

Breaking the Cycle:

Evidence update and
practical strategies for
treating co-occurring
anxiety and substance use

Prof Lexine Stapinski



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I acknowledge the Traditional Custodians of Country throughout Australia and recognise their continuing connection to land, water and culture.

I pay my respects to those who have cared and continue to care for Country.



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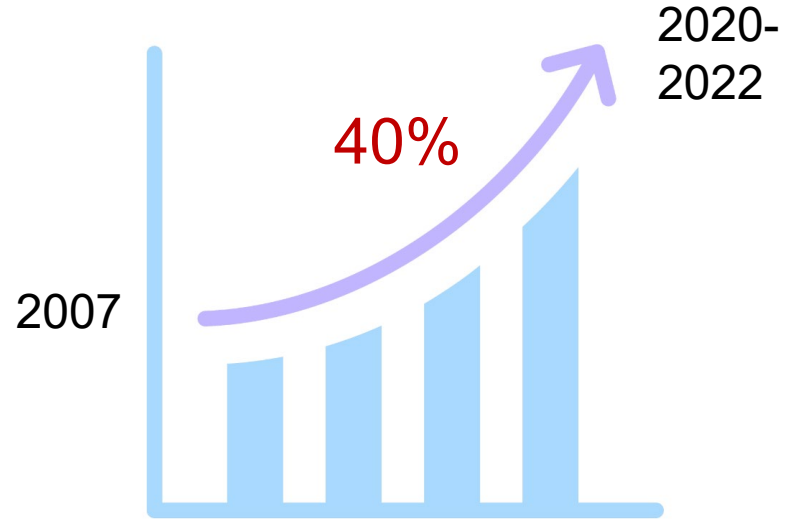
Outline

1. Link between anxiety & alcohol/substance use: what's the evidence and why is it important?
2. What psychological treatment approaches are effective for co-occurring anxiety and substance use?
3. Practical strategies: Integrating treatment approaches for anxiety and substance use

Background: Anxiety

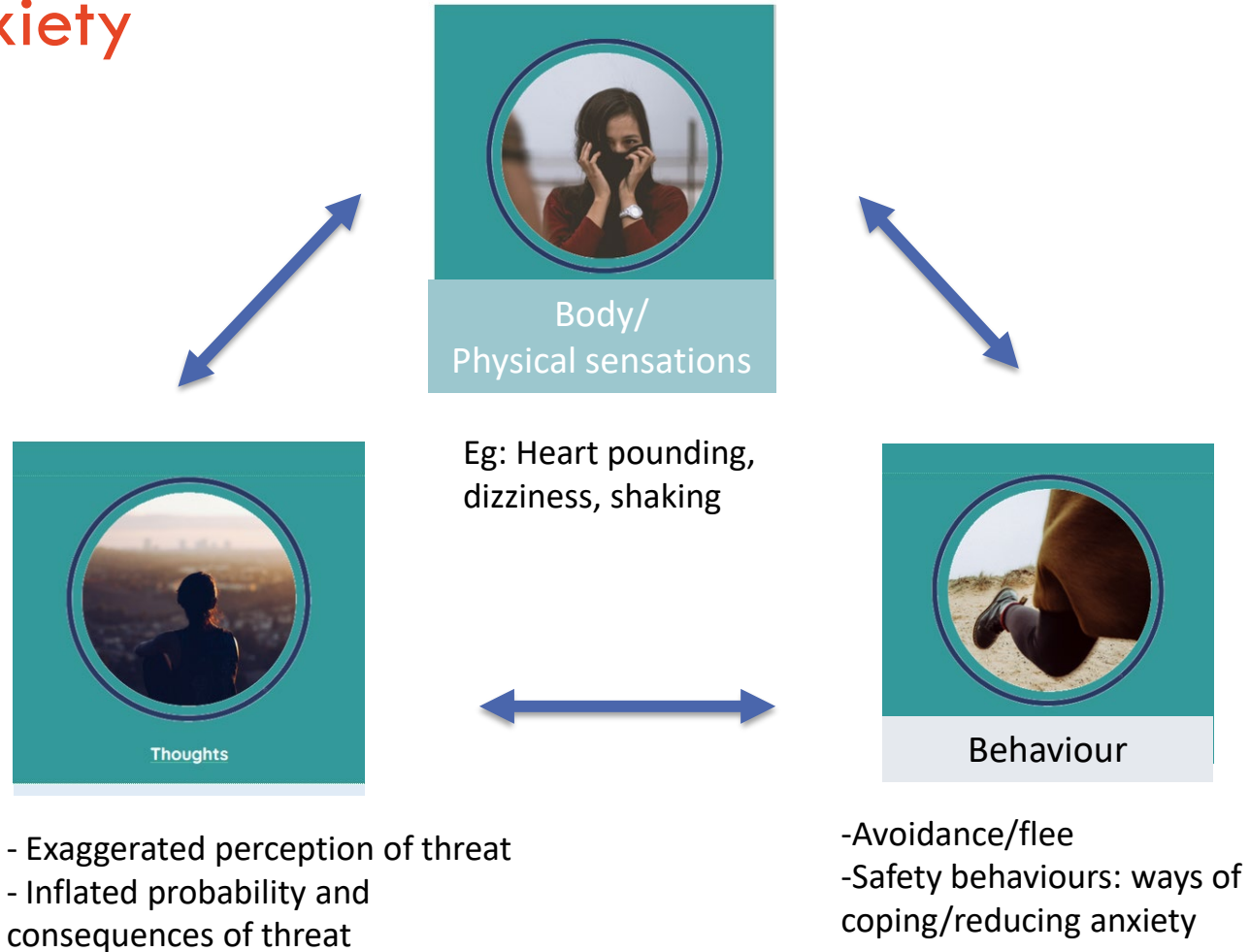
1 in 4

Australians experience anxiety at a level that causes them to have problems in their day-to-day lives






