

Disability Inclusion, Intersectionality, and Knowledge Translation

KTDRR's 2024 Virtual KT Conference

October 15, 16, and 18

Center on
**KNOWLEDGE TRANSLATION FOR
DISABILITY & REHABILITATION RESEARCH**

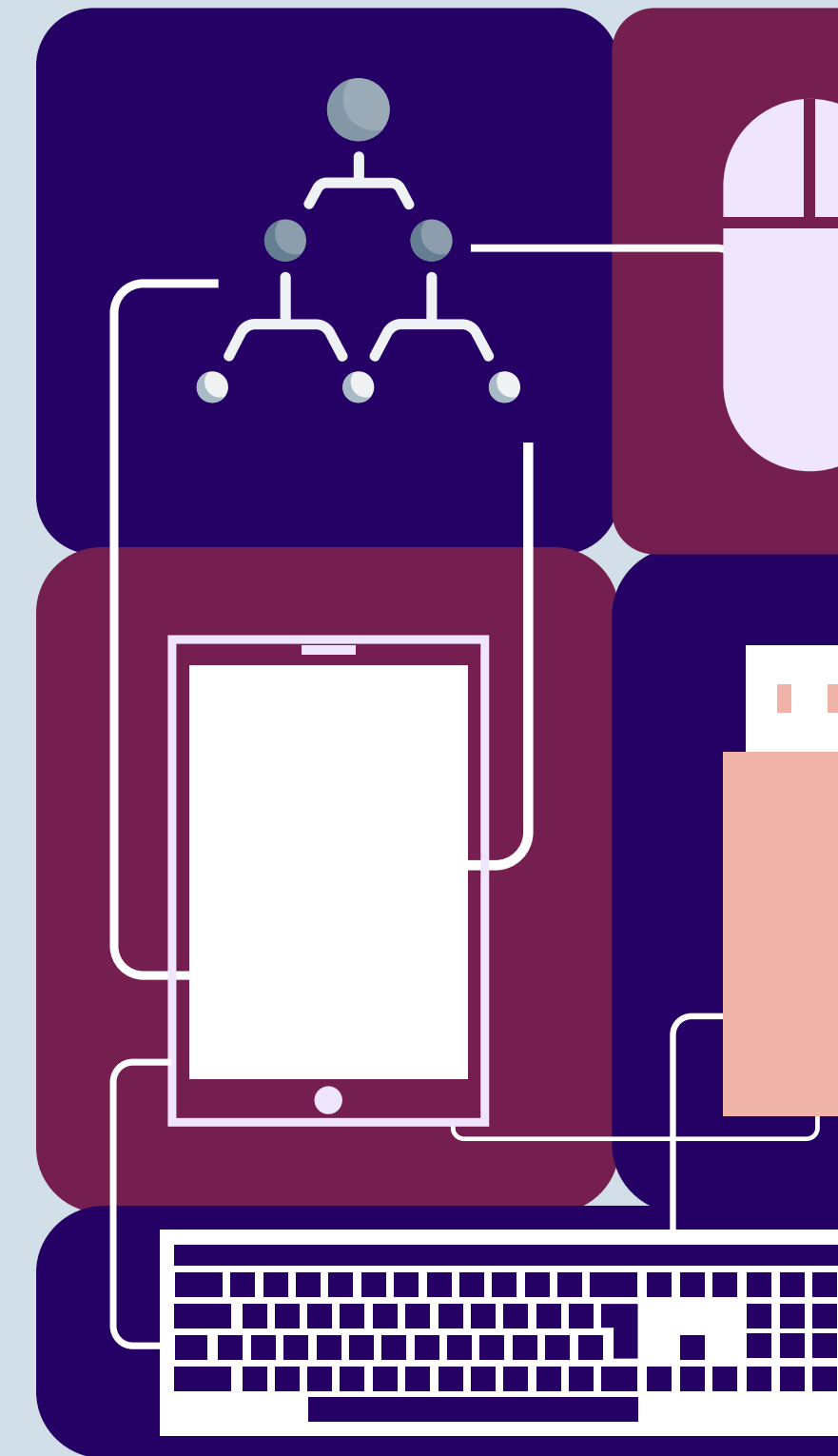
INSTITUT DE RECHERCHE



Developing a Digital Technology Evidence Toolkit and Portal for Mitigating Social Isolation and Loneliness in Older Adults

A pilot study by Nour Elmeestekawy, Elizabeth Ghogomu, Jennifer Petkovic, and Vivian Welch

Center on
**KNOWLEDGE TRANSLATION FOR
DISABILITY & REHABILITATION RESEARCH**



Virtual Meeting/Conference Recording Notice

The American Institutes for Research® (AIR®) allows for the recording of audio, visuals, participants, and other information sent, verbalized, or utilized during business-related meetings. By joining a meeting, you automatically consent to such recordings. Any participant who prefers to participate via audio only should disable their video camera so only their audio will be captured. Video and/or audio recordings of any AIR session shall not be transmitted to an external third party without the permission of AIR.

