

- ▶ **Is occupation the missing link to advancing the universal design of public built environments?**

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Acknowledgment of Country



Presenting on behalf of team



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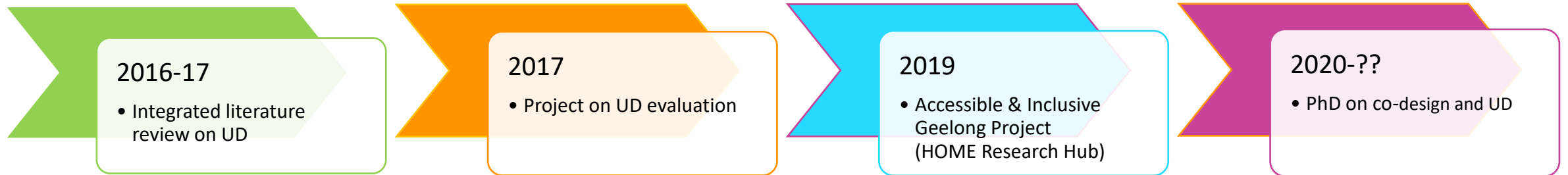
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(Architecture,
Deakin University)

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(Research Assistant,
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Context and overview of presentation



Integrated literature review on universal design

2016-2017



▶ Integrated literature review on universal design

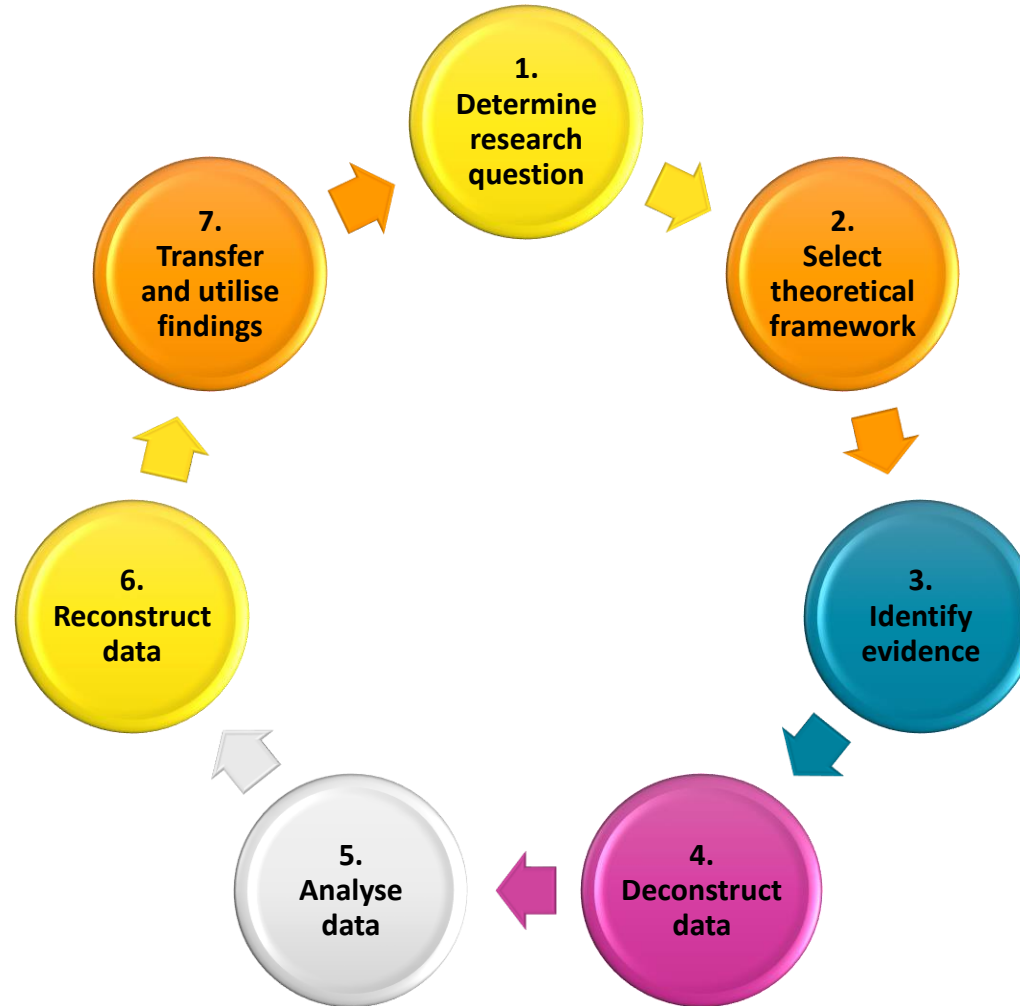
Study aim:

To synthesise current published literature on universal design and built environments and to explore the applicability of this evidence base to practice.

