

Psychosocial factors associated with risk of drug-related overdose among people who use drugs

Dr Amy Malaguti, Health Psychologist

Prof Fabio Sani, Ms Teresa Flynn, Ms Tammie Brown



University
of Dundee

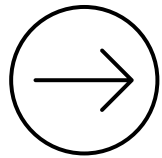
Funding

- The study was funded by the Drug Death Taskforce (Scottish Government)

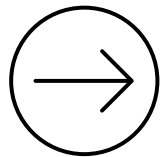
Conflict of interest

- None to declare

Aims



Understand the psychosocial factors associated with overdose among people who use drugs;



Identify intervention strategies that will reduce risk of overdose.

COM-B Model

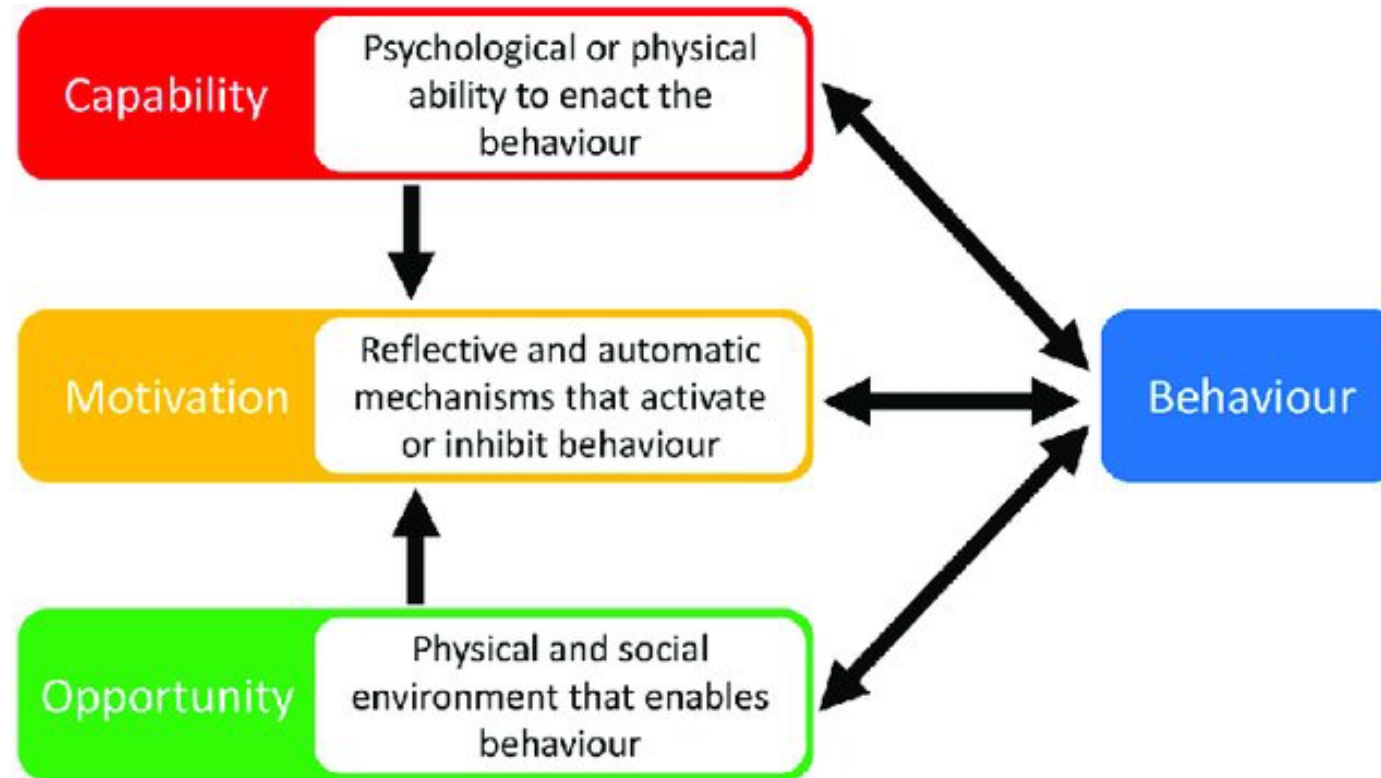


Image from Holloway et al 2020. COM-B Model from Michie et al. 2011

Research project's phases

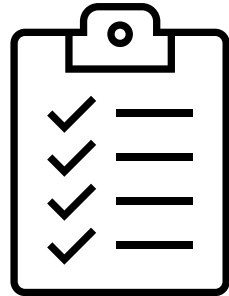


Phase 1: Behavioural analysis
(systematic review and qualitative study)



