FORMING STRONG CULTURAL IDENTITIES IN AN INTERSECTING SPACE OF INDIGENEITY AND AUTISM IN CANADA, THE UNITED STATES, AUSTRALIA, AND NEW ZEALAND

Abstract

Through its hegemonic ideologies, colonialism and its constituent underpinnings of religious and racial superiority, necessitates the erasure of the cultural identity of people outside the dominant Euro-Western culture and as non-normative groups, Indigenous Peoples and autistic people disabled per colonized paradigms, experience oppression, and subjugation harmful to self-identity and mental health. This article discusses culturally-responsive interventions aimed at supporting strong cultural identity formation and safeguard Indigenous and autistic people from stigmatization, misrepresentation, and erasure of identity. Promising research uses Indigenous knowledges in education and arts programming to disrupt patterns of social injustice, exclusion, and cultural genocide while promote positive identity formation, pride, and resilience for Indigenous autistics. While Indigenous and autistic people exist globally, this article reviews literature from Canada, the United States, Australia, and New Zealand.

Keywords

Intersectionality, autism, Indigenous, identity, culture, disability

Introduction

Colonialism in the West was supported by the Doctrine of Discovery, theological and legal decrees that legitimized the right to spread Christianity in the Americas and control and dominion over said land (Victor et al., 2016). Meditated by Euro-centric ideologies of religious and racial superiority, the colonial project used philosophies of the Industrial and Enlightenment periods as theoretical weaponry, physical brutality, biological warfare, and premeditated genocide, to dominate, subjugate, and erase Indigenous Peoples and cultures (Bailey & Arciuli, 2020; Lindblom, 2014; Victor et al., 2016).

Today, the West remains a colonial machine which serves to protect and perpetuate white, hetero male, cisgender, power, privilege, interests, and ideologies (Kelley & Lowe, 2018; Kapp, 2011; Victor et al., 2016). Though Indigenous and autistic populations exist globally (Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013; Bailey & Arciuli, 2020; Kelley & Lowe, 2018), and a more holistic understanding of this topic requires inclusion of Eastern-based literature, this analysis of peer-reviewed articles highlights oppression, systemic inequities, and marginalization faced by Indigenous Peoples and autistic people in Canada, the United States, Australia, and New Zealand including access to culturally-responsive, anti-racist, and anti-discriminatory healthcare and education (Bailey & Arciuli, 2020). This paper explores innovations in education and arts that are grounded in Indigenous worldviews and serves to strengthen positive individual and collective identity formation, promote pride and resilience within an intersecting space of Indigeneity and autism (Victor et al., 2016; Lindblom, 2017a; Kelley & Lowe, 2018; Kahn et al. 2016).

Literature review

This study reviews contemporary scholarly literature addressing the personal and sociological phenomenon of peoples who identify as both Indigenous and autistic, exploring four questions:

- 1. What promotes, protects, prevents, and harms healthy identity formation for Indigenous and autistic people on individual and collective levels?
- 2. What are some of the commonalities in the human experience of Indigenous and autistic people?
- 3. What critical insights can be gained from examining overlapping prejudices that seem distinct but may be related?
- 4. What significant cultural knowledge can be extrapolated from this review to champion greater cultural ownership in the development of culturally-responsive instruments and practices for promoting healthy identity formation for Indigenous and autistic people on individual and collective levels?

Literature search

The literature search was completed in April 2019 using the Academic Search Complete database. Search terms used were "Aut* identity", "Indig* identity", "Abor* identity" and "Youth". Inclusion of articles used the following criteria:

- 1. Is a peer-reviewed journal article;
- 2. Published from 2010 onward;

- Research used either rigorous quantitative and qualitative methodology and contributes to the evolving scholarly knowledge about the development of autistic and Indigenous identity and cultures;
- 4. Examines causal factors for the development of poor identity formation and health risks for autistic and Indigenous Peoples and communities;
- 5. Explores worldviews on disability with a focus on autism spectrum and;
- 6. Reviews clinical instruments, models and interventions studied to test for positive identity formation and protective factors associated with improved mental health and wellbeing for autistic and Indigenous sample groups.

As intersectional research on Indigeneity and autism is a relatively novel area of scholarship, singular search terms and various combinations were used. A total of twenty-three articles were selected from the Academic Search Complete database and an additional two articles were retrieved from the SAGE Journals database. Articles exploring intersectionality of Indigeneity and autism and/or disability are presented in Table 1.

Articles included are summarized in an annotated bibliography and critically evaluated using thematic analysis, a methodology found effective for comparative analyses in literature reviews. Winstone et al. (2014) triangulates the findings of Braun and Clarke (2006), Crawford et al. (2008) and Breakwell (2006), positing that thematic analysis is a method adaptable to various types of research, a necessity for this review given its criteria to include diverse types of both quantitative and qualitative data. The selected methodology analyzes included articles while highlighting themes and gaps in research on Indigenous and autistic identity and cultures.

Twenty-four articles were included. Seven articles explore identity and experiences of autistic Indigenous Peoples (Kapp, 2011; Lindblom, 2014; Lindblom, 2017a; Lindblom, 2017b; Sullivan, 2013; Travers, Tincani, & Krezmian, 2013; Bailey & Arciuli, 2020). Ten articles explore autistic identity (Cooper, Smith, & Russell, 2017; Cridland, Caputi, Jones, & Magee, 2014; Violeta & Langer, 2017; Mogensen & Mason, 2014; DeNigris, et al., 2018; Tan, 2018; Hughes, 2012; Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013; MacLeod, Lewis, & Robertson, 2013; Winstone et al., 2014), five articles, Indigenous identity (Kahn et al. 2016; Kelley & Lowe, 2018; Kickett-Tucker et al., 2015; Tracey, 2012; Victor et al., 2016), and two articles, the inclusion and treatment of Indigenous students with a variety of disabilities (Bevan-Brown, 2013; Graham, 2012).

Culturally-responsive interventions introduced in this literature review test the efficacy for positive identity formation and suggest protective factors to improve mental health and wellbeing for autistic and Indigenous sample groups. This review provides a triangulated evidence-body that addresses research questions and suggests a new theoretical framework which to study the intersectionality of Indigeneity and autism.

