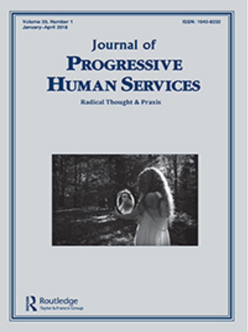

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Reconceptualizing Autism: An Alternative Paradigm for Social Work Practice

Jolynn L. Haney

Center for Social Work Education, Widener University, Chester, Pennsylvania, USA

ABSTRACT
Autism is a complex, often misunderstood condition. More than a neurological disorder, autism can also be viewed as a different cognitive style or an alternative way of perceiving and reacting to the world. As more individuals on the autism spectrum are making themselves known, social workers must be open to using new paradigms to meet the needs of this unique population. This article explores how horizontal diversity and neurodiversity can be used to expand the ways social workers conceptualize autism and, consequently, how they work with persons on the autism spectrum and their families.

KEYWORDS
Autism; disability; horizontal diversity; neurodiversity; social work

According to recent Centers for Disease Control and Prevention estimates, approximately 1 in 68 children was diagnosed with an autism spectrum condition in 2012 (Christensen et al., 2016). Apart from being identified as a neurological disorder, autism has also been described as a different cognitive style or an alternative way of perceiving and experiencing the world. This perspective has been put forth by a number of persons on the autism spectrum, most notably Temple Grandin, one of the most visible faces of autism over the past 30 years. Beginning with her seminal 1986 autobiography, Grandin introduced a new way of viewing persons on the autism spectrum—as multidimensional, self-determined individuals who embrace their differences and have a desire to share their experiences with others (Grandin, 1996; Grandin & Scariano, 1986).

In some cases, autistic persons such as Grandin have personal networks they can rely upon for support, while others may seek professional assistance from social workers. There is a good chance that social workers will encounter an autistic person during their course of practice. According to a 2006 study sponsored by the National Association of Social Workers (NASW), 75% of social workers surveyed reported they had served individuals with developmental (i.e., neurological) disabilities, including autism; yet only 3% identified developmental disabilities as their practice area (Whitaker, Weismiller, & Clark, 2006). Because of increased prevalence rates of autism in both child and adult populations, the likelihood that social workers will be

CONTACT Jolynn L. Haney jlhaney@widener.edu Center for Social Work Education, Widener University, One University Place, Chester, PA 19013, USA.

asked to provide services for autistic persons has also increased. Social workers, who are bound by their *Code of Ethics* (NASW, 2017) to promote self-determination, cultural competence, and social diversity, must be able to appreciate inherent nuances within and among autistic individuals so as to avoid rendering judgments that reinforce or perpetuate disabling stereotypes. However, there have not been many studies that have examined social workers' knowledge and attitudes about autism, but the few that have suggest that social workers may not have adequate or accurate information about autism, which may limit their ability to address the needs of the autistic population (Gilliam & Coleman, 1982; Preece & Jordan, 2007).

This lack of preparation may be due, in part, to having an insufficient framework for recognizing and respecting diversity within the autistic population. According to the NASW (2007):

> Cultural diversity in social work has primarily been associated with race and ethnicity, but diversity is taking on a broader meaning to include the sociocultural experiences of people of different genders, social classes, religious and spiritual beliefs, sexual orientations, ages, and physical and mental abilities. (p. 8)

In recent years, the term *neurodiversity* has been gaining popularity to describe diversity among persons with autism, as well has those who present with other types of neurological differences, such as learning disorders and attention deficit disorder (Baker, 2011). Neurodiversity proponents argue that normality is not an objective state but is subjective and contextual. This point of view offers a significant change in the way autism spectrum conditions could be conceptualized and holds relevance for three key areas within the social work profession: practice, education, and research.

The purpose of this review is to consider diversity within a horizontal framework and to examine how horizontal diversity and a neurodiversity perspective can be used together to inform social workers' practice with autistic persons, their families, and other support systems. Throughout this article, both *identity-first* (e.g., autistic person) and *person-first* (e.g., person with autism) language is used to respect autistic rights advocates who prefer identity-first language, as well as those who prefer person-first language.

