



Knowledge translation for public health: Supporting evidence-informed decision making in local government

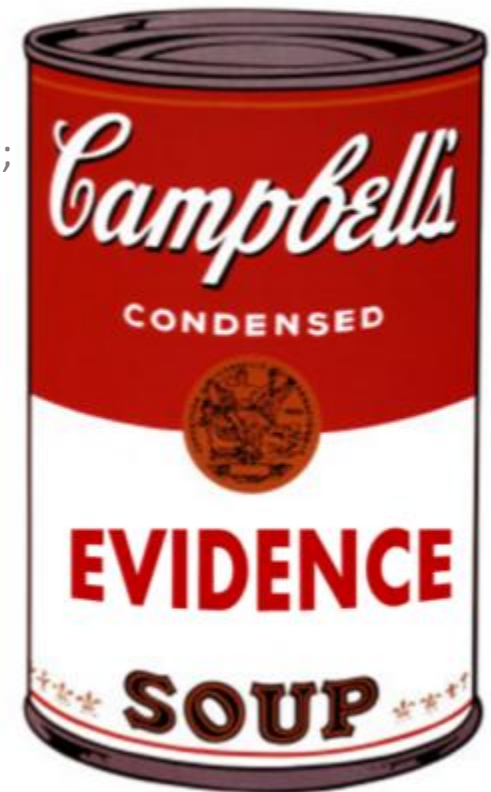
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(incorporating the **Cochrane Public Health Group**)

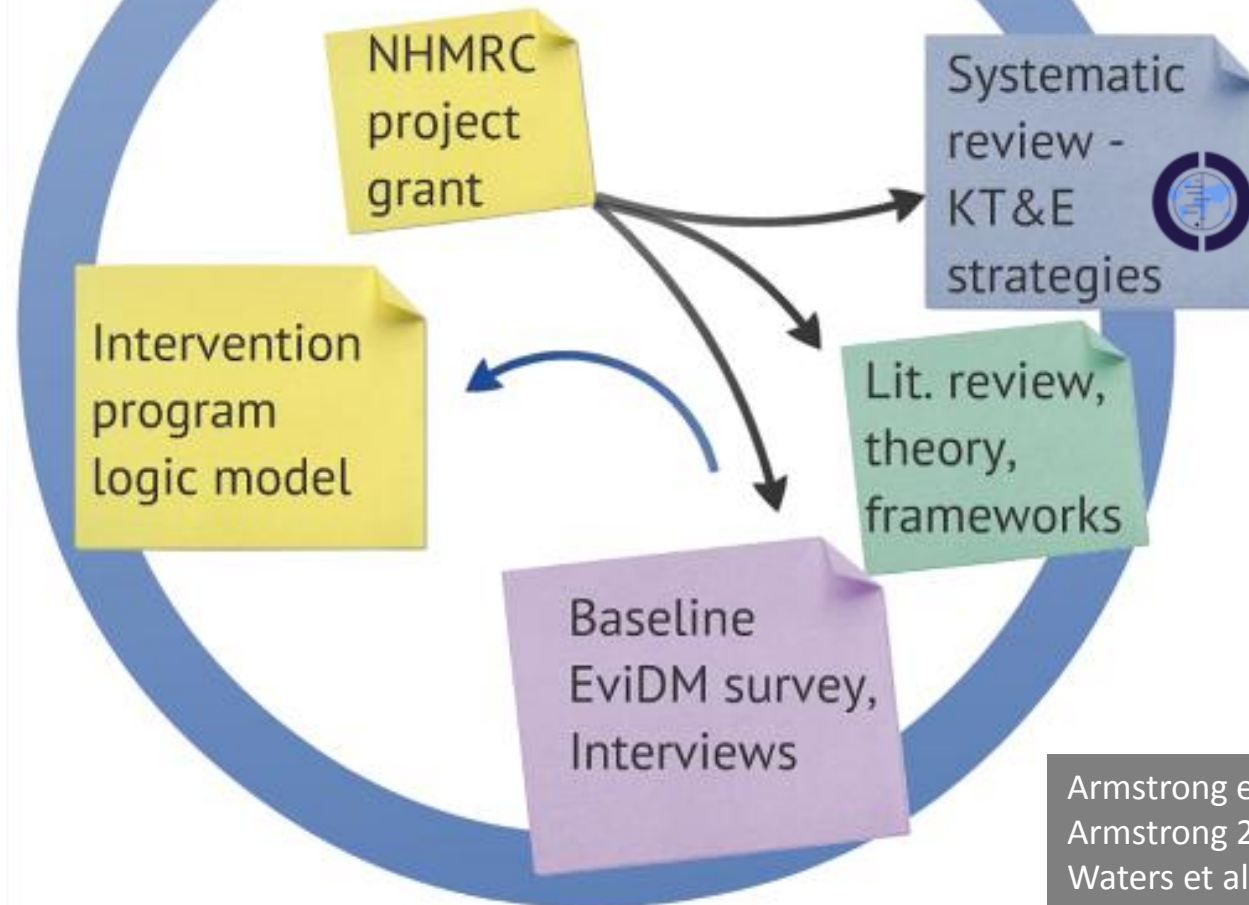
The Jack Brockhoff Child Health and Wellbeing Program; McCaughey centre;
Melbourne School of Population Health; University of Melbourne, Australia