40% increase in 12-month prevalence of anxiety disorders since 2007 Australian National survey (Slade et al, 2024; ANZJP)

Background: Anxiety

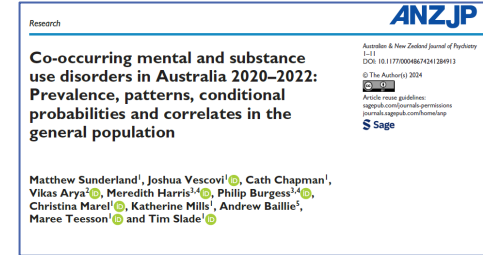


Anxiety disorders: Core concerns

| | | | |
|---|-------------------------------------|---|---|
|  | Social Anxiety Disorder | Social threat | Others will think I'm incompetent/boring/unlikeable |
|  | Panic Disorder | Physical Threat Mental Threat | I'm having a heart attack/stroke I'll lose control/go crazy |
|  | Generalised Anxiety Disorder | Multiple layers of threat: physical, mental, social | I can't control my worry I'll fail to meet my responsibilities, let others down Something will go wrong |

Co-occurrence between anxiety and alcohol use disorders

- Lifetime prevalence of alcohol/substance use disorders in Australia – 18.8% (Slade et al, 2024)
- 31% of Australians consume alcohol at risky levels (NDSHS 2022-23)



| | Tetrachoric correlation with AUD | Probability of AnxD given AUD (past 12m) |
|--------------------------------|----------------------------------|--|
| Social Anxiety Disorder | 0.34 | 19.3% |
| GAD | 0.32 | 10.7% |
| Panic Disorder | 0.31 | 9.7% |
| OCD | 0.21 | 5.9% |
| PTSD | 0.27 | 12.1% |

Co-occurrence between anxiety and drug use disorders

Research

ANZJP

Co-occurring mental and substance use disorders in Australia 2020–2022: Prevalence, patterns, conditional probabilities and correlates in the general population

Matthew Sunderland¹, Joshua Vescovi¹, Cath Chapman¹, Vikas Arya², Meredith Harris^{3,4}, Philip Burgess^{3,4}, Christina Marek⁵, Katherine Mills¹, Andrew Baillie¹, Maree Teesson¹ and Tim Slade¹

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journals.sagepub.com/home/ajp

Sage

| | Tetrachoric correlation with DUD | Probability of AnxD given DUD (past 12m) |
|--------------------------------|----------------------------------|--|
| Social Anxiety Disorder | 0.40 | 43.2% |
| GAD | 0.28 | 21.9% |
| Panic Disorder | 0.32 | 18.5% |
| OCD | 0.29 | 20.6% |
| PTSD | 0.24 | 8.6% |

Co-occurring anxiety and substance use disorders

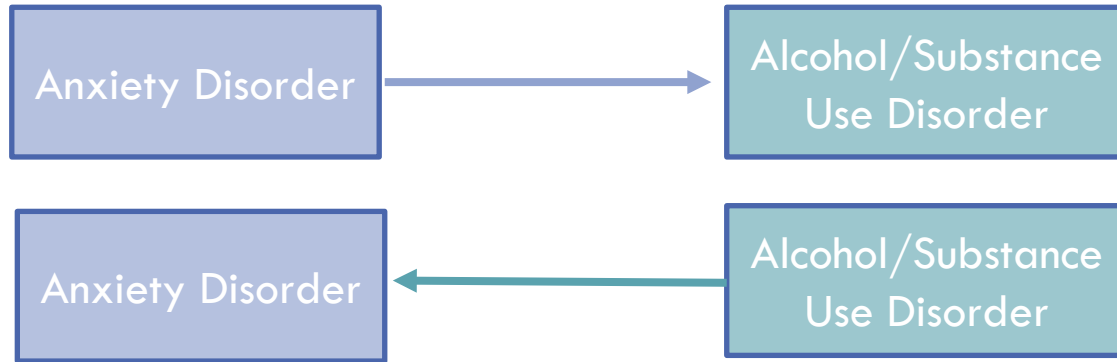
– Models to explain the relationship:



- “Self-medication”, “Stress dampening” models (Khantzian, 1985; Sher & Levenson, 1982)
- Onset of anxiety disorders typically precede onset of SUDs
- Coping-motivated use has been identified as risk factor for development of SUD and related harms (Stapinski et al 2016, Beseler et al. 2008; Kuntsche et al. 2005; Merrill et al 2014).

