the storyline and is mentioned only a few times at the beginning of the movie. There were other characters with IDD, who played minor roles, and their disability was not a prominent narrative theme, such as Walter Junior in *Breaking Bad*. Similarly, in *Never Have I Ever*, Rebecca is in fashion school, and her experience of living with Down syndrome is peripheral to the storyline.

**Treatment by Non-disabled Characters**

We also noted some patterns in how the characters with IDD were treated by others. Eight (80%) media items included either a scene in which the character with IDD was teased or ridiculed, or a reference to a past incident of bullying (e.g., Rebecca in *Never Have I Ever*). The slur “retard” was used in four of the media items (40%; e.g., *I Am Sam, Atypical, As We See It, and The Peanut Butter Falcon*) and was often used when non-disabled characters were annoyed.
or angry with the character with IDD. For example, in *Atypical*, Sam goes on a date with a woman without IDD, and when the date tries to get intimate with Sam and he does not reciprocate, his date gets upset and asks Sam if he is a “retard” and if something is “wrong with his brain”. Even when the slur was not used, characters with IDD were often *othered*. In an episode of *Glee*, the cheer coach is treating Becky just like any other teammate and another faculty member comments, “But this is different, she’s not like everybody else” (Woodall et. al., 2009).

With the exception of Zak in the *Peanut Butter Falcon*, all the characters had robust support systems, including informal and formal supports, such as siblings, colleagues, romantic partners, health aides, therapists, neighbors, mentors, and support groups. Whereas some supports scaffolded the character(s) with IDD, allowing them to live independently, others were overly involved, and thereby undermined their autonomy. For example, Billy’s mom in *Power Rangers*, the health aide in *As We See It*, and Zak’s mentor in *The Peanut Butter Falcon* offer optimal level of support. But Violet’s brother in *As We See It* and Sam’s mom in *Atypical* are somewhat overprotective and undermine the characters’ ability to be self-reliant.

Characters with IDD were also recipients of well-meaning comments laced with microaggressions. In the show *Special*, Ryan’s boss tries to befriend Ryan and relate to him by saying, “Doesn’t the guy in *Breaking Bad* have cerebral palsy? I used to watch that show.” Another coworker tries to strike up a conversation with Ryan by saying she “finally binged watched *Atypical* and I think I finally understand you, want to get lunch tomorrow?” These seemingly friendly statements reflect ignorance, undermine personhood, and are couched in stereotypes regarding individuals with cerebral palsy. Outside of well-meaning family members and colleagues, there are overt attacks on characters’ autonomy and competence. In *the Peanut*
Butter Falcon, one of the staff at the facility where Zak lives states that “he has no idea how to get along in this world.” Likewise, in the movie I Am Sam, Sam’s ability to parent is constantly called into question (Nelson, 2001).

**Quality of Life**

The themes of community inclusion and belonging were woven into much of the media. Based on Schalock and Verdugo’s (2002) model, which emphasizes physical and emotional wellbeing, personal development, and interpersonal relationships as indicators of optimal quality of life, both the lead characters and characters with IDD in supporting roles seemed to be leading high-quality lives infused with purpose. Most of the characters attended school, and some even went on to attend college. In Speechless, JJ’s family owns a large van, lives in a nice neighborhood, and JJ goes to a well-resourced school with a full-time aide. JJ is able to accomplish many things, including getting his own apartment and attending college, although he needs support with a few things like his oral and written communication. Billy is depicted as having a good support system in Power Rangers. His mom is supportive and he has a friend group at school.

Various characters had a job in fast food or technology industries. Rebecca in Never Have I Ever aspired to become a fashion designer (Kaling et. al., 2020) and was attending fashion school. Similarly, Becky in Glee wanted to become a cheerleader at her school, so she practiced and later got on the team, and was finally promoted to captain. Sam in I am Sam, the only character with IDD portrayed as a parent, lives a full life, which includes caring for his daughter, working multiple jobs and living in his own apartment. He has a strong network of support, and people in the café where he works are friendly to him.
Although most of the characters were depicted as leading a purposeful life, some struggled with identity-related issues. In the show, *As We See It*, Violet expresses that she just wants to be “normal” and date like other people. She says, “I’m 25. I want a boyfriend. It’s normal to have a boyfriend. I want to be normal.” (Katims et. al., 2022). However, she demonstrates personal development when she realizes that finding a soulmate is not the most important thing. Her roommates, Harrison and Jack also continue to grow in their own way as the series progresses. Harrison overcomes his fear of going out by himself, whereas Jack learns to cope with his father’s sickness and his relationships with others. The three characters live by themselves, and are able to support themselves and each other. Zac in the *Peanut Butter Falcon*, however, faces many obstacles and challenges before finding autonomy and an optimal quality of life. With help from a mentor, he ‘breaks free’ from the assisted living facility and is able to have new experiences.

