

Session 14

# Research Presentation

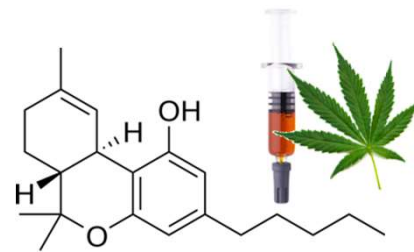
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# Does CBD Enhance Exercise Enjoyment? A Randomised Controlled Trial

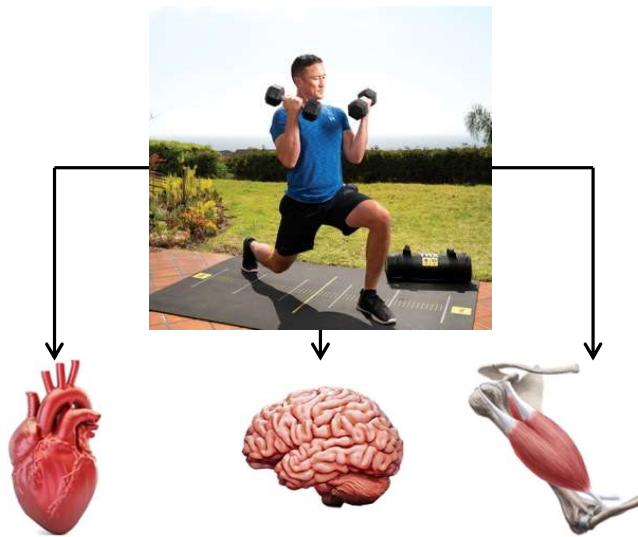


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 @Lambert\_Usyd

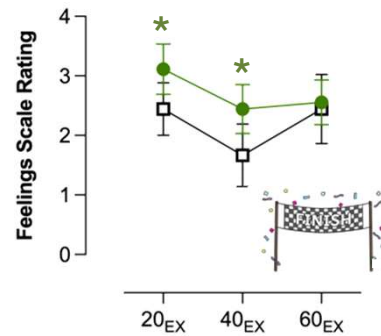
# Background



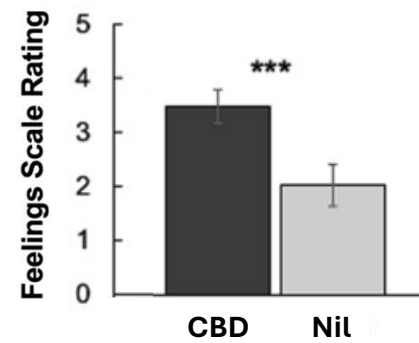
**Negative 'Feelings' – or *Affect***

# Background

Sahinovic *et al.*, (2022)



Gibson *et al.*, (2023)



Population: ?

Sample Size:

CBD: ?



Exercise: ?

# Aim and Hypothesis

## **Aim:**

To investigate the effects of CBD (150 mg) on subjective responses to self-paced aerobic exercise in recreationally active individuals.

## **Hypothesis:**

CBD will enhance the subjective experience of exercise; specifically,  positive affect and  negative affect during and following activity.



# Methods

## Study Design:

- ✓ Randomised
- ✓ Double-Blind
- ✓ Placebo-Controlled
- ✓ Crossover
- ✓ Clinical Trial



## Participants:

- ✓ 3138 AHS students
- ✓  $\geq 18$  years of age
- ✓ Able to exercise



## Treatments:

2 x Soft Gel Capsules:

- 150 mg CBD
- Placebo

(Avecho Biotech. Ltd.)