Results

Comparative analyses of extant peer-reviewed literature on the intersectionality of peoples who identify as Indigenous, and autistic resulted in two main themes and sub-themes as discussed below.

Intersection of historic and modern phenomena of social injustices and genocide

Twenty-two articles reviewed find that Indigenous Peoples and autistic people situated in Canada, the United States, Australia, and New Zealand experience and share historic and modern phenomena of human rights violations and social injustices such as marginalization, discrimination, poverty, disempowerment, and genocide.

Shared experience of colonization

Canada, the United States, Australia, and New Zealand have a unique yet similar constitutional origin story and relationship with the land's original inhabitants. Each of these countries was settled and built on the displacement and disbursement of First Peoples (Lindbolm, 2014; Kapp, 2011, Bevan-Brown, 2013; Bailey & Arciuli, 2020). Colonization, as a project is driven by capitalism, racial and religious bias and cultural superiority, and manifests in systemic, and individualized racism, and socio-political and economic subjugation of marginalized people. A tangible manifestation of these Euro-centric philosophies results in discrimination and discriminatory laws, practices, and policies against Indigenous Peoples. Less visible are the ways the ideologies impact people who are not neurotypically standard and for individuals who identify as both Indigenous and autistic, "factors such as ethnicity, disability and gender can, separately, pose difficulties" and "when combined"... "can develop into insurmountable difficulties" (Lindblom, 2017b, p. 268). In the West, where power and privilege is afforded disproportionately to members of the dominant social group, people who do not conform to the normative group, experience discrimination as its mildest repercussion and genocide at its most severe, endangered by eugenicist policies and practices, for example. Further, the Medical Model of Disability aims for normalization and eradication, viewing perceived impairments against a

typical able-bodied standard. In this paradigm, deviations from the norm are explained as deficit-based and pathological in nature. Persons believed to be differently-abled are therapeutically treated to fix and cure visible abnormalities (Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013; Kapp 2011; Mogensen & Mason, 2015) resulting in harmful coercive interventions.

Identity categorization and control

Indigenous Peoples and autistic people experience profound categorization and control over identity. Membership approval and assignment is determined by agents with powers ascribed within colonial systems and structures. Indigeneity is defined by colonial legislative authority whereas "autism spectrum disorder [ASD]" is defined according to a medicalized framework of diagnostic criteria such as the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders or DSM (Bailey & Arciuli, 2020; Lindblom; 2017a; Sullivan; 2013) or the World Health Organization's International Classification of Functioning, Disability and Health.

The APA's (2013) DSM-V (as cited in Bailey & Arciuli, 2020) views autism as a complex neurodevelopmental condition characterized as "difficulties with social communication coupled with restrictive and repetitive patterns of behaviour or interests", with a "heterogeneous" presentation of characteristics and co-morbidities among autistic individuals (p. 1031).

Autism prevalence is increasing yet under-detection of autism is reported within Indigenous populations (Centre for Disease Control and Prevention, 2012, as cited in Lindblom, 2017b).

Under-detection issues may be associated with periodic changes in and redefining of autism diagnostic criteria (Lindblom, 2014) and the lack of cultural relevancy of the DSM-V's autism

construct to Indigenous Peoples (Bailey & Arciuli, 2020; Lindblom; 2014, 2017a, 2017b). Bailey & Arciuli (2020) finds for "some Aboriginal and Torres Strait Islander communities", "labeling and categorising individuals regarding their abilities or impairments is considered disrespectful" (p. 1039). Lindblom (2017b) adds "Although Indigenous worldviews are diverse, they are perceived to be more inclusive than Western disability models" (p. 269).

Disproportionality in disability diagnostic categories

Disproportionate overrepresentation is described in educational research as "the inequitable distribution of particular social groups referred to or enrolled in special education settings when compared to their natural distribution within a total student body" (Coutinho & Osward, 2000, as cited in Graham, 2012, p. 163). Graham (2012) finds that while Indigenous students with autism and sensory, physical, and intellectual disabilities in the state of New South Wales (NSW), Australia, "are equally represented in special schools", there is a "disproportionate over-representation" (p. 163) of Indigenous students assigned to emotional behaviour disturbances categories and in an increasing number of newly constructed behaviour schools that "require no diagnosis or confirmation of a disability for entry" (p. 170). Findings suggests that disproportionate placement of Indigenous children in classes "for the educationally subnormal" is not exclusive to NSW, but a part of a global experience whereby disproportionality is found to be "an effect, not of erratic incidence patterns, but of social and economic marginalization" (Dyson & Gallannaugh, 2009, as cited by Graham, 2012, p. 163). Graham (2012) asks "what systemic variables are contributing to racial disparities?" (p. 171) in NSW and finds a disproportionate overrepresentation of Indigenous children and youth caught in "long-standing systemic racism" (p. 171) in the state's public education system and "a persistent

failure of Australian education systems to engage, support, and understand Indigenous students" (p. 173).

Bailey & Arciuli (2020) found additional cases of under-representation and misdiagnosis of autistic Aboriginal and Torres Strait Islander Peoples within healthcare and educational settings in Australia. One study by Roy and Balaratnasingam (2010) (as cited in Bailey & Arciuli, 2020) "examined potential cases of missed ASD diagnosis in a caseload of Indigenous adults previously diagnosed with schizophrenia" and found that of the "215 patients" identified in the study, "13 patients (93%) met criteria" for the DSM-IV for ASD (p. 1036). In a separate study by Bent et al. (2015) (as cited in Bailey & Arciuli, 2020) "Indigenous children were significantly underrepresented in the subgroup of participants diagnosed with Asperger's syndrome as per the DSM-IV", indicating "that Aboriginal and Torres Strait Islander people with autism may be less likely to receive a diagnosis if they are less severely affected" (p. 1036).

Sullivan (2013) and Travers, Tincani, & Krezmian (2013) use American state-level data to analyze issues of disproportionate representation among racially diverse learners by examining autism prevalence and relative risk and logistical odds ratios among racial groups. Between 1998 and 2008, literature suggests significant disparities in prevalence of autism between racial groups, in relationship to demographic ethnic representation and the national prevalence rate of autism. Sullivan (2013) finds American Indian/Alaska Native students with a "widespread relative low prevalence" of identified autism and were often "less likely to be identified with autism relative to White students" (pp. 298-310). Travers, Tincani, & Krezmian (2013) find that while the relative risk of autism increased overall across racial groups, "White

students were twice as likely to be identified with autism as Hispanic and American Indian/Alaska Native students" and "Hispanic and American Indian/Alaska Native students were significantly underrepresented every year of the analysis" (p. 41).

