Oregon Undergraduate Research Journal
24.2 (2026) ISSN: 2160-617X (online)
ourj.uoregon.edu

Two Hypotheses for the Rise of Autism Spectrum Disorder Diagnosis

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Abstract

A rise in Autism Spectrum Disorder (ASD) diagnoses has paralleled an unprecedented trend of self-diagnosis driven by social media (Eaton, 2023). This paper investigates how digital platforms shape disability identity formation, self-diagnosis behaviors, and medical misinformation through data targeting, echo chambers, and mass hysteria phenomena. By critically analyzing social and medical literature alongside personal observation, this work explores two hypotheses for this surge: first, that self-diagnosis reflects a growing unmet need for accessible, empathetic care; second, that media medicalization and algorithmic targeting actively cultivate identity-driven misdiagnosis and psychogenic illness. This dual framework highlights tensions between empowering community discourse and the dangers of unverified diagnoses. This research argues that while digital communities can normalize and validate neurodivergence, they simultaneously risk perpetuating misinformation, identity confusion, and overdiagnosis among vulnerable youth. Ultimately, licensed professionals need to play an active role online to safeguard accurate diagnosis and ethical neuropsychiatric care.

1. Introduction

In recent years, there has been an increase in jokes, stereotypes, and pseudoscientific claims on social media related to Autism Spectrum Disorder (ASD) and other neuropsychiatric conditions (Eaton, 2023). ASD is a neurodevelopmental spectrum disorder characterized by multiple symptoms, primarily social deficits with varying levels of severity (Tsai et al., 2020). By engaging with these posts through likes or shares, one can unwittingly become targeted for advertisements promoting tests to determine if one is autistic or on the ASD spectrum, games for people with high IQs, and other media that hint at ASD related qualities. While these ads and games are not explicitly designed to belittle or isolate people, they instill a fixation on ASD in a person's online consumption. Traditional media representations of ASD are often incapable of acknowledging it as an asset of someone's identity to be embraced and celebrated (Fontes and Pino-Juste, 2022). Language surrounding disabilities strongly highlighted the difficulties that parents face and the negative side of conditions such as ASD prior to the existence of social media (Fontes and Pino-Juste, 2022). Although social media has allowed more first-hand accounts from people with lived experience, it is still influenced by consumer clicks and engagement on the internet and social media platforms. Human instinct drives us towards negative curiosity and intrigue in others' lives that are different from our own, making posts that view neurodevelopmental disorders with a

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darker lens more interesting to consume. There is a persistent implication that ASD is a problem requiring resolution, creating a harmful cycle of shame for people with neurodevelopmental disorders, regardless of their level of functionality along the spectrum. This negative portrayal is further reinforced by the excess of self-help blogs or books aimed at adults or parents of children on the spectrum.

Social media influence is a new danger for teens that complicates disability representation as they try to discover themselves and their identity through exposure to this type of content. Available posts form an internal dialogue for people who potentially have ASD, as detailed in Figure 1.

Figure 1. This post walks through a proposed internal dialogue of someone discovering they might be on the autism spectrum. It lacks any guidance or suggestion on seeking true professional diagnosis. It was posted by @autismrworld and reached over 5,000 likes by 3/12/2024 on Instagram.

This account shared a narrative that having social anxiety and finding people with ASD relatable indicates that someone has ASD. The post also normalizes being unaccepting of one's diagnosis, potentially supporting feelings of imposter syndrome that inhibit the progression of ASD acceptance. Encouraging people experiencing these symptoms to self-diagnose at the end of their journey is a harmful practice to their overall health. Professional diagnosis is a necessary tool to promote a quality treatment plan. These symptoms are not explicitly associated with ASD. Many other comorbidities, or conditions that are often diagnosed together within one patient (Matson and Goldin, 2013), have the same deficits. If left without the proper diagnosis, more concerning issues could remain undiagnosed. In Figure 1, pretending to be afraid of appropriation, only to conclude that one is autistic af, provides no realistic guidance surrounding diagnosis. The reality of the journey should include seeking out a licensed physician for a clinical diagnosis or identifying symptoms that might lead one to this conclusion beyond anxiety and previous ADHD (Attention Deficit Hyperactivity Disorder).