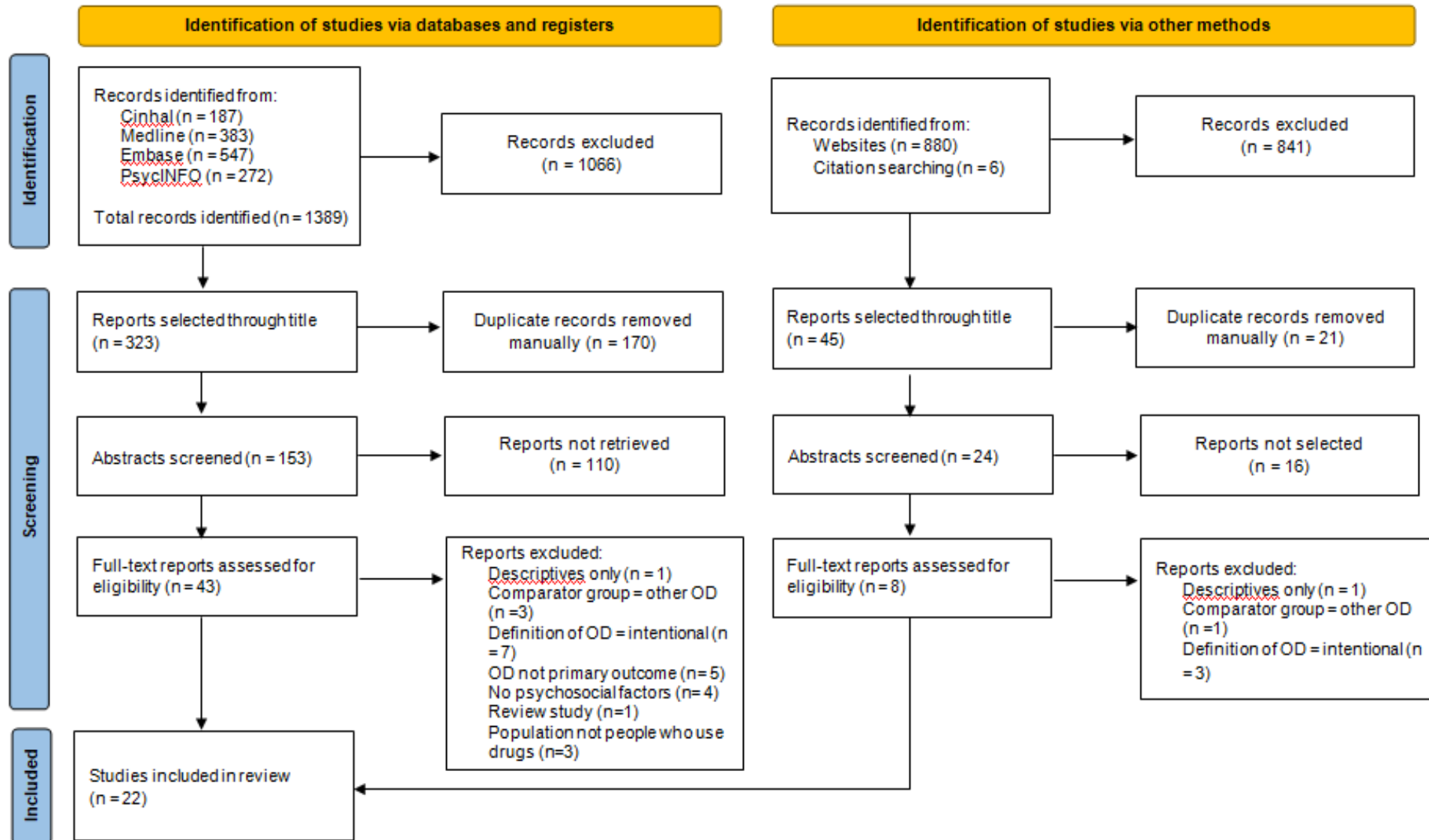
Phase 2: Identification of intervention functions
(via the use of the evidence produced in phase 1).