Background

Autism, which is arguably as much a socially defined construct (Hacking, 1999) as it is a neurological condition, has undergone considerable diagnostic evolution over the past century (Volkmar & Reichow, 2014). In the early 20th century, the term *autistic* was associated with certain types of schizophrenia. In the 1940s, two physicians, Leo Kanner and Hans Asperger, began using the term to demarcate children whose social and functional characteristics distinguished them from other children labeled with psychoses or intellectual disabilities

(Feinstein, 2010). At that time, the medical profession considered autism a rare disease with severe, debilitating symptoms and, until the 1970s, thought autism occurred infrequently. Comparing prevalence rates between the time autism was “discovered” and the present day illustrates how much has changed over a 70-year period. One early prevalence study was conducted in London by Lotter (1966) using Kanner’s diagnostic criteria. Lotter estimated the prevalence rate to be 2.1 per 10,000 children. Around the same time, autism prevalence estimates were even lower in the United States, approximately 0.7 per 10,000 children (Treffert, 1970). By comparison, 2012 data, collected from autism-monitoring sites throughout the United States, estimated that 1 in 68 eight-year-old children was diagnosed with autism (Christensen et al., 2016). This was a marked increase from the 1 in 150 estimate for eight-year-old children that was reported in 2002 data (Centers for Disease Control and Prevention, 2012) and has fueled numerous debates about the reasons for this growth. Some scholars have speculated that the numbers represent a true increase in autism prevalence, while others have argued that broadened diagnostic criteria, in combination with greater public awareness, have caused autism numbers to increase (Gernsbacher, Dawson, & Goldsmith, 2005). Indeed, the increase in the number of autism diagnoses does appear to begin about the same time that infantile autism was introduced in the third edition of the American Psychiatric Association’s (APA) *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*), published in 1980 and revised in 1984; the diagnosis remained unchanged until 14 years later, when Asperger disorder was added to the *DSM-IV* (Fombonne, 2003). In the fifth edition of the *DSM* (American Psychiatric Association, 2013), diagnoses within the pervasive developmental disorders category were modified and condensed to create a single autism spectrum disorder. Among the most significant changes, both Asperger disorder and pervasive developmental disorder not otherwise specified were eliminated, and the term *neurocognitive disorders* replaced *pervasive developmental disorders*.

The effects of the *DSM-5* changes on autism prevalence have been studied with mixed results. Kim et al. (2014) compared *DSM-IV* to *DSM-5* autism criteria and found that a significant number of children diagnosed with autism using *DSM-IV* criteria, primarily those with milder forms of autism, lost their autism diagnosis when *DSM-5* criteria were applied. Results from a more recent analysis of autism diagnoses made between 2013 and 2015 (Bent, Barabaro, & Dissanayake, 2017) showed a slight increase in both age and frequency of diagnosis as well as a plateau in estimated incidence by 2015. This finding suggests that *DSM-5* criteria may result in curtailing the autism-prevalence trajectory.

Characterizing autism

Framing autism solely as a health problem has eclipsed efforts to understand autistic individuals’ experiences of being autistic and to appreciate the benefits of having diverse cognitive styles. The main focus in public-awareness campaigns, media reports, advocacy group campaigns, and public policy initiatives has been to portray autism as a public health concern of epidemic proportions (Billawalla & Wolbring, 2014; Clarke, 2012; McKeever, 2013; Sandler, 2009). Within its mission statement, Autism Speaks, the largest parental advocacy group in the United States, puts forth an autism cure agenda:

> We are dedicated to funding global biomedical research into the causes, prevention, treatments, and cure for autism; to raising public awareness about autism and its effects on individuals, families, and society; and to bringing hope to all who deal with the hardships of this disorder. We are committed to raising the funds necessary to support these goals. (Mission, n.d., para. 2).

However, in their eagerness to raise awareness, promote autism legislation, and fund research, some of these campaigns have represented autism as a public menace (Kras, 2010), resulting in fear and stigmatization of autistic individuals (Kras, 2010; Wallis, 2009).