There has been a notable surge in ASD diagnoses alongside the new trend of self-diagnosed ASD on social media platforms. The resulting escalation of individuals diagnosing themselves with neuropsychiatric disorders online, particularly focusing on adolescents' susceptibility to social media trends, leads to misconceptions regarding disabled persons' capabilities and the burgeoning societal emphasis on identity in the digital world (Eaton, 2023). Exploring two hypotheses for the origins of this trend, there is both the emerging threat of data-driven healthcare and the influence of media medicalization. Healthcare is moving towards more technological systems, such as online portals for records and billing, that collect large amounts of data for each patient. General medicalization is a separate issue in which it is more common and less stigmatized to want a true diagnosis or label for what might be a medical condition. This analysis aims to shed light on both the potential negative consequences and positive outcomes of this trend.

2. Methods

This narrative presents a qualitative analysis combining first-hand observation, literature synthesis, and conceptual exploration. The primary method involved reflecting on personal engagement with social media platforms, particularly the targeting and algorithmic propagation of ASD-related content, memes, and advertisements. Supporting evidence was gathered through a critical review of scholarly sources addressing Big Data ethics, media-induced psychogenic illness, echo chambers, and self-diagnosis phenomena. Key case studies, historical trends in mass hysteria, and contemporary examples of social media influence were analyzed to contextualize the discussion. The approach is interpretive and interdisciplinary, synthesizing perspectives from bioethics, disability studies, and digital media theory. No new empirical data were collected; instead, the paper constructs its argument through the integration of existing research, illustrative case studies, and theoretical frameworks relevant to identity formation and medicalization in the digital age.

3. Discussion: The Dichotomy of Perspectives

3.1. Disability Within the Community

Underrepresented communities continue to seek advocacy and a voice on media platforms. The need to fight for rights long predates the internet. In healthcare, there is a large gap in medical knowledge, empathy, and awareness surrounding groups that are not white men. In recent history, the medical establishment has abused African Americans and women for scientific research, and most other research was conducted on white men (Shavers-Hornaday et al., 1997; Whelan, 2020). The hyper-specialization of careers in medicine within current society prevents practitioners from being able to help a person with unclear symptoms outside the provider's specialty, pushing people to heavily research their issues before seeking care and coming to the appointment with diagnoses and treatments in mind. Care providers sometimes find this helpful, but internet communities and medical providers continue to have strong negative feelings about self-diagnosis (Gass, 2016). Clinically diagnosed ASD patients speak out in a way that appears to some as gatekeeping. There is a significant intersection of trauma and ASD diagnosis that the community feels is unheard or unknown by these self-diagnosed influencers, such as the process of diagnosis, bullying, unacceptance by family and yourself, and stress surrounding thoughts on whether the present social situation was handled correctly.

Media has become medicalized, and kids are consuming it at younger ages than before. During development, we mimic others' behavior because we have not yet developed a stable identity, whether that is our parents, kids at school, TV characters, or social media influencers (Ardizzi et al., 2014). Anxiety, misunderstanding social cues, emotional outbursts, and having a drained social battery are qualities that can describe a teenager going through puberty. Middle school is an awkward time for everyone, but now people search for labels to describe these symptoms, rather than it being a part of their character and life. Instead of brushing something off as a cringey memory when you mess up, many have begun to think there is something medically wrong with themselves.

ASD and ADHD have many overlapping symptoms as well as other neurodivergent identities. The nuances of diagnosing these conditions are even for professionals, but are now

often self-diagnosed through the media. The majority of these self-diagnoses seem to be coming from young populations, identifying typically as female or LGBTQIA+. These are populations that also are historically ignored by the traditional white male physician that our society is accustomed to (Miller and Smith, 2020). Fiduciary relationships focus on the trust between a provider and a consumer of a service or good. The lack of this trust in adolescents, females, and LGBTQIA+ individuals within healthcare provides a need for advocacy and to speak out about their experiences.