Sullivan's (2013) and Travers, Tincani, & Krezmian's (2013) analyses and other works cited in these studies, suggest that underrepresentation of autism is attributed to diagnostic substitution, whereby some students in racialized groups are identified as having a disability other than autism, or experience a latency in an autism diagnosis, raising questions of malpractice and the need for supplementary training and intervention to address clinician subjectivity and bias despite autism being a clinically defined disorder. Substantial variability and "significant racial disparities in ASD diagnosis" demands enhanced culturally-sensitive diagnostic criteria, processes, and assessment tools in school-based identification (Sullivan, 2013, p. 300). School systems face the critical policy issue of their capacity to provide "appropriate services for students with ASD" set within the broader context of issues racially diverse peoples face in accessing health care and treatment (p. 313).

In British Columbia, Canada, access to equitable health care and services for autism among Indigenous populations is raised by Lindblom (2014; 2017a; 2017b). First Nations Peoples, the focus of Lindblom's (2014, 2017a, 2017b) studies, are among three distinctive, constitutionally recognized Indigenous populations in Canada; First Nations, Inuit, and Métis Peoples. Lindblom's (2014) literature review found First Nations children are under-represented both in "publication regarding autism and the prevalence thereof" and that as a demographic group, there is "under-detection of autism among Aboriginal populations" (p. 1248). This issue

was raised in Lindblom's (2017a) study, situated in Northern British Columbia, where educational professionals admitted they "have not come across many First Nations pupils diagnosed with autism" (Lindblom, 2017a, p, 205).

Lindblom (2014) suggests underrepresentation is multifactorial, explained by language and geographical barriers that prevent access by Indigenous children, youth and families to diagnostic services; differences in worldviews that appear counter to a deficit-based Medical Model perspective and impact how a person with autism is viewed and treated among Indigenous cultures; diagnostic substitution; latency of an autism diagnosis; and ethnic bias, racialized prejudice, and discrimination among social service professionals that stem from the broader context of indoctrination within a nation with a long-standing history of colonialism, systemic racism and stereotyping of First Peoples. Lindblom's (2017a) study also suggests compounding systemic inequity follows an autism diagnosis for First Nations, noting only one child "had access to autism funding" despite all children having "been assessed and diagnosed within the dominant health system" (p. 206).

Lack of culturally-responsive services and interventions

There is a shortage of culturally-responsive services and interventions within the educational and disability services space for Indigenous Peoples and autistic people promoting healthy culture-based identity formation. Presently, three theoretical articles investigate

Indigenous values-based perspectives and culturally-appropriate service provision for people with autism and diverse abilities and two articles test music interventions to promote social inclusion for autistic First Nation children and youth.

The first theoretical article, titled *Navajo and Autism: The Beauty of Harmony* (Kapp, 2011), explores the Navajo Native American wellness philosophy of "Hozho" as a possible culture-based, principled approach to supporting autistic people (p. 583). The second, titled *Including People with Disabilities: An Indigenous Perspective* (Bevan-Brown, 2012) reviews the Indigenous Māori Peoples of Aotearoa/New Zealand kaupapa Māori (Māori way; Māori knowledge, attitudes and values) methodology, cultural perspectives, and experiences of disabilities within Māori communities. The third, titled *Indigenous Australians with Autism: A Scoping Review* (Bailey and Arciuli, 2020) examines "the perspectives of Aboriginal and Torres Strait Islander carers and Indigenous and non-Indigenous service providers" to better understand "Indigenous perspectives on autism, as well as barriers and strategies to improve access to diagnosis and support services" (p. 1031).

Lindblom's (2017a) ethnographic case study of five autistic First Nations children in British Columbia, Canada, test music interventions, excluding use of traditional Indigenous music, "through a First Nations lens" (p. 202). Lindblom's (2017b) article shares two of these cases to examine how disability, gender, ethnicity, and culturally-sensitive and personalized traditional Indigenous music and contemporary music interventions can mitigate personal difficulties and improve communication and social inclusion for Indigenous autistic students.

It would seem the absence of culturally-responsive services and supports for Indigenous and autistics peoples in educational and disability services spaces is correlated to negative social outcomes in holistic individual and public health (Tan, 2018; Graham, 2012; Bailey and Arciuli, 2020). According to Bernier, Mao, and Yen, 2010, and Oulette-Kuntz et al., 2006 (as cited by

Lindblom, 2014), clinicians and researchers must acknowledge that clinical diagnostic and assessment tools being utilized today lack in "cultural sensitivity" (p. 1254). Moreover, this literature review reveals inherent cultural biases of clinicians as compounding the increase of risk for diagnostic errors and data reliability and validity (Lindblom, 2014; Travers, Tincani, & Krezmian, 2013; Kicket-Tucker et al., 2015). Purdie and McCrindle (2004) (as cited by Kicket-Tucker et al., 2015) stresses the importance of developing clinical diagnostic tools and recommends involving Indigenous collaboration at all stages of research as a "matter of ethics and rigor" (p. 2). This safeguards instrument efficacy by addressing inequalities and accounting for cultural differences. Purdie and McCrindle, (2004) (as cited by Kicket-Tucker et al., 2015) argue tools developed "in Western cultures will not necessarily be valid in other societies" (p. 2). Kicket-Tucker et al. (2015) highlights three issues that arise in research using diagnostic tools developed "in a different culture"; first, "concepts may be interpreted differently across cultures"; second, "there may be a degree of method bias introduced" and studies show "response errors increase when the instrument is designed and administered by an person of a different culture" and three; "item bias may occur if questions have different meanings for different cultural groups" (p. 2). For example, Travers, Tincani, & Krezmian (2013) argues that "most research on disproportionate representation" is "influenced by some degree of subjectivity", raising the issue of data collection and interpretation that is not buffered against variables such as "variation in disability definitions", "socioeconomic factors", "regional populations differences" and "individual and institutional bias and cultural differences between educators and students" (p. 41).

