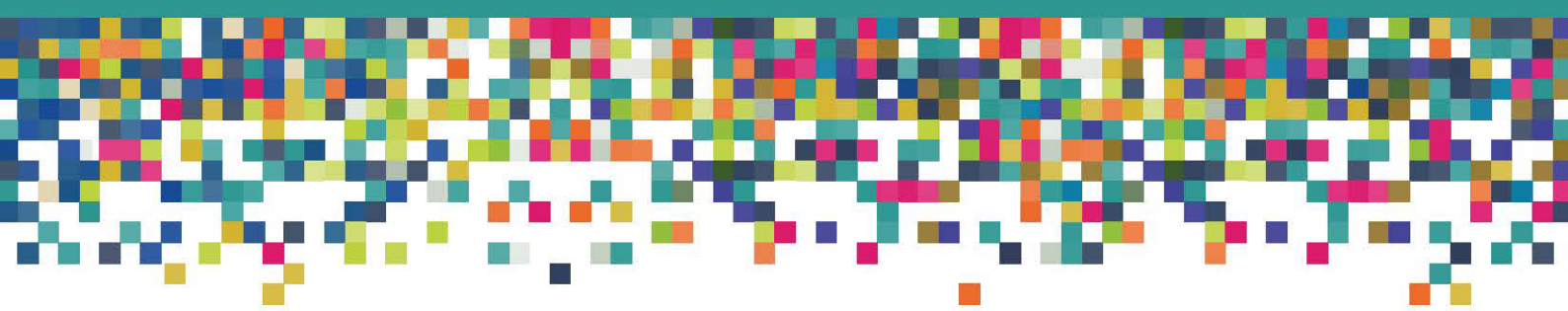




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“THE ALGORITHM WILL BATTLE AGAINST YOU”

A Qualitative Study on Disabled Content Creators’ Perspectives and Understanding of the Challenges Presented by Algorithmic Systems on Social Media Platforms.

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ABSTRACT

Social media platforms have become integral components of individuals' daily routines, providing avenues for interpersonal engagement, self-representation, and involvement in many social groups. Content creators with disabilities are using their channels on platforms, such as YouTube, Instagram, and TikTok, as a means to educate, entertain, and campaign for the rights and representation of individuals with disabilities. However, they also experience various social and technological challenges which make it more difficult for them to use social media for their goals. I interviewed eight disabled content creators to explore the challenges they faced when navigating the complex algorithmic systems on social media platforms. The findings document the challenges across three main areas: content distribution, platform governance and audience interaction. The results highlight the elusiveness of algorithmic transparency and the amplifying of dominant narratives, which ultimately encourage harassment and discrimination against marginalised voices in digital spaces. These biases manifest as shadow banning, content restrictions, and unequal platform treatment and thus, reinforce ableist beliefs and institutional discrimination. I use the findings to show how ableism, capitalist dynamics, and the power in algorithmic processes all come together to form a cohesive theme of Algorithmic Capitalist Ableism (ACA). This study provides more context to the challenges experienced by disabled content creators by documenting their perspectives and understanding, and highlighting the multidimensional nature of social media obstacles. It adds to the larger conversation on digital inclusiveness to promote equitable representation, inclusion, and justice within social media platforms.

INTRODUCTION

Social media platforms have developed into dynamic spaces for content creation, distribution, and participation in the constantly shifting digital ecosystem. Social media has become a key platform for disability activism and self-representation (Ellis and Goggin, 2015; Rodan and Ellis, 2016). These platforms such as TikTok and Instagram provide individuals with a disability a chance to refute mainstream misconceptions about disabilities through short reels or posts highlighting their daily struggles and victories (Muldofsky et al., 2021; Bizot, 2021). Social media platforms provide people with disabilities the chance to present their real lives with disabilities and their own narratives, having suffered from skewed representations of disabilities shaped by mainstream media (Goggin and Newell, 2005; Haller, 2010). However, at the same time, it can amplify the challenges faced by disabled content creators. Algorithmic mechanisms are at the centre of this ecosystem. On social media, algorithms categorise, associate, and filter innumerable sources of information (Diakopoulos, 2016) and hence, play a crucial role in deciding the visibility and dissemination of content. In this environment, content creators with disabilities navigate a difficult landscape where their voices collide with the intricacies of algorithmic design influenced by larger social processes. Recent research has shown that algorithmic systems have been found to contain built-in biases and have a risk of giving users with disabilities less-inclusive or non-inclusive experiences (Guo et al., 2020). Text referencing ‘disability’ was categorised as more harmful by existing machine-learning algorithms used to moderate discussions (Hutchinson et al., 2020). Social media posts concerning disabilities may result in harassment and the invalidation of people’s disabilities (Heung et al., 2022; Sannon et al, 2019). Additionally, in 2020, TikTok admitted that it had been suppressing the content of creators with disabilities (Kelion, 2019; Köver and Reuter, 2019). In light of these social and technological obstacles, how do content creators with disabilities perceive and navigate these challenges in the contemporary social media landscape?

Such experiences echo the scholarly concerns regarding the balance between algorithmic processes, free speech, and advocacy. This study explores the complex interaction between algorithmic social media platform systems and content creators with disabilities by conducting semi-structured interviews with eight content creators with disabilities using Instagram,

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TikTok or YouTube. This study focuses on the particular challenges faced by content creators with disabilities and begins with a critical literature review examining the past depictions of people with disabilities, the dual sides of social media, and the nature and motives of social media algorithms including algorithmic bias. Following the review, a multidisciplinary framework using concepts from critical disability and technology studies is presented to properly address the research questions. The study's methodology, design, and, most crucially, consideration of ethics and reflexivity are then discussed. Drawing from the literature, the final section presents the findings across three main processes: content distribution, platform governance and audience interaction and presents a cohesive theme of Algorithmic Capitalist Ableism (ACA). It concludes by discussing the hurdles faced, the implications of the study, and avenues for future research. This study makes the following contributions: (1) empirical evidence on the experiences of content creators with disabilities, grounding theoretical discussions in real-life experiences; (2) a unified framework, Algorithmic Capitalist Ableism (ACA), for understanding their multifaceted challenges. With ACA as a foundation, this study aims to contribute towards fostering more inclusive and equitable spaces for content creators of all abilities within the online realm, prompting further research and initiatives aimed at dismantling barriers and amplifying underrepresented voices.

In this dissertation, I use both a person-first (person with a disability) approach as it was the terminology used by most participants and an identity-first (disabled person) approach which is in line with modern viewpoints supported by recognised disability resources (RTCIL, 2023; ADA National Network, 2023). I recognise that language related to impairments is still evolving and is always subject to change. Therefore, I avoid using these phrases as fixed labels and adopt a nuanced interpretation that takes into account a variety of tactics, based on the individual's language preferences. In addition, I acknowledge the autonomy of those who decide not to identify with the idea of disability (Dunn & Andrews, 2015).

LITERATURE REVIEW

In this section, an overview of previous research that has been beneficial to the present study is presented. The literature is widely distributed throughout several disciplines, such as critical

disability studies, media and culture studies, and critical technology studies. The section starts with an examination of the historical context around disability and the emergence of ableism. I next investigate the dual facets of social media's influence on disability advocacy and content creation, introducing algorithmic bias and the secret nature of algorithms. I end with the contextual foundation of my research questions and the study's contributions and goals.

The Historical Context of Disabilities

The social invisibility of disabled people was driven by how the media presented them in the past (Hall and Minnes, 1999). The harmful misunderstandings that ableist media often propagate serve as the foundation for audiences' understanding of disability. Historically, negative preconceptions and ableist narratives were often reinforced by media representations of individuals with disabilities in stereotypical or unfavourable ways. For example, Huws and Jones' (2011) study found a uniform and standardised portrayal of people with autism depicted in British newspapers, while Wendell's (1996) study of the American media and television introduced the 'supercrip' stereotype, which portrayed people with disabilities as extraordinary heroes who overcome their infirmities. These stereotypes aimed to romanticise the experience of individuals living with a disability and to downplay the complexity of their daily reality. These depictions reinforce the cultural view that disability is a tragedy or something that must be overcome in addition to misrepresenting the different realities of disabled individuals. In the past, instead of understanding how the circumstances of daily life designed for the able-bodied contributed to disability, that is, the social model of disability; media and the public saw disability as a matter of defect and deficiency, that is, the medical model of disability (Wilson and Lewiecki-Wilson, 2001).