Study 1: Systematic Review



Evidence on
demographic factors
associated with drug-
related overdose

Systematic search (Apr-Jun 2021)



Characteristics of included studies



Total N=22



N=1



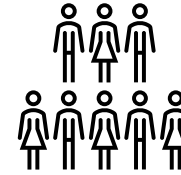
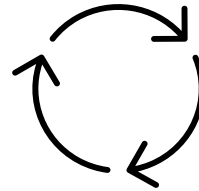
N=17



N=3

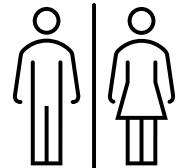


N=1



Experienced fatal or non-fatal OD
Range= 3275 -3364

>50%



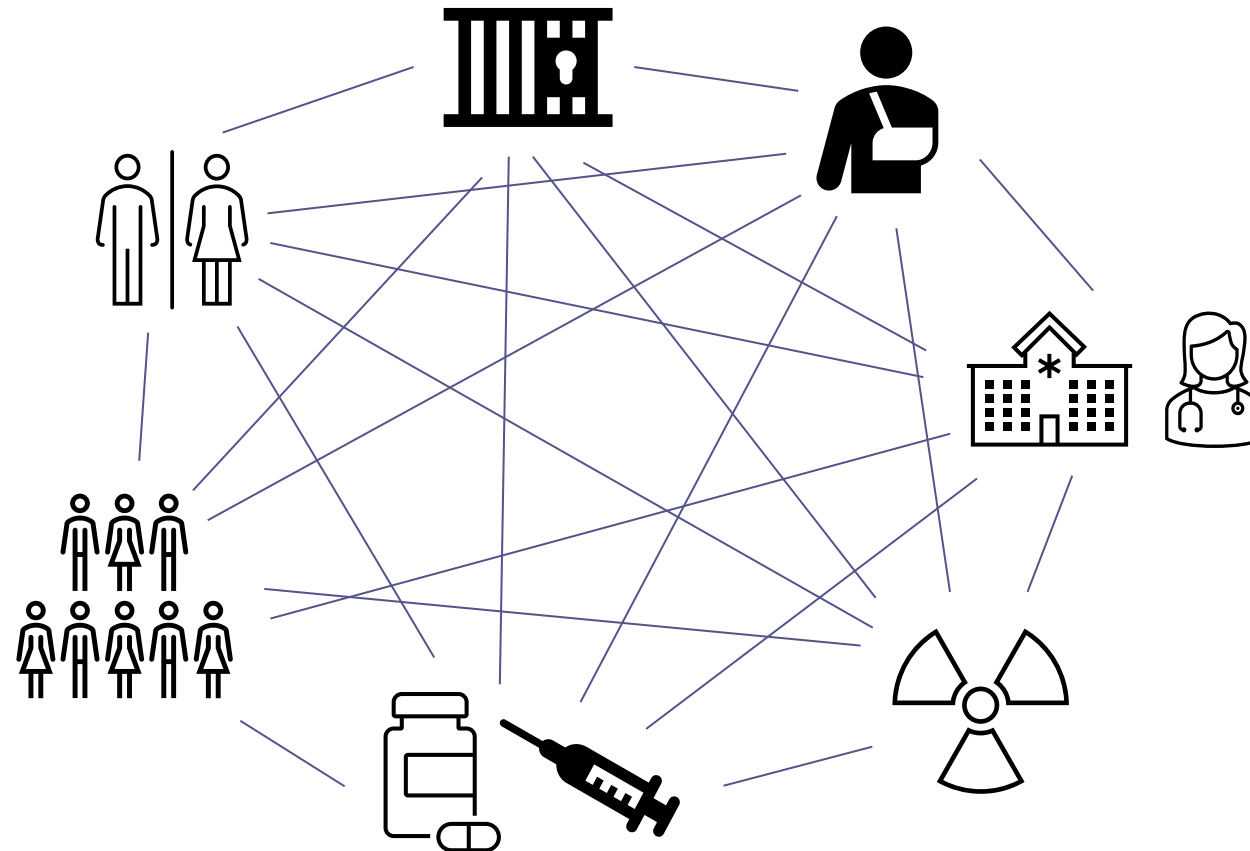
4 studies
female only



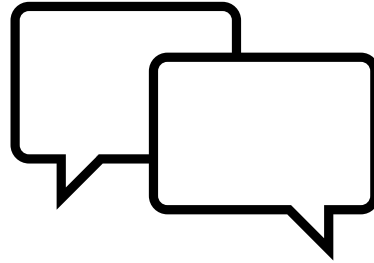
Age range=
20.9 - 56.4 yrs

Themes N=13	Factors N=92	Paper	Data unadjusted	Data Adjusted
Ethnicity	White ethnicity	Riggs	/	aOR 2.44 [2.00 – 2.98]**
	Indigenous	Thumath	OR 1.69 [1.15-2.49]**	/
	Non-Caucasian	Bonar	IRR 0.36 (0.17-0.76)**	/
	Caucasian	Lake	OR 1.62 [1.08–2.43]*	/
	African American	Latkin (2019)	OD <1 year ago model: OR 0.3 [0.1–0.7]* OD >1 year ago model: OR 0.4 [0.2–0.7]*	/