## Primary Outcomes:

Affective Valence ('Feelings Scale')

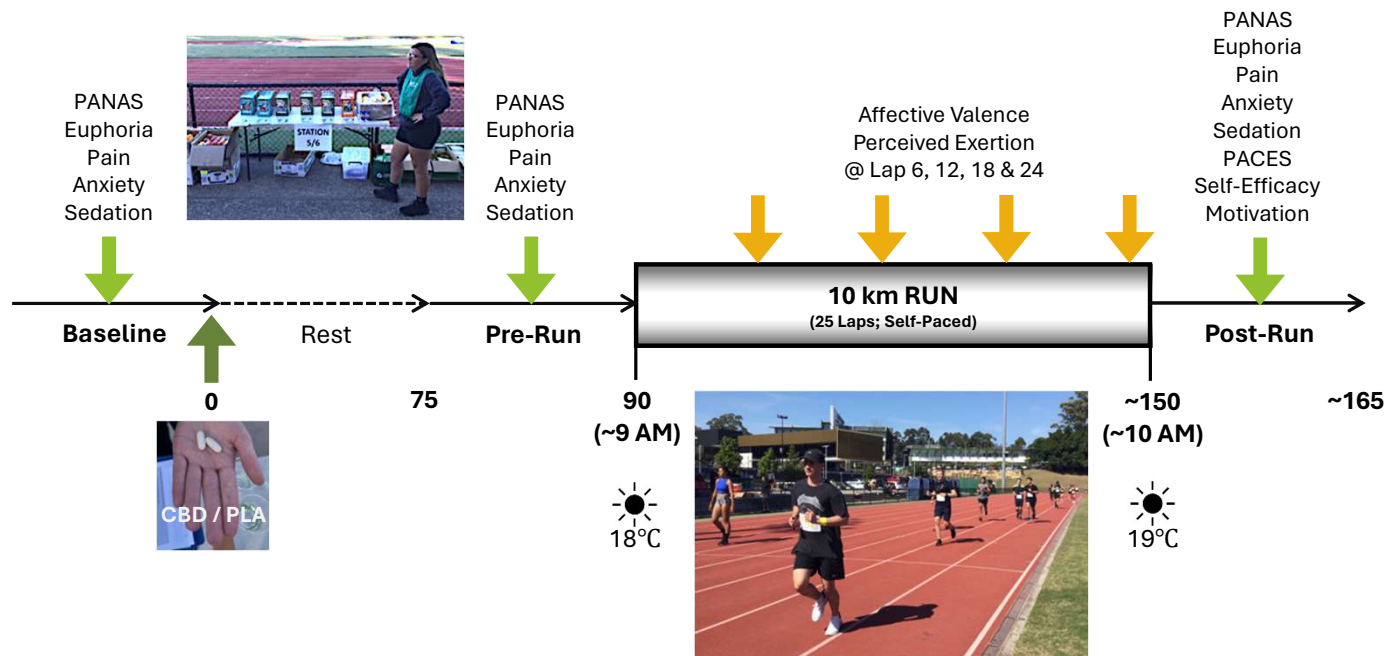


-5 -4 -3 -2 -1 0 1 2 3 4 5

Positive & Negative Affect (PANAS)

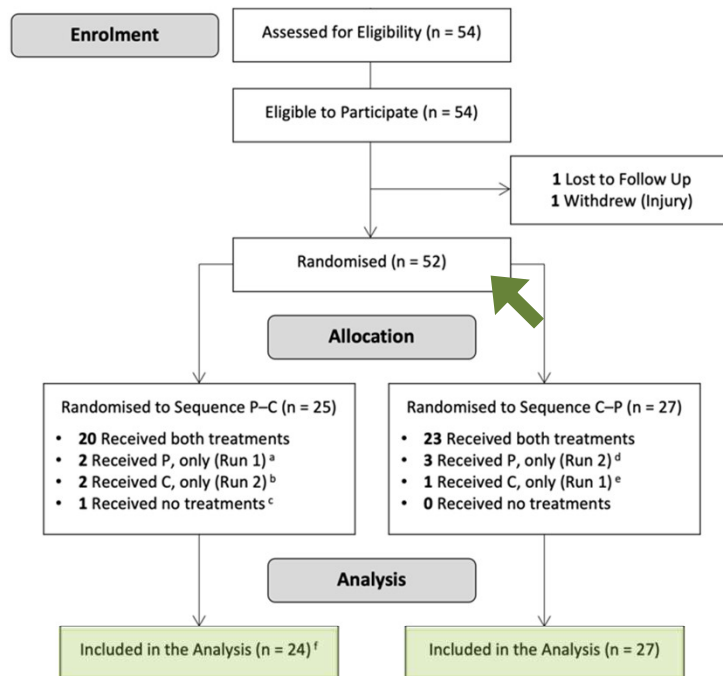
# Methods

## Procedures:



# Results

## Participant Characteristics:



### Characteristic

#### General:

Sex (n)	
Male	29 (57%)
Female	22 (43%)
Age (years)	21.9 [21.0–25.3]
BMI (kg/m <sup>2</sup> )	24.8 (19.3, 30.3)

