Reflections on Mutual Learning between Aboriginal and Torres Strait Islander Communities and a White System Dynamicist

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Acknowledgment of Country

I wish to begin by acknowledging the Wadawurrung and Wurundjeri peoples of the Kulin Nation, the Traditional Custodians of the land on which this presentation was prepared. I pay my respects to their Elders past and present.

Background: Indigenous Ways of Knowing, Being, and Doing & systems thinking

- Increasing number of Indigenous-led explorations of possible interconnections between systems thinking and Indigenous Ways of Knowing, Being, and Doing (e.g. Ray et al., 2022; Heke et al., 2019; Yunkaporta, 2019)

- Acknowledging the diversity of Indigenous cultures globally and the many approaches to systems thinking, this presentation focuses more narrowly on Aboriginal and Torres Strait Islander Peoples, particularly those in Victoria, and on system dynamics

Context for applying group model building to food systems in partnership with Aboriginal and Torres Strait Islander peoples

- Colonisation is the key root cause of food system related problems faced by Aboriginal and Torres Strait Islander people in Australia (Dudgeon et al., 2010, pp. 25–42; Sherwood, 2013; Carson et al., 2007)

- In spite of recognition of the need for Aboriginal and Torres Strait Islander peoples to lead and have power over actions to improve Aboriginal and Torres Strait Islander health and wellbeing (Parter et al., 2019), Australian government policies related to Aboriginal and Torres Strait Islander peoples still too often is top-down, framed around deficit, and imposed upon communities (Askew et al., 2020; Coalition of Aboriginal and Torres Strait Islander Peak Organisations, 2019; The Centre of Research Excellence in Aboriginal chronic disease knowledge Translation and Exchange, 2020; Sherriff et al., 2019)

Group model building & Aboriginal Health

- Interviews conducted with Aboriginal health and university staff with prior experience in a GMB project (Browne et al., 2021)
  - Analysis informed by a theoretical framework for Indigenous and Indigenist research – Ways of Knowing, Ways of Being, Ways of Doing (Martin et al., 2003)
  - **Ways of Knowing** (Sharing stories; Connecting the whole picture; Visual)
  - **Ways of Doing** (Flexibility; Appropriate language; Aboriginal leadership)
  - **Ways of Being** (Collective decisions; Self-determination; Community collaboration)

- This presentation aims to consider the broader context of this analysis, the community based system dynamics process

Group Model Building & Community Based System Dynamics

- System dynamics, group model building, and community based system dynamics (Hovmand, 2014) are three interrelated but distinct terms

- How Aboriginal and Torres Strait Islander Ways of Knowing, Being, and Doing do or do not relate with each of those are three interrelated, but different questions

- They are also contextual questions: related to the skills / approach of the system dynamicst(s) and the particular Aboriginal and Torres Strait Islander communities partnering on the approach

Community Based System Dynamics

- "Community based system dynamics" is used increasingly as a term in public health, with varying measures of how to understand success in CBSD (Felmingham, 2023)

- Defined by multiple projects over time to build SD capacity in order to provide new tools and language to organise for systems change led by communities (Hovmand, 2014; Király, 2019)

- This presentation aims to describe how community based system dynamics has been applied (and continues to be applied) in a context of Aboriginal and Torres Strait Islander health in Australia

Community Based System Dynamics

- Characteristics of CBSD (Hovmand, 2014) relevant to the ongoing efforts in Australia:
  - Long-term, multiple projects
  - Participation as dynamic; led by community
  - Membership of modellers in community as provisional – privileges and obligations
  - Development of a shared language
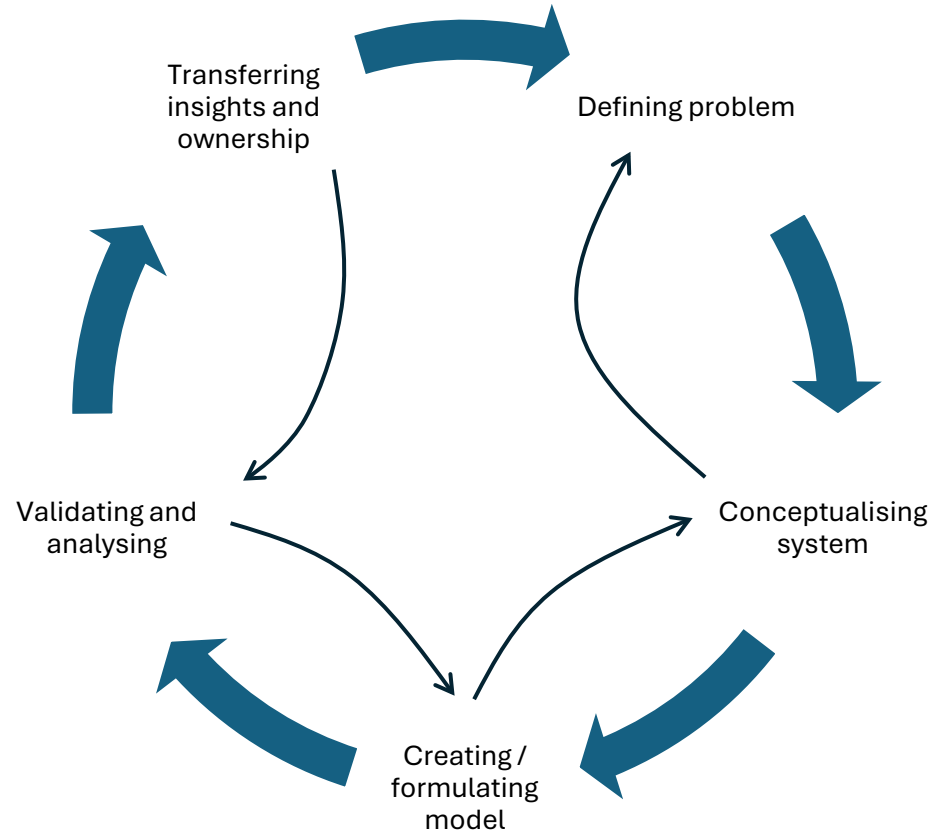 - Social change