Income	Sex Trade work	Fairbairn	OR 2.12 (1.03–4.26)*	/
	Sold Drugs [past 30 days]	Latkin (2019)	OD <1 year ago model: OR 2.7 [1.1–6.6]*	/
	>10 yrs Sex work, ever OD	El-Bassel	/	aOR 2.54 (1.50-4.28)**
	>10 yrs Sex work, recent intimate partner violence, recent OD	El-Bassel	/	aOR 4.08 (1.41-11.81)**
	>10 yrs Sex work, recent non partner violence, recent OD	El-Bassel	/	aOR 3.97 (1.36-11.61)**
	Unemployed longer than 6 months prior to prison	Winter	RR: 5.36 [2.23–12.90]**	aRR: 4.43 [1.89–10.37]**
	[males only] Welfare	Pabayo	/	aOR: 1.44 [1.06–1.95]*
	[females only] Welfare	Pabayo	/	aOR: 1.74 [1.20–2.44]*
	Lower social class growing up	Silva	OR: 1.84 [1.25-2.71]**	aOR: 1.81 [1.15-2.83]**
Homelessness & Unstable	Past 90-day homelessness	Silva	OR: 2.65 [1.72-4.08]**	/
	[males only] Homeless	Pabayo	/	aOR: 1.26 [1.01–1.58]*
	Current homelessness	Riggs	/	aOR 1.35 [1.11-1.63]**
	Ever homeless	Thumath	OR 4.94 [2.33-10.48]**	/