Over time, as more individuals with milder forms of autism emerged (e.g., Asperger syndrome), membership in autism self-rights groups increased; these groups have worked to advocate for autistic rights and to counterbalance negative perceptions of autism by emphasizing their unique talents and strengths (Baker, 2011). Narratives composed by persons on the autism spectrum offer insight into lived experiences that can inform social work education, practice, and research. For example, in *Thinking in Pictures*, Temple Grandin revealed her struggles with dealing with sensory overload and her subsequent invention of a "hugging machine" that she used to mitigate stress and anxiety (Grandin, 1996). Grandin has attributed her ability to develop self-efficacy to the help she received from persons such as her mother, who focused on building upon her strengths in novel ways (Grandin, 1996). Grandin's, however, is just one autistic voice among many. In addition to Grandin's work, there have been an increasing number of memoirs appearing in the popular press and authored by persons on the autism spectrum (Ortega, 2009) as well as online communities created and maintained by autistic persons to promote autism-rights agendas (Davidson, 2008) and provide a place to exchange personal stories, obtain support, and validate the lived experiences of those on the spectrum (Haney & Cullen, 2017).

Autism self-advocates are also participating in scholarly research, not as passive subjects but as co-collaborators in the design and implementation of empirical and qualitative inquiries (Nicolaidis et al., 2011; Robertson, 2010). Research partnerships with autistic individuals have produced a continually growing body of information that has revealed autism to be far from a homogeneous phenomenon by showing that autistic individuals are as diverse within their group as they are in relation to those outside their group.

The autistic community has also been questioning the ethics underpinning certain interventions such as applied behavioral analysis. Sanctioning physical and verbal abuse to initiate behavior change, psychologist O. Ivar Lovaas developed applied behavioral analysis in the 1960s as a "cure" for autism (Chance, 1974). Lovaas stated:

> You see, you start pretty much from scratch when you work with an autistic child. You have a person in the physical sense—they have hair, a nose and a mouth—but they are not people in the psychological sense. One way to look at the job of helping autistic kids is to see it as a matter of constructing a person. You have the raw materials, but you have to build the person. (Chance, 1974, p. 76)

Autistic rights activists have challenged Lovaas's contention that autistic persons are not psychological beings and that the matter of "constructing a person" violates autistic individuals' natural personhood. As phenomenologist Merleau-Ponty (2007) argued, the body is the basis for the mind; therefore, knowing is related to being, which makes our bodies the source of our knowledge about the world. In this regard, behavioral conditioning, using punishment or negative or positive reinforcement, could be considered a phenomenological denial of individual humanity. The Autism Self Advocacy Network, a nonprofit organization run by and for individuals with autism, makes no mention of prevention, treatment, or cure in its mission statement (Our Mission, n.d.). Likewise, The National Autistic People's Organization, an autism-rights advocacy group in the United Kingdom, opposes disabling attitudes about autism by embracing the social model of disability, promoting neurodiversity, using identity-first language, and countering stereotypes of autistic persons (Our Aims, n.d.).

Disability models

Although autism has not always been designated as a disability by law, disability models have been used to understand and explain autism (Waltz, 2013). Disability models are societal constructs that influence the ways in which the larger society conceptualizes disabled persons. The medical model of disability and the social model of disability have been the two dominant paradigms informing how autism is conceptualized.

The medical model

The medical profession has been the major force in constructing our modern understanding of autism and how it is treated. Within the medical model, disabilities are considered disease states brought about by physical abnormalities or system failures (Olkin, 2002), and those illnesses are biological problems that can be remediated using medical interventions. Within this framework, the autistic person is the primary target for intervention (i.e., in need of cure).

One of the main criticisms of the medical model is that it limits understanding disability as anything other than an individual's problem and that treating conditions as diseases means eradicating them. Neurodiversity proponents have argued that under medical model of disability, the focus on a cure agenda could lead to unintended consequences, such as using eugenics to eliminate autism (Waltz, 2008).