In the face of an unaccepting society, no matter the reality of a person's symptoms, they have found solace and community online by following influencers who promote conversation surrounding neurodevelopmental disorders. The realities of carrying an invisible disability on one's shoulders are something many neurotypical people, without neurodevelopmental disorders, will never understand. Sharing a diagnosis with friends and future employers, and the dread of how it could impact those relationships, is something others may never have to face. Although community is a great thing, there may be harm if this community is full of people not properly diagnosed while representing it.

By reaching all audiences, including children who are now developing media-induced symptoms, this is the time for society to start paying attention to the long-term effects of data targeting as a concern for people's health. Our society was not built to support disabled individuals physically or socially. Ignoring the accounts of people clinically diagnosed with ASD to put oneself under their label is naïve. This media-driven need for identity has become a real societal detriment to disability awareness by diluting diagnosed people's voices.

Today's school system does little to stress the negative effects of propaganda and false advertising to the extent that it is presented on platforms such as Instagram or X (formerly Twitter). A focal point must be shone on the real consequences of this new world full of virality and influencers. They hold unquantified control over people's psyche, opinions, and physical health.

3.2. Data Targeting, Echo Chambers, and Mass Hysteria

When we dive into big data, marketing, and targeting, one's control or management of one's symptoms is further put to the test. Big data refers to a new global issue: as our data collection and storage capacities increase, we now have a destabilizing abundance of information and misinformation at our fingertips. There are large overarching themes surrounding this exponential growth in data collection, including ownership, objectivity, and the changing nature of fiduciary relationships becoming data saturated (Mittelstadt et al. 2016, 303).

The speed and capacity at which information can spread on social media has increased the relevance of this topic. Information used to be less accessible to companies. Now, data are mistakenly said to speak for themselves, creating the possibility of data-driven science without a need for theory or hypotheses (Mittelstadt et al. 2016, 320). Given this, data can be used as a confirmation of a diagnosis independent of physician intervention. This would subvert physicians' ability to form a properly unbiased diagnosis. Healthcare is becoming data-driven and could soon undermine the flexibility necessary for diagnosis if relied upon too heavily.

In an analysis of echo chambers and epistemic bubbles, it's highlighted how digital platforms can isolate individuals within their own worldview, leading to reinforcement of existing

beliefs and potentially to misinformation. Echo chambers systematically exclude sources of dissenting opinion, fostering environments in which self-diagnosis can proliferate, unchecked by critical scrutiny. In contrast to epistemic bubbles that result from a lack of exposure to diverse perspectives, echo chambers involve a deliberate rejection and distrust of outside viewpoints (Nguyen 2020, 145). This insight is crucial for understanding why self-diagnosis trends on social media can sometimes lead to widespread misinformation. Self-diagnosis could be a result of echo chambers and herd mentality, creating the spike in prevalence around the globe with access to social media.

Factitious disorder patients may falsely report diagnoses and claim symptoms that are not actually occurring, or even physically induce illness or injury. In the last two decades, the Internet has enabled the spread of such symptoms among people who have never met, but who share a digitally enhanced sense of belonging (Giedinghagen 2023, 271-274). As the threat of mass social media-induced illness increases, an overwhelming increase in self-diagnosis of neuropsychiatric disorders has proliferated on media platforms. Psychiatric fields of medicine are overburdened by the large amounts of patients presenting with self-diagnosed disorders and atypical symptoms that they identify with from the internet. Sources highlight many significant outbreaks, such as Dissociative Identity Disorder (DID) and Tourette's Syndrome, but few highlight more invisible conditions like ADHD and ASD. Although the validity of the patient's symptoms or conditions has been called into question, the only way to ease their obvious discomfort or need for help is to treat them as a real suffering patient. No matter the etiology or specific diagnosis of their condition, these are still people in need of psychiatric support.