The widespread stigmatisation of disabled people as 'heroic role models' (Hardin et al., 2001) or 'innocent victims' (Shapiro, 1994) is largely to blame for the bias in our society today. Such 'benevolence' does not so much combat ableism as it does support it. Disabled and non-disabled people are distinguished by their differences, with perceptions of value socially tied to the markers of difference that define what is 'normal' and what is 'deviant' (Garland-Thomson, 2017). The 'normate', a term Rosemary Garland-Thomson created, is "the social figure through which people can represent themselves as definitive human beings...the

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constructed identity of those who, through the physical traits and cultural capital they adopt, can occupy a position of authority and exercise the power it bestows on them" (2017, p. 8). In other words, marginalised groups must live in a society where the normate controls the prevailing narrative of belonging and otherness, which makes the ability to create self-defined communities imperative. The normate is constructed based on what sorts of bodies are seen as 'abnormal or foreign' and what bodies are 'just' bodies. The latter describes those who are heterosexual, cis-male, white, physically fit, and well-off, to name a few characteristics. Although relatively few individuals truly match this pattern, as Garland-Thomson says, the normate nevertheless has the potential to define the bounds of what it means to be completely human. These factors result in what Caldwell (2010) defines as 'disabled in/visibility'; hypervisible based on any form of significant disability but invisible as "active member[s] in the public sphere (Kuppers, 2001, p. 25) ."

The social model of disability has proven essential in dismantling social discrimination and forging communal identities around which to mobilise and bring about social change (Shakespeare, 1996). However, from the discourses, such interpretations of disability fail to take into account the numerous ways in which other marginalised identities such as race, ethnicity, gender, and sexual orientation connect and intersect with each other. Hence, several experts in the field of disability are now urging the use of a post-structuralist methodology (Shakespeare and Corker, 2002) as they claim that the social model has flaws and that the post-structural lens acknowledges the more unique, complex, and fluid experiences and identities of people with disabilities while drawing connections to and building bridges with feminism, queer studies, and racial studies. Other marginalised groups, such as queers, immigrants, and those who belong to racial and gender minority groups, are also significantly impacted more by in/visibility as it is the product of interactions between disability and other marginalised identities as shown by Caldwell's (2010) 'Intersectional In/visibility'. Disability has often been employed as a marker for racial, sexual, and ethnic undesirability, according to medical pathologization and the histories of immigration. While racial stigma portrays disabled people of colour as criminals, disability stigma is utilised to depict people of colour as flawed or 'misfits' (Garland-Thompson, 2011). Therefore, increasing visibility and representation is more

important than ever for individuals with disabilities, particularly those who are multiply marginalised.

Disability and Social Media

Social media has provided an accessible platform to challenge these stigmas, reshape social norms and become critical spaces for self-expression, advocacy, and community building for people with disabilities (Ellis and Goggin, 2015; Trevisan, 2017). An increasing number of disabled individuals have become content creators and are sharing many facets of their lives with impairments on different social media platforms providing them with a space to interact, feel empowered, and advocate for themselves (Barnes, 2016). They have a way to contest the prevalent narratives about their condition and give them the capacity to create their own identities and narratives in a manner that was previously impossible or unfairly marginalised in conventional media in the past (Elcessor, 2016). Content creators are using these platforms to challenge stereotypes, share their stories and dispel preconceptions. For example, they convey their real-life experiences with their impairments via YouTube ‘How to’ videos in which they share their personal stories, and offer educational service material on how to manage their chronic health issues effectively (Bromley, 2016). These movies have received a lot of views, indicating that they may be excellent teaching resources for those with disabilities to gain practical life skills. In addition to revealing their limitations, creators with disabilities also use social media to build their own identities (Dolphin, 2011). They work to disprove ‘societal constructs of disability’ produced by traditional media and raise public awareness of their impairments via their content. By looking at the TikTok videos of producers with disabilities, Duval et al. (2021) offered technological ideas and discovered that some of these artists' films made an effort to educate the broader public on disability-related issues.

Social media platforms provide disabled individuals with the option to openly express their impairments as producers, especially in light of the fact that they often experience incorrect depictions in the media (Haller, 2010). Some content creators also become involved in activism and disability rights campaigns. Hashtag campaigns such as #CripTheVote were used to advocate for policy reform in the US presidential elections (Cedillo, 2021) on Instagram and TikTok. Social media also serves as a tool for fostering inclusive communities. Sweet et al.

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(2019) have discovered that these platforms encourage the interchange of knowledge, suggestions, and experiences. The dynamics of the community are shaped by content creators, who also provide a feeling of togetherness and solidarity among community members. They share personal experiences, exchange advice, and engage in discussions that help reduce feelings of isolation, build self-confidence, and promote empowerment. Additionally, some disabled content creators have used their social media presence to build successful businesses and support themselves, thus, opening up new revenue streams (Goggin and Newell, 2007).

However, at the same time, being a disabled content creator on social media can be challenging. Nakamura (2008) emphasises the difficulties that marginalised identities encounter in online environments as a result of prevailing social narratives and prejudices due to insufficient representation and appreciation. Content creators with disabilities encounter exclusion, harassment, and discrimination in these online venues, reflecting wider cultural attitudes and biases that endure in real life (Barnes, 2016). They regularly deal with negative views that hinder their creative endeavours (Brown, 2021), and feel unsafe by the lack of inclusive and accountable platforms' rules (Ellcessor, 2016). They are exposed to broad misunderstandings and negative reactions to self-presentation (Ellison and Boyd, 2013), which emphasises the need for ongoing education and discussion. Elman (2016) offered a critical examination of several media that simultaneously sexualize and mock women and girls, whose physical condition and physical immobility make them particularly susceptible to sexual assault. Moreover, identity management on social media is challenging (Goffman, 1956) as online, an individual faces a lot of criticism including cyberbullying and victimization (Varjas et al., 2013) when they go against conventional identities as the audience views this as a 'context collapse' (Marwick and Boyd, 2011), blending the lines of disability, identity and race.

In his study, Bucher (2017) found disabled creators struggling to obtain the attention of the invisible Facebook algorithm and were unable to earn enough likes or comments. It can be due to the attention economy and capitalist motives forcing social media corporations to give priority to content that keeps users interested for longer periods of time since it increases advertising income and data-collecting opportunities similar to the audience marketplace (Napoli, 2003). Hence, visibility is closely linked to market incentives and platform revenue

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generating (Gillespie, 2018). In the disability context, memes, social media campaigns, and other components of the algorithmic attention economy frequently frame and favour disabled people in terms of inspiration, sentimentality towards disabled people, rhetoric of pity, and other ways of talking about disability as undesirable and undesired (Haller, 2010; Loepckky, 2023). Content creators with disabilities find it difficult to sustain themselves financially due to these prejudices influencing social media algorithms (Kingsley et al., 2022; Roberts, 2019). In the creation economy, those from a marginalised population can be financially impacted by algorithms that decide content visibility, recommendations, and engagement and further marginalise already marginalised voices.

Algorithmic Bias

Algorithms unfortunately have been widely influenced by the historical context of disabilities described above. The decision-making by an algorithmic tool that is biased against a certain individual or group is known as algorithmic bias (Ntoutsis et al. 2020). The bias against people with disabilities is known as algorithmic ableism. In the area of crip technoscience, algorithmic ableism is defined as "how the sorting, ranking, and filtering that algorithms do privileges and promote the ideology of 'able-bodiedness', as well as the medical model for disability and a culture of healthism (Loepckky, 2023: n.p)." Various studies have found that algorithm-embedded systems or AI products such as social media platforms are biased towards people with disabilities on social media sites, highlighting the difficulties and injustices they encounter (Crawford and Gillespie, 2016; Eubanks, 2018). Systemic biases that disproportionately affect the content visibility and engagement of creators with disabilities on digital platforms (Noble, 2018; Diakopoulos, 2016) have emerged as a result "of the contexts in which algorithms are developed and instituted which already favour able-bodiedness and cultures of ability (Loepckky, 2023: n.p)."

There have been instances of censorship and shadow banning where content distribution algorithms reduce the visibility and engagement of particularly disability-related content (Botella, 2019; Thing, 2020). For example, TikTok restricted the popularity of videos made by persons with impairments, facial disfigurements, Down syndrome, or autism, during the process of content review and their content was kept out of the 'For you' stream for non-

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disabled persons (Biddle, Paulo Victor Ribeiro and Dias, 2020). This policy on TikTok apparently came from a belief that “content created by disabled users is assumed to be vulnerable to cyberbullying” and, ironically, should hence be protected by suppressing them (Botella, 2019: n.p). One of these biases in contemporary algorithms is influenced by the ‘ugly law,’ a term used to describe historical legislation that sought to exclude disabled people from public spaces (Bogdan & Biklen, 1977). Platforms may present an egalitarian face, but the subtleties of their content-filtering and moderation procedures tend to silence certain voices. There is a higher risk that information connected to disabilities would be identified or deleted disproportionately as a result of algorithmic choices compared to ‘mainstream information’ (Roberts et al., 2020; Liao et al., 2021). Most disabled influences engaging in intersectional activism have experienced shadowbanning and realised “a disproportionate amount of cisgender, white, able-bodied, and famous individuals are not being shadowbanned for similar content to what they posted (Thing, 2020: n.p).” In his investigation of the ‘politics of invisibility’ in online environments, Bucher (2012) makes the argument that shadowbanning effectively obliterates the contributions and presence of disabled creators which ultimately deprives them of economic, political, and cultural possibilities.