Study method:

The ITEA Process

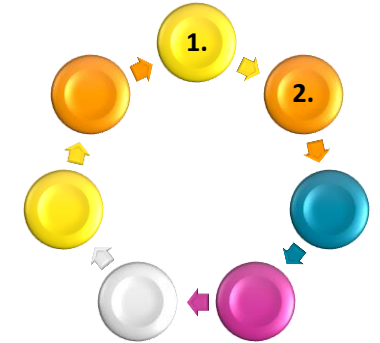
▶ The ITEA (Integrating Theory Evidence and Action) Process¹





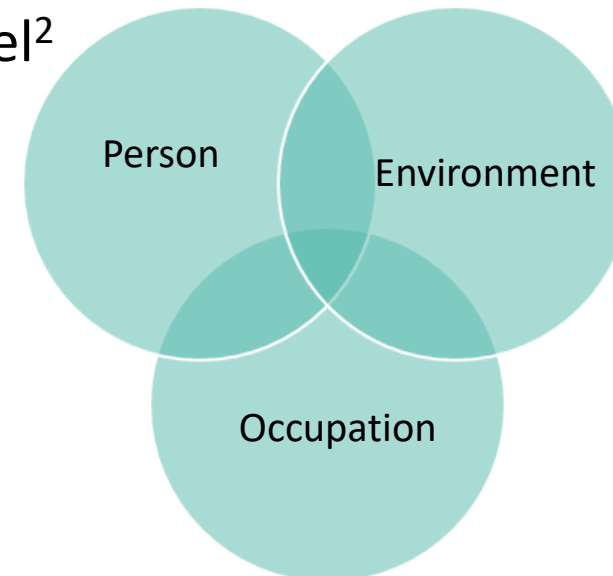
1. Determine research question

How is social participation represented in recent discourse around universal design in the built environment?



2. Select theoretical framework

The Person-Environment-Occupation (PEO) model²



▶ 3. Identify evidence

Inclusion criteria:

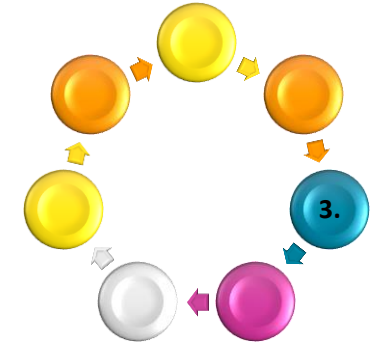
- Relating to universal design
- Published in peer-reviewed academic journal
- Jan 2011 and Dec 2017
- English
- Any discipline / professional area

Exclusion criteria:

- Relating to learning / technology / products
- Conference proceedings

Final sample included 33 articles for review

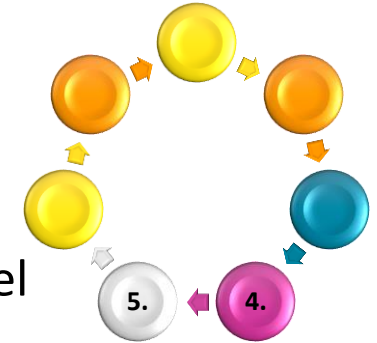
- Majority from Europe (n=18, 55%) or North America (n=10, 30%)
- BE disciplines (n=18, 55%); Health disciplines (n=6, 18%); Humanities (n=8, 24%)





4. Deconstruct data

Data extracted verbatim from publications that reflected 7 components of PEO Model
Classification completed independently & reviewed



5. Analyse data

Critical analysis of data in relation to how the literature reflected the theoretical model

▶ 6. Reconstruct data

Research Question: How is social participation represented in recent discourse around universal design in the built environment?

