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Literature Review

Maori Views of Autism (Takiwatanga): Kaupapa Maori Perspectives, Health Equity, and Emerging Roles for Artificial Intelligence

Karaitiana Taiuru*

Taiuru C Associates Ltd, New Zealand

***Corresponding author**

Karaitiana Taiuru, Taiuru C Associates Ltd, New Zealand.

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Abstract

Autism Spectrum Disorder (ASD) is commonly framed in Western biomedicine as a neurodevelopmental condition characterised by differences in social communication and patterns of restricted or repetitive behaviours. In Aotearoa New Zealand, Maori (the Indigenous peoples) use the term Takiwatanga, a term meaning “my/his/her own time and space” used to describe autism in ways that foreground personhood, relationality, and dignity. This paper synthesises published scholarship, policy sources, and Indigenous health frameworks to outline Maori perspectives on autism, situating these within Te Tiriti o Waitangi (Treaty of Waitangi) obligations, kaupapa Maori (Maori-led) research principles, and the equity challenges created by a health system shaped by colonial histories and ongoing racism.

Recent population-level research indicates that autistic Maori are identified at lower rates than non-Maori in administrative datasets, raising concerns about diagnostic access, pathways to support, and the cultural safety of services. This article discuss community and provider-led responses grounded in family-centred practice, strengths- based approaches to neurodiversity, and Maori health provider models. Also examined are emerging uses of Artificial Intelligence (AI) in autism screening and assistive technologies, highlighting both potential benefits (earlier identification and personalised supports) and risks (algorithmic bias, data governance, and cultural harm) for Maori communities. It concludes with recommendations for Indigenous led, culturally safe, and rights-based autism systems that braid Maori and Western knowledge streams while protecting Maori self-determination.

GLOSSARY

Term: Explanation

Aotearoa: New Zealand (literally, ‘land of the long white cloud’).

Hapū: Sub-tribe or extended kin group; political and social unit within an iwi.

Hinengaro: Mental and emotional wellbeing (mind).

Iwi: Tribe; a large kin group connected through whakapapa (genealogy) and place.

Kaupapa Māori: Māori-led, Māori-grounded approaches to research, practice, and governance.

Mana: Dignity, authority, prestige; an expression of personhood and collective standing.

Manaakitanga: Care, hospitality, and the ethic of looking after others.

Mātauranga Māori: Māori knowledge systems, including epistemologies, practices, and intergenerational learning.

Pae ora: Holistic wellbeing (‘healthy futures’), often described across individuals, whānau, and environments.

Te reo Māori: The Māori language.

Te Tiriti o Waitangi: Treaty of Waitangi (1840); foundational agreement shaping Māori– Crown obligations.

Takiwātanga: A te reo Māori term used for autism; derived from ‘tōku/tōna anō takiwā’ (‘my/his/her own time and space’).

Tikanga: Customary values and practices that guide correct ways of doing things. Tinana Physical wellbeing (body).

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Wairua: Spiritual wellbeing.

Whakapapa: Genealogy; intergenerational connections to people and place.

Whānau: Family collective; extended family and relational network.

Whānau ora: Wellbeing of the whānau; a whānau-centred approach to health and social services.

Whanaungatanga: Relationships, connectedness, and obligations within kinship and community.

Hauora: Health and wellbeing.

Kōhanga reo: Early childhood 'language nest' where te reo Māori immersion supports language revitalisation.

Kura: School (often used for Māori-medium education settings, depending on context).

Marae: Communal and cultural complex; a focal community place for gatherings and protocols.

INTRODUCTION

Autism Spectrum Disorder (ASD) is a global topic of clinical, educational, and policy attention. Yet the dominant understandings of autism and the evidence base for diagnosis and intervention have been produced primarily within Western epistemologies and service systems. For Indigenous Peoples, this creates recurring tensions: autism may be recognised as a meaningful identity and way of being, while diagnosis and access to supports often occur through institutions that have historically marginalised Indigenous knowledge, languages, and governance. In Aotearoa New Zealand, Māori perspectives on autism are increasingly articulated through the Māori language, traditional knowledge, Māori research and practices, and Māori-led disability and health providers. This paper provides an international readership with an overview of Māori worldviews relevant to autism, evidence on Māori autism identification patterns, and culturally grounded approaches for support. It also considers how AI is being applied to autism and why Indigenous governance and cultural safety are essential to ensure these tools benefit Māori rather than reproduce inequities.

WHO ARE MĀORI?

Māori are the Indigenous peoples of Aotearoa New Zealand, with diverse tribes, sub- tribes or extended kin groups, and family collectives connected through genealogy and place. Māori societies are not monolithic; identity and belonging are shaped by kinship, language, customary values and practices, and relationships to land and sea. Te Tiriti o Waitangi (Treaty of Waitangi, 1840) is the foundational constitutional relationship between Māori and the Crown and is routinely referenced in health policy and equity debates in Aotearoa New Zealand. As of 30 June 2025, the Māori ethnic population was estimated at approximately 932,300 people (about 17.5% of the total population), highlighting the importance of Māori-inclusive health and disability systems [1].