The Nature of Social Media Algorithms

Algorithms work to curate material that caters to individuals’ interests using a mix of user behaviour data, platform goals, and often confidential proprietary formulae. By extension, an algorithmic system is not just code and data but also an assemblage of human and non-human actors – of “institutionally situated code, practices, and norms with the power to create, sustain, and signify relationships among people and data through minimally observable, semiautonomous action” (Ananny 2015: 93). The signification process is a key component of Cheney-Lippold's (2011) description of the modulation process of gathering and examining user input to create and establish identities. In digital spaces now, understanding and adapting to the platform’s algorithm is a key aspect in combatting this invisibility and bias. However, the full involvement and inclusion on these platforms are made worse by the opaque nature of these mysterious algorithms.

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Creators' capacity to properly comprehend and examine the subtleties of these algorithms is sometimes constrained by the fact that social media corporations' proprietary and highly guarded algorithmic systems are often secret (Gillespie, 2018). Crawford and Gillespie (2016) state that the black box nature aggravates the erasure of disability narratives and adds to these creators' difficulties. By examining the conversation data from the 'r/youtube' subreddit, Ma and Kou (2021) learned that content creators complained that the platforms did not provide sufficient justification for its algorithmic penalty, and users jointly developed an understanding of how the content moderation system functions to prevent demonetization. This is in line with Pasquale's (2015) 'black box society' which emphasises the lack of transparency on the accountability mechanisms of these platforms. According to Pasquale (2015) and Fuchs (2014), the absence of transparency in these algorithms might have negative implications for accountability, the rule of law, and people's autonomy in the context of algorithmic decision-making. This phenomenon results in a scenario whereby users are exposed to conclusions formulated by algorithms without possessing a comprehensive comprehension of the underlying reasoning or the capacity to challenge them. As a result, creators form folk theories to understand the algorithms deliberately exploit the platforms' algorithms to boost the exposure of their material such as in the #cripthevote campaign (Matwichuk, 2021). As Bucher (2017) describes, the popularity game's rules are formed by the 'algorithmic imaginary' of users; how individuals envision, perceive, and interact with algorithms.

Conceptual Framework and Research Questions

Using a qualitative approach, this study aims to explore the perceptions and understandings of the challenges faced by disabled content creators and how those challenges algorithmically impact their platform experience. The first research question (RQ1) aims to dive into their perceptions and viewpoints about these challenges:

RQ1: How do content creators with disabilities perceive and understand the challenges they face on social media platforms?

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The second research question (RQ2) expands on the first one to investigate the effects of these challenges on their content exposure, engagement, and online experiences as content creators:

RQ2: How do the challenges on social media platforms impact the experience and presence of content creators with disabilities?

Due to the complexity of the topic, I employ a multimodal framework to better understand disabled creators' challenges and their amplification by algorithms on social media platforms. The framework extends and integrates existing ideas while critically engaging with them, drawing on diverse views. The Critical Disability Studies perspective challenges traditional disability studies and stresses how technology and social systems affect disabled people. It will enable me to examine the power relations, prejudice, and societal constructs affecting their experience. Critical Technology Studies, which questions technical determinism and emphasises the agency of content creators in influencing algorithmic interactions, broadens this strategy. By including intersectionality, the approach goes beyond one-axis studies and explores the complex interactions between different identity characteristics that influence how algorithmic challenges are perceived. Disability-identified content creators may also be members of other marginalised groups. A more complete picture of their difficulties may be gained by taking into account how aspects like ethnicity, gender, sexual orientation, and socioeconomic position interact with their experiences of impairment. The approach provides a comprehensive investigation, taking into account the creators' goals, contextual elements, and the confluence of disability, technology, and identity in their experiences. Lastly, other frameworks such as media ecology theory, crip technoscience and feminist technology studies will help investigate how biased algorithms reinforce current disparities and impede their online visibility.

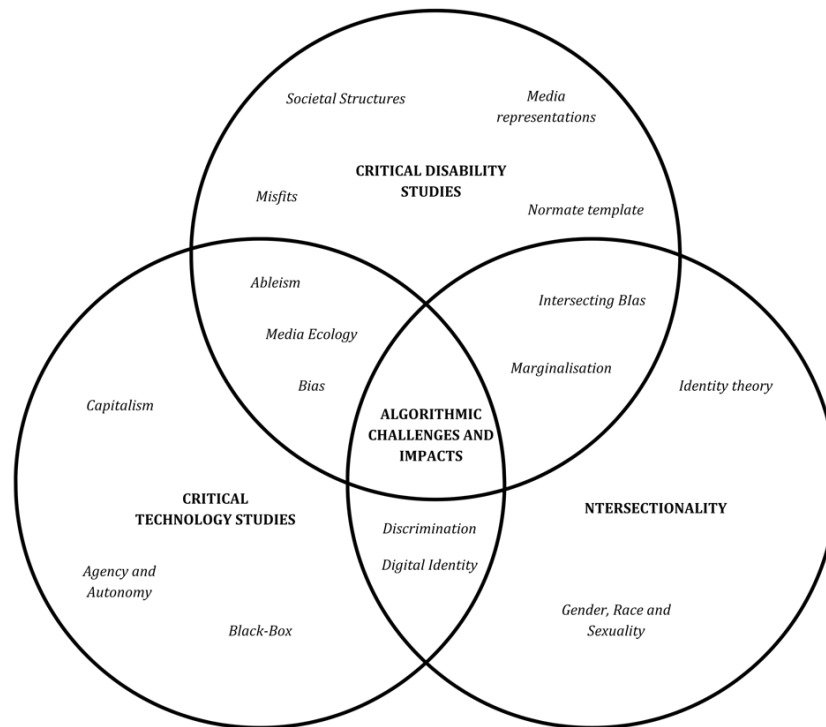


Figure 1: Conceptual framework

Objectives and Contributions of the Research

These numerous studies have highlighted the need to address algorithmic prejudice, taking into account the interactions between marginalised identities such as disability. This non-inclusive nature of algorithms is a pressing issue not only in the field of disability studies but also in communication studies, technology studies, political science, and other branches of the humanities and social sciences. Some researchers have investigated how social and structural variables affect the visibility, representation, and participation of people with disabilities inside algorithmic systems by adopting a disability studies approach (Ellis and Goggin, 2015; Shakespeare, 2002; Haller 2010). However, I have selected a poststructuralist methodology for this research in an effort to go beyond categories of disability and to understand fuller images created by people who incorporate disability as one feature of their fluid and complicated identities. My goal is to further communication and disability academics' comprehension by providing in-depth insights into the intersection of algorithmic experience, content creation, and disability, allowing for a more nuanced understanding of the difficulties or opportunities experienced by content creators with disabilities on social media.

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While there is various literature about algorithmic biases and their impact on marginalized communities, I aim to capture the nuanced insights of challenges from the viewpoint of disabled content creators themselves. Via in-depth qualitative study, I aim to enrich scholarly understandings of the intricate interplay between algorithms, social media platforms, and marginalized voices. By documenting the pressing issues faced by this community, I provide more context for the development of strategies, policies, or platform enhancements that can empower and support content creators with disabilities in their online endeavours. Future studies can use the knowledge from this research of how content creators' challenges are shaped by algorithmic biases and ableist views, to guide legislation, platform development, and initiatives for algorithmic accountability and transparency, eventually aiming for a more welcoming and equal online space for all content creators, regardless of their abilities. This research is an addition to the greater discourse around disability awareness and bias, and it is crucial to continue to amplify and learn more from their voices directly. I am open to criticism and further learning and encourage more emancipatory disability studies research, especially in the field of social media content creation.

STUDY DESIGN

This section outlines the sampling strategy, procedure, research tools, and process of data analysis. It discusses the benefits of using a qualitative and constructivist approach to answer the research questions. It follows with a reasoning behind choosing both IPA and thematic analysis to interpret data and concludes with a thorough examination of the ethical issues involved in the research and the researcher's role.

Methodology

The primary data collection method for this study was semi-structured interviews. Interviews were well-suited to answer the research questions as they required a thorough grasp of the circumstances, experiences, and motives of content creators with disabilities—topics that are inherently subjective and multifaceted (DiCicco-Bloom and Crabtree, 2006). For RQ1, qualitative interviews enabled me to delve into content creators' subjective experiences and viewpoints directly, allowing for the discovery of subtleties that would otherwise be hard to

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record (Turner III, 2010). Through open-ended questions and probing discussions, I obtained a thorough knowledge of how they see and interpret the difficulties presented by these systems, giving voice to their lived experiences that may not be fully represented by purely quantitative techniques. For RQ2, interviews played a crucial role in exploring the intricate interactions between algorithmic systems and participants' experiences by asking them to reflect on their own experiences. With this method, I examined the subtleties, unspoken influences, and emotional and psychological aspects of the creator's interactions with algorithmic systems. I had the flexibility to adapt to the distinct viewpoints and experiences of each participant (Given, 2008). I opted for a constructivist approach (Silverman, 2019) where the data was collaboratively produced, putting both me, the interviewer, and the respondents in an equal position of interest and power dynamics. Due to the sensitive and personal nature of the issue, I chose to conduct individual interviews rather than focus groups (Elmir et al., 2011), minimising the forced self-disclosure and impact of other viewpoints (Silverman, 2019).

