How Do You Connect? Investigating Children's digitally interactions with significant others

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Project Components
1. Literature review
2. School leader survey
3. ***How Do You Connect?**
4. Case studies

HDYC Research questions

- What **digital apps** do children use when interacting with family, friends, educators and others?

- For what **purposes** do they engage in digitally mediated interactions?

- How do they **experience** their digitally mediated interactions?

How Do You Connect Cohort

School	Children	Girls	Boys
Hakea Primary	19	10	9
Saltbush Primary	13	8	5
Tree Fern College	28	16	12

HAKEA PRIMARY
A state school, located in a low SES area, serving a culturally and linguistically diverse community.

SALTBUSH PRIMARY
A state school located in a regional town, serving a working and middle class community.

TREE FERN COLLEGE
A private faith-based school located in a suburban area, with a middle class community.
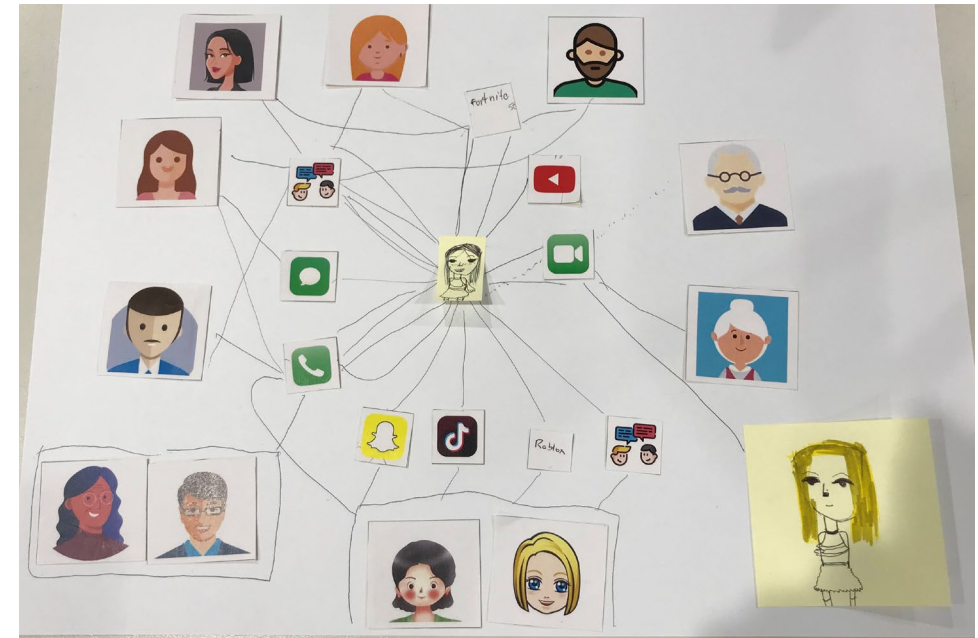
Research Design

The How Do You Connect Kit

- People cards
- App cards
- Emoji cards
- Sticky notes & markers

Data collection

Individual children were engaged in creating network diagrams whilst engaged in conversation with a researcher.

The activity was filmed (no faces visible), and the audio transcribed.

Quantitative analysis

Descriptive statistics derived for: size of networks, membership of networks, number of apps, type of apps, and purposes for app usage.

Qualitative analysis

Thematic analysis of transcripts explored the nature of children's digitally mediated interactions.

Networks & Apps

Number of contacts in children's networks

Site	Average contacts
Hakea Primary	14.8
Saltbush Primary	9.6
Tree Fern College	9.8

Number of apps used by children

Site	Average apps
Hakea Primary	10.4
Saltbush Primary	6.3
Tree Fern College	7.6

Children at culturally diverse state school Hakea Primary had on average **more extensive networks** and also used on average **more digital apps**.