Insert Table 1 about here

Discussion

Screen media plays a role in shaping community attitudes, and perhaps even behavior, toward various lived experiences, including IDD (Lu et al., 2018; Smedema et al., 2012; Walker & Scior, 2013). Since individuals with IDD represent one of the most marginalized groups, their depictions in popular media could be particularly vital in reducing stigma and promoting their community inclusion. Hence, our analysis aimed to address the research question, “How do television shows and movies portray individuals with IDD?” Our analyses of characters with IDD in 10 media units yielded several informative themes surrounding their attributes and
characteristics, prominence of disability to the overall storyline, how they are treated by non-disabled characters, and their overall quality of life.

Our findings confirm the underrepresentation of minority groups in television shows and movies (Nielsen, 2022). According to a report published by Statistica (Guttman, 2023), only 21.6% lead actors in U.S. films were played by people of color. This underrepresentation of people of color was evident in our analyses for characters with IDD as well. Thus, although media portrayals of characters with IDD are becoming more positive and well-rounded, there is still a lack of diversity within the characters. From an intersectionality perspective, it is important to depict more women and people of color with IDD to shed light on their cumulative marginalization from intersecting identities and experiences.

On a positive note, individuals living with IDD playing characters with IDD in popular television shows and movies is an encouraging trend, and resonates with Charlton’s (1998) call for ‘Nothing about us without us,’ which is an indictment of oppression and exclusion, and demands inclusion of individuals with disabilities in spaces and policies that impact them. Simultaneously, it is important to note that individuals with IDD were cast as characters for visible disabilities like Down syndrome and cerebral palsy. However, in three out of four media units portraying a less visible disability (e.g., autism and intellectual disability), the actors were non-disabled and neurotypical individuals. So, while on one hand, mainstream media seems to have made progress in casting people with lived experience for roles that reflect this, this does not seem to extend to characters with less visible disabilities.

The portrayal of characters, including their personalities, dreams and hopes, how they are treated by peers, and their quality of life, is encouraging, and represents evolution from themes noted in previous media analyses (Callus, 2019; Renwick, 2016). Seeing persons with IDD
participate in the school cheer team, attend college, hold a job, and parent a child, can certainly open audience members’ eyes to the impact of inclusion. In fact, these media items often incorporate elements that have been empirically linked to reducing stigma, such as portraying the injustices experienced by individuals with IDD (Walker & Scior, 2013), personal accounts (Lu et al., 2018), and relatable characters (Lorenz & Frisby, 2022). Considering that movies and television shows are a more powerful pedagogical tool than didactic approaches, such depictions can serve as a vital tool for raising community awareness (Stern & Barnes, 2019). They may also aid in promoting positive identity development among youth living with IDD (Dill-Shackleford et al. 2017).

At the same time, these portrayals leave lingering concerns and room for future growth. The depictions of successful endeavors, accomplished often with the help of non-disabled characters, can potentially promote inspiration porn, which objectifies individuals with IDD as props for the benefit of individuals without IDD (Young, 2014). Callus (2019) made a similar observation from a thematic analyses of four movies. Additionally, such hyper positive portrayals may further marginalize individuals with moderate and severe IDD who may not be able to achieve the same measure of success and who often face a plethora of access barriers in doing so. After all, only 19% of individuals with IDD hold paid jobs in the community (Hiersteiner et al., 2018), and many face significant systemic barriers that prevent them from attending college (Lee & Taylor, 2022).

Consistent with previous findings, media depictions of primarily individuals with IDD with low support needs, attending college, being in romantic relationships and holding jobs can be an inaccurate portrayal of their reality, ignoring or minimizing the realities of persons living with higher support needs (Lu et al., 2018; Prochnow, 2014). Based on Shanahan and Morgan’s
(1999) cultivation perspective, which suggests that media depictions shape audience members’ understanding of reality, these hyper positive portrayals may distort audience members’ perceptions of what it is like to live with IDD. Being exposed to only these portrayals may be particularly misleading for viewers who have had no intergroup contact with individuals with IDD outside movies and television shows. Similarly, if media is a source and tool of social learning and edutainment – a combination of education and entertainment – some of the behaviors modeled in the various television shows and movies, including the use of the term ‘retard,’ microaggressions by peers, and supports that undermine autonomy, serve as poor behavior templates for the audience and may reinforce disability stereotypes, stigma, and exclusion (Bandura, 1977; Grady et al., 2021).