Results - 7 overarching themes



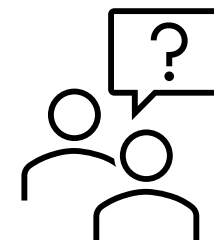
Study 2: Qualitative study



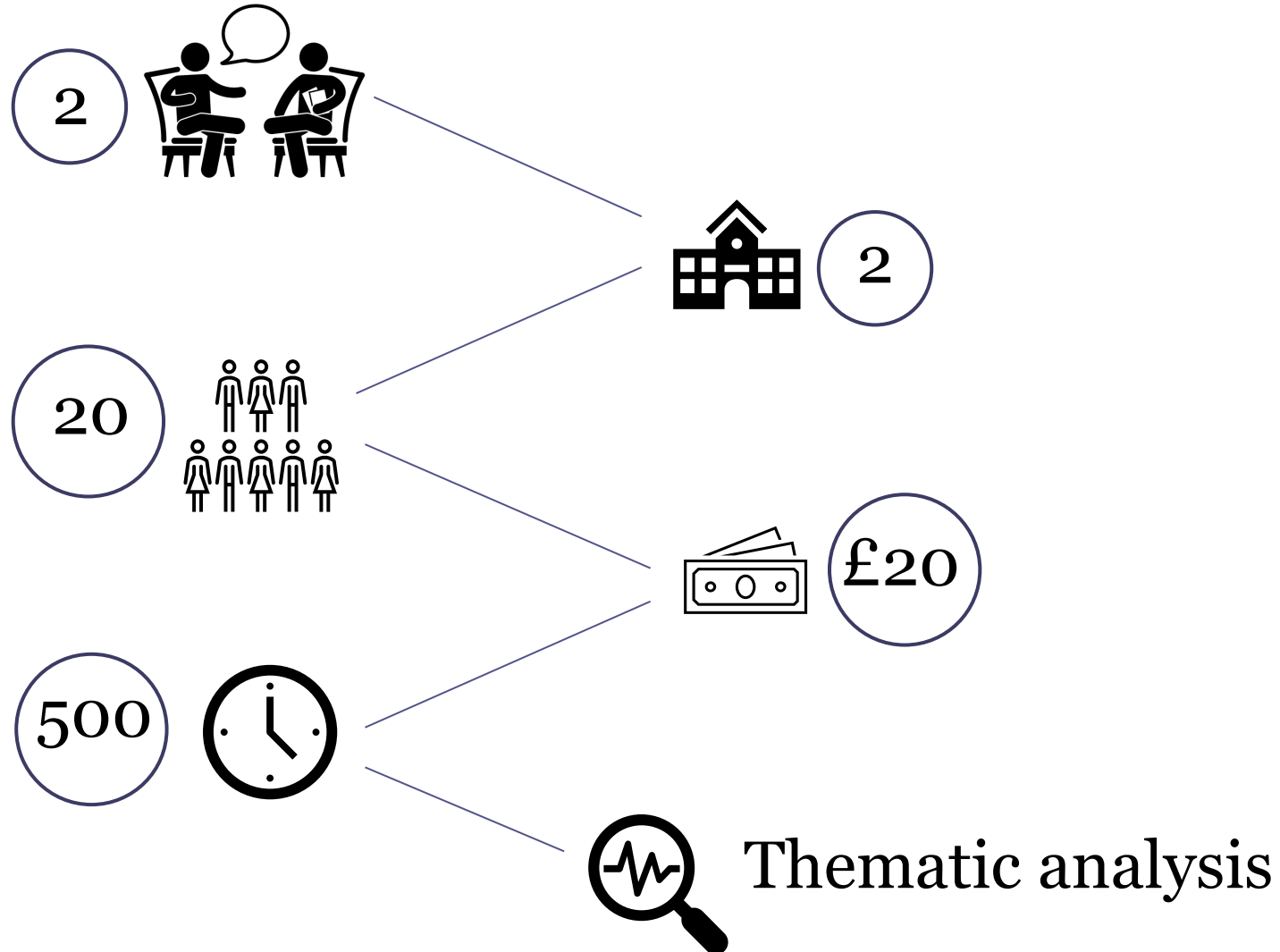
What are the experiences of overdose among people in Dundee?