For racially diverse students, the absence of culturally-responsive interventions is a causational factor for overrepresentation and underrepresentation of racially diverse students in special education categories, for diagnostic substitution and misdiagnosis; for latency of an autism diagnosis and for inhibiting effective engagement with parents and families due to language and cultural barriers and/or a lack of trust and relationships given historic traumas experienced by Indigenous Peoples in colonized systems (Lindblom, 2017a, 2017b; Graham; 2012; Bailey and Arciuli, 2020). Consequentially, Indigenous children are less likely to receive a timely or accurate clinical diagnosis within the critical early intervention years (Sullivan, 2013; Lindblom, 2017a). Instead, autism is often overlooked for behavioural conditions such as "attention deficit/hyperactivity disorder or oppositional defiant disorder" (Sullivan, 2013, p. 311), intellectual disabilities or "ID" (Travers, Tincani & Krezmian, 2014, pp. 1254-1257), further stigmatizing Indigenous children and families by labeling a child as mentally ill, deviant and delinquent (Travers, Tincani & Krezmian, 2013; Sullivan, 2013; Lindblom, 2014).

Researchers find that like Indigenous populations, autistic people are seldom included as active, equal, and contributing partners in research or policy (Mogensen & Mason, 2015; Tan, 2018; Winstone et al., 2014; Lindblom, 2017a; Bailey and Arciuli, 2020). The bulk of services, models and tools serving autistic populations, position professionals in an expert role, treating autistic peoples on the basis of being medically and socially abnormal (Mogensen & Mason, 2015; Tan, 2018; Winstone et al., 2014).

Indigeneity as a protective factor in healthy identity formation

Different theoretical and practical applications of Indigenous ways of thinking, being, relating, and doing were investigated that support healthy social identity development, self-esteem, and mental wellbeing of Indigenous Peoples on individual and collective levels. Findings from eighteen studies support the concept that Indigeneity is both a protective and positive factor in healthy identity formation.

Inherent Indigenous values influence social behaviour

Indigenous Peoples occupy lands in all regions of the world and represent significant diversity and distinction in cultural identities however within this diversity shared perspectives can be found. Lindblom (2017a) identifies "common aspects" among "Indigenous worldviews" as an "Indigenist paradigm" contrasting Indigenist "philosophical assumptions" as "open to all" people "Indigenous or non-Indigenous" and are separate from "specific Indigenous teachings, songs, stories, and other elements" that are "sacred and belong to the land" (pp. 202-204). One such commonality is that Indigenous Peoples are ethics and values-based Peoples, who from childhood, learn responsibilities through cultural teachings passed on by all members of their community in an oral tradition, including social behaviours that contribute to what, in Anglo-Saxon terms, is considered hospitality and inclusion; two concepts shown to support healthy identity formation (Bevan-Brown, 2013; Kapp, 2011; Victor et al., 2016).

Inclusion as a philosophy and practice, has no universal definition but is generally understood as the belonging, valuing, respect, and equal treatment of all. Bevan-Brown (2013) cites Forest and Pearpoint (1992), describing "Inclusion" as "all people regardless of their

colour, gender, socio-economic status, language, religion, ability, sexual orientation, culture or looks" are held and treated as equals and are "valued and accepted members of society" (pp. 571-572). In an educational context, inclusive education refers to an organizational, political, and in some countries, a legal mandate, to "ensure all learners are present" and "can participate and achieve in a quality education of their choice" (Bevan-Brown, 2013, p. 572). Inclusion thus advocates for the presence and active citizenship of students with diverse abilities among all other distinguishable individualities. While this model in its Western societal context is said to have originated from global human rights and inclusion movements of the 1960's (Bevan-Brown, 2013), the core values of inclusion have been practiced since time immemorial by different Indigenous populations worldwide (Kapp, 2011; Bevan-Brown, 2013; Lindblom, 2017a).

Victor et al. (2016) acknowledge that "Indigenous youth represent one of the most marginalized demographics in Canada" (p. 262). In an effort to develop culturally-responsive and "effective health programming" for Indigenous youth situated "in a First Nation in southern Saskatchewan", the research team utilized a participatory arts method grounded in traditional Cree teachings (Victor et al., 2016, p. 262). Researchers found that ancient Cree knowledges contains an ingrained "local system of being, knowing, and expressing" that affirms for Indigenous children and youth, a sense of wholeness and connectedness, internally and externally, to all living things and strengthens their knowledge of oneself in relationship to the world (Victor et al., 2016, pp. 263-264).

Kelley and Lowe (2018) found that while there is a distinct set of "cultural values and beliefs, cultural identity and spirituality" among the "567 federally recognized tribes, nations, bands, clans, pueblos, communities and Native villages in the United States", mutually existing is a shared belief about relational connectedness and interrelatedness between an individual, their family, wider community and the natural environment, with each member, human or non-human, playing a vital role in the web of life (p. 127). A specific example is drawn from the Keetoowah-Cherokee Peoples and cultural beliefs about belonging in life's "circle" (Kelley and Lowe, 2018, p, 128), which explains all relations have a natural place in life's circle and only when all parts are present, sharing their unique gifts, are we whole.

Similarly, the Navajo view themselves as interconnected through a web of life; believing "everything has a spirit" and "thus merits equal respect" (Kapp, 2011, p. 588). The treatment of members of its society is influenced by a wellness philosophy called "Hozho", promoting six principles; holism, interconnectedness, "harmony", "positive thinking", "relationship", "reciprocity" and "discipline" (Kapp, 2011, pp. 588-589). Taken together, "Hozho" fosters a natural state of peace, respect, and belonging among its people (Kapp, 2011, p. 583).