In addition, AIR does not permit participation in AIR meetings through the use of AI bots such as Otter.ai or other AI platforms to record or transcribe conversations for AIR meetings, webinars, or virtual events in lieu of in-person attendance, unless requested as a reasonable accommodation. Any participants who attempt to use AI software for meeting participation will be denied admission, or their session will be terminated once it becomes apparent such software is in use.

Table of Contents

01

BACKGROUND

What we already know

02

OBJECTIVES

The purpose of our project

03

METHODS

What we did

04

ANALYSIS

How we examined the data

05

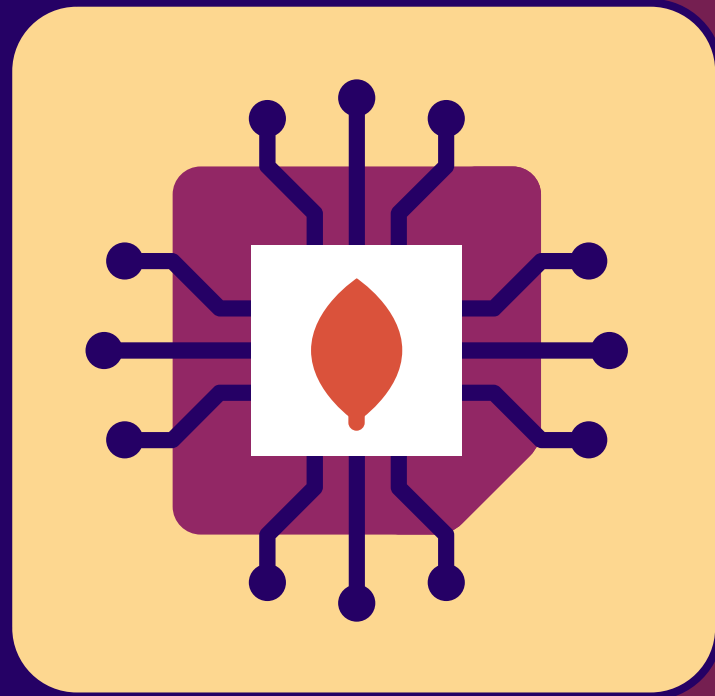
RESULTS

What we discovered

06

CONCLUSION

The next steps



01

BACKGROUND

What we already know

Literature Review

- Social isolation and loneliness among older adults are recognized as pressing public health issues nationally and internationally. [1–6]
- The COVID-19 pandemic exacerbated these issues, particularly among older adults due to physical distancing measures, leading to increased social isolation and loneliness. [1,2,4,7]
- Technological advancements have led to increased use of interconnected devices, making digital and remote interventions viable solutions for maintaining social connections among older adults. [8,9]
- The pandemic also accelerated the reliance on remote methods and digital technology to maintain social connections among older adults. [8,9]



THE GAP!

practical guidance for implementing digital interventions
with consideration for equity and accessibility



02

OBJECTIVES

The Purpose of our Project

Objectives

- 1** Identify effective digital approaches to reduce social isolation and loneliness
- 2** Assess and synthesize evidence on equity considerations for these technologies
- 3** Develop and evaluate the equity-focused toolkit of effective digital interventions



03

METHODS

What we did

Methodology

1 Selection of Systematic Reviews

- Derived 3 intervention reviews from an existing WHO Evidence and Gap map using the following criteria: **[10]**

1. Meta-analysis
2. Highest quality
3. Lowest risk of bias
4. Within 5 years
5. Older adults

2 Developing a Summary Template

- Evaluated three different summary styles:
 1. Evidence 4 Equity
 2. Youth Endowment Fund
 3. Disability Evidence Portal
- Acquired feedback from our advisory committee and selected the Youth Endowment Fund template as most suitable

3 Completing the First Draft of the Toolkit

- Created the toolkit landing page on our Ottawa Centre for Health Equity (OCHE) website
- Designed the top-level and second-level images on Canva
- Migrated all the completed summary data onto the OCHE website