Rationale

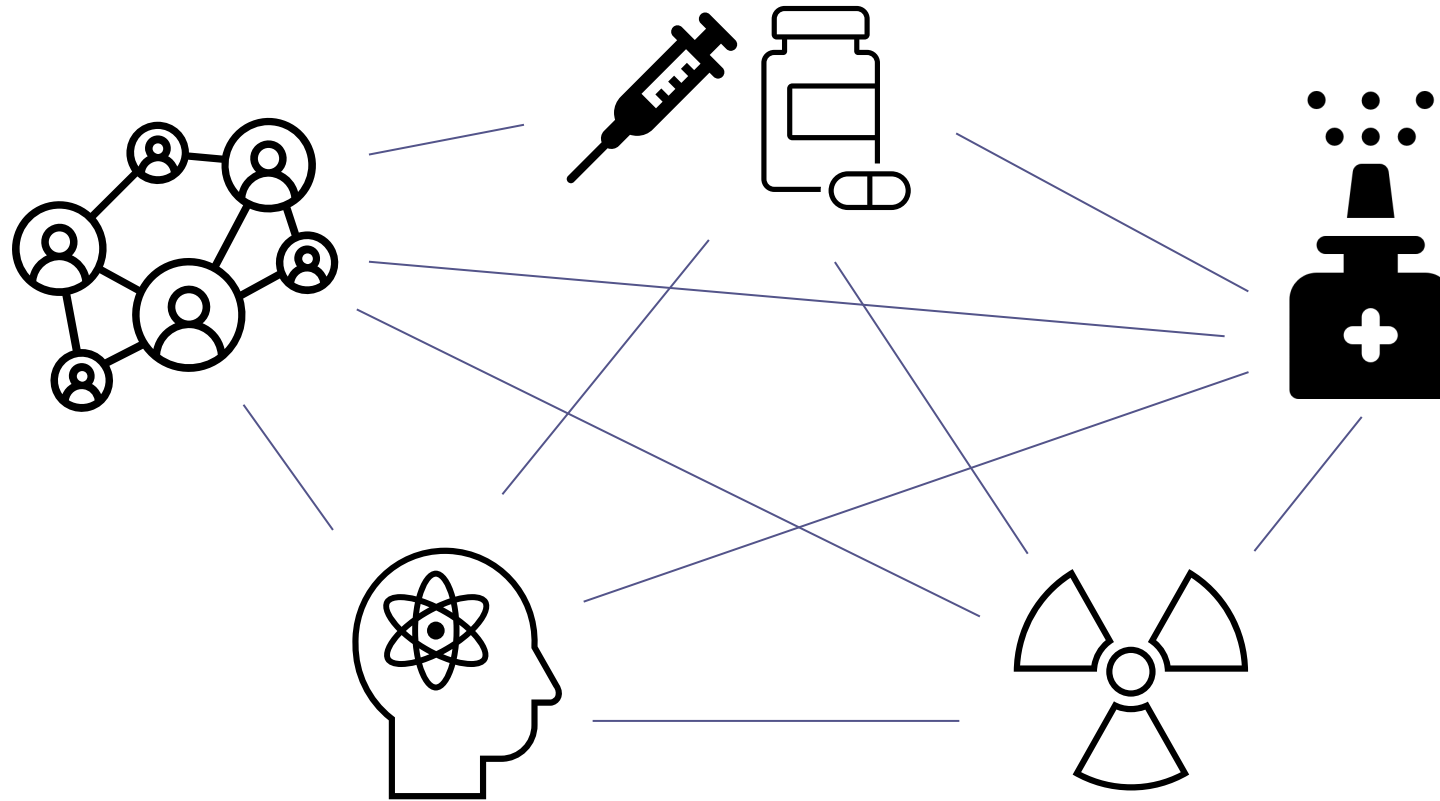
- ① Dundee City = ↑ age-standardised DRD rate of all local authority areas [NRS 2020]
- ① Dundee City = largest increase in DRD rate 5.9 (2000-2004) → 43.1 (2016-2020) /100,000 pop [NRS 2020]



Qualitative Interviews



Results



Quotes “”

“Just out of rehab, I was stuck in the hostel. It just felt like I’d wasted that time coming off the Methadone, sorted my life out, come back to Dundee and it throws me out in the lion’s den”. CC13



“I just got paid there a fortnight ago and all the payday pals came out. And where are they now?” CC3



“You don’t need to take any, you know what I mean. But if I’m paying for it I’m taking some you know what I mean”. CC1

“I couldn’t explain it. It does, it brings you right out of where you are but you want to go back to where you were, you know?”. CC14



“Even though they go mental because they’re going into an instant rattle they’re pure wanting to fight with you, man, but I’d still stab them with it. I don’t care; as long as I’m thinking I’m saving their life”. TH6