In the early 20th century, diagnostic nomenclature for persons whose behaviors deviated from the norm included labels such as *mentally deficient, imbecile, moron, idiot, cretin*, and *feeble-minded* (Huey, 1912). These classifications led to treating persons with disabilities as subhuman and qualitatively deficient objects (Carlson, 2005). In particular, individuals with intellectual disabilities have had a long history of being regarded as subhuman. In the mid-1800s, Dr. Isaac Kerlin, superintendent of the Pennsylvania Training School in Germantown, described two students with intellectual disability in this manner: "Two children have attached themselves to all of us, on account of their infancy and beauty, and are justly entitled to the appellation of 'pets' in our household. We shall call them Beckie and Bessie." (Kerlin, 1976, p. 285). Individuals with autism have also been described as being animal-like, even by pioneers in autism treatment. For example, in a 1965 *Life* magazine article titled "Screams, Slaps and Love: A Surprising, Shocking Treatment Helps Far-Gone Mental Cripples," Lovaas described using electric shocks to train an autistic child named Billy, whom he characterized as being "diabolically clever," "cunning," and "a monster" who was "hell-bent on destroying [his mother]" ("Screams, Slaps, and Love," 1965, p. 96). The article also detailed the story of a young girl, Pamela, who did not respond to "scoldings and stern shakings" (p. 90) and was forced to stand on an electrified plate and was shocked "to give her something to be anxious about" (p. 90). Even though the events reported in the *Life* article occurred more than 50 years ago, similar abuses in the name of treatment have persisted. As recently as 2013, the Judge Rotenberg Educational Center in Massachusetts used physical punishments, such as withholding food and administering electric shocks, to eliminate "problematic" behaviors in the persons with autism and other developmental conditions (Conaboy, 2013).

The idea that medical diagnosis drives social destiny was discussed by Doll (1940) who, inspired by Itard's 1932 account of the wild boy of Aveyron, wrote about the role mental diagnosis plays in "assisting man to attain his social identity" (p. 160). Once an identity has been established based on a medical or mental condition, personhood becomes interpreted through the diagnosis, which focuses on the body's impairment. Foucault (1973/1994) used the term *medical gaze* to denote the separation of mind and body in medicine and the medical profession's unipolar focus upon the physical manifestation of disability. In the case of autism, the medical gaze defines autistic people by their condition.

Researchers have espoused several theories grounded in the medical model to describe the nature of autism. These theories, including the theory of mind (Baron-Cohen, Leslie, & Frith, 1985) and the extreme male brain theory (Baron-Cohen, 2002; Baron-Cohen et al., 2011), attempt to explain autistic persons' characteristics such as their inability to read the intentions of others. Advances in cognitive neuroscience and brain studies have also resulted in a number of medical discoveries about the autistic brain, yet none of these have resulted in a definitive identification of the cause(s) of autism.

The social model

The social model of disability, developed as a reaction to the medical model's emphasis on the biologically flawed individual, is grounded in Foucault's charge that the medical field polarizes groups into normal and abnormal categories, sanctioning control and confinement of those falling in the latter group (Tremain, 2005). Within the social model, disability results from societies' failures to consider individuals who fall outside the norm (Oliver & Sapey, 2006). In other words, impairment itself does not result in disability; rather, it is societies' lack of accommodations for impaired persons that creates disability. To accommodate disability, society must consider interactions between individuals and their environments (Noreau & Boschen, 2010); thus, this model underpins a person-in-environment analysis and guides "consulting, advocacy, and training" that support collaborative relationships between professionals and persons with disabilities (Gill, Kewman, & Brannon, 2003, p. 305).

The chief criticisms of the social model are that it (a) minimizes the effects impairment have upon the lives of disabled persons, (b) characterizes all disabled persons as oppressed, and (c) is unrealistic about achieving a barrier-free society (Shakespeare, 2006). Grue (2011) summarized the narrow focus of the social model as being "constructed around an 'ideal' disabled person—a male wheelchair user belonging to a dominant ethnic group who suffers no significant health problems because of his impairment" (p. 538). In effect, the social model is not much different from the medical model in that it is also based on deficits and compares impaired persons to normality standards established by society (Smith, 1981).

The minority model

A fourth model of disability, the minority model, is less often mentioned in the literature. It is sometimes used interchangeably with, or as a subtype of, the social model of disability (Mitra, 2006; Olkin, 1999). As described by Grue (2011), the minority model developed in America during the 1960s and 1970s, following the civil rights movement. Instead of promoting disability rights, its proponents promote their cultural identity, which is inextricably linked to their distinguishing differences from others in society.

