

Co-use and co-quitting

Developing the evidence base for an intervention to address tobacco and cannabis co-use using mixed methods

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- My PhD plans
 - What I have learned so far
 - How has this altered my plans

Background

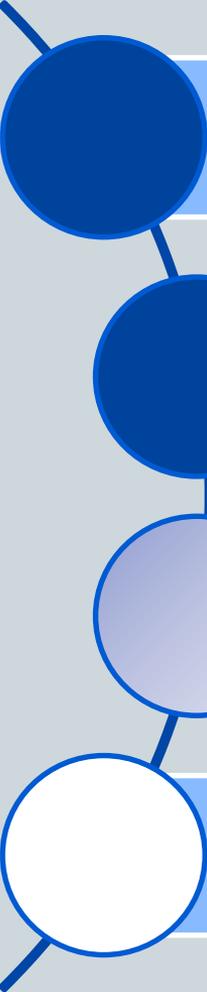
- Tobacco and cannabis are commonly co-used; co-administration is especially common in Europe (Hindocha 2016)
- Tobacco prevalence amongst people with a substance use disorder is very high: ~95% vs. ~ 14% in general population (Guydish 2016)
- Although co-use is common, both substances are rarely co-treated

Aim:

To develop the evidence base for an intervention which addresses tobacco and cannabis co-use amongst young adults



MRC complex intervention framework



1. To carry out a systematic review of interventions which address both substances

2. To carry out a questionnaire survey to ascertain patterns of co-smoking, motivation to quit

3. To carry out qualitative interviews with co-smokers, to further explore similar questions as above

4. Develop a logic model which could form the basis of intervention development (post PhD)

COM-B framework for behaviour change (Michie et al, 2011)

BEHAVIOUR

Capability

Opportunity

Motivation

Physical

Psychological

Social

Physical

Automatic

Reflective

COM-B framework for behaviour change

CO-QUIT ATTEMPT

Capability

Opportunity

Motivation

Managing
cravings

Coping
with life
stressors

Knowing
another
quitter

Access to
support/tx

Desires,
impulses

Improve
health

Study 2: Quantitative survey

Cross-sectional survey of Further Education students

- Online survey investigating
 - demographic information
 - tobacco and cannabis use frequency
 - motivation to quit
- Descriptive data analysis used to profile respondents
- Odds ratios were calculated using logistic regression, to determine factors predicting motivation to quit

Recruitment & inclusion criteria

Recruitment via further education colleges

50 colleges in London and surrounding area invited to participate

- Email sent to each enrolled student with link to online survey
- Incentive: 3 x £50 shopping vouchers drawn at random
- All respondents asked screening questions
- Inclusion criteria:
 - ✓ Recent (past 6 month) tobacco AND cannabis use
 - ✓ Aged 16-30
 - ✓ Currently enrolled as a student



Credit: [Eliott Reyna](#) on [Unsplash](#)

Results: demographic information, tobacco and cannabis use

Responses:

3 colleges participated

400 students completed screening, n= 141

eligible responses; total population unknown

- Almost all aged 16-20
- 43% Black or other Ethnic Minority (BME)
- 60% female and other gender

- 40% reported daily tobacco use
- 22% reported daily cannabis use

Had they tried to quit either substance?

- 8% had quit both
- 12% had made an attempt to quit both

- Amongst current co-users;
 - 21% had made a tobacco quit attempt
 - 4% had made a cannabis quit attempt

Results: Motivation to Stop Smoking tobacco

	Not motivated	Motivated	OR (95% CI), p
Gender			
Female or non-male	17 (35%)	31 (65%)	1.00
Male	16 (37%)	27 (63%)	0.93 (0.39 to 2.18), p=.86
Ethnicity			
Non BME	26 (47%)	29 (53%)	1.00
BME	7 (19%)	29 (81%)	3.71 (1.39 to 9.90), p=.009
Motivation to Stop Cannabis			$\chi^2=1.72$, 2df, p=.42
Not motivated	23 (40%)	35 (60%)	1.00
Motivated	2 (18%)	9 (82%)	2.96 (0.59 to 14.94), p=.19
Not known	8 (36%)	14 (64%)	1.15 (0.42 to 3.17), p=.79
Cannabis: days used per month			
10 days or less	20 (42%)	28 (58%)	1.00
11 days or more	12 (29%)	30 (71%)	1.79 (0.74 to 4.31), p=.20
CDS score (mean \pm SD)(n=89)	13.5 \pm 5.4	12.6 \pm 5.8	0.97 (0.90 to 1.05), p=.47
CAST score (mean \pm SD)(n=89)	5.8 \pm 4.4	6.4 \pm 3.8	1.04 (0.93 to 1.16), p=.50

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Results: Motivation to Stop Cannabis

	Not motivated	Motivated	OR (95% CI), p
Gender			
Female or non-male	52 (88%)	7 (12%)	1.00
Male	31 (78%)	9 (23%)	2.16 (0.73 to 6.37), p=.16
Ethnicity			
Non BME	50 (91%)	5 (9%)	1.00
BME	33 (75%)	11 (25%)	3.33 (1.06 to 10.47), p=.039
Motivation to Stop Cannabis			$\chi^2=3.49$, 2df, p=.18
Not motivated	27 (96%)	1 (4%)	1.00
Motivated	41 (79%)	11 (21%)	7.24 (0.88 to 59.39), p=.065
Not known	15 (79%)	4 (21%)	7.20 (0.74 to 70.42), p=.090
Cannabis: days used per month			
10 days or less	38 (81%)	9 (19%)	1.00
11 days or more	45 (87%)	7 (14%)	0.66 (0.22 to 1.93), p=.45
CDS score (mean±SD)(n=89)	12.0 ± 5.7	16.5 ± 5.3	1.16 (1.01 to 1.32), p=.030
CAST score (mean±SD)(n=89)	6.0 ± 4.0	8.6 ± 4.4	1.17 (1.02 to 1.33), p=.027

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Conclusions

Motivation to Stop Smoking

- Only BME ethnicity appears to predict presence of Motivation to Stop Smoking
- Increased motivation to stop cannabis, and heavier cannabis use may play a role

Motivation to Stop Cannabis

- Motivation to Stop Smoking appears to predict MTSC
- Dependence on cigarettes and cannabis may predict MTSC

Back to the COM-B framework

Co-quit???

Capability

Opportunity

Motivation

Knowledge
of
treatment

Coping
with life
stressors

Few
quitters in
circle:
ethnicity?

Not
seeking
treatment

Tobacco

Cannabis

References

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