Limitations

Although our analyses of media depictions of IDD arguably addresses a research gap, the results should be viewed in the context of various methodological limitations. Ten media items included in our analyses represent a limited sample of overall media depictions through various print and screen media. For example, how individuals with IDD are depicted in news media or children’s cartoon shows (e.g., Julia, a Muppet with autism on Sesame Street) could be an important area of future research.

Next, the perceptions of our coders, who self-identified as non-disabled and neurotypical, may not fully represent or correspond with the views of individuals with IDD regarding the quality of life of characters with IDD, and how these characters were treated by others. The coders may not have noticed microaggressions that individuals with lived reality might. Similarly, past research suggests only a moderate correlation between how persons living with a certain condition self-assess their quality of life relative to proxy assessments (i.e. assessments
by family members and care providers; Griffiths et al., 2020). Thus, our coders’ analyses of characters’ quality of life may have privileged the perspective of college students without IDD. Our analyses could be strengthened by including coder(s) who identify as individuals with IDD.

Additionally, this study opens opportunities for several lines of inquiry and subsequent research questions. Most importantly, along with depictions of IDD, it is important to build on previous research and explore how the various depictions are linked to audience members’ views and shifts in attitudes toward persons with IDD (Walker & Scior, 2013; Stern & Barnes, 2019; Smedema et al., 2012). Through a more nuanced analysis, future studies can also explore how different demographic groups respond to various media depictions, as well as different types of IDD conditions (e.g. autism cerebral palsy, Down syndrome). Some parenting studies in the past have described a ‘Down syndrome advantage,’ which suggests that parents of children with Down syndrome enjoy greater wellbeing relative to parents of children with other IDD conditions, often because both children with Down syndrome and their caregiver are highly responsive to each other (Corrice & Glidden, 2009; Mitchell et al., 2015). It would be informative to explore if this ‘advantage’ extends to media depictions as well. Future studies can address the questions—‘Is Down syndrome depicted more positively relative to other types of IDD?’ and ‘Are visible disabilities (e.g., Down syndrome and cerebral palsy) depicted differently than less visible disabilities (e.g., autism and fetal alcohol spectrum disorder)?’ Similarly, it remains unclear how a lack of representation of IDD in the media industry, particularly the absence of people with IDD in leadership roles impacts how people with IDD are portrayed; thus making this an important area of future inquiry.

In conclusion, our analyses of characters with IDD across 10 fictional movies and television shows yielded informative findings on various aspects of IDD portrayal. We
uncovered themes related to character demographics and attributes, prominence of IDD to the storyline, how characters with IDD were treated by non-disabled characters, and depictions of the quality of life of characters with IDD. These themes represent a preliminary step toward future explorations of the intersection among media, IDD, stigma, and inclusion. The significant and ubiquitous presence of media in our lives today, combined with rapid growth of media platforms and services, presents a vital opportunity to utilize optimal and realistic media portrayals of IDD to reduce disability stigma and advance inclusion of persons with IDD.
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## Results of Media Analyses

<table>
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<tr>
<th>Character, Title and TV episodes coded</th>
<th>Character (minor, major)</th>
<th>Demographic characteristics</th>
<th>Disability related attributes</th>
<th>Personality attributes</th>
<th>How prominent is the disability to the storyline?</th>
<th>How are they treated by characters without IDD?</th>
<th>Quality of Life</th>
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<tr>
<td>Sam in Atypical (2017) TV show</td>
<td>Major White, Male, Teenager to young adult, high school student and later a retail worker, Middle or upper Class</td>
<td>Hard time reading and expressing emotions, very literal and direct, interests become obsessions where he takes a deep dive into the topic (e.g., Antarctica)</td>
<td>Honest, smart and anxious. Became increasingly friendly and affectionate as the series progressed. But also, quick to anger if things did not go his way.</td>
<td>Central to the storyline</td>
<td>Occasional bullying, name calling and teasing by classmates and on a date during his time in high school. Supportive family, but mom seems overprotective and discourages dating. Dad encourages him to try new things. Friends are inclusive and rarely focus on his autism. Has a love interest</td>
<td>He gets help through therapy, has a job at a tech company, attended school and college, and has strong and lasting friendships. He lived at home with his family. When preparing for college he attended a support group of others his age with autism.</td>
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<tr>
<td>Billy in Power Rangers (2017) Movie</td>
<td>Major Black, Male, Teenager, High school student, Middle Class</td>
<td>Organized and meticulous. Unable to understand sarcasm or humor, doesn’t like physical touch</td>
<td>Friendly, talkative, helpful and smart. He helped the power rangers develop a bond. He internally talked through stressful situations and thought about consequences. He was there for his peers and helped them in the adventures that came their way.</td>
<td>Not prominent</td>
<td>Bullied in school 2-3 times, called a freak/crazy, and defended by non-disabled counterpart. The antagonist almost killed him because of his seeming kindness and vulnerability.</td>
<td>Had a good support system and lived at home with his mom who was supportive. Attended high school, recognized the disadvantages that his autism brings him and has a friend group. Lost his dad when he was a child.</td>
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## MEDIA PORTRAYAL OF IDD