Co-occurring anxiety and substance use disorders

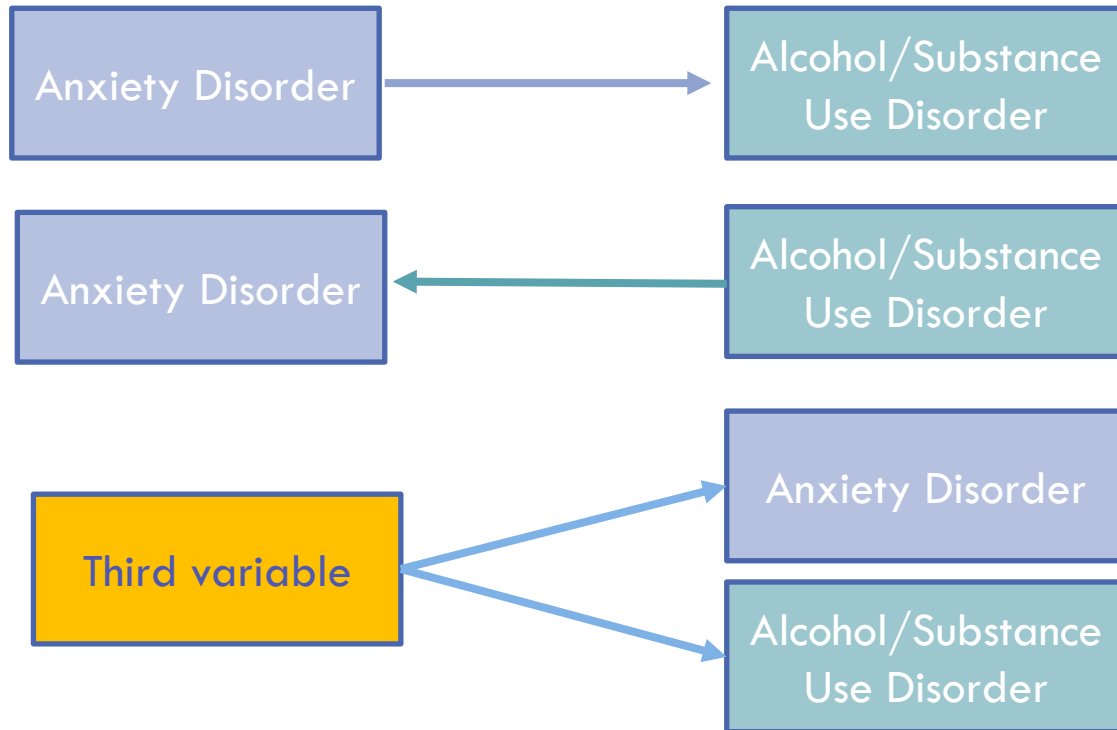
– Models to explain the relationship:



- Induce anxiety during withdrawal, prolonged use may disrupt stress-response system
- Some anxiety disorders (GAD) improve/remit after period of alcohol abstinence
(Brown et al 1991)
- Due to order of onset, at most explains 25% of cases (Stewart & Conrod, 2008)

Co-occurring anxiety and substance use disorders

– Models to explain the relationship:



Why is co-occurring anxiety and substance use important clinically?



Vicious Cycle of Anxiety & Substance Use

- Problems tend to be more debilitating, chronic
- Each problem fuels the other, this impacts recovery

Stewart & Conrod, 2008; Kushner et al 2000, Hussong et al, 2011

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Treatments evaluated for co-occurring anxiety and substance use



Single disorder focussed treatment

- Anxiety-focused treatment, or
- Substance use-focused treatment.



Sequential dual-focussed treatment

- Anxiety treatment, followed by alcohol treatment (or vice versa)
- May be different clinicians/services



Parallel dual-focussed treatment

- Separate anxiety and substance use treatments, delivered in parallel
- May be different clinicians/services



Integrated dual-focussed treatment

- Treatment for both anxiety and substance use, integrated delivery
- One clinician and therapy

Single disorder focussed treatments

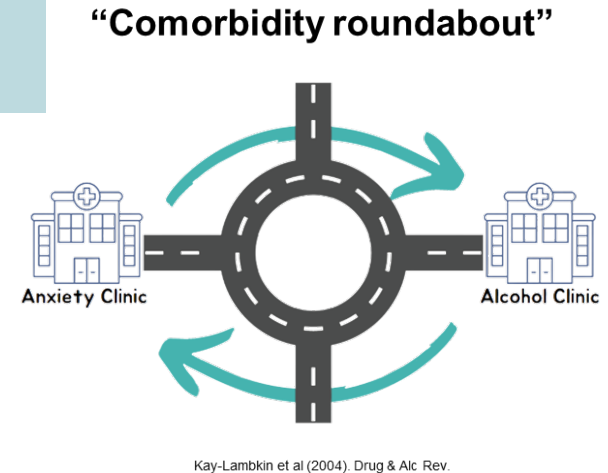
| | |
|--|---|
| Substance use focussed treatments | <ul style="list-style-type: none">• Anxiety interferes with engagement with standard substance use treatments• Anxiety symptoms are among the strongest predictors of treatment non-response and relapse to substance use (Schellekens et al, 2015; Trocchio et al 2013) |
| Anxiety focussed treatments | <ul style="list-style-type: none">• Mixed evidence; some trials found substance use did not disrupt benefits of anxiety Tx (Wolitzky-Taylor et al 2015, McEvoy & Shand, 2008)• However, limited data as people with co-occurring SUD are typically excluded from trials of psychotherapy for anxiety disorders |

Dual-focussed treatments: Parallel or Sequential delivery

| | |
|--|--|
| Sequential dual-focussed treatments | <ul style="list-style-type: none">• Sequential treatment for SAD-AUD: improved anxiety outcomes but similar substance use outcomes to AUD treatment only (Schade et al., 2005) |
| Parallel dual-focussed treatments | <ul style="list-style-type: none">• Parallel dual-focussed treatment for panic and AUD (Bowen et al 2000): similar outcomes to AUD treatment only• Parallel dual-focussed treatment for SAD-AUD: worse alcohol outcomes to AUD treatment only (Randall et al., 2001) |