background

- EIDM: combining sources of evidence
- Barriers and facilitators well documented (e.g. Innvaer 2002; Orton 2011)
- KT&E proposed to facilitate EIDM
- But do our KT efforts make a difference? (LaRocca et al. 2012, Mitton et al. 2007, Perrier et al. 2011, Orton et al. 2011)
- Dobbins et al. 2009
- Diffusion of innovations - Dobbins et al. 2002
- 108/141 PH Depts in Canada
- Tailored/targeted messages more effective in some circumstances
- Need for strategies to address org factors
- Recent international efforts...
 - Lavis et al. 2011 – HSR; CIPHER – Sax Institute; TROPIC – Deakin Uni



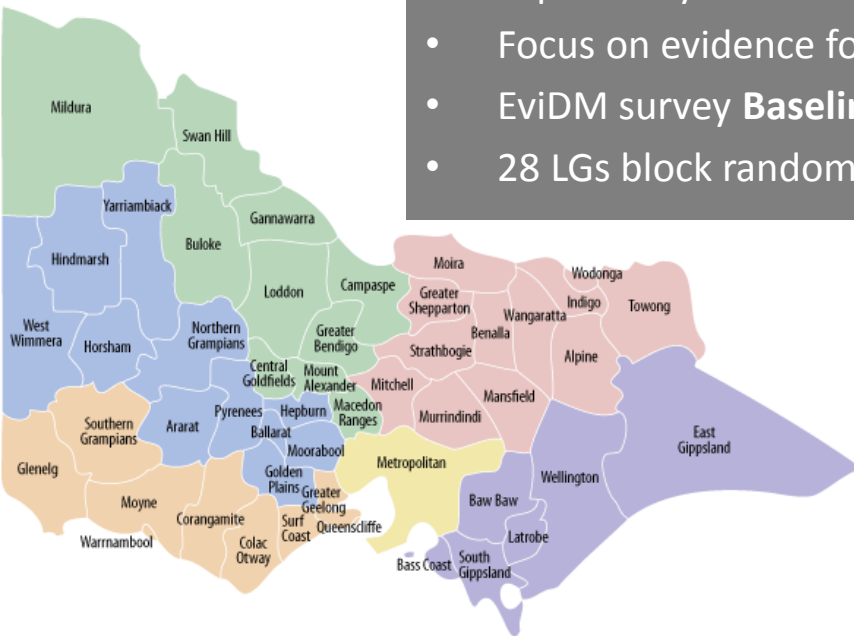
preliminary research



Armstrong et al 2009 *Cochrane (protocol)*
Armstrong 2011 PhD thesis
Waters et al 2011 *BMC Public Health*

Methods

- Exploratory **cluster RCT** in Victorian local government (LG) 2 years 2009 – 2011
- Focus on evidence for obesity prevention – public health
- EviDM survey **Baseline**: 45 LGs; n=135 individuals
- 28 LGs block randomized by budget tertile (14 Intervention; 14 Comparison)



- Mixed methods Process & Impact Evaluation
 - EviDM survey **post-intervention** 28 LGs; n=76 individuals
 - Interviews with council staff, managers, CEOs
 - KB reflective diaries, database of contacts
 - Training evaluations

PROCESS

OUTCOMES

ACTIVITIES/ COMPONENTS

PARTICIPATION/ REACH

INDIVIDUAL

ORGANISATION

SYSTEM

APPROACH: Knowledge Utilisation framework/
Diffusion of Innovations

Tailored support

Training

Targeted
communication

Evidence summaries

Intervention councils:

Nominated LG staff
within public health
-related
Departments

Comparison councils:

Nominated LG staff
within public health -
related Departments

Increase
confidence

Increase
skills

Increase
access

Increase
access

Improve EIDM
culture within
public health
(PH) team

↑ Research use
within
PH team
(instrumental
& conceptual)

Improve
EIDM culture within
Department/team

↑ Research use across
organisation
(instrumental &
conceptual)

EIDM culture
and system-
level support

EXPLORE:
What is the
role of the
organisation
& system?
How does it
need to be
changed?