Types of Apps

	TikTok	Snapchat	Discord	Email
Hakea (n = 19)	13	11	5	6
Saltbush (n = 13)	6	9	4	0
Tree Fern (n = 28)	5	6	2	21

Children at Tree Fern College relied on the apps integrated into the school's laptop program and were the highest users of email. They were least likely to use social media and gaming apps.
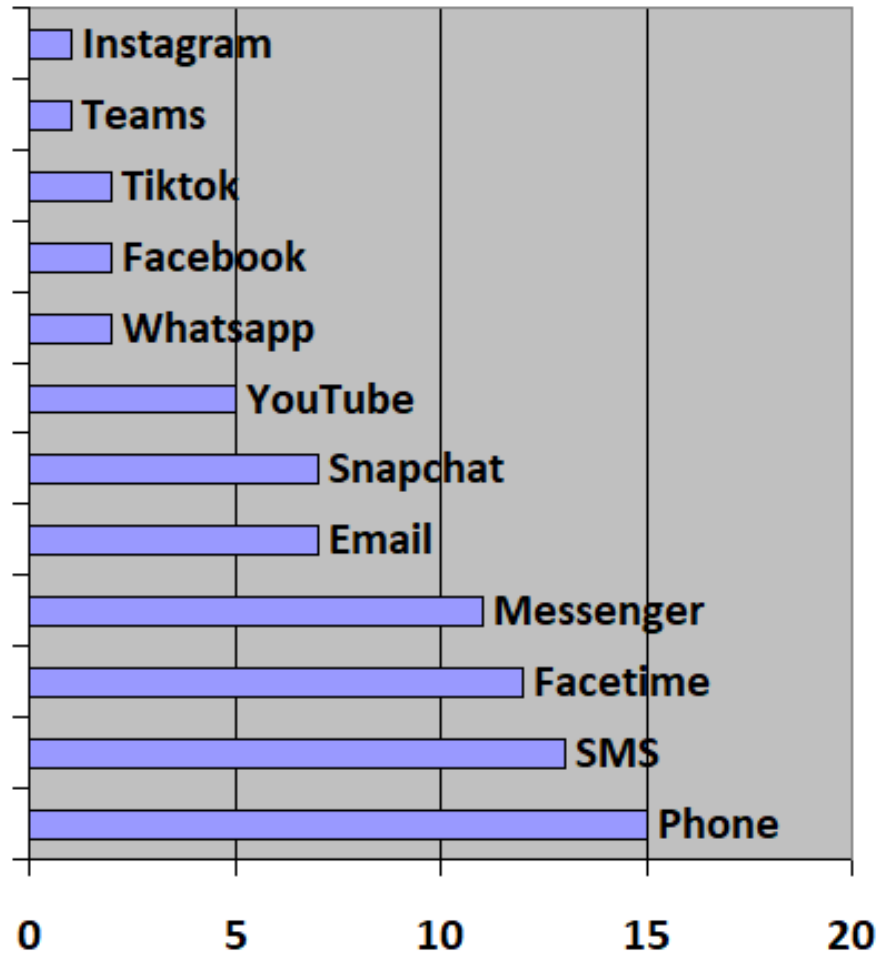
Hakea children were the keenest users of TikTok. Several children were active content producers.

Saltbush children were proportionally greater users of instant messaging app Snapchat. None of them used email.

Digital interactions with parents

Bar chart — Digital interactions with parents (horizontal bars, scale 0 to 20):

- Instagram: ~1
- Teams: ~1
- Tiktok: ~2
- Facebook: ~2
- Whatsapp: ~2
- YouTube: ~5
- Snapchat: ~7
- Email: ~7
- Messenger: ~11
- Facetime: ~12
- SMS: ~13
- Phone: ~15

Quick verbal interactions by phone are a preferred way for children and parents to interact when not co-present.

Gender and interactions with parents

Interactions with mothers were reported by significantly more **girls** (70%) than boys (56%).