Three research studies were done to examine the views of the Māori Peoples of Aotearoa/New Zealand on the Inclusion Movement and while the opinions of polled Māori participants varied, generally Māori participants expressed that "people with intellectual disabilities, ASD, blindness and vision impairment were generally valued family members and many examples of inclusive attitudes and practices were shared" (Bevan-Brown, 2012, p. 571). The concept of "disability" for the Māori does not focus on "individual pathology" but is related

to "a loss of land, culture, identity, knowledge base, values, practices, and language" (Bevan-Brown, 2012, p. 573). Bevan-Brown (2012) finds social behaviour towards people with disabilities is driven by Māori worldview and the many beliefs that construct it, making inclusion an inherent offspring of the culture. For example, the cultural concept of "Whānau [Family]" dictates a communal responsibility to the care of one another, viewing all members as extended family (Bevan-Brown, 2012, p. 573). Māori families with a disabled child receive extra support from its community members who live out the teachings of "Whānau", naturally assuming the role as one of many caretakers of those who have a need for "additional assistance" (Bevan-Brown, 2012, p. 574). Additionally, the belief that "good health" is the interaction of the "taha wairu (spiritual side), taha hinengaro (thoughts and feelings), taha tinana (the physical side) and taha whānau (family)", taken with the core Māori values of "Whanaungatanga" (kinship, relationship), "aroha" (love), "wairuatanga" (spirituality), "āwhinatanga" (helping people) and "manākitanga" (respect, kindness, hospitality), it is clear that as a civilization, Māori Peoples generally not only have a "global acceptance of difference" woven into its culture, but that all members are one part of a whole (Bevan-Brown, 2012, pp. 579-581).

Positive ethnic cultural and social identity as a protective factor

Though Indigenous ethnic cultural identity is not a pan concept given the diversity and distinction that exists among Indigenous Peoples owing to a number of variables, findings from this research validate ethnic cultural identity as a protective factor against negative holistic health outcomes. This finding overlaps with articles exploring autistic self-identity and the relationship between autistic self-identity and improved health outcomes.

Autistic community culture, though gaining visibility and acceptance in popular culture, is still an under-examined area in academic research. It is not yet well understood as to the protective factors associated to autistic community cultural belonging. However, literature available on the topic of identity and autism suggests a positive correlation between self-identifying as a member of the autistic community and an increase in positive protective factors for improved individual health and wellbeing (Cooper, Smith, & Russell, 2017, Violeta & Langer, 2017, Lindblom, 2017b).

The strengthening of cultural and social identity is personalized and contextualized and dependent on factors like geography, worldview, socioeconomic status, and determinants of health. It is shaped by how one views their personhood in relationship to the ethnic or social cultural group they belong and the cultural norms and meaning that one identifies and ascribes to as belonging in the cultural group. While literature reviewed is not representative of all Indigenous Peoples or autistic people, studies show a clear pattern that both cultural groups face societal challenges and survive ongoing oppression that exacts a toll on self-identity, self-esteem, and overall health (Kahn et al., 2016; Violeta & Langer, 2017; Cooper, Smith & Russell, 2017). Concurrently, literature reveals that positive ethnic and social identity is a protective mechanism for improved health as it is directly correlated to the development of resiliency, positive self-image, and healthy coping strategies for Indigenous Peoples and autistic people experiencing injustices (Kahn et al., 2016; Violeta & Langer, 2017; Cooper, Smith & Russell, 2017).

Indigenous ethnic cultural identity

In Kahn et al's (2016) study, on the resilience of American Indian (AI) and "other Indigenous Elders" and urban AI Elders perspectives on resilience and resilience strategies for youth, Elders collectively identify "three themes linked to resilience"; culture, youth activities, and education" (p. 127). According to Elders surveyed, "building resilience in youth is tied to youth knowing their cultural identity, and to understanding history and stories of the past" while participating in "Traditional activities" that enhance "their sense of cultural belonging and identity" and pursuing education, noting knowledge as power (Kahn et al., 2016, pp. 127-129).

Victor et al. (2016) corroborates the above findings, suggesting that youth wellness is improved when adolescents engage in cultural-based activities that "promotes the development of kiskenimisowin (self-knowledge)" and learn self-advocacy skills in an emotionally and culturally "safe enough space", so that youth can "partake in self-expression" to "discover their individual and cultural identities" (p. 275). Kelley & Lowe (2018) triangulates the notion of culture as a protective factor, finding in their study of a "seven-week after-school cultural-based intervention for Keetoowah-Cherokee youth ages 10-13 at risk for obesity", that "culture, a strong sense of community and family matter" and "can serve as protective factor or buffer against negative health outcomes" (pp.129-130).

Lindblom (2017a) offers important considerations related to forming strong cultural identities in an intersecting space of Indigeneity and autism. In a study on "autism and music interventions through a First Nations lens", Lindblom (2017a) found that "for a First Nations child with autism, the inclusive environment in the traditional community with all aspects of the

culture, including the music, could be beneficial in many ways" (p. 208). Indigenous music is described as "integral to healing" with the drum identified as "a powerful significance of our people" (Lindblom, 2017a, pp. 206-207). Adams et al. (2015) (as cited by Lindblom, 2017a) discusses music having "agency" and because "everything in creation is connected within Indigenous worldviews", music provides "First Nations children with access to their specific culture and heritage and also connects them to their ancestors and culture" (p. 207). Despite tribal music's reported cultural meaning, this study revealed "little, or no, access to Indigenous music in school" and attributed this to "the inequalities of the dominant system" and that "not all the children in the study had access to their tribal music in their home setting" (Lindblom, 2017a, pp. 207-208). Children and families interviewed expressed varied levels and frequency in which Indigenous music is engaged with, acknowledging the child's personal preferences, motivations, sensory sensitivities, and observable behaviours as influential factors (Lindblom, 2017a).

Autistic social identity

Autistic people experience a higher prevalence of mental health disorders compared to the general population (Cooper, Smith & Russell, 2017; MacLeod, Lewis & Robertson, 2013). Global stigma and pathologizing of autism, bullying and victimization, and individualized lack of acceptance of being autistic all contribute to reduced mental and emotional well-being in autistic people (Cooper, Smith & Russell, 2017; DeNigris et al, 2017). A positive autistic cultural self-identity can help to ameliorate and reduce the negative impacts of social-psychological stressors (Violeta & Langer, 2017; Tan, 2018; Mogensen & Mason, 2015). Cooper, Smith & Russell (2017) "assert that the social and health benefits of social identity processes are highly pertinent" to the autistic population and "have significant implications for clinical practice" (p.