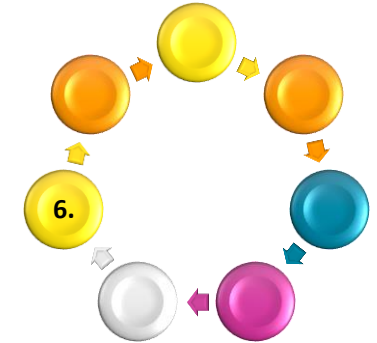
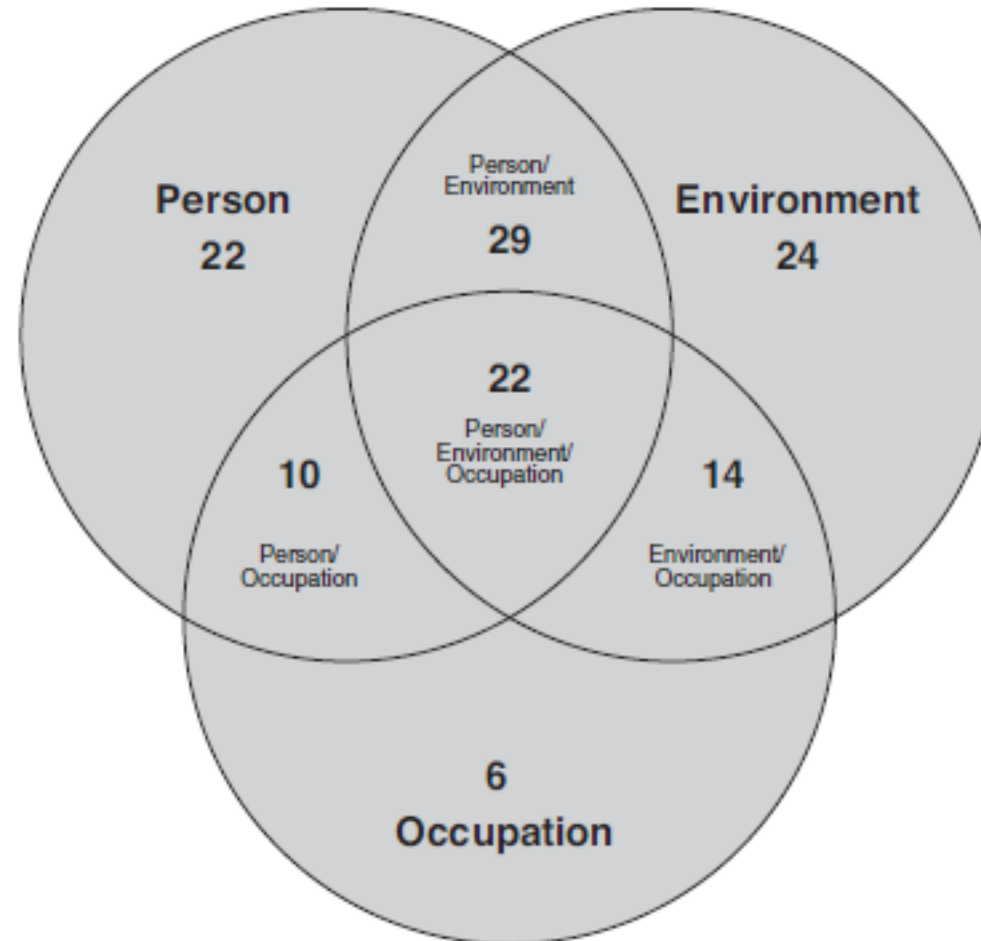
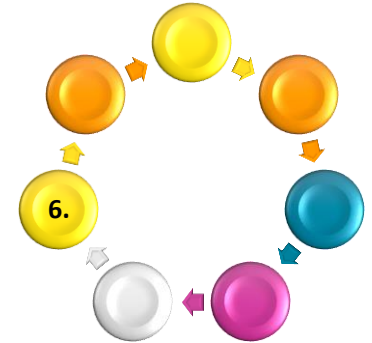


Figure 2. The PEO model including articles reviewed.

Key Findings

Research Question: How is social participation represented in recent discourse around universal design in the built environment?