Digital interactions, & gender

Gender and children's networks

Network size	Boys	Girls
> 14	7	3
< 8	1	5

Overall, the average number of contacts did not distinguish between girls and boys. However, **gender differences** were found at the extremes i.e., in those with the **largest and smallest networks.**

Gender and app usage

App/Gender	Girls	Boys
Snapchat	21	7
Discord	1	10

Mediated interactions with family: Purposes

Practical assistance

Like, if I'm sick and I need to take my medication, or when they go to work and they leave their stuff, and when I'm **calling them because I need something.** (Azizi, Hakea PS, phone)

I just **ask um like, 'Where are you?'** to my dad because yeah normally he picks me up some places. (Declan, Treefern College, WhatsApp)

Arranging activities

Sometimes like with Messenger and Facetime um like, my mum and my dad, or some other people in my extended family, um they like um **discuss and like have a plan**, and like they're gonna catch up. (William, Treefern College)

Bonding

For example, when I'm at one of my friends' houses and **just want to say hi**, **when I want to actually see her face**. (Daisy, Saltbush PS, Facetime)

… it lets me have conversations with people overseas and that **aren't really there, but it feels like they really are**. (Declan, Tree Fern College, FaceTime)

Co-viewing

My mum's got videos of me on Facebook. … She does like **show me some funny videos** that I'm allowed to see. (Annie, Saltbush PS)

I call them on Facetime on their laptop and then they watch.. (Bahiya, Hakea, YouTube)
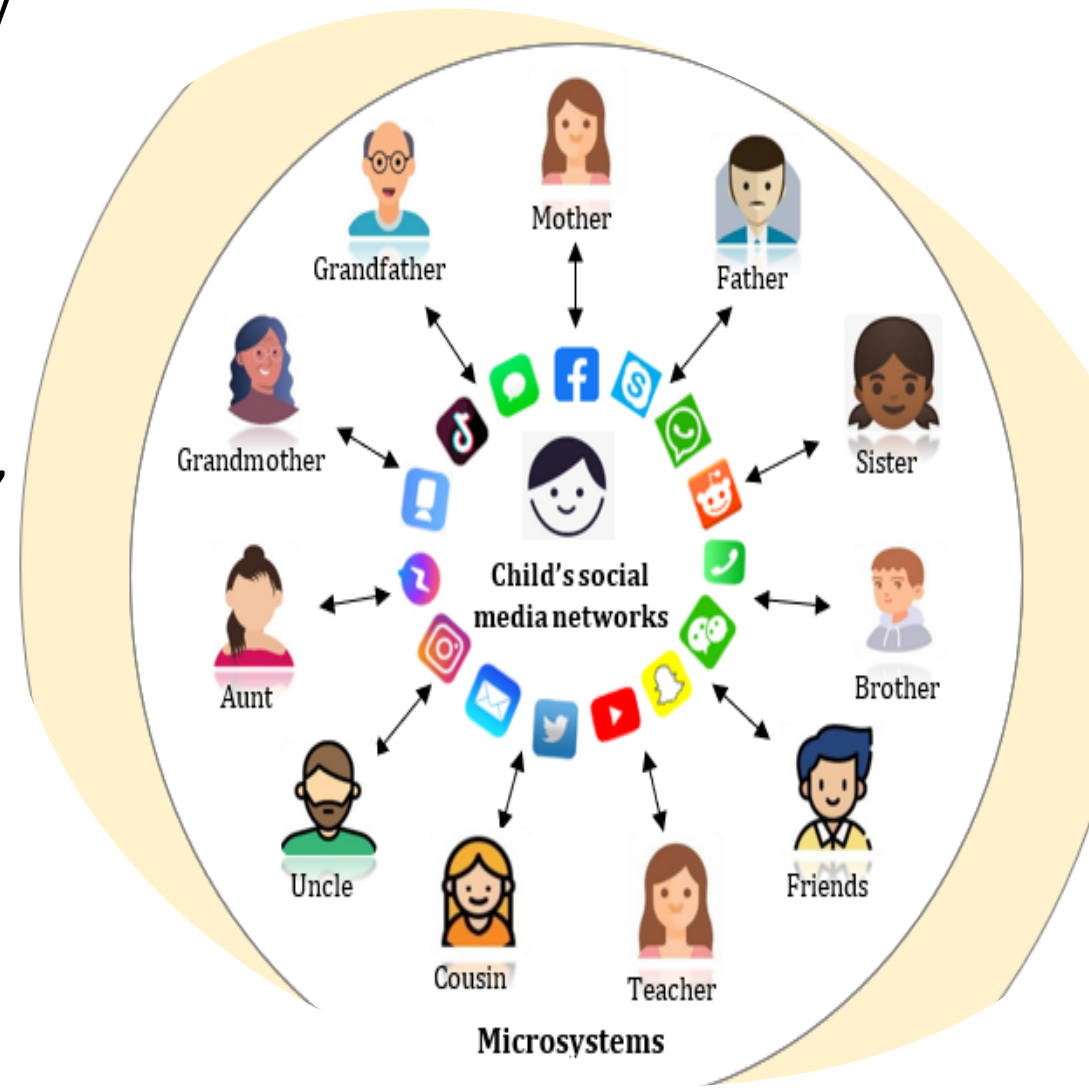
Use of emojis