Phase 1 conclusions

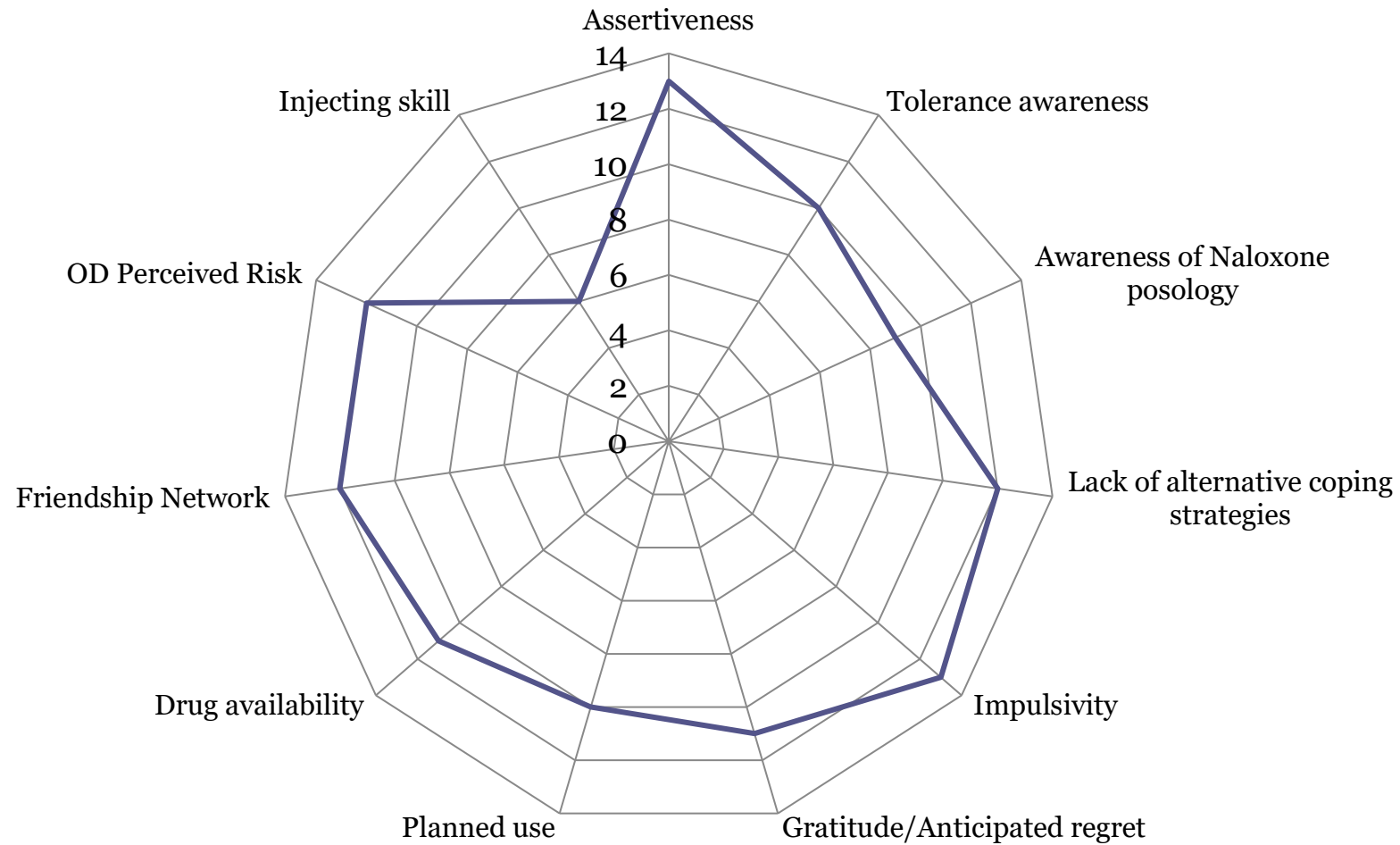
- Complex interplay of internal & external influences observed in the 2 studies.
- Social & physical environments played a significant role in risk-taking behaviours.
- Interventions on overdose risk reduction should shift to target the interpersonal skills involved in drug using behaviours which lead to increased risk of overdose.