- Discourse on person generally at population level
- Discourse on environment quite focused on building features
- The person-environment relationship is widely accepted
- Minimal discourse on occupation
- Greater emphasis on accessibility than usability

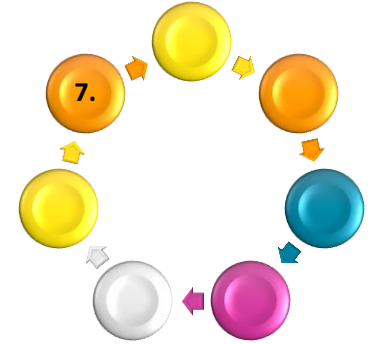


▶ 7. Transfer & utilise findings

1. Published findings³

2. Identified gaps in knowledge

- What outcomes are trying to be achieved from UD?
- For whom is UD trying to achieve outcomes?
- What does / should UD evaluation look like?



Project on universal design evaluation

2017



Evaluation of universal design – Project Aims



To scope existing methods of evaluating the application of universal design (UD) in the built environment and how UD should be evaluated.

- Is UD being evaluated? If so, how?
- What do stakeholders perceive UD evaluation should look like?

How can usability be evaluated as an outcome of universal design in public buildings?

Evaluation of universal design - Methodology



Mixed methods - qualitative/quantitative (HEAG-H 99_2017)

- Electronic survey (n = 157)
- Key informant in-depth interviews (n = 37)

Evaluation of universal design – Key findings

UD evaluation perceived as very important but not widely practiced

- 72% survey participants had applied UD; 36% had evaluated UD

No preferred / empirical evaluation method(s) of UD evaluation

- Checklists most commonly used and preferred by stakeholders
- Strong desire for a more fit-for-purpose tool but challenges noted!
- Some stakeholders evaluating usability post-occupancy but not consistently done

...that's what I think is so tricky that there is no exact measurement and I would love to know what that looks like because that would make it a lot easier when someone just sort of says let's universal design to something; I'd love there to be a tool. [Participant 9_Access Consultant]

Accessible and Inclusive Geelong Project (The HOME Research Hub)

2019



Accessible & Inclusive Geelong Project



5 Principles of Action



1. Adopt inclusive co-research and co-design approaches
2. Embed Principles of Universal Design
3. Ensure that improvements to the built environment are available to all
4. Prioritise attitudinal change
5. Adopt inclusion as a core value for Geelong

PhD on Co-design and Universal Design

2020-??



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Co-design and universal design project

How can people with disability participate in **co-design** to enhance the **universal design** of Australian public built environments?

- What does current practice look like?
- What does best practice look like?

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Methodology

A series of case studies currently underway to explore how these concepts are being and should be applied in practice

Case study 1: Co-designing an inclusive visitor centre in Geelong

Case study 2: Co-designing autism-friendly museums

Case study 3: Co-designing playgrounds for all

Understanding the role of people with disabilities in co-design and universal design processes

Invitation to participate in online workshop

If you have experience in working with people who live with disability in co-designing public buildings we would love to hear from you.

What is involved?

1.5 hour online workshop (Date TBC)

For further information:

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This study has been approved by Deakin University Ethics Committee (Project ID: 2019-023).




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In conclusion

UD acknowledges that people's needs and abilities are diverse and that an environment or product should be designed in a way that is **usable** by the vast majority of a population without adaptation or stigma and that continues to meet users' needs throughout their lifespan. State University, The Center for Universal Design

Involvement of users, in particular those who experience disability, is vital but there is more to understand about how to do this well.

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“The process of co-design needs to be all inclusive”...
How do we achieve this?



References



1. Hitch, D., Pepin, G. & Stagnitti, K. (2014). The Integrating Theory, Evidence and Action (ITEA) Method: A Procedure for Helping Practitioners Translate Theory and Research into Action. *British Journal of Occupational Therapy*, 77(12), 592-600.
2. Law M, Cooper B, Strong S, Stewart D, Rigby P, Letts L. (1996). The person-environment-occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*. 63(1)
3. Watchorn, V., Hitch, D., Grant, C., Tucker, R, Aedy, K., Ang, S., & Frawley, P. (2019). An integrated literature review of the current discourse around universal design in the built environment – is occupation the missing link? *Disability and Rehabilitation*, DOI: 10.1080/09638288.2019.1612471

Questions

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