844). Cooper, Smith & Russell's (2017) study investigating "Autism social identity and mental health in autistic people" (p. 844), triangulated the findings of Greenaway et al., (2015) and Jetten et al. (2015), finding positive associations between autism group membership and psychological wellbeing and personal self-esteem (p. 851). This suggests the degree to which an autistic person evaluates their worth is significantly influenced by "how positively one sees an in-group (its social worth)" (p. 851). However, autistic identity is far more complicated and as this literature review finds, some autistic peoples report "strong self-images" based on "success and achievement related to their personal strengths", distancing themselves from the autism diagnostic label because they do not see themselves in prevailing stereotypes and professional literature describing autism within a medical, deficit-based model (MacLeod, Lewis & Robertson, 2013, pp. 41-48).

Autistic people struggle to adopt a positive self-identity and identify positively with autistic culture given the layers of misinformation, misunderstanding and misconduct in Western societies towards autistic people (Mogensen & Mason, 2015; Cooper, Smith & Russell, 2017; Winstone et al., 2014). Mogensen & Mason (2015) highlight how different ideas of autistic self-identity coexist given the ideologies of the Medical Model, resulting in "structural" and systemic ableism and normalization (p. 267). This review emphasizes the social-psychological harms that arise from these conditions (DeNigris et al, 2017; Hughes, 2012), while also suggesting that a positive autistic culture must exist outside or separate to the Medical Model (Winstone et al., 2014). In Kapp, Gillespie-Lynch, Sherman & Hutman (2013), researchers examined perceptions of both the Medical Model and the neurodiversity paradigm and suggests benefits to autistic people when adopting a holistic self-image, arguing for the integration of the Medical and Social

Models of Disability. The authors suggest positive self-identification and appropriate services and supports are attainable when autistic people are regarded as having a unique set of challenges related to being autistic and have needs recognized and met.

MacLeod, Lewis & Robertson (2013) noted that when autistic cultural identity is viewed through a lens of intersectionality and considers "diversity inherent within the spectrum", it is a construct "of value" (pp. 47-48). Identifying as being autistic is significant to a young person in their constitute understanding of who they are and is critical for the development of a positive autistic self-identity (Winstone et al., 2014; Tan, 2018; Mogensen & Mason, 2015). Equally important are internalized self-concepts that respect and celebrate their autistic humanity and that autistic peoples have positive role models, much like Indigenous youth have in Elders, to learn what it means to be autistic (Winstone et al., 2014; Tan, 2018; Lindblom 2017a, 2017b).

Discussion

Indigeneity and autism are natural variations of human diversity and thus create dimensions of human group belonging with distinctive cultures. Unlike Indigenous Peoples, who are culturally distinct ethnic groups, autistic people are a global community, identified by a clinical or self-diagnosis, and collectively construct social movements such as the "Neurodiversity movement" (Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013, p. 60) and an evolving autistic culture based on shared values, beliefs, history and cultural elements like communication and experiences, celebrations, fashion, and the arts.

Extant scholarship on the individual and sociological experience of Indigenous Peoples and autistic people largely exists as separate bodies of knowledge. By analyzing Indigeneity, autism, disability, and identity, whereby examining overlapping prejudices, new pathways for research have emerged. What might otherwise be considered unrelated micro and macro phenomena, findings demonstrate historical and ongoing injustices and the implications of this discrimination as a consequence of colonialism and its ideologies faced by Indigenous Peoples and autistic people.

Literature suggests patterns of social injustice, exclusion, and cultural genocide within the human experience of each cultural group. While further research is needed, articles about Indigeneity and autism revealed unique discriminations and considerations found at this intersection and identify factors that influence identity formation and engender pride and resilience for Indigenous and autistic people individually and collectively. Indigenous cultural identity and autistic cultural identity are inherently diverse and distinctive, yet this study presents significant global cultural knowledges that can guide the development of self-determined, culturally-responsive interventions for promoting healthy identity formation for autistic Indigenous Peoples.

Forming positive cultural identity

Literature documents a pattern of a lack of ownership, and self-determination by Indigenous Peoples and autistic people as it relates to conducting scholarly research and designing and overseeing social-educational programming that it is appropriate and responsive to the lived realities of its members (Lindblom, 2014; Lindblom, 2017a; Bevan-Brown, 2013). This

review suggests favorable results for the healthy development of cultural identity when using clinical and community-based interventions either designed and created by or in partnership with cultural groups or that are, at a minimum, culturally-sensitive and appropriate (Victor et al., 2016; Lindblom, 2017a; Bailey and Arciuli, 2020).

Positive identity formation and social-psychological wellness is bolstered by culturally-responsive interventions that are self-determined, contextualized, personalized, and account for historical and ongoing forms of discrimination. For Indigenous populations, the most promising clinical and community-based interventions for positive cultural identity formation include diverse and distinctive Indigenous worldviews, pedagogy and traditional ways of being, knowing, relating, and doing (Lindblom; 2017a, 2017b; Bevan-Brown, 2013; Kelley & Lowe, 2018). For autistic populations, it is clinical and community-based interventions grounded in the concept of Indigenization; that is, practices that balance a Euro-Western worldview and Indigenous worldviews. Within an intersecting space, interventions need to record and address individualized and collective challenges related to neurology—Euro-Western Medical Model lens and simultaneously, identify and honor strengths and inherent self and community worth and share individual capacity for common good—Indigenous egalitarian, strength-based lens (Kapp, Gillespie-Lynch, Sherman & Hutman, 2013; Lindblom; 2017a; Bailey and Arciuli, 2020).

Promising research are the arts and educational-based models, with studies finding the use of innovative approaches such as participatory visual and storytelling methods, as meaningful for participants (Victor et al., 2016; Kelley & Lowe, 2018; Lindblom; 2017a, 2017b), Overall, culturally responsive interventions and practices for healthy cultural identity formation

embodies the idea that each member is an important part of the larger whole and including their presence, perspective, and lived experience is as valid and meaningful as it is necessary, in shaping individual and collective cultural identity.