<table>
<thead>
<tr>
<th>Character, Title and TV episodes coded</th>
<th>Character (minor, major)</th>
<th>Demographic characteristics</th>
<th>Disability related attributes</th>
<th>Personality attributes</th>
<th>How prominent is the disability to the storyline?</th>
<th>How are they treated by characters without IDD?</th>
<th>Quality of Life</th>
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<tbody>
<tr>
<td>Violet, Harrison, and Jack in As We See It (2022)</td>
<td>Major</td>
<td>Violet: 25 years old, lower middle class, Asian, female, Arby’s worker</td>
<td>Violet: speech impediment, strong emotions, Takes things literally, obsessions</td>
<td>Throughout the series, each character grows in their own way. Violet learns to keep her feelings under check when things do not go her way. Harrison overcomes his fear of going out by himself, and Jack learns to cope with his father’s sickness and his relationships with others. Throughout the series they are brutally honest with each other,</td>
<td>Prominent</td>
<td>Throughout the series, they had a supportive and compassionate caregiver. Some characters, however, were rude and showed lack of understanding toward their autistic behaviors. Violet is called ‘retarded.’ Her brother refers to her as ‘not normal’ and is a bit controlling</td>
<td>They live together and are able to support themselves. Violet and Jack have jobs, whereas Harrison belongs to a wealthy family who pays for a large portion of the apartment. A home healthcare aid comes to their apartment and supports them with some tasks and challenges.</td>
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<tr>
<td>S 1, Ep. 1, 2, 3, 8</td>
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<td>Harrison: 25 years old, middle class, white, male, unemployed</td>
<td>Harrison: gets overstimulated, scared of new experiences and doesn’t like to leave the house</td>
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<td>Jack: 25 years old, middle class, male</td>
<td>Jack: brutally honest, obsessions</td>
<td>All 3 are very straightforward</td>
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### Cerebral Palsy