One of the more well-known applications of a disability constituting a cultural identity has been the Deaf culture (Sparrow, 2005). Viewing their condition as a difference that defines them as a distinct culture, many Deaf persons reject attempts to fix their hearing, such as cochlear implants, and oppose being pressured to make changes so they can be assimilated into the non-deaf population (Kermit, 2010; Sparrow, 2005). The Deaf community also rejects the notions that they are suffering, that their condition is tragic, and that not being hearing impaired is advantageous (Sparrow, 2005).

Like the Deaf community, autism neurodiversity proponents identify autism as their cultural identity and reject the idea that they must be cured (Jaarsma & Welin, 2011). This has created tension between two factions of autism advocates, parents of children with autism and autistic self-advocates (Baker, 2011).

A new paradigm

Autistic individuals may seek assistance for a variety of behavioral health issues, one of which may be to improve their abilities to integrate into society without sacrificing their unique characteristics. Therefore, to adhere to the principles of NASW and its *Code of Ethics*, social workers need to conceptualize autism in a way that is different from the ways the medical and social disability models allow. The proposed conceptual framework for such a new paradigm is based on the idea of horizontal diversity linked to the tenets of the growing neurodiversity movement.

Horizontal diversity

Within an ecological framework, diversity can be used to conceptualize and contextualize autistic differences. Based on studies of biodiversity, two types of diversity exist in nature: vertical and horizontal (Loreau, 2010). Vertical diversity is related to the notion of food chains, “directional paths of trophic energy or, equivalently, sequences of links that start with basal species, such as producers of fine organic matter, and end with consumer organisms” (Martinez, 1991, p. 370). Therefore, vertical diversity implies a hierarchy of power and control among differing elements of a population. This type of diversity also incorporates value judgments determined by placement (i.e., rank) on a continuum. In the study of human diversity, *vertical* denotes superiority for members of the population who meet acceptable standards of behavior (Awbrey, 2007). The implication is that ranking lower in the hierarchy is due to deficit. The driving force of vertical diversity is the recognition of differences within the larger group without sacrificing the integrity and control of the dominant group (Awbrey, 2007).

According to Awbrey (2007), individuals who are different may either be assimilated into, or separated from, the dominant group. When assimilation occurs, members of a minority group become indistinguishable from the dominant group and forfeit their ability to define the rules of society (Young, 1990). Assimilation also establishes and reinforces standards of normality against which new groups can be compared, leading to self-alienation by individuals who deviate from the standard. Awbrey (2007) noted that assimilation results in the loss of group members' original cultural identity and having to mask their true selves. Well-meaning physicians, school personnel, parents, and human service professionals have all promoted assimilation of the autistic population by using behavioral modification and operant conditioning to train autistic persons to act normally.

In contrast, within a horizontal diversity framework, ranks are not assigned to subgroups within a population. All groups are viewed as being equal; therefore, no one group is subjugated to another. Although horizontal diversity recognizes that qualities and conditions may differ across the general population, it assigns no less significance to any of them.

Horizontal diversity offers an opportunity to build what Awbrey (2007) referred to as a "relational alternative" (p. 18). Groups do not need to be mutually exclusive; both similarities and differences may exist among groups, and membership within the groups may overlap. Therefore, because members of one group may also be members of one or more other groups, relationships replace hierarchies. In this respect, horizontal diversity allows individuals to navigate among various aspects of their identities without having to deal with stigmatizing judgments.

Applying horizontal diversity to autism is supported by research showing that autistic traits are present in the general population (i.e., the broader autism phenotype). Wing (1981) noted that features of Asperger syndrome could be found in members of the larger population who have complex inner worlds but do not show deficits in interpersonal communication and social skills acquisition. She posited that one or both parents of a child with Asperger syndrome may, themselves, have a similar disposition, not viewing anything unusual about their child's behavior until it is called to their attention by others. Supporting the notion of natural variation, Constantino and Todd (2003) used the Social Responsiveness Scale to demonstrate that subthreshold traits appeared to be genetically transferable, concluding that these traits were "continuously distributed" across the population (p. 524). In 2007, Hurley, Losh, Parlier, Reznick, and Piven developed the Broad Autism Phenotype Questionnaire (BAPQ), which supported Wing's (1981) contention that relatives of persons with autism are more likely to have autistic traits. More recently, Kanne, Wang, and Christ (2012) further studied this phenomenon to create and validate the Subthreshold Autism Traits Questionnaire (SATQ), another tool to measure autistic traits in the general population. The SATQ's significance is its potential to expose the presence of subclinical autistic traits in the general population, which could lead to greater support for neurodiversity, eliminate the divide between autistic and nonautistic persons (i.e., us versus them) and, thereby, broaden the definition of normality.

