

FROM DIGITAL LITERACIES TO DIGITAL + DATA CAPABILITIES FOR SEXUAL HEALTH

Kath Albury and Samantha Mannix
Swinburne University of Technology



BACKGROUND

The Australian 2018-2022 Sexually Transmitted Infection (STI) Strategy notes that “understanding the social drivers that influence the rates of STIs in Australia, such as social media and other technology platforms” is a critical gap in the current response to STIs (Commonwealth of Australia, 2018).

Additionally, the Australian Digital Health Agency has released a range of strategic plans and guidelines since 2020, including the *National Digital Health Capability Action Plan (CAP)*, the *National Digital Health Workforce and Education Roadmap*. An *Australian Digital Health Capability Framework* is currently in development.

These activities speak to the increased recognition by governments and the health care sector of the dynamic and emerging role of digital technologies and practices within health care settings. However, we observed that while many sexual health clinicians, educators and policy-makers are currently engaging with the concepts of ‘digital literacy’ and ‘digital health literacy’ (in both research and practice), there is no consensus model or central definition of these terms.

QUESTIONS

HOW IS DIGITAL LITERACY CURRENTLY DEFINED AND ASSESSED WITHIN THE BROAD DOMAIN OF SEXUAL HEALTH?

HOW IS DATA LITERACY CURRENTLY DEFINED AND ASSESSED WITHIN THE BROAD DOMAIN OF SEXUAL HEALTH?

METHODS

digital literacy; digital health literacy; eHealth literacy; data literacy; sexuality; sexualities; sexual health; intimate relationships; sexual relationships; sexually transmitted; HIV

Web of Science; Medline; PubMed; Cinahl; Embase; PsychInfo, Communications and Mass Media

Narrative Literature Review

30 results (duplicates + unrelated results removed)

No results using this combination of terms and “data literacy”

Qualitative Expert Interviews

Researchers Field

Public Health	9
Digital Health	1
Sexual Health	6
Digital, Data Studies	4
Gender, Sexuality Studies	4
Youth Studies	1

Sites of Experience

Local Health	9
Sexual Health	1
Women’s Health	6

FINDINGS

Current understandings of digital and data literacy in sexual health research and practice:

- Are focused on individual skills and knowledge (and may over emphasise deficits)
- Exclusively address consumers rather than practitioners/organisations
- Demonstrate limited engagement with ‘data literacy’

Current challenges for sexual health policy, research and practice:

- Siloed expertise and understandings (organisational and disciplinary)
- Difficulty accessing, understanding, and utilising different types of data
- Uneven understandings of how digital technology uses and data practices reflect and impact on diverse practices of sex and intimacy, and diverse experiences of sexuality and gender.
- Underdeveloped digital and data governance structures in sexual health contexts
- No established consensus on what counts as ‘digital sexual health’ platforms and technologies

DISCUSSION

A focus on capabilities (as opposed to literacies) allows us to reframe conversations about the role of digital technologies in health. Where ‘literacies’ have historically been associated with attempts to measure and remediate **individual deficits**, ‘capabilities’ offers an opportunity to consider **collective and systemic approaches** to digital and data practices.

Following McCosker and colleagues (2020 np) “we position [digital and] data capability in organisational contexts, as a more holistic (rather than individual) set of infrastructures, practices, competencies and goals”. We offer a model that builds on McCosker et al’s Data Capabilities Framework for the Not-for-Profit sector (2022) which outlines **organisational capabilities as a wholistic approach to Access and Infrastructure + Skills + Governance**.

We additionally adopt a ‘**capabilities approach**’, reflecting the ways capabilities have been understood as enablers of social justice within the fields of international development and public health (Alexander 2008; Nussbaum 2003, 2011; Sen 2004).

DIGITAL CAPABILITIES

DEFINITION	SUB-CAPABILITIES	EXAMPLE CORE QUESTIONS
Digital platforms and technologies used and the technological means to manage and make use of them.	<ul style="list-style-type: none"> • Vernacular platforms & technologies • Enterprise platforms & technologies • Systems & tools (internal and external) 	<ul style="list-style-type: none"> • What counts as a digital sexual health platform or technology? • How well do digital technologies & platforms support organisational purpose?
The ability to generate, read, appraise, analyse & use & present digital content responsibly to aid operations, clinical practice, campaigns & resources, evaluation and decision-making.	<ul style="list-style-type: none"> • Technological skills & general platform knowledge • Search engine optimisation & algorithmic literacies • Platform analytics • Platform vernacular & vocabularies • Content creation & distribution 	<ul style="list-style-type: none"> • How is digital expertise & knowledge fostered & to what extent is it shared across the organisation? • How are roles & responsibility for maintaining organisational digital identity & communication allocated ?
Established processes of stewardship, leadership and accountability in the ethical creation and conduct of digital initiatives.	<ul style="list-style-type: none"> • Digital identity • Content moderation • Data stewardship, management & moderation • Ethics & inclusivity • Legality • Risk Management 	<ul style="list-style-type: none"> • Is there an organisation-wide policy to support digital identity, communication and/or technologies? • Who takes responsibility for managing organisational digital identity, privacy and safety?

ACCESS + INFRASTRUCTURE

SKILLS

GOVERNANCE

DATA CAPABILITIES

DEFINITION	SUB-CAPABILITIES	EXAMPLE CORE QUESTIONS
The degree to which useful data is generated or accessed, and the technical means to manage and make use of it.	<ul style="list-style-type: none"> • Collection methodology • Availability for use • Classifications & standards • Systems & tools • Interoperability of both internal & external platforms and systems 	<ul style="list-style-type: none"> • What counts as sexual health data, & how is it generated and accessed? • How well do different platforms work together?
The ability to generate, read, appraise, analyse and use and present data responsibly to aid operations, evaluation and decision-making	<ul style="list-style-type: none"> • Data wrangling (cleaning, editing, linking) • Data & domain expertise • Analysis (problem posing & solving) • Communicating with data 	<ul style="list-style-type: none"> • How do organisations & individuals understand & articulate their own data generation practices? • How are roles & responsibility for the use of data allocated within the organisation?
Established processes of stewardship, leadership and accountability in the ethical creation and use of data for decision-making.	<ul style="list-style-type: none"> • Use, re-use & sharing • Stewardship & management • Ethics & inclusivity • Risk Management • Data breach 	<ul style="list-style-type: none"> • Who is accountable for datasets, & who has the authority to control access & use them? • How does lived experience inform decision-making around the collection, use & storage of data?



Contact:
kalbury@swin.edu.au
smannix@swin.edu.au
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