System dynamics applications over time

- Food security workshops as part of the Study of Environment of Aboriginal Resilience and Child Health (SEARCH) (Muthayya et al., 2020)
  - The "audition" – demonstrating GMB to community members (crucially, including Elders) – open to possibility that people would not participate (Hovmand, 2013, pgs. 31 – 36)
- Let's Have a Yarn about Chronic Disease on Gunditjmara Country (Beks et al., 2022)
  - Mutual trust building – working together on capacity building in both directions: Aboriginal facilitators of GMB workshops and White researchers as being respectful collaborators / partners to Aboriginal communities
- Interviews – pausing and reflecting on GMB with Aboriginal and Torres Strait Islander peoples (Browne et al., 2021)
  - Crucial time to carefully reflect and plan next steps based on learning from previous projects

System dynamics applications over time (cont'd)

- FoodPATH – "to map Aboriginal stakeholders' perspectives of the key drivers of food choice in order to develop and prioritise actions" (Browne et al., 2023)
  - Larger scale – more people trained, more communities engaged (from single sets of workshops to five sets of geographically dispersed workshops)
  - Commitment to modelling a problem of interest to the community; commitment to following through with action
- Urban COVID-19 Systems Map (Fredericks et al., 2023)
  - Example of use of GMB spreading in Australia beyond work done in partnership with Deakin University
- New work on commercial determinants of Indigenous health
  - First opportunity for simulation modelling, built on previous work
- New work led by Aboriginal researchers exploring breastfeeding amongst Aboriginal and Torres Strait Islander people

Repeated applications of the modelling cycle

Transferring insights and ownership

Defining problem

Validating and analysing

Conceptualising system

Creating / formulating model

Adapted from Hovmand, 2013, p. 13

- Different community members / facilitators in each workshop, but continuity in the repeated work across Victoria

- Increasing capacity in SD over time

- Increased capacity leading to more insights / model / time

- Crucially, **more than just SD capacity was being built**

Capacity building for white researchers

Indigenous Ways of Knowing, Being, and Doing capacity building

- Time spent on Aboriginal lands (Wurundjeri, Wadawurrung, Gunditjmara, more)

- Forming initial relationships

- Building relationships over time

- Prioritising process, listening, humility

- Recognising learning as an ongoing process and commitment, not something transactional (ie, not just doing this to "get a model")

CBSD capacity building process

- White researcher led workshop

- Aboriginal and Torres Strait Islander led with white researcher in room giving feedback

- Increased levels of leadership in FoodPATH workshops

- Extending leadership of systems research through new research projects and recognition of systems capacity in multiple / broad projects, such as PhD's, other research grants

Process: Training

- Diverse range of trainings / formats offered (online / in person)
- Interviews / discussion as a core part of the training: interrogating if this approach is useful at all and how language / tools / processes need to be adapted
- "Two-way learning" (Browne et al., 2013; Haynes et al., 2019): inherent in the process was that it was both about people learning about system dynamics and about Indigenous Ways of Knowing, Being, and Doing
- Knowledge constructed together via relationships as opposed to static knowledge exchanged or solidified as "facts"

FoodPATH: Impact

- Report and project showcased through a variety of mediums by the Victorian Aboriginal Community Controlled Health Organisation: https://www.vaccho.org.au/foodpath/

- Policy impact
  - Findings fed into feasibility study and consultation into limiting junk food marketing to children
  - A member of the team gave evidence to Senate inquiry into supermarket prices

Next steps / considerations

- Continuing to deepen relationships and learning between researchers and communities

- Simulation modelling – building up capacity to apply it (**both** for Aboriginal and Torres Strait Islander peoples to understand it **and** for White researchers to understand if / how it can be used meaningfully in partnership in Indigenous Health)

- Understanding simulation modelling as an alternative analysis method to synthesise / analyse diverse data sources

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