PROCESS EVALUATION: Intervention reach, dose,
quality, fidelity, cost/resources, barriers & enablers

ASSUMPTIONS:

- Increased support & interaction through facilitated program will improve outcomes
- Knowledge, confidence and skills predict research use
- EIDM culture at system-level influences the EIDM culture and research use in organisations but requires individuals with knowledge, skills & confidence
- Innovation will spread through organisations and the system

Contextual Factors:

- Type of decision, type of use
- Decision-making structures/systems
- Council size and structure

Intervention components

Tailored support

- **Knowledge broker**
- Monthly contact: Scheduled
- Support-response, tailored messages
- Visits, meetings: ad hoc



Group Training

- **Group training** for skills development and networking
- Biannual, all councils invited
- Skills: **ask, access, assess, apply** research evidence

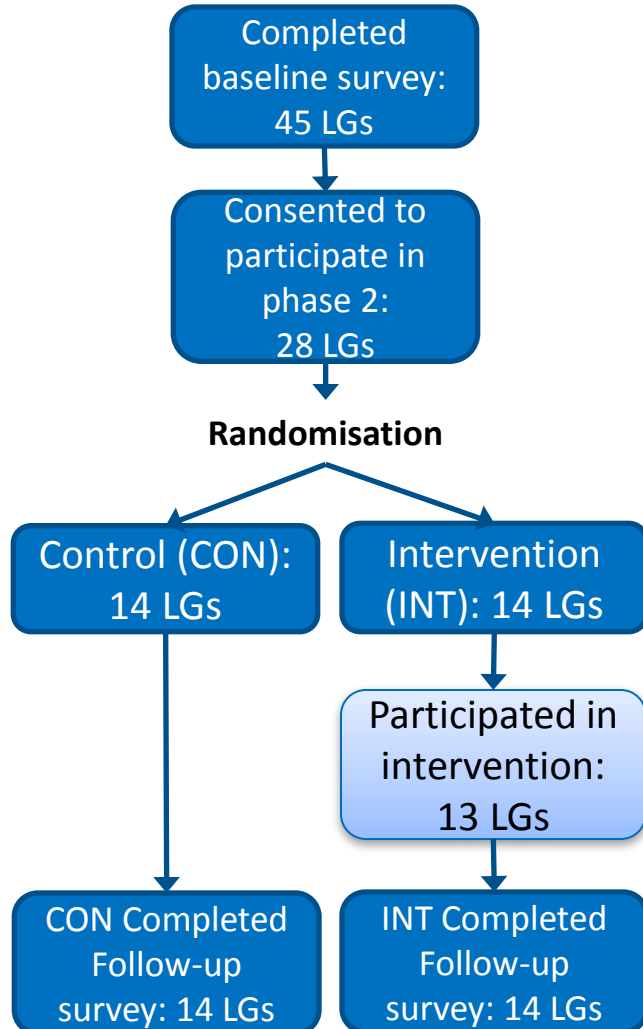


Targeted communications

- **Evidence summaries** for Local Govt & Obesity prevention
- Developed through broad consultation
- Published on CO-OPS