As people post on social media, more information than ever is becoming publicly accessible. A case study followed a large account of this at a high school where a group of girls spontaneously developed facial tics, muscle twitching, and garbled speech (Bartholomew 2012, 509), like influencers who post about having tics due to Tourette's. Two main issues have grown from this. One, the ethical problem of whether the tics are legitimate, with the issue of these girls now having their privacy. Evidence of this can be seen in the case study where those affected were able to put their case directly to the wider public online (Bartholomew 2012, 511). These women have no ownership over their journey, symptoms, or future use of this case. If there were any discrepancies in the future, they could face public humiliation, impacting their health further. Secondly, there is the possibility that the phenomenon of these symptoms is falsely constructed by the patient. If the symptoms were fabricated or considered false based upon their origin, then it would be a social issue surrounding the need to associate with an identity, rather than a medical phenomenon about truly induced symptoms from media. Mass hysteria long predates the internet. However, this case is only one of many. It commonly occurs in school-aged children, as seen in a study that reviewed all cases of mass hysteria published in 1872–1972 and 1973–1993. In the century spanning 1872–1972, there were a total of 78 identified outbreaks, 49% of which occurred in schools. In the 20-year span of 1973–1993, there were 70 more reported outbreaks, 50% of which occurred in schools (Boss 1997, 234). It remains unclear if these situations are examples of factitious disorders or if the reality of these symptoms has made a new social-media induced form of illness.

Many influencers have begun to post differing opinions by speaking out about their

personal experiences. This presence of influence and celebrity-like status feeds into a modern need to characterize and find an identity. This affects the population in lots of new ways, but a positive from their activity is that it expresses the number and strength of disabled people living amongst every population and acknowledges the wider breadth of disability than previously thought of by society.

Adolescence is the time when one finds their identity and path and is susceptible to the influence of mass hysteria. There is a common theme where people who feel the most unseen and unheard are the ones crying out for help in ways such as mass hysteria symptoms or even becoming a spokesperson for their issues online. The birth of the internet was in the 1980s, so this large spike in hysteria cases in modern history is unsurprising. The internet and media have become an echo chamber of your thoughts, with no contesting arguments to sway you away from potentially incorrect thought processes. Marketing efforts have morphed into strictly targeting-based campaigns on these searches and posts that, at an outside glance, seem otherwise harmless.

As seen in the exponential rise in mass hysteria, cutting out a medical provider and using self-diagnosis by searching symptoms online can cause panic or one-directional thinking. This fundamental issue revolves around the fact that as a society, we tend to believe that objective truth is free of values or interpretations and that technology is value-free and provides objectivity. Emphasizing this concept as revealing objective truths without the need for human interpretation (Mittelstadt et al. 2016, 320). Without professional human interpretation of concepts, one cannot truly understand the weight or complexity of what one is reading. By putting full trust in a machine, such as a phone, that learns from personal bias, there is a misunderstanding that it simply gives the results that the person searched for, which in turn is what the person wanted to hear. We interpret results as objective binary information without accounting for the personal bias of our search. Content such as what is produced in Figure 2 is a common result for the Instagram search of #autism. This Instagram post claims to be traits of autism, but each bullet point could also be considered normal human behavior.

Figure 2. This post by @lifeinanautismworld received 11,746 likes by the time of viewing on 3/12/2024 on Instagram. It states various traits that they consider to be autistic traits, but are not part of actual ASD diagnostic criteria, and are behaviors that can be exhibited by all people.

Not being able to tell the difference between left and right can range from a silly mistake, to dyslexia, ASD, and more. Based on these minute characteristics, one cannot form an educated diagnosis. The content reinforces the idea of having ASD because the information is easily relatable, but it does not speak to a valid diagnosis of ASD

AI is a new concerning factor in medicine, in which greater reliance on data representations of patients, brought about by the adoption of big data practices, may create new gaps in care or doctor-patient relationships (Mittelstadt et al. 2016, 328). The downsides of AI for medicine have

yet to be sufficiently analyzed, but the future will hold many new accounts of media and consequences of data driven healthcare before the systems can be properly modified. At each moment of input, processing, and output, information functions to fasten information to a subject or person (Koopman 2019, 13). This fastening of information and its impact on our ability to think objectively is a barrier to helping society with its medical needs. The prolonged exposure of neurodevelopmental disorder symptoms to as applied to neurotypical people through media has consumed unconscious thought, producing social media induced hysteria.