The case for integrated anxiety-substance use treatment

- People typically see the anxiety and substance use as inter-related
- Due to these interconnections, greater effectiveness may be achieved with **an integrated treatment** that provides explicit assistance in addressing these links
- Unintegrated treatments may be demoralising or insufficient for clients with co-occurring anxiety and substance use
- Alleviates frustrations with the referral process (“comorbidity roundabout”)



Testing the effectiveness of integrated treatment

Baillie et al. *BMC Psychiatry* 2021, 21:109
http://www.biomedcentral.com/1471-2440/21/109

 **Open Access**

STUDY PROTOCOL

An investigator-blinded, randomized study to compare the efficacy of combined CBT for alcohol use disorders and social anxiety disorder versus CBT focused on alcohol alone in adults with comorbid disorders: the Combined Alcohol Social Phobia (CASP) trial protocol

Andrew J Baillie^{1*}, Claudia Sannibale^{2,3}, Lexine A Stapinski^{1,4,5}, Maree Teesson^{1,2}, Ronald M Rapee¹ and Paul S Haber^{1,4}

Abstract
Background: Alcohol use disorders and social anxiety disorder are common and disabling conditions that frequently co-exist. Although there are efficacious treatments for each disorder, only two randomized controlled trials of interventions for these combined problems have been published. We developed a new integrated treatment for comorbid Social Anxiety Disorder and Alcohol Use Disorder based on established Motivational Interviewing (MI) and Cognitive Behaviour Therapy (CBT) interventions for the separate disorders. Compared to established MCBT for alcohol use disorders this new intervention is hypothesized to lead to greater reductions in symptoms of social anxiety and alcohol use disorder and to produce greater improvements in quality of life. Higher levels of alcohol dependence will result in relatively poorer outcomes for the new integrated treatment.
Methods/design: A randomized controlled trial comparing 9 sessions of individual integrated treatment for alcohol and social phobia with 5 sessions of treatment for alcohol use problems alone is proposed. Randomisation will be stratified for stable antidepressant use. Post treatment clinical assessments of alcohol consumption and diagnostic status at 3 and 6 month follow-up will be blind to allocation.
Discussion: The proposed trial addresses a serious gap in treatment evidence and could potentially define the appropriate treatment for a large proportion of adults affected by these problems.
Trial registration: Australian New Zealand Clinical Trials Registry ACTRN1362000020831.
Keywords: Alcohol use disorders, Social anxiety disorder, Comorbidity, Cognitive behavior therapy, Clinical trial

ANZJP

Research

Randomised controlled trial of integrated cognitive behavioural treatment and motivational enhancement for comorbid social anxiety and alcohol use disorders

Lexine A Stapinski^{1,4,5}, Claudia Sannibale^{2,3}, Mirjana Subotic¹, Ronald M Rapee¹, Maree Teesson^{1,2}, Paul S Haber¹ and Andrew J Baillie^{1*}

Abstract
Objective: Alcohol use disorder and social anxiety disorder are interconnected disorders that commonly co-occur. We report the first trial to assess whether integrated treatment for social anxiety and alcohol use disorder comorbidity improves outcomes relative to standard alcohol focused treatment.
Methods: Participants were recruited to a randomised controlled trial, and randomly allocated to one of two treatments, Integrated (n=61) or Control (alcohol focused, n=56). Assessment and treatment sessions were conducted at two sites in Sydney, Australia. Inclusion criteria were as follows: (1) clinical diagnosis of social anxiety disorder and (2) Diagnostic or sub-clinical symptoms of alcohol use disorder. Diagnoses were determined according to the Diagnostic and Statistical Manual of Mental Disorders (4th ed.). All participants (n=117) received 10 sessions of cognitive behavioural treatment and motivational enhancement. The integrated treatment simultaneously targeted social anxiety disorder, alcohol use disorder and the connections between these disorders. The Control treatment focused on alcohol use disorder only. Outcomes were assessed at 6-month follow-up, with interim assessments at post-treatment and 3-months. Primary outcomes were social anxiety disorder severity (composite Social Phobia Scale and Social Interaction Anxiety Scale), alcohol use disorder severity (standard drinks per day and Severity of Alcohol Dependence Questionnaire) and quality of life (Short-Form Health Survey) was assessed to capture the combined impairment of social anxiety and alcohol use disorder comorbidity.
Results: At 6-month follow-up, both conditions showed significant reductions in social anxiety and alcohol use disorder symptoms, and improved quality of life. There was no evidence of between-condition differences for alcohol outcomes, with mean consumption reduced by 5.0 (9.8) and 5.8 (1.0) drinks per day following Alcohol and Integrated treatments, respectively. Integrated treatment achieved greater improvements in social anxiety symptoms (mean difference=-14.9, 95% confidence interval=-28.1, -1.4, d=0.46) and quality of life (mean difference=7.6, 95% confidence interval=-11.2, 14.0, d=0.80) relative to alcohol focused treatment.