Conclusion

Indigenous Peoples and autistic people situated in Canada, the United States, Australia, and New Zealand share related historical and ongoing patterns of subjection and oppression as non-normative groups outside the dominant Euro-Western culture resulting in significant negative impacts to self-identity and mental health. This study offers a greater understanding as to the factors that influence cultural identity formation and a new paradigm to explore the intersectional forms of discrimination impacting peoples who are Indigenous and autistic. Additional research is needed to further test culturally-responsive interventions developed by, or in partnership with, Indigenous autistic people. This review suggests a new theoretical framework which to study the intersectionality of Indigeneity and autism. Promising research uses Indigenous knowledges in education and arts programming as a way to disrupt patterns of social injustice, exclusion, and cultural genocide while promote positive identity formation, pride, and resilience for Indigenous autistics.

Glossary

aroha love

āwhinatanga helping people

kaupapa Māori Māori way; Māori knowledge, attitudes and values

Māori the Indigenous Peoples of Aotearoa/New Zealand

manākitanga respect, kindness, hospitality

taha hinengaro thoughts and feelings

taha tinana the physical side

taha wairu spiritual side

taha whānau family side

wairuatanga spirituality

whānau family —immediate and extended

whanaungatanga kinship, relationship

References

- Bailey, B., & Arciuli, J. (2020). Indigenous Australians with autism: A scoping review. *Autism*, 24(5), 1031–1046. https://doi.org/10.1177/1362361319894829
- Bevan-Brown, J. (2013). Including people with disabilities: an Indigenous perspective. *International Journal of Inclusive Education*, 17(6), 571-583. https://o-doiorg.orca.douglascollege.ca/10.1080/13603116.2012.694483
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*. 3(2), 77-101.
- Breakwell, G.M. (2006). Interviewing methods. In G.M. Breakwell, S. Hammond, C. Fife-Schaw and J.A. Smith (eds) *Research Methods in Psychology* (pp. 232-253). London, UK: Sage.
- Cooper, K., Smith, L. G. E., & Russell, A. (2017). Social identity, self-esteem, and mental health in autism. *European Journal of Social Psychology*, 47(7), 844-854. https://0-doi-org.orca.douglascollege.ca/10.1002/ejsp.2297
- Crawford, P., Brown, B., & Majomi, P. (2008). Professional identity in community mental health nursing: A thematic analysis. *International Journal of Nursing Studies*. *45*(7), 1055-1063.
- Cridland, E. K., Caputi, P., Jones, S. C., & Magee, C. A. (2014). Understanding high-functioning autism during adolescence: A personal construct theory approach. *Journal of Intellectual & Developmental Disability*, *39*(1), 108-118. https://0-doi-org.orca.douglascollege.ca/10.3109/13668250.2013.870331
- DeNigris, D., Brooks, P. J., Obeid, R., Alarcon, M., Shane-Simpson, C., & Gillespie-Lynch, K. (2018). Bullying and identity development: Insights from autistic and nonautistic college students. *Journal of Autism & Developmental Disorders*, 48(3), 666-678. https://0-doiorg.orca.douglascollege.ca/

- 10.1007/s10803-017-3383-y
- Forest, M. & Pearpoint, J. (1992). Inclusion! The bigger picture. Network. 2(1), 6-10.
- Graham, L. (2012). Disproportionate over-representation of Indigenous students in New South Wales government special schools. *Cambridge Journal of Education*, *42*(2), 163-176. https://0-doi.org.orca.douglascollege.ca/10.1080/03057
- Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2015). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, 46, 294-307.
- Hughes, P. (2012). An autoethnographic approach to understanding Asperger's syndrome: a personal exploration of self-identity through reflexive narratives. *British Journal of Learning Disabilities*, 40(2), 94-100. https://0-doi.org.orca. douglascollege.ca/10.1111/j.1468-3156.2012.00738.x
- Jetten, J., Branscombe, N. R., Haslam, S. A., Haslam, C., Cruwys, T., Jones, J. M., Dingle, G.,
 Liu, J., Murphy, S., Thai, A., Walter, Z. & Zhang, A. (2015). Having a lot of a good thing:
 Multiple important group memberships as a source of self-esteem. *PloS One*, 10(5) e0124609.
- Kahn, C. B., Reinschmidt, K., Teufel-Shone, N., Oré, C. E., Henson, M., & Attakai, A. (2016).
 American Indian Elders' resilience: Sources of strength for building a healthy future for youth. American Indian & Alaska Native Mental Health Research: The Journal of the National Center, 23(3), 117-133. https://o-doi- org.orca.
 douglascollege.ca/10.5820/aian.2303.2016.117
- Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. *Developmental Psychology*, 49(1), 59-71. https://0-doiorg.orca.douglascollege.ca/10.1037/a0028353

- Kapp, S. (2011). Navajo and autism: The beauty of harmony. *Disability & Society*, 26(5), 583-595. https://0-doi-org.orca.douglascollege.ca/10.1080/09687599.2011.589192
- Kelley, M. N., & Lowe, J. R. (2018). Strong cultural identity effects stress levels among Native American youth at risk for obesity. *Journal of Cultural Diversity*, *25*(4), 127-131. Retrieved from https://0-search-ebscohost-com.orca.douglascollege.ca/login.aspx?direct=true&db=a9h&AN=133748734&site=ehost-live&scope=site
- Kickett-Tucker, C. S., Christensen, D., Lawrence, D., Zubrick, S. R., Johnson, D. J., & Stanley, F. (2015). Development and validation of the Australian Aboriginal racial identity and self-esteem survey for 8-12 year old children (IRISE_C). *International Journal for Equity in Health*, *14*, 1-13. https://0-doi-org.orca.douglascollege.ca/10.1186/s12939-015-0234-3
- Lindblom, A. (2014). Under-detection of autism among First Nations children in British Columbia, Canada. *Disability & Society*, 29(8), 1248-1259. https://0-doi-org.orca.douglascollege.ca/10.1080/09687599.2014.923750
- Lindblom, A. (2017a). Exploring autism and music interventions through a First Nations lens. *AlterNative-An International Journal of Indigenous Peoples*. *13*(4) 202–209 DOI:10.1177/1177180117729854
- Lindblom, A. (2017b). "It gives them a place to be proud" Music and social inclusion. Two diverse cases of young First Nations people diagnosed with autism in British Columbia, Canada. *Psychology of Music*, 45(2), p 268-282. DOI: 10.1177/0305735616659553
- MacLeod, A., Lewis, A., & Robertson, C. (2013). "Why should I be like bloody Rain Man?!"