Although normalizing disabilities is important, these mimicking behaviors, as seen in mass hysteria cases, are being found in young kids exposed to these platforms. Mittelstadt warned that big data can be taken advantage of, pushing ads and news in line with one's previous search histories. The creation of this echo chamber reinforces our ideas. An article by Baystate Health wrote that over 90% of teenagers report using social media and spend an average of 9 hours a day online. They also found that teenagers would commonly search questions like: "What is wrong with me?" and "Do I have autism?" (*Doctor*, 2023). Videos include false information about behaviors, such as stimming or hyper fixations, by portraying them as things as simple as getting a song stuck in your head for an extended period. What is not commonly understood is that a lot of the symptoms of ASD, such as poor psychosocial adjustment, are also common symptoms of puberty (Mensah et al., 2013). It is also possible that these online haters of self-diagnosis are attacking people who are suffering from real symptoms.

As the shift to unmask in society and to not be ashamed of your neurodivergence becomes a social media trend, two potential hypotheses arise when diving into the true cause of self-diagnosis in social media. First, that the doctors and patients affected by these psychogenic illnesses are simply being expressed more than ever through our new, greater ability to communicate and educate one another. Or, the media has become an agent to direct human behavior, causing the rise of new misdiagnosed patients and media-induced illness.

Many bioethicists have struggled to address the hardships of disability and functioning in society in formal writing. For example, Adrienne Asch, a notable figure in disability rights, advocated for the autonomy of disabled individuals in making decisions about their own lives, including end-of-life choices. However, her perspective often centered on visible and physical disabilities, neglecting those with invisible, minor, or socially oriented disabilities. Asch argued that impairment might provide a reason to deny or limit medical intervention, a stance that overlooks conditions like ASD and other neuropsychiatric disorders that do not necessarily threaten physical health but significantly impact quality of life (Asch 2001, 299).

Asch did not account for the modern phenomenon of online communities and self-diagnosing on the internet, which has empowered people with different conditions to view their disabilities as strengths rather than weaknesses. These networks of communication and trust can bring about a new challenge in the field of disability ethics, influencing public perception of disabled individuals. Trends of self-diagnosing neuropsychiatric disorders have fostered a more accepting society, prompting responses from academia, medical professionals, and the general public. However, this increased acceptance often does not extend to those with less common, invisible disabilities like Ehlers-Danlos Syndrome. Disability should not be defined as an inability to care for oneself. Many disabled individuals can

manage their lives while dealing with significant challenges. Disabilities do not inherently mean a shortened life expectancy. The need to set rigid boundaries on what constitutes a disability can cause harm and trauma, perpetuating negative stereotypes. Disability does not equal death.

4. Conclusion

Media serves as a powerful instrument for raising awareness about the potential symptoms individuals may be facing. However, those consuming online information need to know that online research is only an initial step in expanding mental health education. The responsibility of diagnosis should rest solely in the hands of qualified professionals. By encouraging this distinction, we not only uphold ethical standards but also ensure the well-being and proper treatment of those navigating the complexities of ASD, thus preventing further false positive diagnoses, false symptoms, and social media-induced illness. It is crucial to emphasize the distinction between media and the internet as tools for education and not as avenues for diagnosis. While both hypotheses explored in this review offer valuable insights into the current surge in diagnoses, they are yet to be solidified and proven. A new discourse of action on the role of media in the bioethics of ASD diagnosis must be taken. The public must not rely on these influencers, but rather seek other peer-reviewed sources and licensed help. Licensed individuals need to expand their practice onto these modern web platforms, sharing their breadth of knowledge for the benefit of the general public.

The status of invisible, minor, or socially oriented disabilities are being destigmatized by contemporary information technologies. These technologies have created a dual-edged sword: on one side, they have provided platforms for communities to support each other and celebrate neurodivergent identities; on the other side, they have also facilitated the spread of misinformation and self-diagnosis, which can lead to harmful consequences. The future of disability advocacy and bioethics must address these complexities to ensure a balanced, informed, and supportive approach to disability in the digital age.

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