Methodology

4 Composition of Reviewers

- Tapped into our professional and personal networks
- Created a panel of reviewers to participate in the feedback interviews, including:

1. Researchers
2. Practitioners
3. Policymakers
4. Community members

5 Collecting the Feedback Data

- 8 one-on-one, semi-structured Zoom interviews (30 - 60 minutes each)
- Audio-recorded and transcribed with Otter.ai
- Transcripts approved by participants before use
- \$25 honorarium for members of the public

6 Identifying Strengths and Modifications

- Coded deductively using a home-made framework:

Part One: Contextual Information

6 Parent codes (e.g. *Research Familiarity*)

Part Two (a): Evaluation of the Structure

5 Parent codes (e.g. *Anticipated Time Spent*)

Part Two (b): Evaluation of the Content

18 Parent codes (e.g. *Equity Value*)

Part Three: Evaluation of the Exercise

1 Parent code (*Suggestions to Improve*)



04

ANALYSIS

How we examined the data

Analysis of the Feedback Data

- Using Peter Morville's User Experience Honeycomb (on the right), [11] the data was analyzed across the following themes:
 1. Usability
 2. Usefulness
 3. Desirability
 4. Credibility
 5. Findability
 6. Value
 7. Equity Value
- Accessibility was a cross-cutting theme
- Points of improvements to the interface, content, and feedback exercise were derived from the raw data into actionable "next steps"





05

RESULTS

What we discovered

We Discovered...

- **Most (87.5%)** believed it was *credible*
- **Most (87.5%)** believed it was *understandable*
- **Most (87.5%)** believed it was *useful*
- **Most (87.5%)** believed it was *desirable*
- **Some (75%)** believed it was *valuable*
- **Some (75%)** believed it had *equity value*
- **Few (37.5%)** believed it was *usable*
- **Few (12.5%)** believed it was *findable*



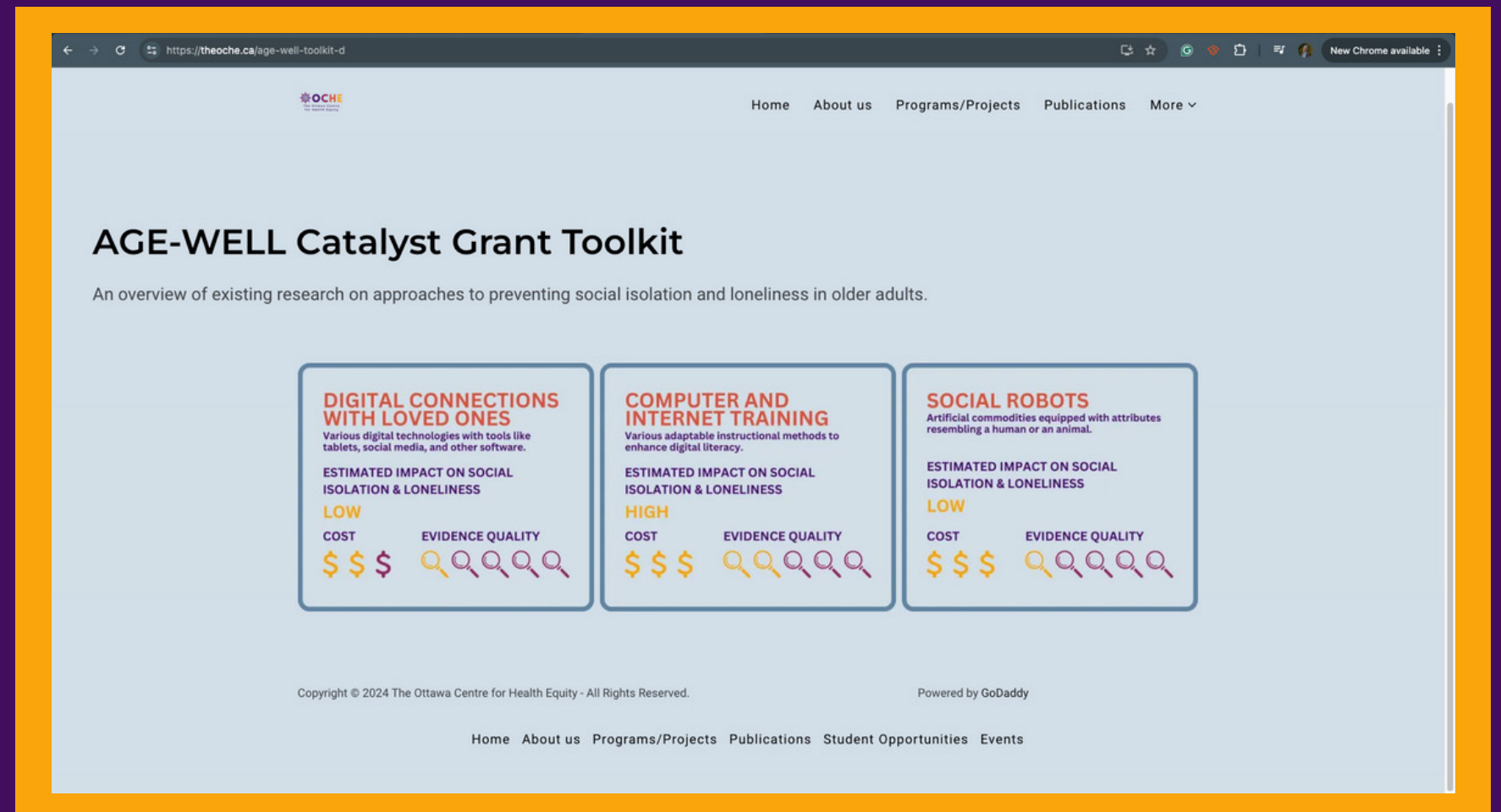
30 suggested improvements to the **interface**

