

Brief negative affect focused functional imagery training abolishes stress induced alcohol choice in hazardous student drinkers

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Introduction

- ✓ Feelings of depression and anxiety, powerfully motivate alcohol use in order to mitigate such **negative emotions** [1].
- ✓ **Drinking to cope** with negative affect (DTC) is a significant prospective risk factor for the development of problematic drinking [2].
- ✓ Modern therapies for treatment-seeking drinkers have been developed to **weaken the association** between the experience of negative affect and motivation to drink [3].
- ✓ **Episodic Future Thinking** (EPFT) and **Functional Imagery Training** (FIT) manipulations involve instructing participants to imagine themselves in the future, to pre-experience a positive event [4-5].

The current study tested whether a brief intervention that combines EPFT & Personalised Feedback would attenuate the effects of stress induction on alcohol seeking behaviour in a sample of hazardous student drinkers who endorsed DTC.

Methods

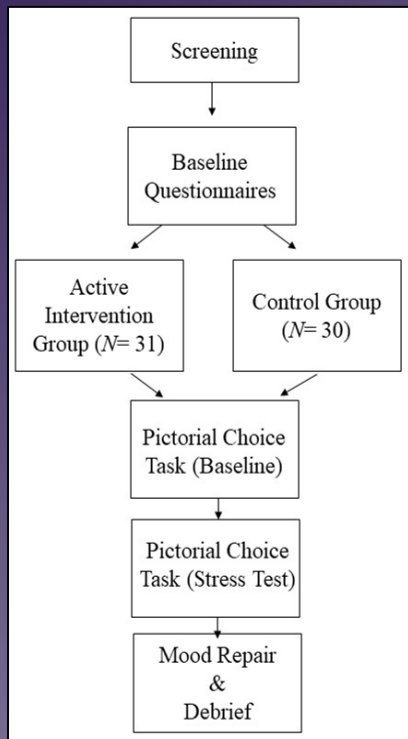


Figure 1: Study Design

- ✓ **Active Group:** participants watched brief EPFT inspired personalised videos, with the text read out (over audio) by a female voice (available in full at YouTube link: <https://youtu.be/xbhTxFCcRjY>).
- ✓ **Control Group:** participants watched a brief video which summarised the binge drinking risk information derived from the US National Institute on Alcohol Abuse and Alcoholism (NIAAA) College Drinking Factsheet



Figure 2: Pictorial Choice Task

- ✓ **Outcome measures:**
 - % alcohol vs. food images in a pictorial choice task at baseline and under noise stress (Figure 2)
 - Subjective mood (happy – annoyed)

Results

✓ % Alcohol vs Food Choice (Figure 3):

ANOVA revealed a significant interaction between intervention (active, control) and time-point (baseline, stress test) $F(1, 59) = 4.59, p = .036, \eta^2 = .72$, driven by a significant increase in alcohol choice from baseline to stress test in the control group, but not the active group. Furthermore, the two groups differ significantly in the stress test.

✓ Subjective Mood:

There was no main effect of group or interaction between group and time point for either subjective happiness or annoyance.

Conclusions

- ✓ Selectively attenuated stress induced increase in alcohol seeking
- ✓ The therapeutic effect of the active intervention did not extend to subjective mood

Conflict of Interest: No conflict exists

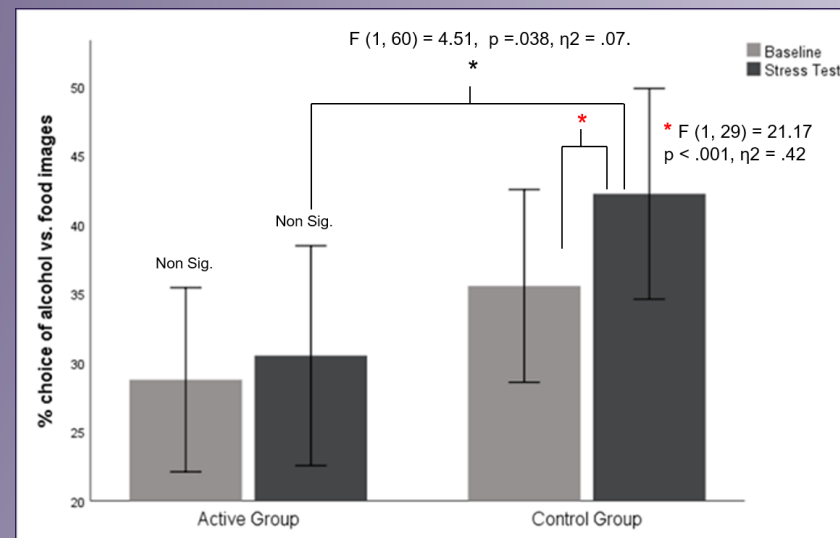


Figure 3: % choice of Alcohol vs. food images

References: [1] Hogarth, L. (2020). "Addiction is driven by excessive goal-directed drug choice under negative affect: translational critique of habit and compulsion theory." *Neuropsychopharmacology* 45(5): 720-735. [2] Hogarth, L. and L. Hardy (2018). "Alcohol use disorder symptoms are associated with greater relative value ascribed to alcohol, but not greater discounting of costs imposed on alcohol." *Psychopharmacology* 235(8): 2257-2266. [3] Stasiewicz, P. R., C. M. Bradizza, R. C. Schlauch, S. F. Coffey, S. B. Gulliver, G. D. Gudleski and C. W. Bole (2013). "Affect regulation training (ART) for alcohol use disorders: development of a novel intervention for negative affect drinkers." *J Subst Abuse Treat* 45(5): 433-443. [4] Heckerens, J. B. and M. Eid (2020). "Inducing positive affect and positive future expectations using the best-possible-self intervention: A systematic review and meta-analysis." *The Journal of Positive Psychology*: 1-26. [5] Andrade, J., M. Khalil, J. Dickson, J. May and D. J. Kavanagh (2016). "Functional Imagery Training to reduce snacking: Testing a novel motivational intervention based on Elaborated Intrusion theory." *Appetite* 100: 256-262