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Developing a framework for enhancing data literacy in the Indigenous Australian community

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Enhancing data literacy is important for Aboriginal and Torres Strait Islander Peoples because it is essential for effective engagement and communication with health services, self-determination, personal health management and Indigenous Data Sovereignty. Data literacy incorporates accessing, using and sharing data in order to make decisions within personal and professional spheres and it is a critical skill for participation in contemporary society. However, while there has been a movement toward ensuring good Indigenous Data Governance processes, for example the CARE Principles developed by the (Global Indigenous Data Alliance, 2018), and the National Indigenous Australians Agency's Framework for Governance of Indigenous Data (2024) and improvements around data infrastructure and research capability within Australia, as led by the (Australian Research Data Commons, 2021), there has not been any specific focus on improving data literacy within Indigenous Australian communities. This work also aligns with the National Agreement on Closing the Gap Priority Reform 4, "Shared Access to Data and information at a regional level" which highlights (a) the need for communities to have access to data to make decisions about their future; (b) data and information sharing; (c); transparency and capacity building so communities have access and ability to collect and use data (Department of Prime Minister & Cabinet, 2020) to assist with closing the gap between Indigenous and non-Indigenous Australians.

There is currently no mechanism for determining data literacy in Indigenous communities or any framework to enhance Aboriginal and Torres Strait Islander Peoples' data literacy. The overall aim of this research is to support the enhancement of data literacy within the Aboriginal and Torres Strait Islander community by developing and evaluating a community informed and culturally appropriate data literacy enhancement framework that can be used by organisations.

This research was designed in collaboration with the Aboriginal and Torres Strait Islander Community Health Service Brisbane (ATSICHS). This co-design approach is important to ensure that research is Indigenous led and meets the needs of the Aboriginal and Torres Strait Islander community. Furthermore, this approach aligns with developing data literacy initiatives as suggested by Komosar, et al. (2024) data literacy practices need to be conceptualised through the group it is about. This presentation will highlight key considerations around Indigenous research and data collection as well as explore data literacy from an Indigenous perspective. It will also explain how the framework has been developed and how it will be implemented.

This research adopted an Indigenous research methodology and incorporated a case study approach using mixed methods. Within this study qualitative data has been collected through interviews or focus groups and yarning (Bessarab & Ng'andu, 2010) with community members and ATSICHS staff, and quantitative data collected through surveys. Indigenous Standpoint Theory (Moreton-Robinson, 2013) and Cultural Interface Theory (Nakata, 2007) were incorporated as theoretical and conceptual frameworks to assist interpret findings and theorise knowledge from an Indigenous perspective. This research upholds the Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS) Code of Ethics for Aboriginal and Torres Strait Islander Research (2020).

Data collected through interviews underwent thematic analysis using the six steps outlined by Braun and Clark (2006). Responses were also compared quantitatively, for example, where participants suggested their confidence level when using data. All data were considered through an Indigenous lens to ensure that Indigenous Australian voices were privileged, and Indigenous perspectives are considered. Following the analysis a number of factors were identified as being important for inclusion in the data literacy framework. This included community perceptions, understanding of and engagement with data, as well as how ATSICHS staff were using data in their interactions with clients and how they could improve data literacy. The incorporation of the identified factors into the framework will be discussed in this presentation.

It is expected that this framework will assist ATSICHS staff engage with clients about their data, and data held and collected at ATSICHS. This research has potential to improve data literacy Indigenous communities by supporting staff to empower community members regarding data. Establishing a data literacy framework that encompasses best practices in data access, collection and utilisation, can enhance self-determination and data management within Indigenous Australian communities, thereby fostering improved socio-economic outcomes. This research could be used to support other community organisations and Indigenous communities to enhance data literacy.

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