28 suggested improvements to the **content**

01 suggested improvement to the **feedback exercise**



Top-level Version 1





06

CONCLUSION

The next steps

Conclusions

- 1** Identified 3 effective digital approaches to reduce social isolation and loneliness
- 2** Assessed and synthesized evidence on equity considerations for these 3 technologies
- 3** Developed and evaluated this equity-focused toolkit across Peter Morville's User Experience Honeycomb

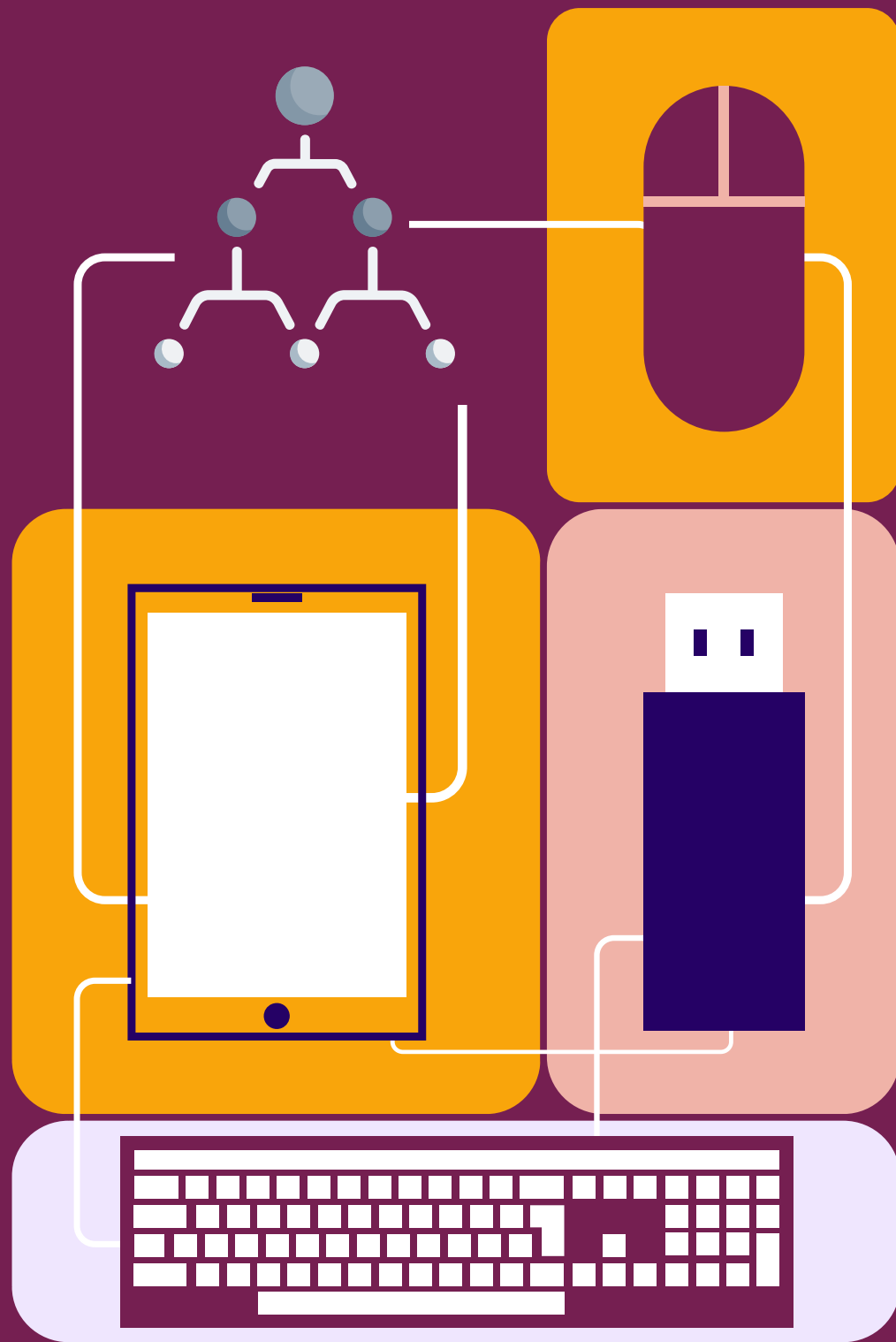
Next Steps



- Create **version 2.0** (from this data)
- **Scale-up** the toolkit
- **Disseminate** to WHO and other networks

References

- [1] World Health Organization, editor. Decade of healthy ageing: The Baseline Report for the Decade of Healthy Ageing 2021–2030 [Internet]. World Health Organization. World Health Organization; 2021 [cited 2021Aug20]. Available from: <https://www.who.int/publications/i/item/9789240017900>
- [2] Menec VH, Newall NE, Mackenzie CS, Shooshtari S, Nowicki S. Examining social isolation and loneliness in combination in relation to social support and psychological Distress using Canadian longitudinal study of aging (CLSA) data. PLOS ONE. 2020;15(3).
- [3] Cotterell N, Buffel T, & Phillipson C. Preventing social isolation in older people. Maturitas. 2018;113:80–84.
- [4] Calderón-Larrañaga A, Dekhtyar S, Vetrano DL, Bellander T, Fratiglioni L. COVID-19: Risk ACCUMULATION among biologically and SOCIALLY vulnerable older populations. Ageing Research Reviews. 2020;63:101149.
- [5] Alonso-Lana S, Marquié M, Ruiz A, Boada M. Cognitive and neuropsychiatric manifestations of covid-19 and effects on elderly individuals with dementia. Frontiers in Aging Neuroscience. 2020;12.