Māori framings of autism: takiwātanga and relational wellbeing

Although biomedical definitions of ASD remain influential in clinical practice, Māori framings often emphasise relational and holistic wellbeing rather than deficit-based categorisations. The term takiwātanga has become widely used in Aotearoa New Zealand to describe autism in Māori language. In Te Tau Tītoki, a national framework for supporting people on the autism spectrum, takiwātanga is described as derived from "tōku/tōna anō takiwā," meaning "my/his/her own time and space," and is intended to honour autistic people and affirm acceptance and dignity [2]. This linguistic framing resonates with Māori values that prioritise dignity and authority, relationships and connection, and care and hospitality.

From a Māori perspective, disability and neurodiversity are often understood within broader intergenerational and collective contexts. Family responsibilities, community roles, and identity formation are strongly shaped by genealogy and traditions. Holistic Māori health models, such as Te Whare Tapa Whā, emphasise multiple domains of wellbeing (including wairua—spiritual wellbeing; hinengaro—mental and emotional wellbeing; tinana—physical wellbeing; and whānau—family and social wellbeing). These perspectives can complement contemporary neurodiversity-affirming approaches by focusing on strengths, participation, and belonging while still recognising real support needs [3].

Māori autism statistics and diagnostic equity

Robust prevalence estimates of autism among Māori remain limited, in part because diagnostic pathways, screening tools, and service uptake are shaped by structural inequities. A national study using the Integrated Data Infrastructure (IDI) examined autism identification among people aged 0–24 years as of 30 June 2018. The authors found that autism identification rates were lower for Māori (70.9 per 10,000; n = 2,877) compared with non-Māori (117.7 per 10,000; n = 19,904), with Māori also identified later on average [4]. Lower identification in administrative data should not be assumed to reflect lower underlying prevalence; rather, it can indicate barriers to assessment, referral, diagnosis, and culturally safe engagement with services.

A scoping review of Māori and autism literature similarly notes gaps in evidence and highlights the importance of Māori-led research to clarify how autism is experienced and supported in Māori communities [5]. For policy and service planning, these findings support an equity-oriented interpretation: if Māori are under-identified or identified later, they may miss timely access to early supports, education accommodations, and whānau respite. This reinforces the need for diagnostic and support pathways that are accessible, culturally safe, and governed in partnership with Māori.

Health-system bias, racism, and cultural safety

Māori health inequities are widely documented and are linked to colonisation, institutional racism, and unequal power in decision-making. A systematic review of quantitative studies in Aotearoa New Zealand found consistent associations between experiences of racial discrimination and poorer health outcomes as well as reduced access to and quality of healthcare [6]. In parallel, scholarship on cultural safety argues that health equity requires more than individual level 'cultural competence'; it requires addressing power imbalances, institutional accountability, and care as defined by patients and communities [7].

Western diagnostic processes may privilege behavioural norms, communication styles, and service engagement patterns that do not match Māori realities, particularly for whānau facing poverty, discrimination, or mistrust created by prior harmful encounters with state systems. The Waitangi Tribunal's Hauora inquiry report on Stage One of the Health Services and Outcomes Kaupapa Inquiry (Wai 2575) emphasises Treaty-based obligations and the systemic nature of Māori health inequities, including issues of partnership, active protection, equity, and Māori options in service delivery [8]. Taken together, these sources support an interpretation that improving autism outcomes for Māori requires structural changes to how services are designed, funded, evaluated, and governed, not merely better 'awareness' of Māori culture.

Kaupapa Māori research and 'braided rivers' approaches

Kaupapa Māori research refers to Māori-led approaches grounded in Māori philosophies, aspirations, and governance. In health research, the Health Research Council of New Zealand's Guidelines for Researchers on Health Research involving Māori emphasise responsibilities to Māori participants and communities, and the importance of Māori cultural informed engagement and benefit [9]. Contemporary national ethical standards similarly state that all health and disability research in New Zealand is of interest to Māori and should consider risks, benefits, and Māori aspirations [10].

For interdisciplinary work such as combining clinical science, disability studies, and Indigenous knowledge 'braided rivers' approaches can be useful. The He Awa Whiria (Braided Rivers) model is described as enabling different knowledge streams to function separately or together, supporting respectful dialogue between Māori knowledge and Western science while preserving the integrity of each stream [11]. In autism contexts, this means Māori concepts of personhood, whānau wellbeing, and tikanga-based practice are not treated as 'add- ons' to biomedical care, but as legitimate knowledge that should shape problem definition, outcomes, and what counts as evidence.