Participants

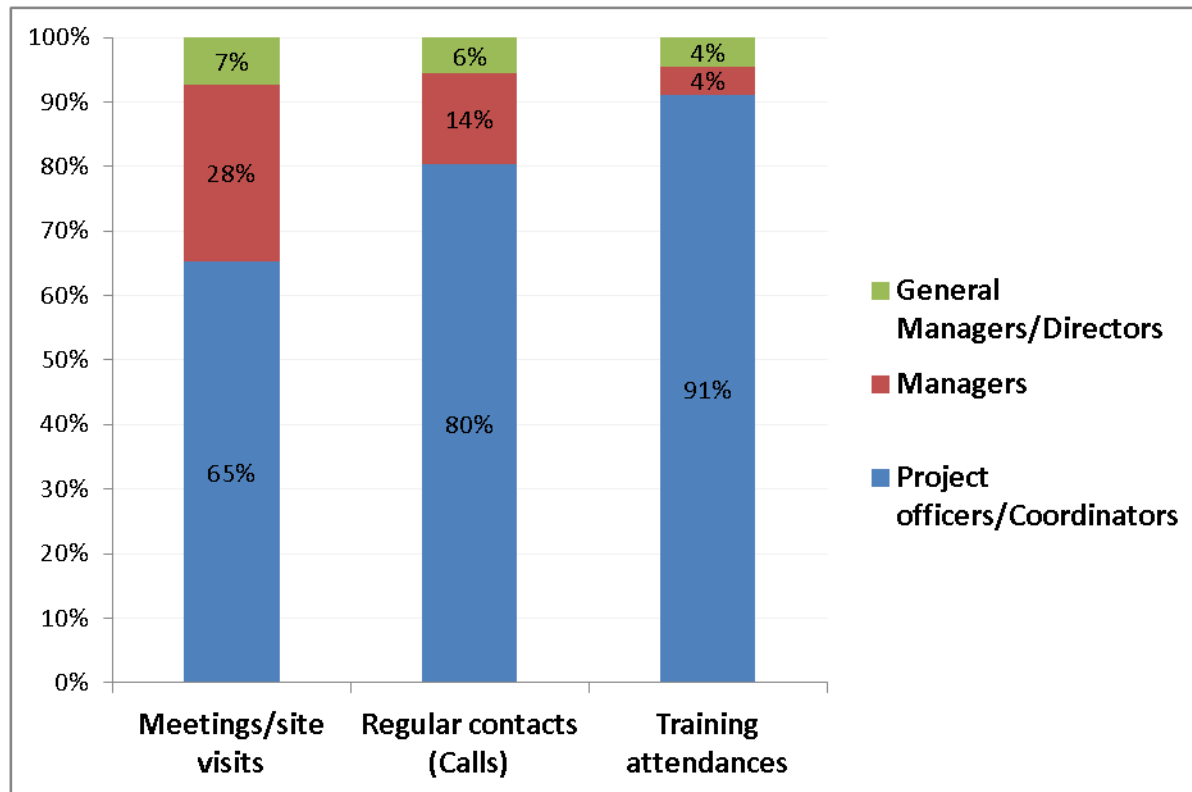


<i>n</i>	Baseline 2009		Follow-up 2011	
	INT	CON	INT	CON
	42	93	34	35
Gender	24=F, 18=M	62=F; 31=M	27=F, 7=M	35=F, 10=M
Age (median)	40-49	40-49	40-49	40-49
Job title (median of 7 categories)	Prog Mgr	Planner	Prog Mgr	Prog Mgr
Education level (median of 8 categories)	GrDip	Bach	GrDip	GrDip
Years in Local Govt (mean, range)*	12.9 0.5 - 33y	9.4 0.1 - 33 y	9.9 0.5 - 25 y	10.9 1- 35 y
Years in current position (mean, range)	4.5 0.1 - 12 y	3.5 0.1 - 30 y	4.1 0.5 - 15 y	4.1 0.5 - 17 y

*statistically different between INT and CON at baseline

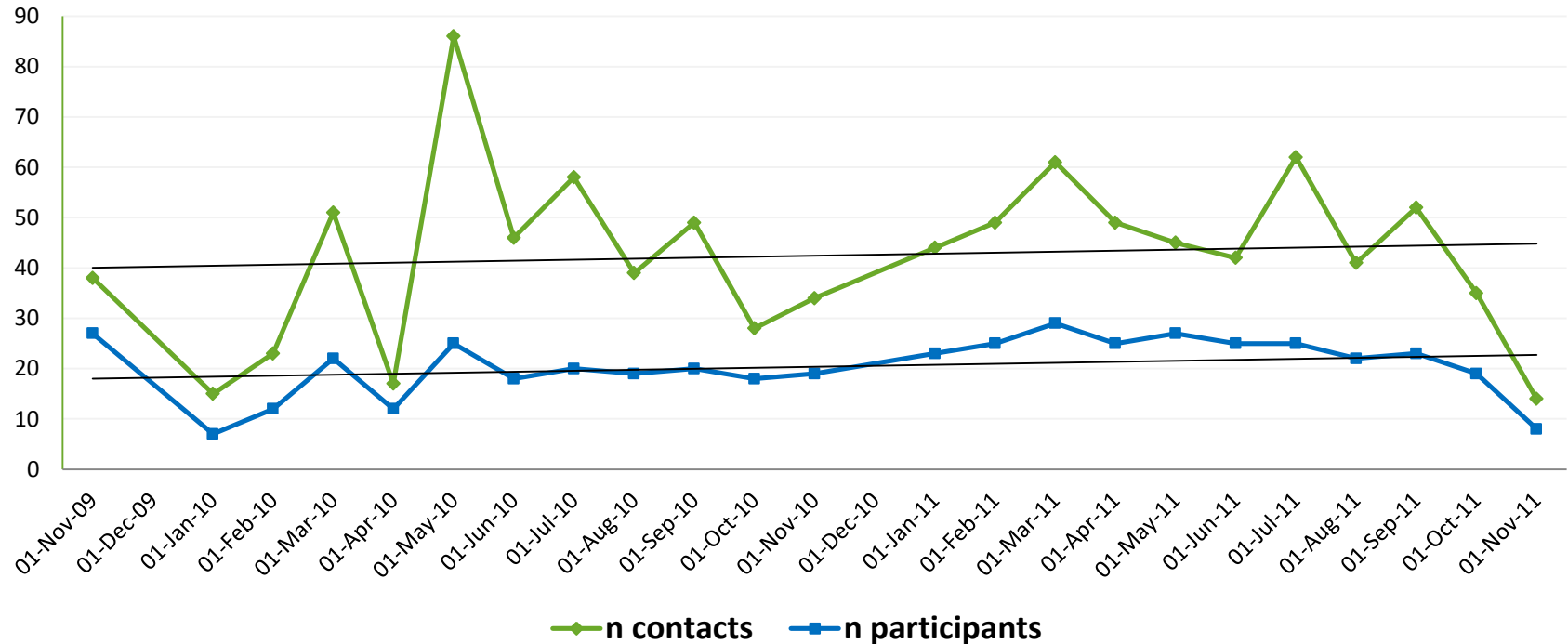
Reach

- 13 councils, 61 participants involved in monthly contact
 - began with 62: of those 30 remained in council; 32 new participants joined
- 123 attendances at biannual group training



Dose , Fidelity

contacts delivered and individual participants contacted (unique) per month



- **Dose:** monthly contacts, 61 participants
- **KB focus:** Skills (23%), Access (20%); Instrumental research use (12%), Intervention evidence (9%), Confidence (6%), Org research use (6%)
- **Participant focus:** Research use (39%); Skills (25%); Other LGovt responsibilities (22%)
- **Fidelity:** All components delivered as intended