RCT to examine integrated treatment for co-occurring social anxiety and alcohol use disorders

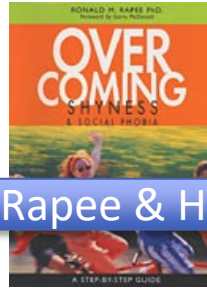
Stapinski, Sannibale, Subotic, Rapee, Teesson, Haber & Baillie, 2021, [ANZJP](#)


Funder: Australian Government
National Health and Medical Research Council



Integrated Treatment for Social Anxiety & Alcohol Use

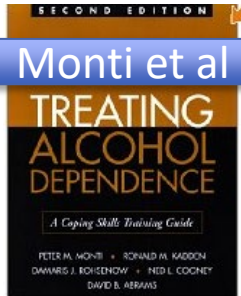
Based on evidence-based approaches:



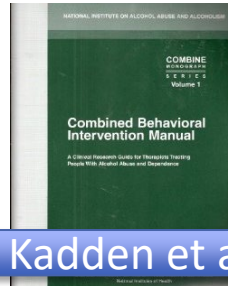
Rapee & Heimberg



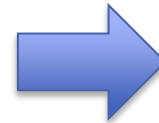
Social Anxiety



Monti et al

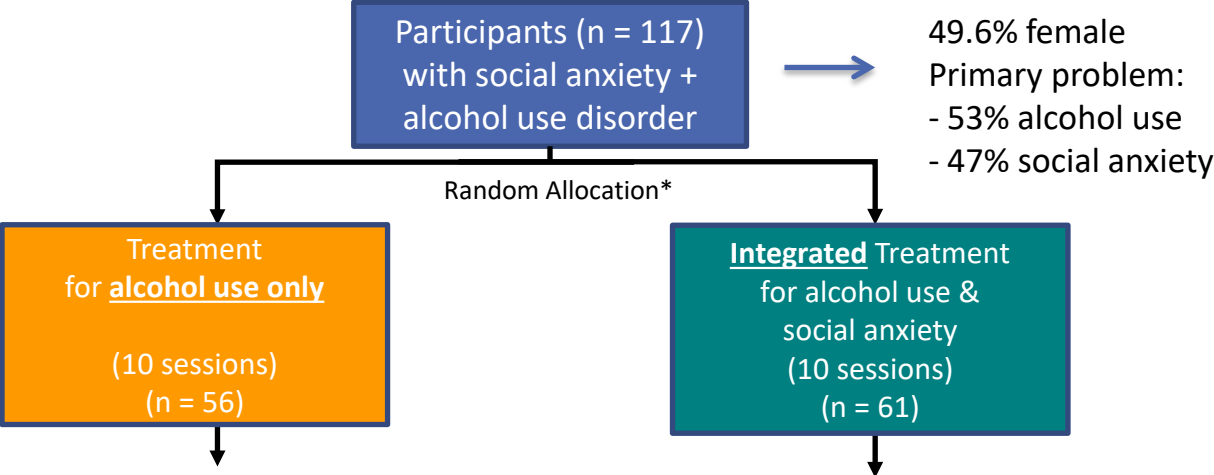


Kadden et al

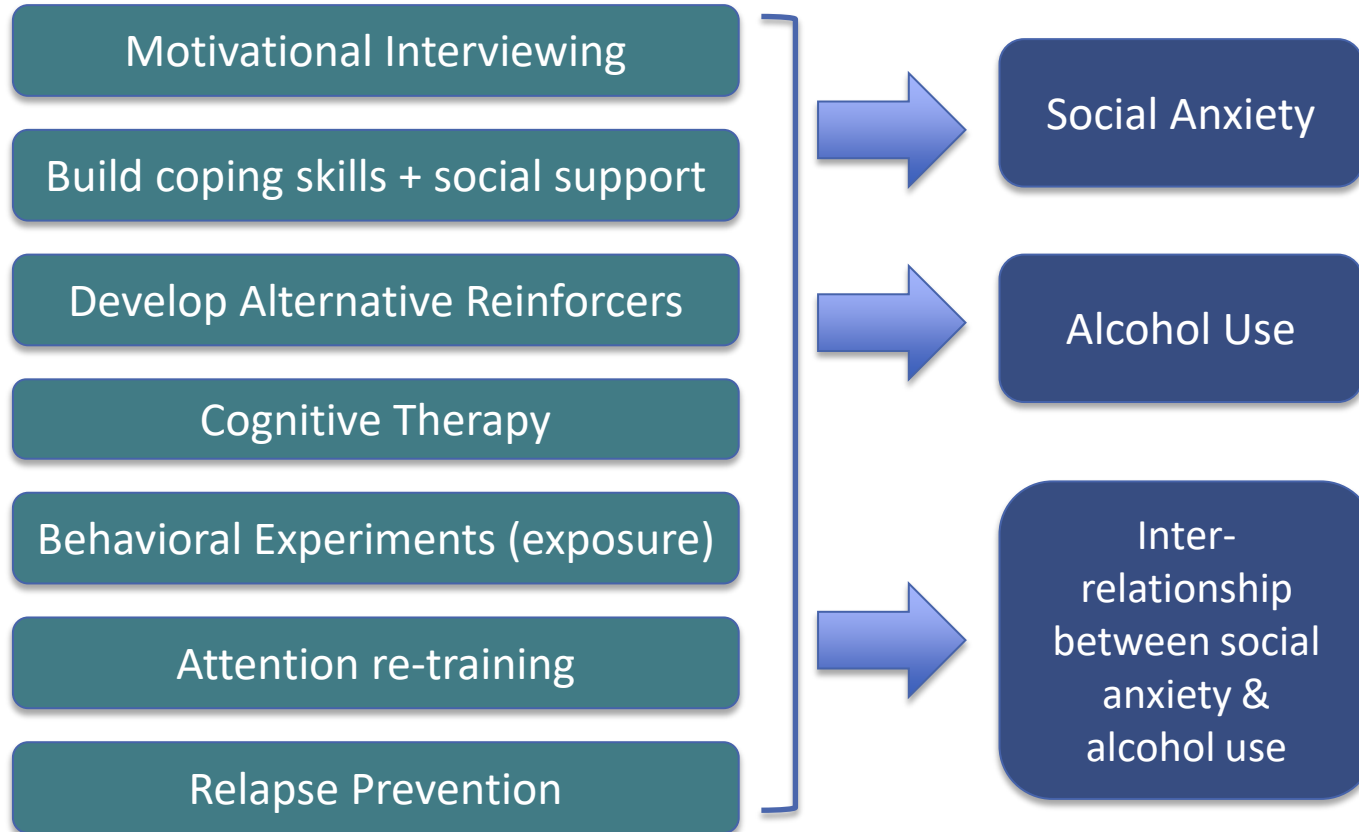


Alcohol Use

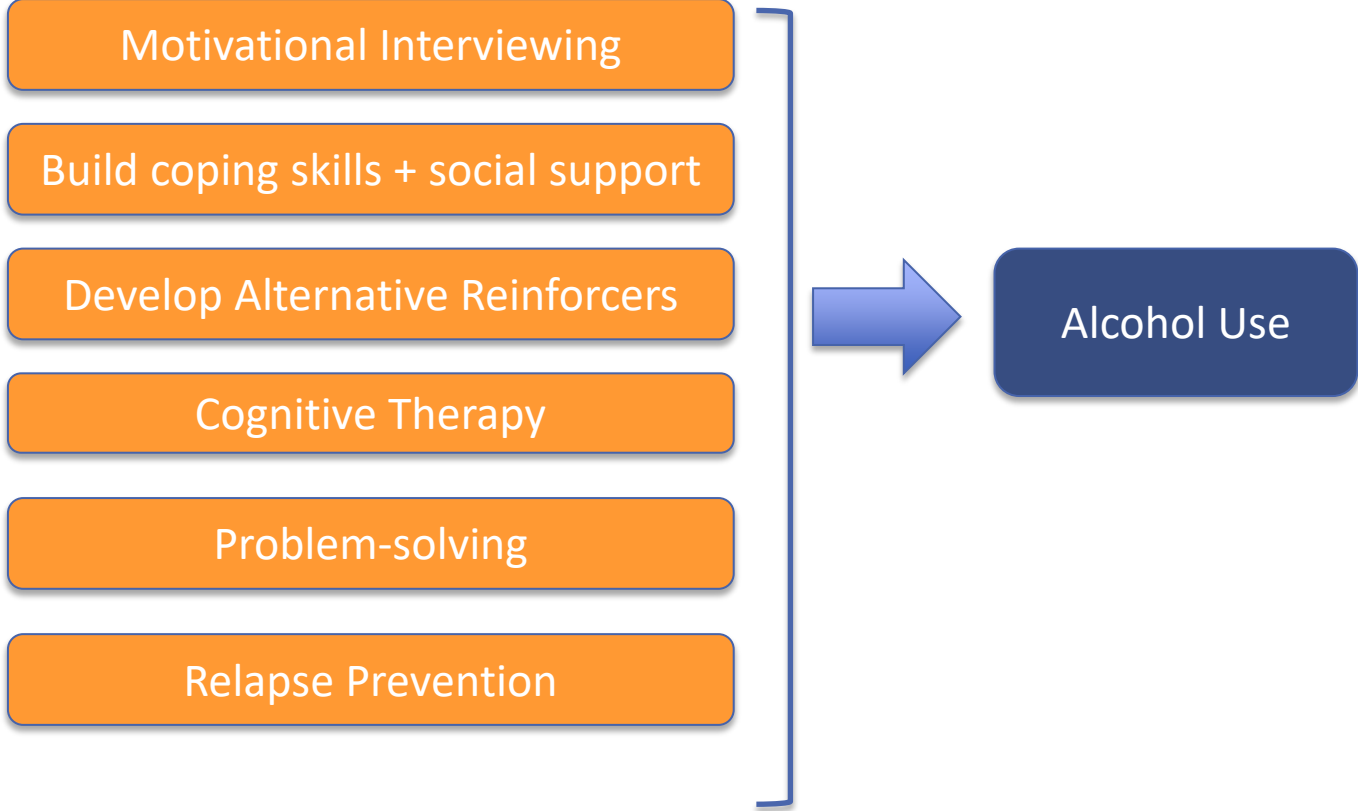
Integrated Treatment: Can we improve outcomes?