Neurodiversity

The term *neurodiversity* was coined by autism activist Judy Singer in the 1980s (Solomon & Bagatell, 2008) and first appeared in print in the late 1990s (Blume, 1998). The term suggests that normality is not a discrete state but exists on multidimensional planes of unique thoughts and behaviors. Reconceptualized as neurodiversity, autism can be thought of as natural human variation rather than a disease. In this regard, autistic symptoms are characteristics of distinctive cognitive styles and ways of experiencing the world. Understanding autism through a neurodiverse lens means considering autism as something a person *is* rather than something a person *has*. As once noted by autistic self-advocate Temple Grandin, "If I could snap my fingers and become nonautistic I would not do so. Autism is part of who I am" (Grandin, 1996, p. 16). Her sentiments were affirmed by another self-advocate and author, Liane Holliday Willey, who commented:

> Yet, no matter the hardships, I do not wish for a cure for Asperger's syndrome. What I wish for is a cure for the common ill that pervades too many lives; the ill that makes people compare themselves to a norm that is measured in terms of perfect and absolute standards, most of which are impossible for anyone to reach. (Willey, 1999, p. 211)

Neurodiversity can serve as an alternative way to redefine autism and to create both an autistic cultural identity (Baker, 2011) and a social movement (Orsini & Smith, 2010). According to Blume (1998), "Neurodiversity may be every bit as crucial for the human race as biodiversity is for life in general. Who can say what form of wiring will prove best at any given moment?" (para. 4). In a TED talk about her experience of being autistic, Rosie King (2014) explained:

> One of the things I can do because I'm autistic—it's an ability rather than a disability—is I've got a very, very vivid imagination. Let me explain it to you a bit. It's like I'm walking in two worlds most of the time. There's the real world, the world that we all share, and there's the world in my mind, and the world in my mind is often so much more real than the real world. Like, it's very easy for me to let my mind loose because I don't try and fit myself into a tiny little box. That's one of the best things about being autistic. You don't have the urge to do that. You find what you want to do, you find a way to do it, and you get on with it. If I was trying

> to fit myself into a box, I wouldn't be here, I wouldn't have achieved half the things that I have now. (King, 2014, 1:55)

The increasing popularity of the neurodiversity movement (Krcek, 2013) indicates that neurodiversity is a social phenomenon the social work profession cannot ignore. Because social work is predicated upon principles of economic justice and social caring, driven by the pursuit of knowledge and competency at all levels of practice, social workers are well suited to promote a social justice agenda for individuals with autism.

At first glance, neurodiversity may seem to be a simple matter of applying diversity principles to persons with neurological differences; however, complex ethical considerations concerning neurodiversity and autism exist. Two major stakeholder groups, autism self-advocates and parent advocates, have disagreed over issues concerning the nature of autism and how it should be considered by society (Baker, 2011). Each group has created powerful coalitions bent upon influencing public policy, medical research, and treatment. To add to the complexity, not all persons with autism support neurodiversity; some have expressed their desire for a cure (Krcek, 2013). For example, Jonathan Mitchell is an outspoken opponent of the neurodiversity movement (Mitchell, 2015). On his web log, aptly named *Autism's Gadfly*, Mitchell noted:

> I believe being a neurotypical is a better way of life. I don't see how anyone can argue, not having decent interpersonal relationships including marriage, being able to earn a decent living and being able to be productive and get things done during the day is not a better way of life. (Mitchell, 2013, para. 3)

Mitchell, and other like-minded individuals on the autism spectrum, are reminders that, above all else, social workers must be mindful that those on the autism spectrum are diverse and may perceive being autistic in different, and sometimes opposing, terms.