Cost, resources to implement

Database

KB use of time

% time spent on each activity (incl. preparation)

Meetings/site visits	21
Participant Contact- phone	17
Participant support*	17
Data Collection/evaluation	16
Participant Contact- email	13
Miscellaneous administration	9
Training	5
Dissemination	1

Time spent – contacts & visits

time spent (mean \pm SD)

All calls continued, planned and unplanned	25 \pm 12 min
Meetings and visits	76 \pm 26 min
All calls <i>not</i> continued (missed, rescheduled)	6 \pm 22 min

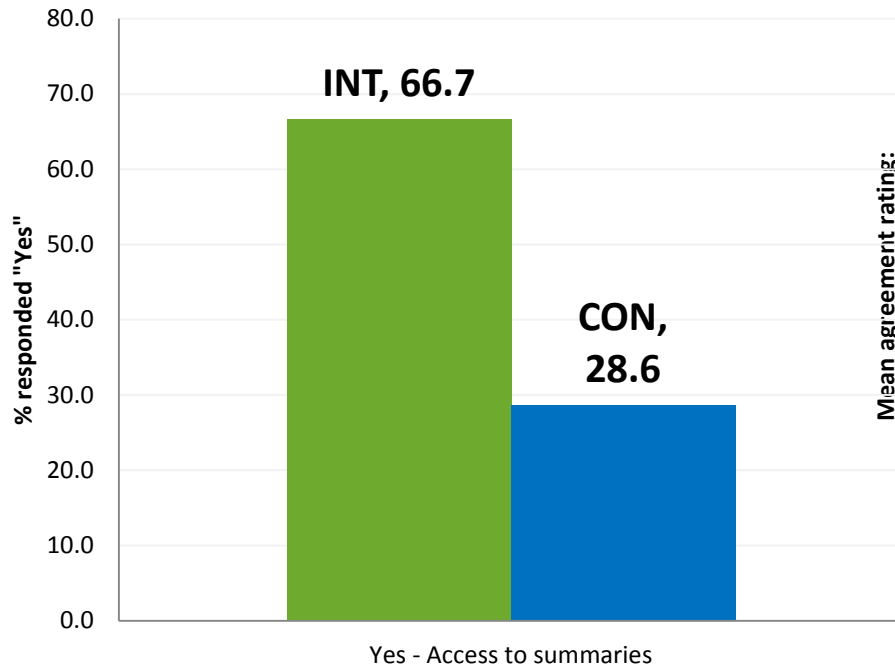
*Accessing or summarising evidence, reviewing documents

KB reflective diary

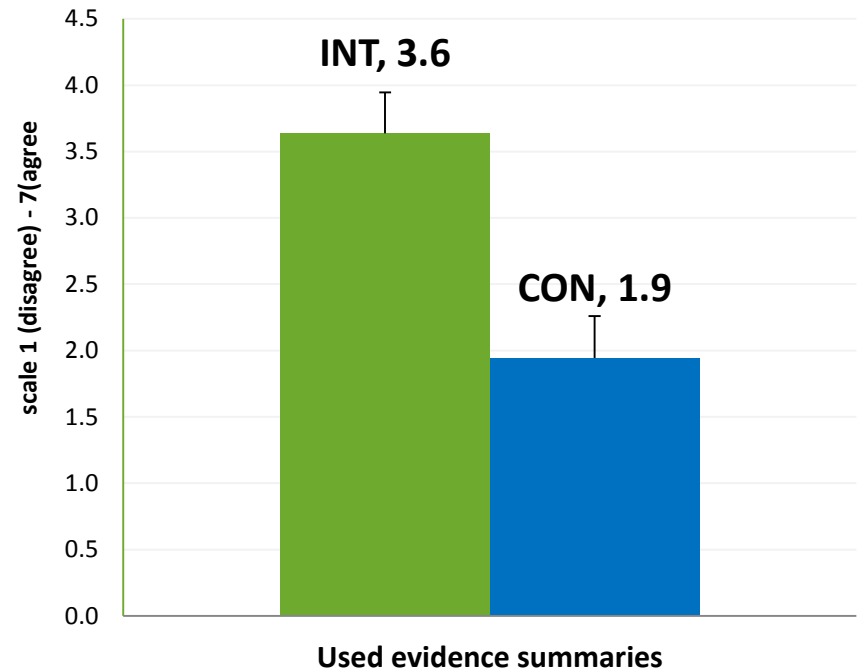
- Not enough time –more investment in establishing relationships, understanding context
- Breadth of focus put strain on time

Evidence summaries

Have had access to the evidence summaries developed for the project



Have used the evidence summaries developed for the project to inform local program decisions



So, what (do we think) happened...