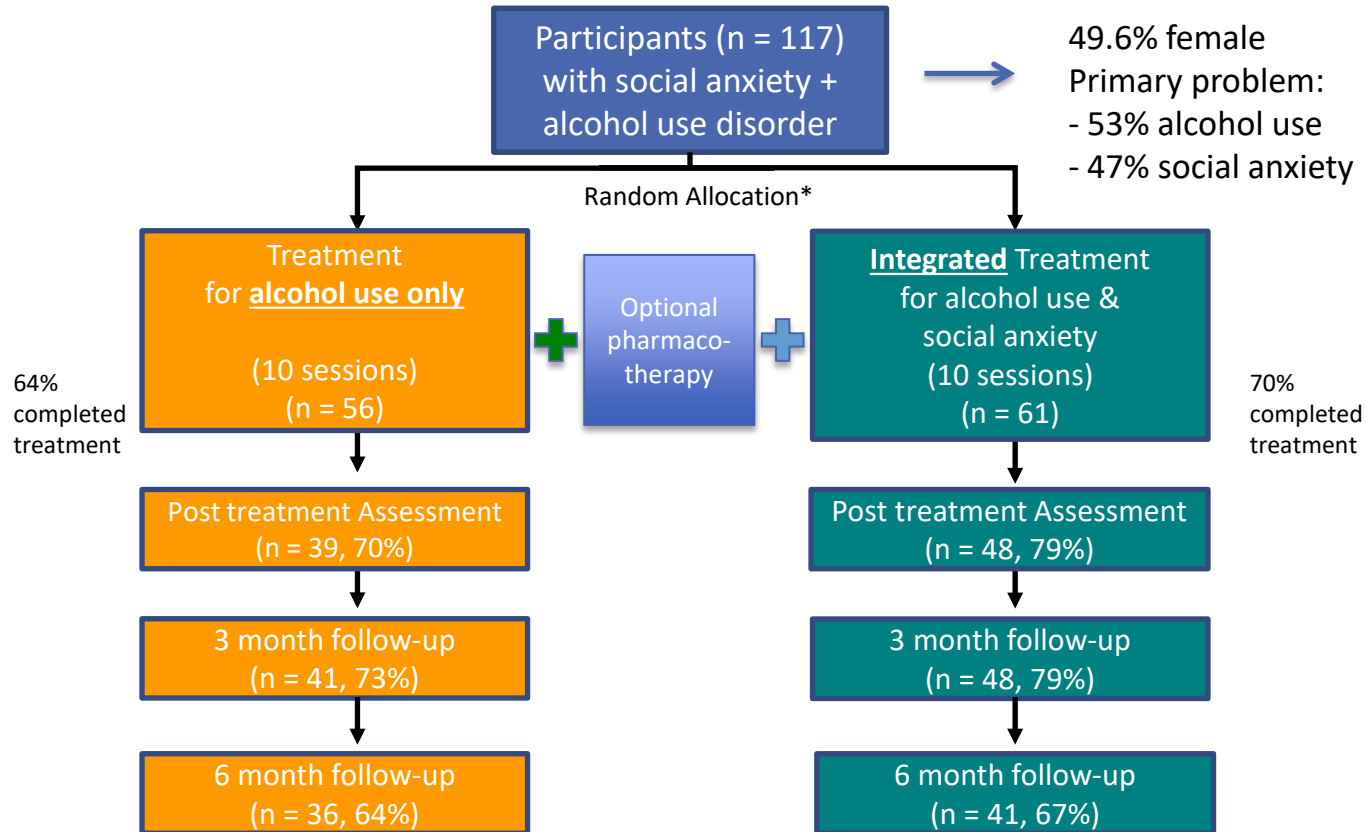
Integrated Treatment for Social Anxiety & Alcohol Use



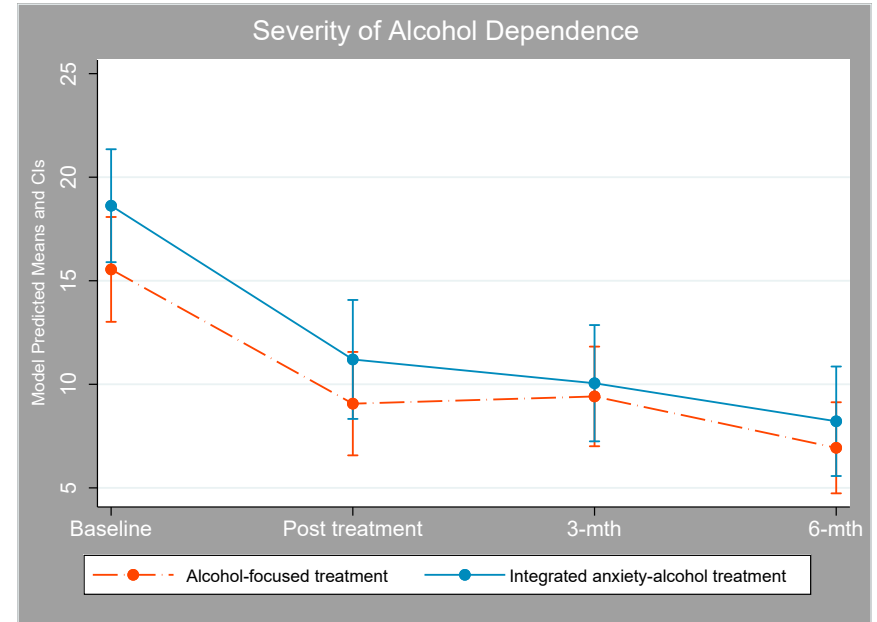
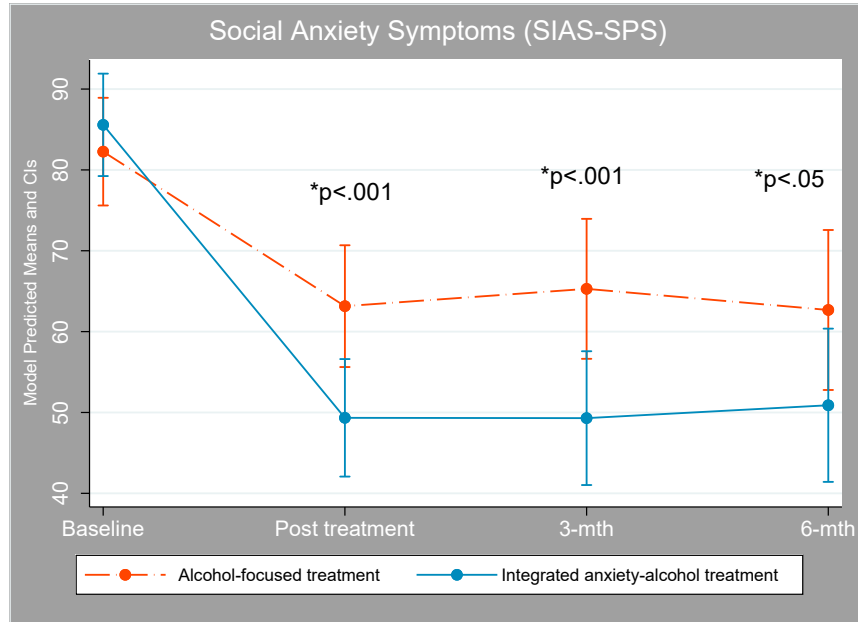
Comparison Group: Treatment for Alcohol Use Only



Integrated Treatment: Can we improve outcomes?