13 emoji cards (e.g., thumbs up, smiley face).

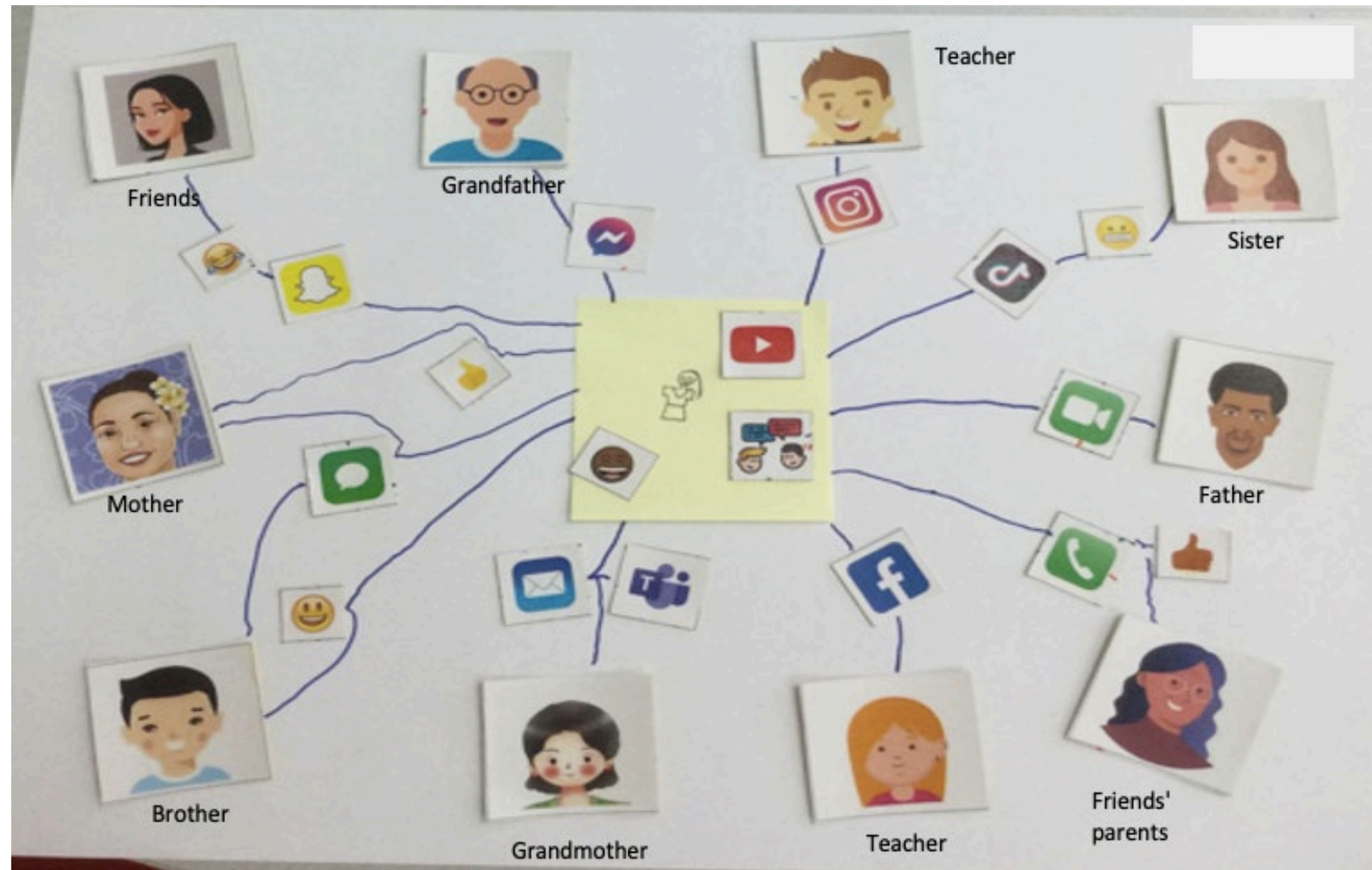The researcher invited each child to select emoji cards.