Sampling

The purposive sampling technique was used to find participants. Potential participants were identified and contacted through a hashtag search on Instagram and a Google search using phrases such as ‘creators with disability’, ‘disability’ and ‘disability awareness’. A total of eight content creators, all of whom self-identified with a disability, were selected. The study sample included four identifying as females, three as males and one individual identifying as neutral. The participants were mostly from the United Kingdom and the United States. They were chosen based on the following criteria: (1) their active engagement in content creation, (2) their self-identification as individuals with disabilities, (3) their content related to disability awareness or advocacy, and (4) having a follower count of over 1.5k. The aforementioned criteria were derived from an initial pilot research in order to ensure a consistent degree of similarity across all participants, hence facilitating a more comprehensive examination of the collective experiences and viewpoints within that specific group (Guest, Bunce & Johnson, 2006). At the same time, the sample was heterogeneous in terms of gender, type of disability, and forms of content, which is an important quality in qualitative research to guarantee a wide variety of experiences and views are reflected (Patton, 2015). Such heterogeneity contributed

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to a richer understanding of the challenges. The balance of heterogeneity and homogeneity in the sample helped facilitate both depth and breadth in the exploration of their experiences. The demographics of each participant are shown in detail in Appendix A.

Procedure

An invitation to participate in the research was sent directly through Instagram DMs or emails where available. An information sheet detailing the study's goals, the nature of involvement, and guarantees of confidentiality was sent to each participant. The video-conferencing platform, Zoom, was used for the interviews, allowing for a convenient and geographically flexible conversation. The study's goal and process were explained to participants at the start of each interview, and verbal consent was acquired. Participants were also asked to choose if they preferred anonymity. To protect their privacy if they want to remain anonymous, all identifying information was deleted after transcribing. The interviews lasted for an average of 34 minutes and were recorded with the participants' permission using Zoom's recording feature. By accurately recording the conversations, this strategy enabled me to concentrate on the interviewees' interaction rather than writing notes. The tapes of each interview were then verbatim transcribed and manually compared to the recordings to confirm the correctness of the transcriptions and the data's integrity. A pre-developed topic guide, tested and modified in the pilot study, served as the basis for the semi-structured interviews. Semi-structured interviews offer a compromise between uniformity between interviews and the freedom to explore subjects as they come up in conversation (Whiting, 2008; Bryman, 2016). The topic guide (Appendix B) consisted of an introductory question to develop rapport first (Elmir et al., 2011), followed by some open-ended questions on participants' experiences and views of their challenges, comprehension of the social media platform's algorithm, and the effects of these factors on their content creation process.

Data Analysis

This research used Interpretative Phenomenological Analysis (IPA) and Thematic Analysis, two complementing analytic methodologies to analyse the data. IPA was chosen as it allows the study to (1) gather first-person narratives, (2) get an 'insider perspective' (Conrad, 1987:

n.p), and (3) understand participants' perceptions of algorithm-related views by analysing how they make sense of their experiences (Smith & Osborn, 2007). As a phenomenological approach, IPA provides a structured yet flexible framework to delve into the nuances and complexities of their challenges, grounding the analysis in the participants' perspectives, and thus, mitigating interviewer bias (Heinonen, 2015). The pilot study results confirmed that this method aligns well with the study's objective. However, while IPA provided the depth needed, its limited generalizability (Bryman, 2016) underlined the necessity for thematic analysis to find wider similarities among participants' narratives, hence, enriching the understanding and interpretation of their collective experiences.

Using an inductive approach, I followed the steps to perform IPA by Smith and Osborn (2007) and allowed patterns to emerge from the data. After an initial list of themes for each participant was generated and clustered, I employed thematic analysis to identify connections and patterns among all participants' experiences, providing larger insights and complementing IPA's in-depth individual emphasis. In an iterative approach, grouped codes were brought together using supporting quotations to correctly convey each challenge and categorised them under a main label to produce a final list of themes (Appendix C). Three global themes and several sub-themes were formed. IPA and thematic analysis allowed for a comprehensive exploration of the research questions at both the individual and collective levels respectively. This combination strengthened the study's conclusions, which analysed the challenges and impacts perceived by disabled content creators.

Ethics and Reflexivity

Ethical considerations in this research were stringently upheld. I made sure that participants were aware of the study's goals, methods, and any repercussions, as well as their right to discontinue at any moment (Elmir et al., 2011). Verbal consent was used preferably since it's more participatory. It enabled concerns to be addressed promptly and fostered an environment of trust and mutual understanding between me and the participants (Guillemin & Gillam, 2004). I also allowed participants to select their anonymity status to show respect for their autonomy and contributions and empower them as active contributors to the study rather than passive subjects (Saunders, Kitzinger & Kitzinger, 2015). However, if

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participants would rather remain anonymous, I guaranteed their right to privacy by deleting any identifiable information and using pseudonyms. These factors encouraged an ethical and participant-centred approach, boosting the research's quality by cultivating a relationship of trust with participants and valuing their autonomy and contributions.

I also acknowledged the higher risk of uneven power dynamics within the research relationship as I was coming from an ‘outsider’ point of view. I was aware of how my identity may have affected the dynamics of the interviews by the way I was seen as, in previous studies, respondents have argued that non-disabled researchers may mislead and misunderstand the knowledge and experiences of people with disabilities (Oliver, 1992, Kitchin, 2010). To mitigate this power imbalance and risk of misunderstanding, I tried to be sensitive and respectful throughout, recognising that their experiences should influence the study, not mine. I balanced my interpretative function with the participants' viewpoints and promoted an open discussion. I was also in contact with a gatekeeper at the beginning of the process to help me tailor my approach to be more culturally sensitive and appropriate. However, I acknowledge that a more continuous collaboration would have been ideal. The findings of this study were also shared with the participants and consultants as a token of reciprocity.

FINDINGS

The world of digital content, as illuminated by the participants' experiences, reveals several socio-technical challenges ranging from algorithmic biases to social disparities that disproportionately impact content creators with disabilities. This section presents the difficulties they encounter across three main areas: Content Distribution, Platform Governance and Audience Interaction. Each area is subdivided into the challenges and their algorithmic impacts which are contextualised and extended using past literature and supporting quotes.

Content Distribution Challenges and Impacts

Algorithmic bias and stigmas

The ‘neutral’ digital space is far from being impartial. There is a rising worry about the fairness and transparency of algorithmic systems. Ableism, a systematic kind of prejudice towards

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people with disabilities, has a strong presence online. 4 out of 8 participants firmly asserted that disability-related stigmas extend to algorithmic biases, supporting O'Neil's (2016) and Diakopoulos's (2016) statement that algorithms may magnify pre-existing prejudices in society. Russell commented that it is hard for an algorithm to be impartial if it is based on human knowledge or data and hence, is skewed by its very nature: 'There's always bias. That's what an algorithm is. To be non-biased would be to not have an algorithm, right?' The reduced visibility of content creators with disabilities on social media due to algorithmic ableism (Loeppcky, 2023) was observed by Catarina and Al. They mentioned the unbalanced digital ecology where the algorithm prioritises certain content and bodies more and hence their chosen content subject (disability) does not get as much viewing as more 'popular' themes.

[...] I know there's bias and discrimination. Do I think I'm getting as much viewers as someone who's doing like cute fashion content? No. But also that's because of my topic that I've chosen. – Catarina

Daniel brought in the 'attention economy' perspective that visibility is largely driven by content that maximises user engagement. This supports the argument that in a capitalist digital ecosystem, the algorithm's potential of side-lining disability-related content illustrates how bias is driven by information that garners more attention (Napoli, 2003). Disability-related content is not seen as having greater economic worth, hence becoming a low preference for recommendation algorithms.