 Navigating the autistic identity. *British Journal of Special Education*, 40(1), 41-49. https://o-doi-org.orca.douglascollege.ca/10.1111/1467-8578.12015

- Mogensen, L., & Mason, J. (2015). The meaning of a label for teenagers negotiating identity: experiences with autism spectrum disorder. *Sociology of Health & Illness*, *37*(2), 255-269. https://0-doi-org.orca.douglascollege.ca/10.1111/1467-9566.12208
- Purdie, N. & McCrindle, A. (2004). Measurement of self-concept among Indigenous and non-Indigenous Australian students. *Aust J Psychol.* 56(1), 50-62.
- Sullivan, A. L. (2013). School-based autism identification: Prevalence, racial disparities, and systemic correlates. *School Psychology Review*, *42*(3), 298-316. Retrieved from https://0-search-ebscohost com.orca.douglascollege.ca/login aspx?direct=true&db.

 =a9h&AN=90604741&site=ehost-live&scope=site
- Tan, C. D. (2018). "I'm a normal autistic person, not an abnormal neurotypical": Autism spectrum disorder diagnosis as biographical illumination. *Social Science & Medicine*, 197, 161-167. https://0-doi- org.orca.douglascollege.ca/10.1016
 /j.socscimed.2017.12.008
- Tracey, N. (2012). The autistic core in Aboriginal trauma: Breaking down or breaking out of the autistic defence. *Psychoanalysis, Culture & Society*, *17*(4), 356-372. https://0-doi- org.orca. douglascollege.ca/10.1057/pcs.2012.35
- Travers, J. C., Tincani, M., & Krezmien, M. P. (2013). A multiyear national profile of racial disparity in autism identification. *Journal of Special Education*, 47(1), 41-49. https://0-doiorg.orca.douglascollege.ca/10.1177/0022466911416247
- Victor, J., Linds, W., Episkenew, J.-A., Goulet, L., Benjoe, D., Brass, D., Schmidt, K. (2016). Kiskenimisowin (self-knowledge): Co-researching wellbeing with Canadian First Nations youth through participatory visual methods. *International Journal of Indigenous Health*, 11(1), 262-278. https://0-doi-org.orca.douglascollege.ca/10.18357/ijih111201616020

Violeta, K. J., & Langer, S. J. (2017). Integration of desire, sexual orientation, and female embodiment of a transgender woman previously diagnosed with autism spectrum disorder: A case report. *Journal of Gay & Lesbian Mental Health*, 21(4), 352-370. https://0-doi-org.orca.douglascollege.ca/10.1080/

Winstone, N., Huntington, C., Goldsack, L., Kyrou, E., & Millward, L. (2014). Eliciting rich dialogue through the use of activity-oriented interviews: Exploring self-identity in autistic young people. *Childhood*, *21*(2), 190-206. https://0-doi- org.orca.douglascollege.ca/

 Table 1. Articles addressing intersectionality of Indigeneity and autism and/or disability

Author(s)	Title	Research design	Findings
Bevan-Brown (2013)	Including people with disabilities: An Indigenous perspective	Ethnography	While there are varied opinions about the inclusion of people with disabilities, generally the core Māori values support inclusion, positing that integrating these values in to educational programming and disability services will results in culturally appropriate service provisions for the Māori Peoples and contribute to greater inclusion of all people with a disability.
Graham (2012)	Disproportionate over representation of Indigenous students in New South Wales government special schools	Literature review	Indigenous students in New South Wales, Australia are equally represented in special schools for students with Autism and intellectual disabilities while significantly overrepresented in special schools in an emotional behavioral disturbance category.
Kapp (2011)	Navajo and autism: The beauty of harmony	Ethnography	The Navajo Peoples traditional wellness philosophy called Hozho is suggested to better serve the needs of autistic members of the community

			compared to the Western medical model of disability and related interventions.
Lindblom (2014)	Under-detection of autism among First Nations children in British Columbia, Canada	Literature review	Reports autism is under-detected in First Nations in British Columbia, Canada and examines potential explanations including protective cultural, ethnic and genetic factors, absence of culturally sensitive diagnostic tools and colonial legacies.
Lindblom, A. (2017a)	Exploring autism and music interventions through a First Nations lens	Ethnography	Contemporary discourses and practices for autism within a Western deficit-based medical model paradigm are not well-matched with inclusive First Nation worldviews. There are many benefits for First Nations autistic children when included in traditional culture-based environments. Culturally sensitive, personalized music interventions show promise as a therapeutic modality.
Lindblom, A. (2017b)	"It gives them a place to be proud" – Music and social inclusion. Two	Ethnography	First Nation's Peoples traditional ways of living such as Involvement of Elders and access to traditional music helps counter impacts of colonization and suggests promising

	diverse cases of young First Nations people diagnosed with autism in British Columbia, Canada		benefits to First Nations learners with autism. The use of culturally sensitive and contextualized music interventions are recommended to help autistic Indigenous children overcome intersections of challenges and promote their social inclusion.
Sullivan (2013)	School-based autism identification: Prevalence, racial disparities, and systemic correlates.	Survey research design	Significant differences in prevalence in racial groups; Hispanic and American/Indian/Alaska Native pupils less likely to be identified with autism relative to white pupils whereas white pupils were less likely to be identified with autism than Asian/Pacific Islander pupils.
Travers, Tincani & Krezmien, (2013)	A multiyear national profile of racial disparity in autism identification	Survey research design	The risk for autism increased across all racial groups however white pupils were two times as likely to be identified with autism as Hispanic pupils and American/Indian/Alaska Native pupils while the odd ratios for Black and Asian/Pacific Islander pupils declined and Hispanic pupils and American/Indian/Alaska Native pupils were significantly underrepresentation annually in statemandated special education reports.

Wilson & Watson (2011)	Autism spectrum disorder in	Literature review	There is a scarcity of Australian-
	Australian Indigenous Families:		produced literature tracking the
	Issues of diagnosis, support and		number of Autistic Aboriginal
	funding		children in Australia, how autism is
			experienced within Indigenous
			families and how Indigenous children
			with autism living in rural and urban
			places are being supported.