#### Recent Running:

Days in the last fortnight (n)	
Zero	10 (20%)
1–4 days	30 (59%)
5–9 days	9 (18%)
10–14 days	2 (4%)
Distance (km/event)	4.8 [3.0–5.0]
Duration (minutes/event)	30 (25–43)

#### Cannabis Use:

Ever Used (n)	
No	24 (47%)
Yes	27 (53%)
Time since last use (n)	
≤4 weeks	2 (4%)
1–12 months	12 (24%)
>1 year	13 (25%)

#### CBD Use:

Ever Used (n)	
No	47 (92%)
Yes	4 (8%)
Time since last use (n)	
≤4 weeks	0
1–12 months	3 (6%)
>1 year	1 (2%)

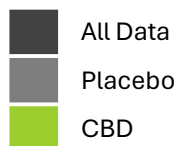


# Results

Did CBD ↓ the 'undesirable' effects of exercise?



No main effects of Treatment or Treatment by Time interactions ( $p$ 's > 0.10).



# Results

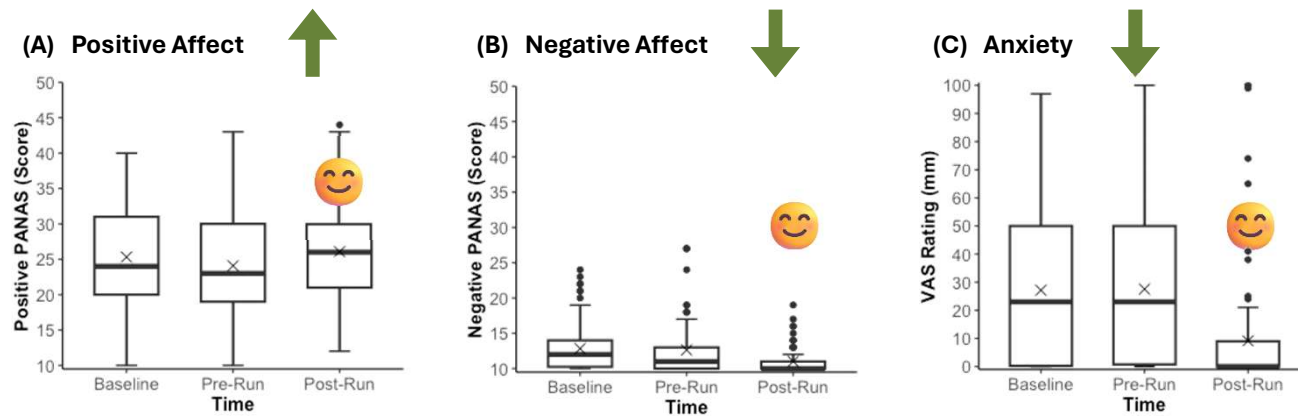
Did CBD  or  any other outcome measures?

	Fixed Effects ( $\rho$ )	
	Treatment	Treatment $\times$ Time
Primary Outcomes:		
Secondary Outcomes:		

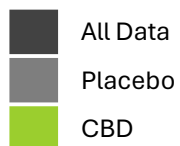
Note: Effects of Run, Sex and Time not shown.

# Results

Did exercise  or  any other outcome measures?



All Post-Run values differed from Pre-Run and Baseline ( $p$ 's < 0.05)



# Conclusion

CBD (150 mg) does not appear to enhance the subjective experience of self-paced aerobic exercise in recreationally active individuals.

Nor, however, does it appear to compromise it (or exercise performance).

These findings suggest that CBD use is safe under exercise conditions and unlikely to impede physical activity participation.

Our study also reaffirms the powerful mood-enhancing effects of exercise.



# Acknowledgements

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