Your content is recommended more because it's entertaining. [...] But if you're creating content that's serious [disability-related], not entertaining, it's harder to get algorithmic flow because YouTube doesn't see it as going to entertain a lot of people, they say, this is kind of boring. And so I think that yes, it [the algorithm] does battle against you in the growth strategy. – Daniel

The findings further extended the conversation on how capitalist influences on algorithmic judgements go beyond economic capital to include cultural capital as well. The synthesis implies that these algorithms are also influenced by prevalent societal norms and preconceptions, in addition to profitability. Al and Alicja's viewpoints emphasised that the

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algorithm favours content that is influenced by both capitalist objectives and societal expectations of specific narratives from certain groups. For creators with disabilities, this translated into being algorithmically favoured if only they want to reveal their personal tragedies (Haller, 2010), as AI mentioned: ‘I think it's clear that disabled creators are often at a disadvantage unless they choose to share their traumas.’ Her observation is consistent with the finding that disabled people are commonly prioritised and depicted via the lens of emotional pity, inspiration, and unfavourable language about disability (Loeppcky, 2023). This observation can be extended to past portrayals of disability in mainstream media. Alicja’s perspective further broadened the discussion of prejudices against people with disabilities to include intersecting identities like gender. She shed light on the gendered stereotype that women in digital media must always be optimistic and positive: ‘There's this theory of like, the can-do girls, the moment they're sharing their pain, they're distracting.’ These findings show that social media platforms often push content that they think would be more engaging in an effort to keep users engaged, resulting in content that adheres to societal stereotypes for greater exposure, thus reinforcing bias and stigmatization.

The ‘black-box’ nature of algorithms

6 out of 8 participants emphasised a recurrent theme of battling the mysterious nature of social media algorithms. Alicja’s feeling of ‘I don’t know what I’m doing [...] it’s like being in the dark’ describes the ‘black box’ nature of algorithms (Pasquale, 2015). As creators attempt to navigate and comprehend the unwritten rules regulating content distribution, the opacity of these algorithmic systems often leaves them forming their own theories (Bucher, 2017). When asked about the reasoning behind the popularity of a video, the concept of unpredictability was underlined by Ana who perceived her TikTok experience as ‘super random’, suggesting ‘luck’ often influences which videos become popular. Nic indicated that although early interaction is ‘fairly understandable, the jump from medium popularity to large popularity is a little less clear and still somewhat mysterious.’ He also described the puzzling discrepancies he perceived when posting identical videos on different platforms:

I post my videos on both TikTok and Instagram [...] sometimes they perform differently on each platform. it's often the case that a video that does well on TikTok

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does not do well on Instagram and vice versa, and I don't really understand the exact difference [...] it's not clear why. - Nic

Content creators struggle with the constantly shifting dynamics of the platform algorithms while simultaneously attempting to develop a community. They are challenged by this continual change to be reactive rather than proactive, always attempting to keep up with the latest developments. The efforts made by the creators trying to comprehend patterns of content popularity are consistent with Bucher's (2017) 'algorithmic imaginary'. The 'mystery' of algorithms may often cause sentiments of frustration since they have an unpredictable influence on content exposure, as Russell feels:

It changes constantly [...]. Once I finally get like a grip on the algorithm and I set myself up for success, the algorithm changes and I have to go back to the drawing table.

Economic implications

A theme of financial difficulties due to algorithmic distribution was recurrent in participants' challenges. 5 out of 8 content creators stated that the unpredictability of content distribution algorithms has a substantial influence on their financial security.

We [creators] rely on algorithmic distribution to create ad revenue and brand deals. Economy-wise like keeping yourself financially stable whilst being a disabled content creator I think is probably one of the biggest challenges you know. - Daniel

Societal biases can still play a negative role in securing revenue as AI perceives she gets much fewer brand deals than non-disabled creators: 'Many content creators with my levels of engagement and followers are starting to get brand deals and even talent agencies, but unfortunately I haven't had many of these opportunities.' Her perception concerning lost brand partnership prospects represents the unfairness Roberts (2019) and Kingsley et al., (2022) pointed out where marginalised content creators often do not have the same economic opportunities as their mainstream counterparts. Similarly, Catarina's comment on racial inequities in brand collaborations is consistent with Benjamin's (2019) discussion on the connections between

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injustice, race, and technology, highlighting that the problem is not isolated to a single group: ‘When we look at black content creators, they don't get offered sometimes the same rates for brand partnerships as white creators. And so that's inherently wrong.’ While these monetization issues resonate with Kingsley et al. (2022) exploration of economic barriers in the digital realm, Daniel personifies the algorithm as an active adversary. Hence, for content creators who rely on these platforms for advocacy or livelihood, in Daniels’ terms, ‘the algorithm will battle against you’.

Platform Governance

Content Moderation

The personal experiences shared by most participants suggest a clear pattern of suppression and censorship towards disability-related content on social media platforms. One of the issues that stood out the most in the interviews is O'Neil's (2016) perception of unequal platform treatment towards creators with disabilities. Catarina noticed that ‘disability creators, especially ones who are talking about certain topics tend to get shadow banned’ whereas, Al, on the other hand, personally experienced this type of covert censorship: ‘My content is often hidden because I talk about abuse, ableism, discrimination.’ Sandie also accounted for TikTok's content moderation inequality: ‘I was blocked and banned a lot more than non-disabled bodies for revealing the side of my bum cheek,’ although they noticed non-disabled TikTok users showing a lot more skin without any repercussions. This unequal treatment, as Sandie explained, seems to be a result of the implicit cultural belief that disabled people should be protected. This belief aligns with Biddle, Ribeiro and Dias's (2020) ‘invisible censorship’ and Bucher's (2012) ‘politics of invisibility,’ implying a misplaced desire to ‘protect’ disabled people rather than providing them with an equal voice.

5 out of 8 participants noticed a decline in their reach particularly when exploring sensitive topics. Russell pointed to a highly sensitive filtering mechanism in which words related to mental health like ‘depression’, ‘suicide’ or ‘anorexia’ in his captions immediately reduced his reach, even when the context is positive: ‘I've noticed if I write the term in a depression in a caption, the reach will do down.’ These reports suggest a pattern where platforms are lowering the

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prominence of content that deals with certain delicate subjects which could lead to content being flagged as sensitive and subsequently censored or taken down. Both Russell and Daniel stressed the need for having these dialogues but are faced with platform restrictions and algorithms that hinder their goal.

We obviously need to have this discussion and we can't have the discussion if you get punished when you're trying to talk about these topics in a beneficial manner.

- Russell

A lot of disability advocates have to mention sex in the video because they want to talk about can disabled people of this disability have sex, right [...] But the content is flagged as being too sensitive for YouTube and then they'll give you a black mark and you can't post for a week [...] which is crazy because like what that does is it kind of stumps your growth, stops your revenue, and it kind of stumps your advocacy. - Daniel

These comments further added to algorithmic discourses by underlining algorithms' lack of distinction to distinguish between information that is intended to educate and is genuinely inappropriate. The highly sensitive regulation also hints at what Tufekci (2015) describes as 'commercial content moderation'. As discussed above, algorithmic judgements are inextricably linked to societal stigmas and capitalist pressures to generate profit (Roberts, 2019). Hence, content creators with disabilities are unfortunately more prone to this type of regulation as their work may be more susceptible to being flagged as 'sensitive' (Gillespie, 2010).

Lack of transparency

Participants raised a concern about the transparency in moderating decisions on platforms such as TikTok which ultimately results in unfair punishments or the suppression of important discussions in the disability community. The lack of subtlety in algorithms needed to read content in its social context and the lack of transparency in moderating decisions reiterated the findings of Ellis and Kent (2017) and Ma and Kou (2021) respectively.

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If people are getting their account shut down because of an AI or like a bot who's monitoring that, that's really frustrating [...] And that we don't know how it's implemented, that's more frustrating again. I'm just concerned about how it's actually implemented. – Catarina

I know there were rumors about Tiktok like suppressing disabled creators content. But I don't know if that's true. I've seen stuff where they've had videos removed that didn't need to be removed and it seems like because it's disability-related. - Ana

Catarina's worries regarding automated content moderation describe the difficulties and possible drawbacks of algorithmic governance. The uncertainty Ana raised about whether the suppression is intentional or not illustrates the lack of transparency content creators battle with when analysing platforms' decisions and attempting to determine if there is a particular bias against their content. Automated moderation often results in false flaggings and unfair penalties, and the absence of an effective method for handling complaints increases creators' frustration. By the time creators get into contact with someone for an unfair penalty, their reach and profile are already damaged. Especially when it comes to marginalised areas, many platforms fail to adequately implement their own regulations as Ana said:

I've reported things before that are awful but nothing ever seems to happen. They have these policies of what they say is and isn't allowed but never do anything about it.

As a result, creators are further alienated by this ambiguity since it leaves them wondering why their material was removed. These experiences paint a picture of a community that is struggling with murky algorithms and the potential undervaluation of disability experiences.