Access:

Decreased mean
differential change

Culture:

Increased mean
differential change

Confidence:

Decreased mean
differential change

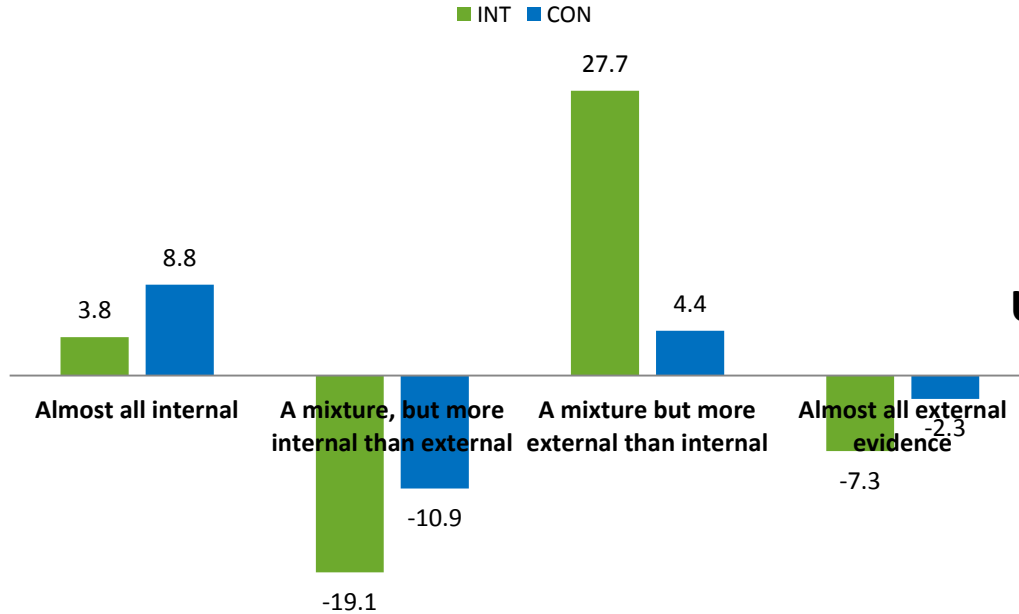
Did **KT4LG influence** participants **perceptions** of these domains?

descriptive

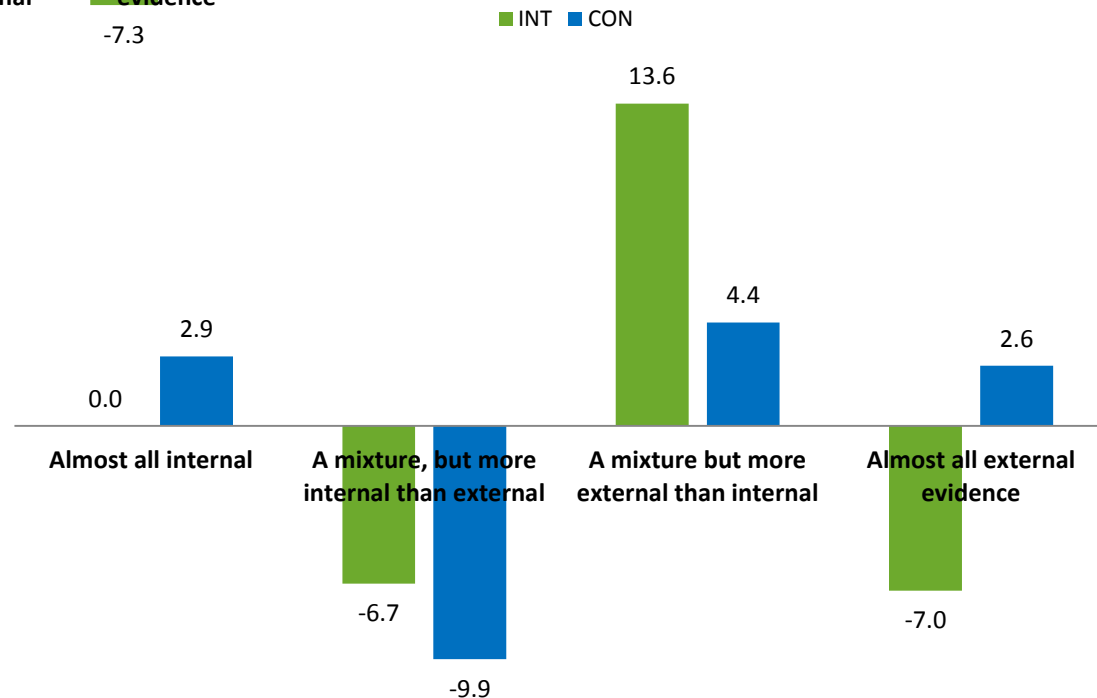


effectiveness

INFLUENCE overall change – baseline to follow up (%)