- [6] Brooke J, Jackson D. Older people and COVID-19: Isolation, risk and ageism. Journal of Clinical Nursing. 2020;29(13-14):2044–6.
- [7] Leigh-Hunt N, Bagguley D, Bash K, Turner V, Turnbull S, Valtorta N, et al. An overview of systematic reviews on the public health consequences of social isolation and loneliness. Public Health. 2017;152:157–71.
- [8] United Cities and Local Governments (UCLG), Metropolis, UN-Habitat. Digital Technologies and the COVID-19 Pandemic [Internet]. UCLG. 2020. Available from: https://www.uclg.org/sites/default/files/eng_briefing_technology_final_x.pdf
- [9] Ibarra F, Baez M, Cernuzzi L, Casati F. A systematic review ON Technology-supported interventions to Improve Old-Age Social Wellbeing: LONELINESS, social isolation, and connectedness. Journal of Healthcare Engineering. 2020;2020:1–14.
- [10] Welch VA, Ghogomu E, Barbeau V, Dowling S, Doyle R, Beveridge E, et al. Digital interventions to reduce social isolation and loneliness in older adults: An evidence and gap map. 2022. <https://doi.org/10.1002/cl2.1260>.
- [11] Morville P: User experience Design. UX Honeycomb Model. [Internet]. Semantic Studios. 2004. Available from: <http://www.semanticstudios.com/publications/semantics/000029.php>



THANK YOU!

DO YOU HAVE ANY QUESTIONS?

Email: nelme098@uottawa.ca

Website: theoche.ca

CREDITS: This presentation template was created by [Slidesgo](#), and includes icons by [Flaticon](#), and infographics & images by [Freepik](#)

 www.ktdrr.org

 ktdrr@air.org

 800.266.1832

Center on
**KNOWLEDGE TRANSLATION FOR
DISABILITY & REHABILITATION RESEARCH**