Māori health providers and community-led solutions

Māori health and disability providers offer culturally grounded alternatives and complements to mainstream services. The national Māori Health Strategy, He Korowai Oranga, positions whānau ora (healthy families and collectives) as a central aim and promotes holistic wellbeing across individuals, families, and environments [12]. For autism, Māori providers and Māori-led community organisations can support families navigation, culturally safe assessments, and wrap-around supports that recognise the realities of Māori caregiving, language revitalisation, and community obligations.

Community solutions reported in Māori disability and health practice commonly include: (a) family centred planning that identifies strengths, sensory needs, and communication preferences; (b) community hubs and schools / language-nest early childhood centres supports that maintain cultural identity and belonging; (c) peer networks and self-advocacy opportunities for autistic Māori; and (d) workforce development that trains practitioners in cultural safety, Māori language pronunciation, and cultural protocols for engagement with families. Whānau Ora commissioning approaches have been evaluated as mechanisms for enabling more integrated and whānau-centred service responses [13].

Artificial intelligence and autism: opportunities and risks for Māori

AI is increasingly used to support autism related screening, assessment, and intervention. Machine learning models have been developed to predict elevated likelihood of autism using limited background and medical information, potentially supporting earlier identification and triage [14]. Digital behavioural phenotyping approaches using computer vision and machine learning to analyse behaviour captured via tablet-based tasks have shown promising diagnostic accuracy and have been proposed as scalable screening tools in real-world settings [15]. AI is also being integrated with assistive technologies (AT), including communication supports, wearable devices, and adaptive learning tools, with reviews highlighting a rapidly expanding innovation landscape [16].

For Māori, potential benefits of AI-enabled autism tools include faster pathways to assessment in areas with clinician shortages, more consistent access to supports, and opportunities for personalised learning in Māori language or culturally relevant contexts. However, there are also significant risks. If Māori are underrepresented in training datasets or if tools encode culturally specific behavioural norms, AI systems may perform poorly for Māori children and adults, reinforcing inequities or generating harmful misclassifications. Digital screening tools may also increase data capture (video, audio, interaction logs), raising questions about consent, secondary uses, and governance, especially where data are stored or processed outside Māori controlled systems. These issues reinforce the importance of Indigenous governance: Māori communities and providers should be involved in deciding whether and how AI tools are used, what outcomes matter, how fairness is evaluated, and how data are protected.

A Māori cultural approach to AI in autism would therefore prioritise: (a) co-design with autistic Māori and families; (b) cultural safety and trauma-informed practice in data collection; (c) transparent evaluation of model performance for Māori and other equity groups; (d) Māori-controlled or Māori-governed data arrangements where feasible; and (e) ensuring that AI complements rather than replaces relational care, family engagement, and clinician accountability.

DISCUSSION AND RECOMMENDATIONS

Māori views of autism are not reducible to a single 'cultural perspective'; they are diverse and evolving, and they exist alongside global neurodiversity movements and local disability rights agendas. Nevertheless, several themes recur across Māori health frameworks and disability practice: dignity, relational wellbeing, cultural based engagement, and the expectation that state systems honour Treaty obligations through partnership and Māori options. The evidence of lower autism identification for Māori in national administrative data should be treated as an equity signal and a call to redesign pathways to support [4].

Based on the literature and policy sources reviewed, we propose the following recommendations for services and researchers working with Māori and autism:

1. Embed cultural safety as a measurable organisational responsibility, not an optional training module [7].

2. Resource Māori providers and Māori models to deliver family-centred autism supports aligned with He Korowai Oranga [12].

3. Improve diagnostic access through outreach, culturally safe assessment pathways, and equitable resourcing to counter under-identification [4].

4. Use braided rivers approaches to integrate traditional Māori knolwedge and Western clinical evidence, ensuring Māori knowledge is not subordinated [11].

5. When deploying AI, require equity-by-design: co-design with Māori, subgroup performance reporting, and clear Indigenous governance of data and deployment decisions [14-17].

CONCLUSION

International autism scholarship and practice increasingly acknowledge that diagnosis and support are shaped by culture, power, and access. In Aotearoa New Zealand, Māori perspectives, including the use of Takiwātanga offer a relational and dignity-centred framing of autism that aligns with broader Māori health concepts such as whānau ora and pae ora. Current evidence indicates Māori are identified with autism at lower rates in national administrative data, consistent with wider patterns of inequity in health systems. Addressing this requires Māori led approaches, culturally safe institutions, and Treaty-consistent governance. AI may contribute to earlier identification and new supports, but only if designed and deployed with Indigenous participation, transparency, and safeguards that prevent new forms of bias and data harm. A braided rivers approach honouring both Māori and Western knowledge streams provides a practical pathway for designing autism systems that are equitable, culturally safe, and effective.

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