Control and Penalties

Content creators, like workers, are part of a larger economic structure where their creative output is a source of value extraction. 2 out of 8 participants felt monitored, assessed, and 'punished' by the algorithm for not following and keeping up with the algorithm's demands. Catarina noticed a decrease in her reach when she took longer breaks from posting: 'If I'm busy

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and I don't post, I feel like there's a penalty with the algorithm. That's very frustrating.' This observation demonstrates a strong interplay between agency and control as social media platforms hold a high concentration of power, where individuals are subject to the rules and algorithms set by the platform as Fuchs (2014b) argued. This invisible type of surveillance and self-regulation is similar to Foucault's (1975) concept of the 'panopticon' where the algorithm constantly monitors your behaviour and punishes you by decreasing your reach. Alicja mentioned her battle against this invisible control: 'I try not to become a victim of algorithmic kind of constant work and a constant feeling of being inadequate,' mirroring the tension between authentic labour and exploitative conditions described by Marx (Fuchs, 2014a).

Dependence and Autonomy

Gillespie's (2018) 'economy of visibility' – 'Capitalist machines' powering social media networks prioritise interaction and money rather than authenticity - creates a challenge of dependency and autonomy for disabled creators. In fostering organic communities with 'capitalist machines,' content creators are caught between dependence (on platforms for visibility and revenue) and autonomy (freedom to create genuine content) - a dialectical relationship. Alicja expresses the tension she feels between personal autonomy and external forces encapsulating the paradox of harnessing a system that perpetuates capitalist values to achieve communal goals.

There are certain trends and certain things that you need to do and that you perhaps need to dance sometimes to show your entire body and ...really keep up with what Instagram wants you to do [...] I know that there is a certain game that you should play... just make an algorithm your friend [...] I am aware of the algorithm, you know, and I am critical of it. But at the same time, I'm like. Yeah. It's like a paradox, you know, when you are critical of it, but you're in it. So you are part of it and you're contributing to this system. And I know that I'm contributing to it - Alicja

This perspective is reminiscent of Bourdieu's (1986) idea of 'cultural capital': Similar to how people use 'cultural capital' to negotiate and gain social status, content creators strategically use their understanding of what the algorithm favours to enhance their visibility. As a result,

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creators strive to strike a balance between genuine content production and conforming to the requirements set by capitalist algorithms and platform guidelines. Despite being aware of the bias and values these platforms perpetuate, creators sometimes feel stuck by their popularity and ubiquity, expressing the difficulty in balancing one's critical awareness with the necessity of using the platform. The sense of entrapment or dependency communicated by participants echoes themes of survival and adaptation between platform dependence and autonomy (Tatjana Hödl and Myrach, 2023).

I am not in control of the algorithm [...] They have the monopoly over their social media platforms at the moment, so we haven't really got anywhere else to go. – Sandie

I'm using this capitalist machine to create a community, but I have no other choice and it helps. - Alicja

Audience Interaction and Algorithmic Impact

Online discrimination and hate

A tangible sense of battling a turbulent sea of misunderstandings, prejudices, and resistance was felt while delving into the voices of disabled content creators who share a universal goal: Increasing awareness and visibility of disabilities through content creation. Although social media has empowered creators, it also sadly makes marginalised groups more susceptible to hatred and discrimination due to the detachment and anonymity that are inherent in digital settings (Varjas et al., 2013).

I feel like disabled advocates are up against like people who are just opinionated, you know, highly opinionated people. - Daniel

Unfortunately, as my platform has grown, so too has the amount of negative comments. I think that disabled people get so much hate online. I see some really bad comments that are like a lot of the time with disability... Like it ventures into like eugenics, like oh you don't deserve to live. - Ana

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As Ana indicated, direct animosity towards people with disabilities is correlated with ingrained discriminatory, and even eugenic, ideas from the medical model of disability (Wilson and Lewiecki-Wilson, 2001). Al also received many hateful messages over time, including death threats and ableist slurs. Nic and Catarina further added that they found that people with visible disabilities experience a ‘condescending or pitying’ attitude from the audience. This account of patronizing compassion echoes definitions of ‘heroic role models’ (Hardin et al., 2001) or ‘innocent victims’ (Shapiro, 1994) which denies disabled people a deep and nuanced identity by pitying or overpraising them, showing how preconceived notions of the past are still present today.

I felt like it didn't really matter how functional or not functional you were, people still treat you a certain way if you were outwardly presenting with a visible disability. The attitude is a little condescending or like pitying [...] or people will take it in the other direction and think that like any person who has a disability is like very inspirational, like just for existing. – Nic

Resistance to learning

Another challenge disabled content creators often face is resistance in connecting with the audience as Ana pointed out: ‘I feel like people seem to be a bit more resistant to learning about disability versus learning about other things.’ She links this resistance to an overwhelming diversity of impairments within the disability spectrum itself: ‘I think that just comes from disability being so different.’ Instead of making the effort to comprehend this wide range, the audience may feel overburdened and disinterested and thus, withdraw into the comfort of their preconceived assumptions. This cultural ignorance phenomenon, or ‘aversive disablism,’ as Goodley (2014) argues reflects society’s greater incapacity or resistance to accepting diversity. Nic and Al highlight the dismissive attitudes that creators with disabilities frequently face when trying to educate the audience. Al states that her non-disabled audience is unable to see the advocacy and perceives her content ‘as constant complaining rather than raising awareness because most of them just don’t care about disability.’ Nic’s requests are seen as divisive or aggressive, as opposed to being seen as requests for understanding and change. These experiences bear similarities to how marginalised voices are often seen as ‘misfits’

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(Garland-Thompson, 2011) and campaigning is rejected as simple complaints or ‘oversensitivity’ which limits awareness efforts.

The minute that a disabled creator will, like, make a video asking for some sort of change or like people to act differently [...] people will come in and be like [...] how dare you ask for more? What more could you want? You know, like you are ungrateful. - Nic

Surprisingly, the resistance extends to internal disagreements and divides over the identification and terminology of terms within the disability community itself. Russell and Daniel faced this type of pushback in their community which impacted the community’s cohesiveness and led to decreased visibility:

There are times where again I get pushed back because of people [...] There's a large population in the autism community that doesn't believe autism is a disability. - Russell

A lot of people do identify with Asperger's syndrome... some woman will be like, you can't use that term anymore, it's a nasty term, and then she'll report your video so then you get less algorithmic distribution right? So what you're doing- you're battling you're trying to get information out to help a community that will then give you backlash because then they're in an uneducated portion of that community. - Daniel

Invalidation of intersecting identities

Sandie adds the dimension of intersectionality as a non-binary disabled content creator with her horrible experience of defying traditional gender conventions.

Historically I've gone by the pronouns She, her. Recently, I've decided that I feel more neutral. So I prefer they/them. On my profile, I just changed the order of my pronouns. Well you just thought I'd started World War Three. People were like I don't understand. Aren't you married? And I'm like what's that got to do with anything? Yes, I am married and I've been like, spent my morning explaining to

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people how pronouns got nothing to do with sexual orientation. And then I've lost over 100 followers. – Sandie

The criticism faced for changing their pronoun usage is representative of the ‘context collapse’ idea proposed by Marwick and Boyd (2011). This is speaking about the fuzziness of distinctions between various social situations and audiences, which may lead to discrimination. The multiple obstacles Sandie faces may be put in perspective by using Crenshaw's (1989) idea of intersectionality, which describes the prejudice persons who intersect with several marginalised identities endure.

Sexual Harassment

As Elman (2016) found, online discrimination against disabled content creators especially women, may take the form of unwanted sexualization, making the online space more unwelcoming. Sandie discovered that they were the target of sex predators despite their intentions to produce material that appealed to the disability community. Sandie points out the ‘staring’ culture discussed by Garland-Thomson (2006), who contends that disabled people's bodies often become objects of awe or interest:

My account posted in a couple places, devotee forums, that fetishize and kind of really enjoy and sexualized disabled people. And then those people that flock to those forums come to my account and follow me for the purpose of sexual gratification. Nothing to do with my content or what I'm trying to say [...]. It's anything that showed my legs in my wheelchair, it's just the wheelchair. - Sandie

The online discrimination environment can be a source of anxiety and trauma, causing a major psychological and emotional toll, especially for marginalised people who often suffer the most from targeted assaults as Sandie experienced. Moreover, sexual harassment has only been made worse by the availability of channels that encourage such objectification in the digital era. Sandie's juxtaposition of users' online experiences and models in physical commercials is similar to Turkle's (2011) argument that the digital world, with its feeling of detachment and anonymity, often lacks comparable responsibility:

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In the online space it's a completely different kind of fetish and I don't understand what the difference is. I'm just advertising a product just the same as the girl on the billboards in Marks and Spencer's [...]. I've deleted more than now 65,000 followers, and it damages your profile, damages your account to do that. I took my account right back to just less than 10,000 and then I left it and they all just came back. They just all came back. It is very depressing. It affects our reach, it affected my mental health. – Sandie