Phase 2: Identification of target behaviours and intervention functions



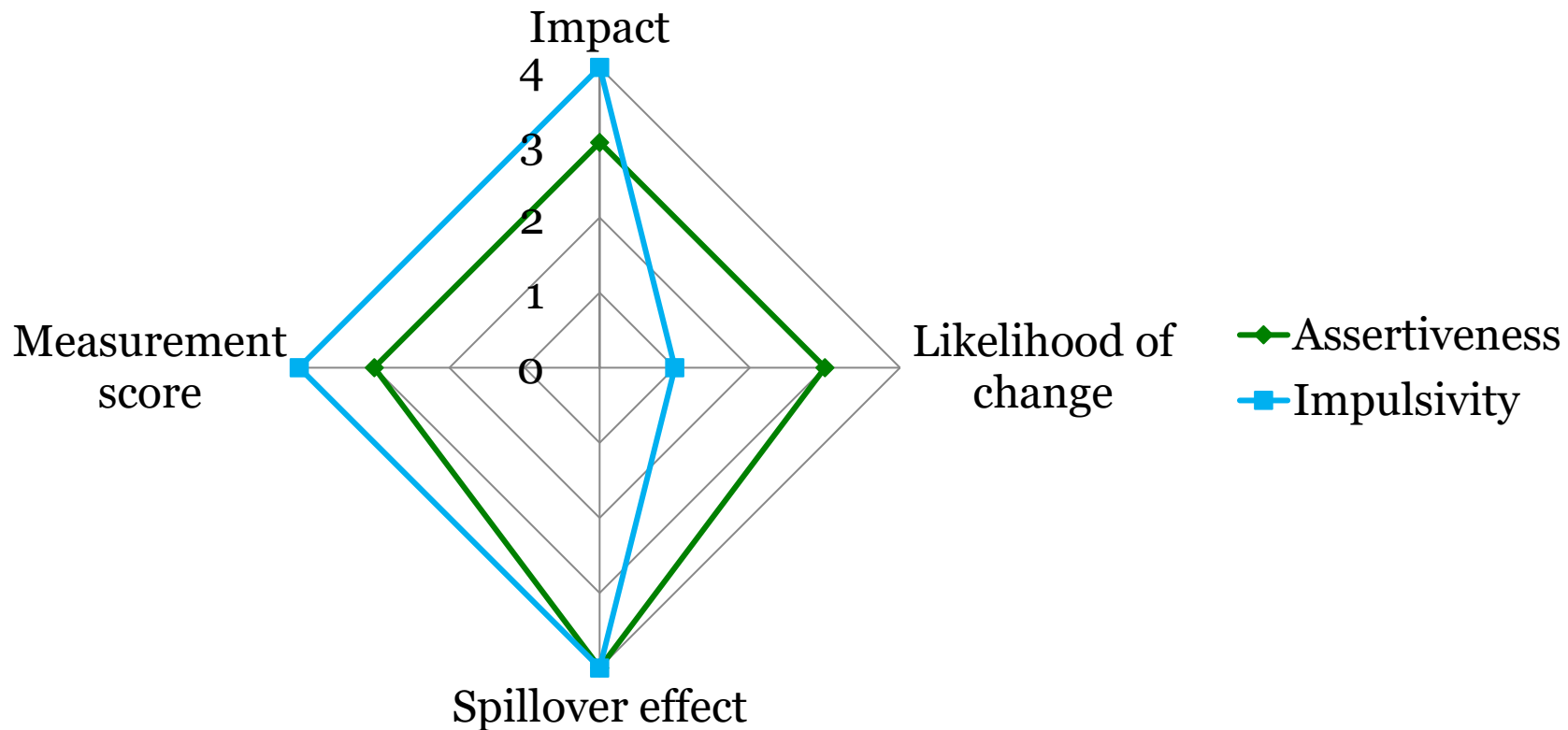
Prioritisation of target behaviours

Desired outcome: Reduce unintentional overdose



Scored on: a) Impact of behaviour change; b) Likelihood of change; c) Spillover effect; d) Measurement score

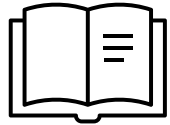
Selecting target behaviour



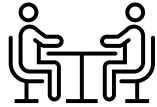
Intervention: Assertiveness training

- Entails 5 behaviour change techniques:
 - *information about social consequences of assertive communication*
 - *feedback on outcome of assertive communication*
 - *demonstration of the behaviour*
 - *instructions on how to be assertive under peer pressure*
 - *behavioural rehearsal and practice*

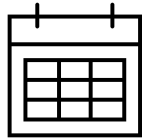
Pilot study implementation considerations



- Published literature on implementation of assertiveness training in clinical practice considers different delivery modalities (Goldfried & Davison, 1994; Lange & Jakubowski, 1976; Speed et al. 2017).



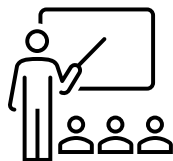
- Individual or group delivery // Face-to-face



- Intensity of intervention delivery also varies (multiple contacts to aid reflection and feedback on behaviour rehearsal)



- Acceptability, practicability and affordability of repeated contacts to establish recurrent behavioural skills training



- Training of peers involved in Overdose Research Teams to carry out intervention

Summary



Phase 1

- Complex interplay of individual, social, environmental factors
- Manuscripts currently being updated with 2023 search re-run



Phase 2

- Skeleton intervention design produced
- Considering options for follow-up study to pilot intervention

Thank you!

 amy.malaguti@nhs.scot

 @AmyMalaguti



University
of Dundee