They were used to describe network connections and links between people, apps & activities.

At Tree Fern College, children used an average number of 2 emojis (Mean = 2.57; SD = 1.57, range = 0 to 5)

The most popular emojis were thumbs up, smiley face,& laughing face.

Example

As children created their network diagrams, they talked about which emojis they used and why they used them in their social media networks to connect with others

Gender & emojis (Tree Fern College)

Emoticons	Frequencies (%)	
	Boys (n = 17)	Girls (n = 11)
Thumbs up	8 (88.9)	14 (93.3)
Smiley face	7 (77.8)	13 (86.7)
Laughing face	5 (55.6)	11 (73.3)
Surprise	1 (11.1)	4 (26.7)
Love heart	0 (0.0)	3 (20.0)
Thumbs down	0 (0.0)	2 (13.3)
Grimace face	2 (22.2)	1 (6.7)
Smiley face with sunglasses	0 (0.0)	1 (6.7)
Total	23	49
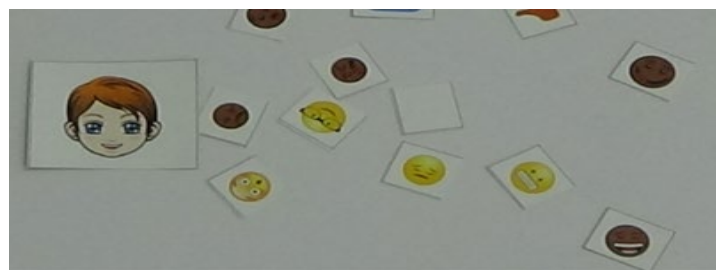
Emojis in communication: Purposes

Express feelings
They're for fun and **telling people how you feel.** (Conrad, Tree Fern)

if you're messaging someone, and you can't actually see them, you might use a smiley face or like a laughing face to **show how you feel.**...If I talk to my friends, I usually use the smiley face like a lot (Nikki, Tree Fern) 😊

Give praise
I use the thumbs up to tell my friends if it's like they like did **good job**. (Jasmine, Tree Fern) 👍

Express opinions
if you like agree on someone, your smiley face, **if you think something's disgusting**, you'll do with a spewing face. (Matthew, Tree Fern) 🤮

Instead of words
Sometimes my mom tells me to message my grandma. And usually, I just do emojis **because I don't know what to say.**

They can replace text ... so if you're laughing you can put this one or if you're like um sad or something with that one, **instead of writing 'sad'.** (Thomas, Tree Fern) ☹️

Closing thoughts

- Children are intentional and purposive in their use of digital tools for communication
- Mediated interaction mainly involves family and friends
- A prior relationship and knowledge of the person is important in children's interactions, online and IRL
- Mediated interactions happen in social context, time, and place
- Differences of school context, community context, and gender seem to impact on children's practice of DMI.

Next steps

- In-depth case studies will delve more deeply into children's ecologies, including child, parent, educator and school perspectives

- Publications are in development. Check website for updates https://sahnd.unisa.edu.au/

- We welcome conversations and insights about digital mediation across school, home and community.

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