Affirming diversity includes recognizing that there are many diversities, including cognitive diversity. Despite differing perspectives, social workers can find opportunities to bridge the ideological gaps that exist between those who support the neurodiversity movement and those who oppose it. A prerequisite for respecting neurodiversity requires acknowledging that the subjective experiences of persons on the autism spectrum are authentic expressions of self. To expect autistic persons to assimilate (i.e., become "normal") or to imitate non-autistic behavior is antithetical to social work's strength-based approach. Supporting autistic diversity means, for example, understanding that avoiding eye contact may be a coping method used to modulate uncomfortable arousal, not a sign of dishonesty or disrespect (Gernsbacher, Davidson, Dalton, & Alexander, 2003). It seems that successful interactions between autistic and non-autistic individuals might fail because their respective lived experiences are so different. Consequently, one may not perceive that the other's experiences are valid, thus expecting the other to change or assimilate (Awbrey, 2007). To illustrate this point, Temple Grandin once characterized herself as feeling like an “anthropologist *on* [emphasis added] Mars” (Sacks, 1995, p. 58). Her word choice is revealing because it demonstrates her self-perception as being a typical (i.e., normal) person who is in strange world encountering atypical (i.e., not normal) beings. In other words, Grandin did not describe herself as feeling like an anthropologist *from* Mars, which would imply she thought of herself as being atypical. Emerging research suggests that some autistic persons perceive themselves as being normal and find neurotypical behaviors to be odd or abnormal (Haney & Cullen, 2017). Yet individuals on the autism spectrum are continually challenged to modify behaviors that do not fit societal norms and are burdened with the sole onus to change that is placed upon them.

Implications for social work

Social workers are challenged with balancing the needs of families and caretakers of autistic persons, while at the same time supporting autistic persons’ autonomy (Wilkins, 2010). Although autism admittedly presents significant challenges to individuals and families, using a neurodiversity perspective to understand and appreciate the strengths offered by autistic personhood can support efforts to advocate for accommodation within the social model of disability. That is, recognizing neurodiversity does not preclude accommodating for the disabling effects of having a different cognitive style. Social workers, as well as other health care professionals, can learn about autism by listening to the narratives provided by individuals on the autism spectrum.

Practice

Social work is well positioned to promote neurodiversity as an emancipating alternative to disability. Autistic-rights advocates have been attempting to reclaim power to end their domination and oppression by systems that oppress and marginalize them. For their part, social workers can learn about, and keep up-to-date on, resources that support neurodiversity and autistic self-agency. Neurodiversity-driven intervention models, such as Armstrong’s positive niche construction—the idea that an individual can thrive by directly modifying the environment in such a way that it enhances that individual’s chances for success (Armstrong, 2010)—offers guidance for social workers working with persons on the autism spectrum. Armstrong identified eight principles, grounded in ecological niche theory, that can be used to build upon autistic persons’ strengths:

(1) The human brain works more like an ecosystem than a machine.
(2) Human brains exist along continuums of competence.
(3) Human competence is defined by the values of the culture to which you belong.

> (4) Whether you are regarded as disabled or gifted depends largely on when and where you were born.
> (5) Success in life is based on adapting one's brain to the needs of the surrounding environment.
> (6) Success in life also depends on modifying your surrounding environment to fit the needs of your unique brain (niche construction).
> (7) Niche construction includes career and lifestyle choices, assistive technologies, human resources, and other life-enhancing strategies tailored to the specific needs of a neurodiverse individual.
> (8) Positive niche construction directly modifies the brain, which in turn enhances its ability to adapt to the environment. (Armstrong, 2010, pp. 11–27)

It is important to note that Armstrong's principles are consistent with social work's ecological approach and are applicable to all levels of social work practice, education, and research.

Social workers have the knowledge and training to partner with the autistic community to meet these goals. What is important for social workers to recognize is that they, as transformative agents of change (Ferguson, 2013; Tew, 2014), have a fundamental responsibility to critically evaluate systematic oppression of neurodiverse persons continuously.