Understanding of algorithmic impacts

Algorithms are data-driven. On social media, feedback loops are produced through the connection between algorithmic suggestions and user engagement data (O'Neil, 2016). However, hate speech and bad interactions distort this feedback loop for content creators with disabilities. Daniel perceived the reports by his own community 'will have a knock-on effect on the algorithm' whereas Nic perceived 'the sentiment actually doesn't matter, if it's like positive or negative, like people yelling at me, It will like increase the reach either way.' This implies that the algorithm may unintentionally give greater weight to material with negative comments if they have more interaction as described by Cheney-Lippold's (2011) modulation concept. Online identities and categories are fluid and determined by algorithms based on real-time data (Cheney-Lippold, 2011), implying that what algorithms value can change over time and is sensitive to feedback. This unfortunately challenges and exposes disabled content creators to more hatred and prejudice as algorithms may further prioritise these stereotypes, intensifying the stigmatisation. The algorithm overlooks to market their material to a broader audience or pushes more harmful stuff as Sandie observed in her personal experience with dealing with harassment. She implied Instagram's algorithms mistakenly read fetishists' likes and shares for real involvement similar to what O'Neil (2016) outlines in 'Weapons of Math Destruction'. It unintentionally directs more of her content their way, believing that this is what the user 'wants' to see as they described:

I think it [Instagram algorithm] sees this is this woman, she's doing this thing in her fashion stuff and these men like it. Oh, here she is. She's doing another thing in fashion in her wheelchair. Last time men liked it. Let's send it to some more men

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again. So it wasn't anything to do with me...it turned out to be the platform. I've deleted more than now 65,000 followers that have been those strange people. Now I've blocked them... And it damages your profile, damages your account... I can't just keep doing that. So I left it. And now I just removed them on a daily basis and it's very disheartening. – Sandie

Algorithms often follow trends, and early involvement—even from unwelcome sources—can lead a post to corresponding audiences, continuing a loop of negative engagement. This not only affects their online visibility but also shapes their digital identity and damages their profile. Disabled content creators like Sandie have lost thousands of followers and now feel unsafe producing content that properly represents who they are due to the skewed audience metrics and lack of accountability on social media platforms.

DISCUSSION

The interviews with the 8 content creators with disabilities provided insight into the complex and multifaceted challenges they encounter on social media platforms and how it impacted them. This section connects the challenges across the 3 key areas: content distribution, platform governance, and audience interaction and introduces a unified theme, Algorithmic Capitalist Ableism (ACA). Limitations and suggestions for further study are made at the conclusion.

Algorithmic Capitalist Ableism (ACA) on Social Media Platforms

The perspectives of the participants revealed an intricate interplay between algorithmic systems, larger sociocultural frameworks, and disabled content creators in terms of visibility, representation, and identity negotiation. Analysing these challenges via the perspectives of critical technology and disability studies gives rise to a common theme of Algorithmic Capitalist Ableism (ACA) culture. ACA builds on Ntoutsi et al. (2020) definition of algorithmic bias, capitalist motives of platforms (Napoli, 2003) and societal prejudices that gave rise to Caldwell (2010) 'disabled in/visibility'. The concept shows the impact and control (Fuchs, 2014a; Fuchs, 2014b) algorithmic systems have over disabled content creators. Using Pasquale's (2015) concept of the 'black-box' and Cheney-Lippold's (2011) constant modulation

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of digital identities theory, ACA argues that challenges around content distribution, platform governance and audience interaction influence and in turn, impact each other algorithmically.

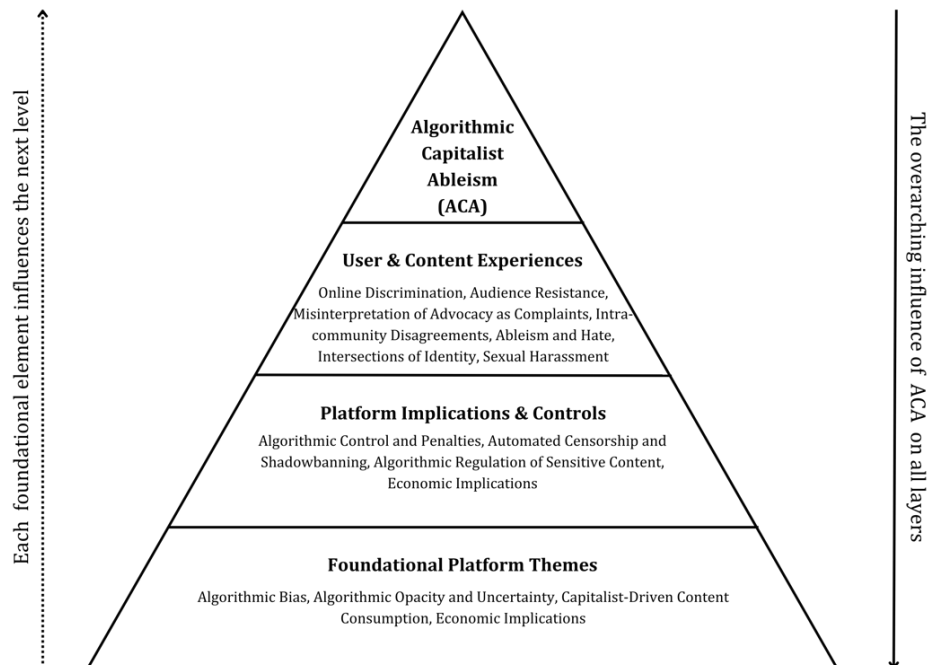


Figure 2: The Algorithmic Capitalist Ableism (ACA) framework

In relation to RQ1: ‘How do content creators with disabilities perceive the challenges on social media platforms?’, ACA encapsulates the multifaceted challenges content creators with disabilities face on social media by showing their interplay and influence. ACA expands on the power and relevance of algorithms in shaping content visibility by arguing that these algorithms are not just powerful but inherently biased against content that challenges capitalist norms and benefits. Firstly, algorithms reinforce and amplify pre-existing disability-related social biases impacting the reach of content creators with disabilities. Secondly, ACA shows that algorithmic decisions are driven by the political economics of social media platforms, consistent with the idea of ‘capitalist machines’ that put money above authenticity (Napoli, 2003). Content that is pertinent to the lives of individuals with disabilities is not deemed ‘engaging’ or ‘relatable’ to a wider audience by these algorithms. Disability advocacy and authentic content are deprioritised and excluded in favour of content that generates revenue.

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Thirdly, these platforms exclude content that contradicts the ‘normate’ template (Garland-Thompson, 2017) using highly sensitive content moderation techniques which incorrectly tag posts with physical impairments or debates regarding disabilities as sensitive with a motive to ‘protect’ them (Botella, 2019). Lastly, harassment and discrimination are amplified by algorithmic ableism. ACA describes even though this is not primarily the fault of algorithms, the ‘socio-technical assemblages’ (Ananny, 2015: 93) accentuate these negative voices. This is mainly due to the modulation nature (Cheney-Lippold, 2011) of algorithmic responses which are affected by ableist audiences’ responses. The feedback cycle as well as the anonymity and detachment in the digital sphere, causes unpleasant effects of sexual harassment and fetishization encountered by creators with disabilities.

Findings to answer RQ2: *‘How do these challenges impact their experience and presence?’* includes understanding the potential amplification or hindrance of their voices, economic ramifications, mental well-being and marginalization that may arise as a result. The illusive ‘black box’ nature of algorithms (Pasquale, 2015) and their opaque functions further add to the current discussion over the drawbacks of algorithmic transparency and the difficulties content creators have when anticipating and reacting to algorithmic changes (Crawford and Gillespie, 2016). The effects of this opacity and sensitivity are highlighted by the ACA lens, notably how it unintentionally marginalises disability advocacy material and upholds social stereotypes while keeping creators in the dark. Unfortunately, it further impacts the mental well-being of disabled content creators as they face constant pressure to modify their work to satisfy algorithmic requirements for user engagement and financial gain. When using social media platforms, they have to balance two competing desires: a natural, sincere want to share their experiences and a calculated goal to maximise algorithmic visibility. This dialectical interaction reflects a conflict between authenticity and algorithm satisfaction, consistent with Marxist conceptions of labour and value creation (Fuchs, 2014). As a result, ACA causes significant economic ramifications to disabled creators who often encounter financial obstacles and uneven brand collaboration chances, highlighting the wider economic disparities in the digital ecosystem.

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These interconnected themes illustrate the complexity and the algorithmic nature of the challenges faced by disabled content creators as they work to raise awareness, promote change, and establish supportive online communities. ACA highlights the overlap of these challenges with diverse elements of identity, power, and prejudice. It contends that these platforms' algorithmic controls inadvertently promote ableism, either by silencing or restricting the voices of disabled artists or by giving the advantage to content that fits ableist standards and prioritises profit-driven content. Due to algorithmic opacity and economic pressures, this results in a culture of ableism and prejudice that is further intensified on social media platforms.