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<tr>
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<tr>
<td>Walter Junior in Breaking Bad (2008)</td>
<td>Minor</td>
<td>Male, White, Middle Class, teenager, high school student</td>
<td>Uses crutches, speech difficulties</td>
<td>Initially Walter Jr. comes across as negative, but later is shown as grateful and excited for the many opportunities. Sassy at times</td>
<td>Not central to the storyline.</td>
<td>He has a close friend and a good relationship with his parents. His parents buy him a car, take him shopping and share meals with him. There is one scene, however, in which he is mocked by his peers for not being able to dress himself independently.</td>
<td>He drives, attends school, lives in 2-parent household, and has friends. Using crutches does not seem to deter him from doing things</td>
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<td>S 1, Ep. 1; S 3, Ep. 3; S 5, Ep. 4</td>
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<td>JJ in Speechless (2016)</td>
<td>Major</td>
<td>White, male, middle class, high school teenager</td>
<td>Uses a wheelchair, Uses technology and tools for communication</td>
<td>He is smart, funny and considerate. He enjoys goofing around. He is a committed (and slightly insecure) boyfriend who wants to attend same college as his girlfriend, so she doesn’t leave him</td>
<td>Prominent</td>
<td>His family is supportive, and his mom is his strongest advocate. People are overly concerned with being “sensitive” which makes them treat him differently. He is called an “inspiration.” His</td>
<td>Supportive family and school, graduates from school, goes to college, and lives in his own apartment</td>
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<td>S 1, Ep. 1; S 2, Ep. 6</td>
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<td>Ryan in Special (2019) TV show S 1, Ep. 1; S 1, Ep. 8; S 2, Ep. 8</td>
<td>Major White, male, 28 years old, middle class</td>
<td>Walks with an atypical gait</td>
<td>Ryan is funny and friendly. Because Ryan’s disability is not very visible (e.g., atypical gait), he is unsure of his identity. He also struggles with disclosing his CP to his colleagues. But he is happy once he opens up about it with others.</td>
<td>Prominent Ryan’s friends and colleagues like him, and spend time with him, but occasionally show pity. Some people stereotyped him or compared him to TV show characters with CP. A child points out that he “walks funny” and then gets scared of him. His mom is protective of him.</td>
<td>classmates and his mentor are supportive.</td>
<td>Ryan sees a physical therapist, works as an unpaid intern, and lives at home with his mom.</td>
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<td>Down syndrome</td>
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<td>Rebecca in Never Have I Ever (2020) TV show S 1, Ep. 2; S 2, Ep. 3; S 3, Ep. 2</td>
<td>Minor White, female, younger/teenage, middle class</td>
<td>Nothing is apparent or referenced</td>
<td>Rebecca is shown as being friendly, fashionable and honest. When she first met the show protagonist, she sought out her advice. During interactions with her brother, she is honest, kind, and speaks her mind.</td>
<td>Not prominent</td>
<td>Her interactions are mostly with her family and the show protagonist. Everyone treats her with kindness and respect. Her family, esp. her brother is at times protective. There are some references to bullying in the past.</td>
<td>Rebecca’s family is supportive and she has a friend group. Her career goal is to be in the fashion industry and she is in fashion school to achieve that goal. She is independent and has her own room in the family home.</td>
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<td>Becky in Glee (2009) TV Show Season 1 Episode 9; Season 3 Episode 1; Season 6 Episode 3</td>
<td>Minor Female, teenager, high school student, white, middle class</td>
<td>Has trouble with motor movements during cheer</td>
<td>Becky is friendly in the first season and grateful for the opportunity to be on the cheer team. In later seasons, she is portrayed as snarky/sassy. She also lashes out at others and is not afraid to start a food fight. At times, she is brutally honest with her fellow</td>
<td>Not prominent</td>
<td>Becky makes friends after joining the cheer team. Coach Sue treats Becky just like any other member of the cheer team, but another character says that Becky “is not like everybody else.” Her classmates and cheer coach are there for her even after Becky graduates high school. Her boyfriend stands up for Becky aspires to be on the cheer team, and manages to get in. She is even promoted to co cheer captain, who helped get more people on the team. She later graduated high school and attended college and has people in her life that she can count on for support.</td>
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<td>Zak in The Peanut Butter Falcon (2019) Movie</td>
<td>Major role- Zak was the main character and other characters' lives revolved around his</td>
<td>Male, white, young adult, lower class, lives in a nursing home</td>
<td>Speech impediment</td>
<td>Zak is smart, strong, curious, and somewhat naive. He is determined to escape the assisted living facility, pursue wrestling, and meet his favorite wrestler. He is strategic in planning his escape, and is physically strong.</td>
<td>Prominent-</td>
<td>He is not treated well in a few situations and is called a ‘retard’ by a person in the assisted living, and is told that he has “no idea how to get along in the world.” Younger children bully him. One facility worker does a lot of tasks for him, but the main character encourages self-determination and stands up for him.</td>
<td>Initially lacks family support, financial means, and doesn’t have much autonomy. But later has a mentor who supports him, which allows him to have new experiences.</td>
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| Sam in I Am Sam (2001) Movie | Major- Sam is the central character as much. The movie depicts Sam as a competent single father with intellectual disability | White, male, middle aged, lower income, works at a cafe | Speech impediment | Sam is friendly, compassionate and talkative. He is very neat, organized, and likes to stick to a schedule. He is friendly, empathetic and dedicated to being a good father. He enjoyed interacting with his customers. He has some emotional outbursts. | Prominent- Sam’s ability to be a single parent despite his intellectual disability is key to the storyline. | People in the café are friendly to him. His daughter asks once if God meant for him to be like this or if he had an accident. She points out that he isn’t like other dads but goes on to say she is lucky. Another child calls him a “retard.” Sam’s ability to parent on his own is constantly called into question, but he has several supporters. | Works multiple low-paying jobs, lives in an apartment complex, has a group of friends, and a neighbor who helps him with childcare. His lawyer is supportive of him. |

**Intellectual Disability without a known etiology**