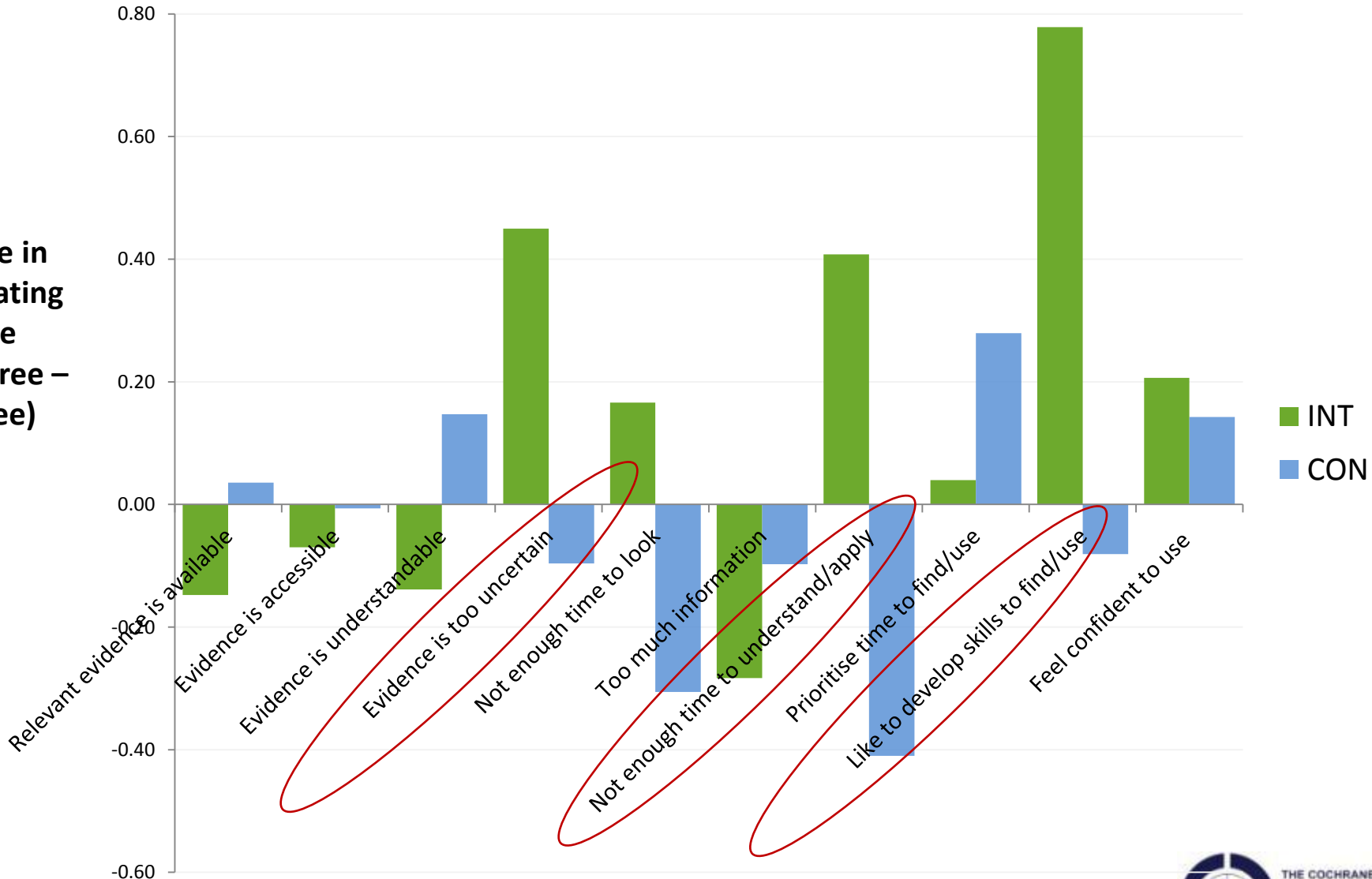


USEFULNESS overall change – baseline to follow up (%)



EIDM barriers

Change in mean rating score
(1 disagree – 7 agree)



Barriers



- Organisational **culture**
e.g. **Time** to participate in an exchange, Time to apply research to context) – thus having to push, not build capacity for access
e.g. **Senior staff /management** – lack of internal champions
- Need to respond to **policy/priority change**
- Workforce **turnover** (52% left council)
- Not having a “**way in**”, not knowing what would help

Enablers



- Tools, processes development (systems) may assist with building organisation **culture**
- Training: confidence and skills
- Opportunity – new purpose when **priorities change**
- KB’ s ability to find a “**way in**”, learning their priorities e.g. evaluation methods
- Workforce – engaging the right people early and when **turnover** occurs

Reflections on methods

- **Cluster RCT feasible...but...within local government:**
 - **Participants at baseline \neq follow-up**
 - **Large sample size required**
 - **Different types of individuals**
- **Recommendations for new research**
 - **Embed ability to follow individuals longitudinally**
 - **Investment in outcome measurement**

Implementing KT strategies to enhance EIDM in public health decision-making

- Feasible, acceptable, willingness to pay
- Resources to implement, KB role
- Barriers and enablers, contextual challenges
- Organisational culture – development

KT4LG is the first study of its kind in Australia

- KB role promising for ↑ access & ?use
- Effectiveness still uncertain, underpowered
- Shifts in access, confidence
- But needs organisational support/incentive

Thank you!