Limitations and Future Research

The study design successfully documents the wide range of difficulties of disabled content creators directly from their own voices. Some limitations in the study must be addressed in order to fully understand the substantial impact algorithmic challenges have on digital platforms. Human perceptions and the complexity of algorithmic operations are diverse and diversified, indicating that it is difficult to fully capture all nuanced experiences. The findings of this study are bounded by the experiences of the 8 participants interviewed. I was successful in covering a diverse range of disabilities, but since most of the participants were based in the US and UK, I was not able to delve deeper into the intersections of race and other marginalized identities with disabilities to offer a more comprehensive understanding. A larger sample size might enhance the generalizability of the findings. Future studies could expand on the geographical locations and investigate the many disability-related norms, policies, and popular platforms that exist in different locations. Additionally, it would be advantageous to use mixed-method strategies that combine qualitative insights with quantitative computational analysis. Since algorithms are continually improved and updated, it is challenging to measure and evaluate their influence over time. To give a thorough knowledge of algorithmic experiences, longitudinal studies that monitor changes in algorithmic behaviour and their effects on users can be further explored. More detailed insights may be gained by looking at particular case studies of content suppression. While I specifically focused on the challenges experienced by content creators with disabilities, future studies

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could examine cultural or platform-specific differences by conducting a comparison across several digital platforms on how specific features do not support them. The path to more egalitarian digital landscapes may be paved whether they are technology modifications or community-driven efforts by the deeper comprehension of the linkages between structure and agency that have begun to surface as a result of this study.

CONCLUSION

Social media platforms, although full of possibilities, nonetheless have biases by nature. Through eight interviews, the investigation into the challenges faced by content creators with disabilities on social media platforms has revealed the complex interactions between algorithmic systems, disabled content creators, and the larger sociocultural context. Their experiences as described above, are not isolated. They are signs of more general trends and issues that have been carefully examined in scholarly literature over the last ten years. The results of this research have been combined into a cohesive theme of Algorithmic Capitalist Ableism (ACA), which captures the multiple nature of problems in content distribution, platform governance, and audience engagement. ACA shows that algorithmic biases are profoundly entangled with sociopolitical and economic foundations, replicating more general patterns of ableism and capitalist motivations. These biases, driven by both corporate imperatives and algorithmic opaqueness, have wide-ranging effects and often silence and marginalise voices who disagree with the dominant narrative. This study has effectively shown the nuanced ways that algorithmic systems both influence and are affected by the experiences of content creators with disabilities using the lens of critical technology and disability studies.

In a digital landscape where algorithms wield considerable power in shaping content visibility, engagement, and online interactions, the implications of this research are substantial. It was necessary to hear from the experiences of disabled content creators themselves as this places them in the context of a larger conversation about equality, justice, and the need for structural reform in the content creation sector. The research's conclusions may be useful in continuing discussions about algorithmic fairness, inclusion in the digital domain, and the

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transformational potential of social media for underrepresented groups. More fair and inclusive platform policies and practices could be influenced by these findings. The insights gained from this research highlight the critical need for platforms to be more open, less arbitrary, and more inclusive in how they use their algorithms. a world where content creators with disabilities feel seen and heard by their audiences and the platforms they depend on, regardless of the themes they address.

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APPENDIX

Appendix A: Participant Demographics Table

Participant Number	Name or Pseudonym	Platform(s)	No. of followers	Social Media handle	Type of Disability	Pronoun	Age	Ethnicity
P1	Daniel	Instagram	43.4k	@theaspieworld	Autism, ADHD	He/Him	36	British/Mixed race
		TikTok	40k					
		YouTube	249k					
P2	Ana (Pseudonym)	Instagram	50.6k	-	Physical disability - mobility-related (paralysis, spinal cord injury)	She/Her	21	Caucasian
		TikTok	70.3k					
		YouTube	15.1k					
P3	Alicja	Instagram	1.8k	@hy_stera	Invisible chronic illness, Neurodivergent	She/Her	-	-
P4	Nic	Instagram	54.3k	@leftyonhardmode	Trans radial limb absence in the right arm (congenital)	He/Him	30	White/ Non-Hispanic
		TikTok						
P5	Sandie	Instagram	38.9k	@the_searchforsilverlinings	Wheelchair-user	They/Them	52	White/British
		TikTok	29.6k					
P6	Russell	Instagram	25.3k	@russi.co	Diagnosed with autism at age 12 along with OCD, anxiety, depression, and subsequently PTSD.	He/Him	32	White
P7	Catarina	Instagram	22.9k	@blindishlatina	Deafblindness - Usher Syndrome which includes retinitis pigmentosa - a progressive vision condition	She/Her	-	Latíné/Latina
P8	Al	Instagram	11.5k	@a_spoonful_of_pain	Bedbound, Chronically ill	She/Her	-	-

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Appendix B: Table of Themes

Themes	Sub-themes	Codes	Quotes
Content Distribution Challenges	Algorithmic Bias	Perceived Viewership Gap and Algorithmic Stigmas	[...] Do I think I'm getting as much viewers as someone who's doing like cute fashion content? No. But also that's because of my topic that I've chosen [...] Stigmas extend everywhere. Yeah, Baked into the algorithm is in part of society - Catarina
		Capitalist-driven content consumption	Your content is recommended more because it's entertaining. But if you're creating content that's serious [disability-related], not entertaining, it's harder to get algorithmic flow [...] - Daniel
		Algorithmic preference for stereotypical representations and Trauma Sharing	I think it's clear that disabled creators are often at a disadvantage unless they choose to share their traumas - Al
	Algorithmic Opacity	Feeling of being in the dark	I don't know what I'm doing [...] it's like being in the dark - Alicja
		Understanding popularity shifts and platform disparities	[...] it's often the case that a video that does well on TikTok does not do well on Instagram and vice versa, and I don't really understand the exact difference [...] it's not clear why - Nic
		Adapting to changing algorithms	It changes constantly [.]. Once I finally get like a grip on the algorithm and I set myself up for success, the algorithm changes and I have to go back to the drawing table - Russell
	Financial Impact	Relying on algorithmic distribution	“We [creators] rely on algorithmic distribution to create ad revenue and brand deals. Economy-wise like keeping yourself financially stable whilst being a disabled content creator I think is probably one of the biggest challenges you know. - Daniel
		Inequities in brand deals	Many content creators with my levels of engagement and followers are starting to get brand deals and maybe even talent agencies, but unfortunately I haven't had many of these opportunities. - Al
Platform Governance Challenges	Content Moderation	Disproportionate Censorship /Shadowbanning	I was blocked and banned a lot more than non-disabled bodies for revealing the side of my bum cheek - Sandie
		Perceived Reduced Reach of sensitive topics	I've noticed if I write the term in a depression in a caption..., the reach will do down - Russell
		Lack of transparency	If people are getting their account shut down because of an AI or like a bot who's monitoring that, that's really frustrating [...] And that we don't know how it's implemented, that's more frustrating again. I'm just concerned about how it's actually implemented - Catarina
	Platform Control	Perception of being punished by algorithm	If I'm busy and I don't post, I feel like there's a penalty with the algorithm. That's very frustrating - Catarina
		Conflicts between platforms rules and creative autonomy	They have the monopoly over their platforms, I have no where lese to go - Sandie
		Feeling of constant work	I try not to become a victim of algorithmic kind of constant work and a constant feeling of being inadequate - Alicja
Audience Interaction Challenges	Online discrimination	Increase in negative comments	Unfortunately, as my platform has grown, so too has the amount of negative comments. I think that disabled people get so much hate online
		Condescending attitudes towards visible disabilities	[...] people still treat you a certain way if you were outwardly presenting with a visible disability. The attitude is a little condescending or like pitiable [...] or people will take it in the other direction and think that like any person who has a disability is like very inspirational, like just for existing - Nic

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		Invalidation of intersecting identities	I just changed the order of my pronouns. Well you just thought I'd started World War Three. People were like I don't understand. Aren't you married?[...] - Sandie
		Fetishization of disability	[...] And then those people that flock to those forums come to my account and follow me for the purpose of sexual gratification. Nothing to do with my content or what I'm trying to say [...] - Sandie
	Audience Resistance	Resistance to learning about disability	I feel like people seem to be a bit more resistant to learning about disability versus learning about other things - Ana
		Intra-community conflicts	There's a large population in the autism community that doesn't believe autism is a disability - Russell
	Understanding of algorithmic Impacts	Impact of reports on algorithmic distribution	she'll report your video so then you get less algorithmic distribution, right? - Daniel
		Impacts of comments on reach	I feel like the sentiment actually doesn't matter either, if it's like positive or negative, like people yelling at me, It will like increase the reach either way - Nic
Understanding of recommendation algorithm		I think it [Instagram algorithm] sees this is this woman, she's doing this thing in her fashion stuff and these men like it. Oh, here she is. She's doing another thing in fashion in her wheelchair. Last time men liked it. Let's send it to some more men again - Sandie	