Partnering in advocacy with persons who have milder forms of autism may be a less daunting task for social workers compared to finding ways to build self-advocacy skills in individuals who have more serious sensory, social, and communication challenges. It is important to note that assistive technology offers opportunities for engaging a wider range of autistic persons in advocacy work; likewise, the Internet can provide a method of communication that does not require the uncomfortable face-to-face interactions that some autistic persons prefer to avoid. As mentioned, over the past several years, there has been a proliferation of online communities developed by persons on the autism spectrum. These virtual communities could be used to encourage self-advocacy for those who prefer to engage in nonverbal communication.

At the policy level, social workers can use their knowledge about disability and neurodiversity to inform and counsel legislators on policies affecting autistic persons, particularly on proposed medical-model-based legislation that may run counter to the beliefs and wishes of autistic persons who seek acceptance, not cure. Understanding that diversity and disability are not mutually exclusive concepts, social workers can advocate for benefits that accommodate disability as well as promoting acceptance for those on the autism spectrum as neurodiverse individuals.

Education

Effective social work practice involves not only critical-thinking skills but also a knowledge base for making accurate assessments and initiating meaningful changes (Gambrill, 2012). As far as neurological conditions are concerned, however, institutions offering social work education have been slow to incorporate neuroscience into their curricula, in comparison with other professions such as nursing (Egan, Neely-Barnes, & Combs-Orme, 2011). Even though disability is considered a dimension of diversity (NASW, 2017), the Council for Social Work Education (2008) does not mandate that disability content be included in social work education curricula. Thus, very few schools offer coursework concerning disabled populations (Laws, Parish, Scheyett, & Egan, 2010). With limited opportunities for social work students to engage in general disability coursework, they are unlikely to learn about neurological conditions or newer concepts such as neurodiversity.

Social work educators may wish to take their cue from Rutgers University English professor Ann Jurecic (2007), who called upon her colleagues to "develop and use new pedagogical theories and practices that are responsive to neurological difference" (p. 439) or from Gilson and DePoy (2002), who recommended placing a greater emphasis on unaccommodating environmental factors instead of personal deficiencies when teaching about disabilities. To this end, Mogro-Wilson, Davidson, and Bruder (2014) responded to the need to study autism from a diversity perspective by developing an empowerment-based social work curriculum to educate social work students. These perspectives challenge social work educators to move beyond the limits of the medical model and offer conceptual frameworks that acknowledge the contextual and cultural nature of impairment.

Research

The Autism Self-Advocacy Network mission statement concludes with this declaration: "Nothing about us without us!" (Our Mission, n.d., para. 1). Despite a few successful initiatives to include autistic persons in autism studies, social work research has lagged behind other disciplines in this area. Neurodiversity is a new and understudied topic, particularly from a social work viewpoint. Consequently, there are multiple opportunities to research this topic and to apply a neurodiversity perspective when conducting research. Considering autism within a neurodiversity framework could also result in a holistic social work practice, research, and education model that is in concordance with the critical tradition of the social work profession.

Although their numbers are small, results from a few studies may help to inform research methods that best represent the interests of the autistic population. For example, when Clarke and Amerom (2008) compared parents' and autistic persons' priorities, parents tended to focus on medicalization and cure; autistic individuals favored acceptance of their neurological diversity. This suggests that multiple informants are necessary to gain a full picture of autism (Jepsen, Gray, & Taffe, 2012) and that researchers must employ research methods that do not rely on third-party reports from parents, clinicians, and educators. A neurodiversity paradigm necessitates conducting investigations based on information derived from the population being studied.

Conclusion

Since autism was first identified in the 1940s as a rare, debilitating disease, the diagnostic criteria for autism have broadened considerably to include individuals with milder forms of the condition. Acting as self-advocates, these individuals have engaged in reconstructing autism as a type of cognitive diversity, laying claim to an autistic culture and contending that neurodiversity supports the acceptance of autism rather than its cure. This shift away from the concept of autism as disease, disability, and deficit is a significant paradigm change for social work practitioners, researchers, and educators. The neurodiversity model promotes inclusion, self-determination, and recognition of diverse cognitive styles, each of which is consistent with the professional tenets of social work. To implement neurodiversity principles, social workers must be willing to embrace a different paradigm and a new way of conceptualizing autism and working with those affected by it.

ORCID

Jolynn L. Haney http://orcid.org/0000-0002-8818-7599

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