Public Health Evidence & Knowledge Translation research group

incorporating the Cochrane Public Health Group

The Jack Brockhoff Child Health and Wellbeing Program

McCaughey Centre, Melbourne School of Population Health

University of Melbourne

<http://ph.cochrane.org>

@CochranePH



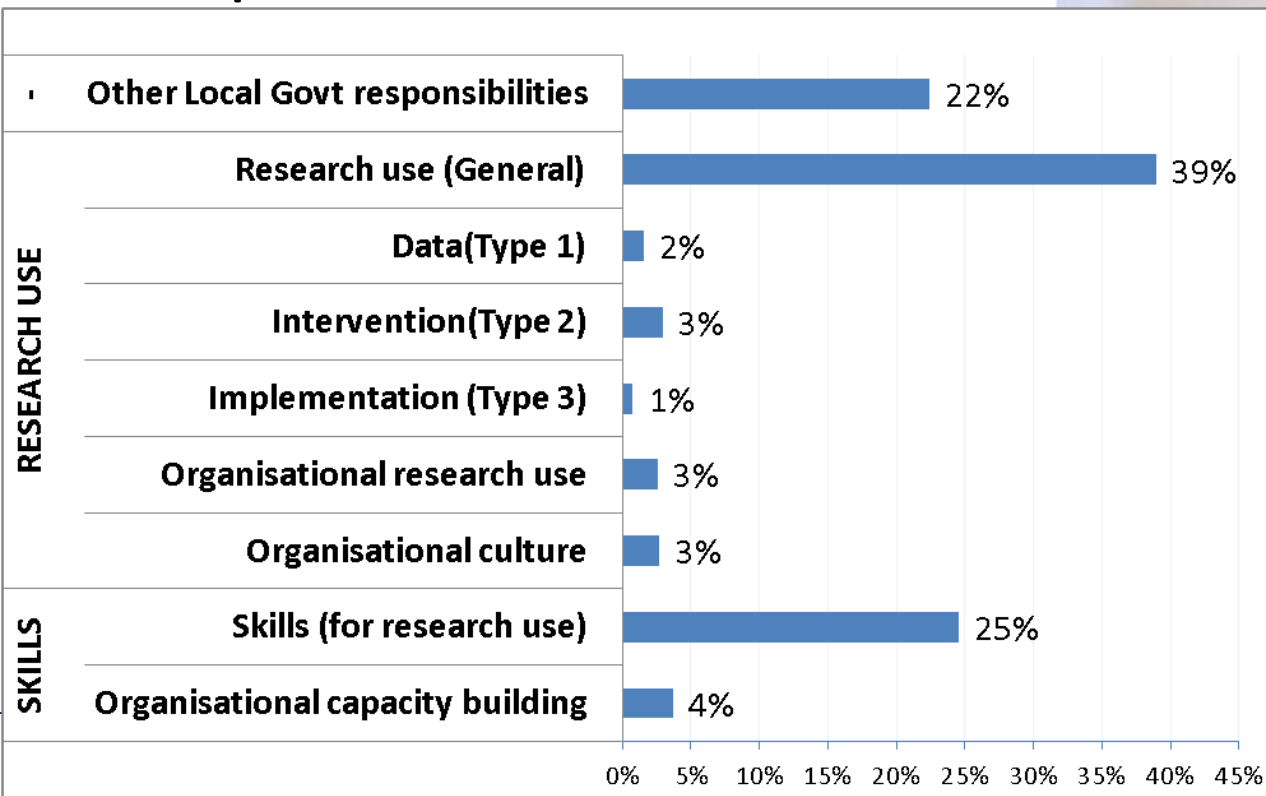
The screenshot shows a Twitter feed with four tweets. The top tweet is from @CochranePH, dated 2h, mentioning a review in BioMedCentral. The second tweet is from Evidence Live, dated 5 Sep, mentioning a BMJ article. The third tweet is from @CochranePH, dated 4 Sep, mentioning a report from a UN workshop. The bottom tweet is from @CochranePH, dated 4 Sep, mentioning a congress in Adelaide.

Dose, activities (2)

- Knowledge broker's focus

- Skills (23%); Access (20%); Instrumental research use (12%), Intervention evidence (9%); Confidence (6%); Organisational research use (6%)

- Participants' focus



Dose, activities (3)

- **Group training**
 - 123 participants, 72% completed evaluation forms
 - Free-text responses to questions, analyzed thematically
 - **Enjoyed most**: Skill development/acquisition (53%); interactive structure (25%)
 - **Plan to apply to practice**: Searching techniques/tools (51%); PICO (35%); applicability/transferability tool (28%); use of research in practice (22%)
 - **Training useful for informing practice?** Yes (75%)



“Very useful. Always good to be reminded/ re-motivated.”

“Interactive group work. Helped to see how it can be applied to practical situations.”

“Group tasks were useful and adaptable to workplace.”

“These sessions are useful when they are practical and linked to real issues/challenges facing local government.”