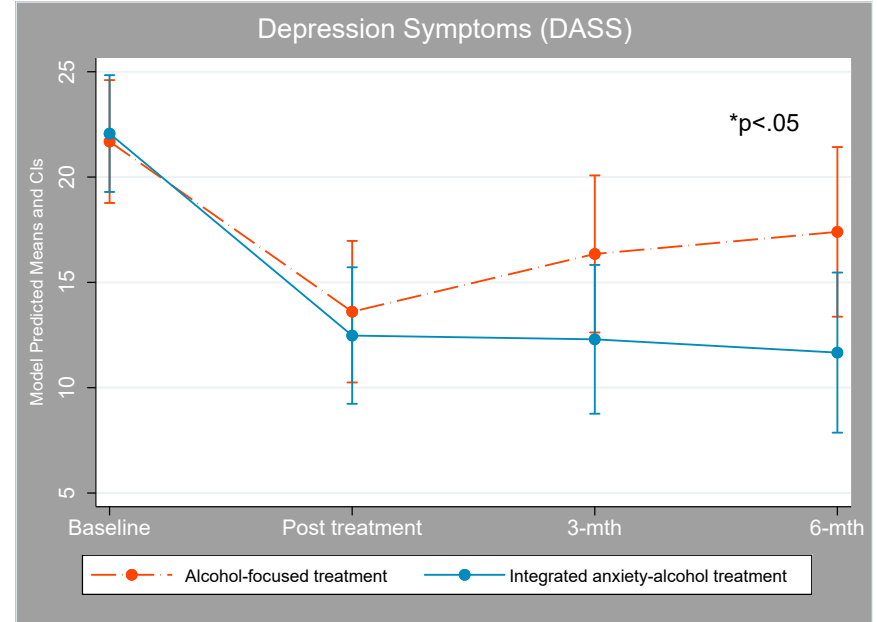
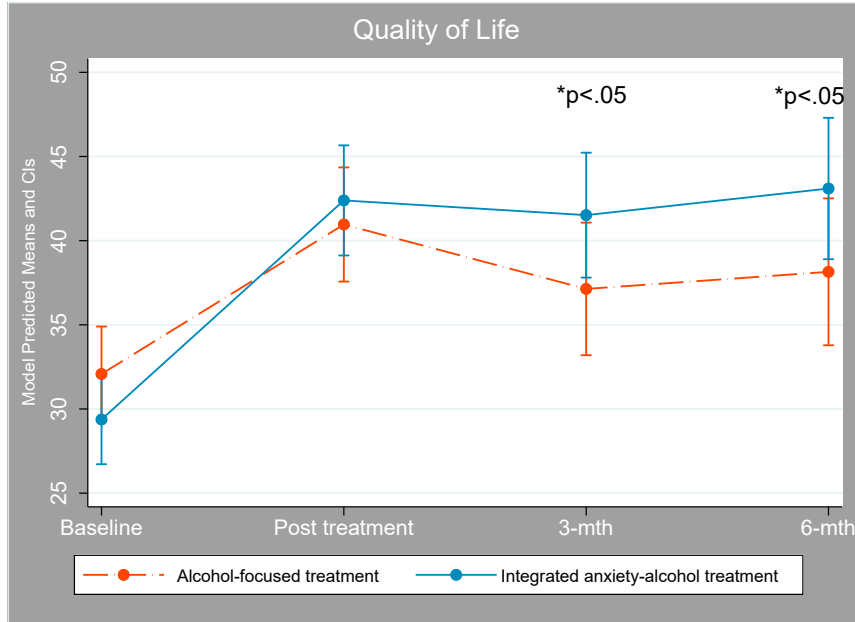
Primary outcomes: Social Anxiety and Alcohol Dependence



Integrated treatment associated with significantly greater reductions in SAD symptoms at all 3 timepoints

Both groups significantly reduced alcohol consumption and dependence symptoms, no between group differences.

Secondary Outcomes : Quality of Life & Depression

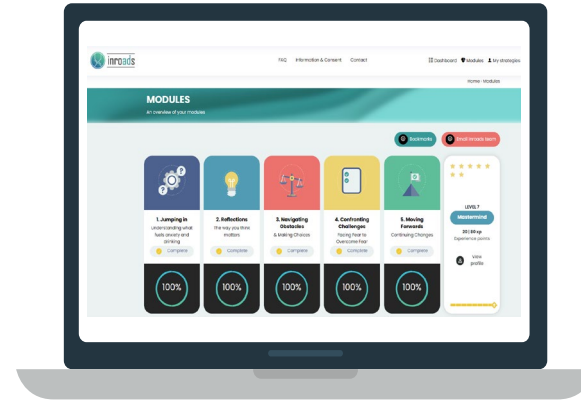


Integrated Treatment significantly improved quality of life, and significantly reduced depression symptoms by 6-month follow-up.

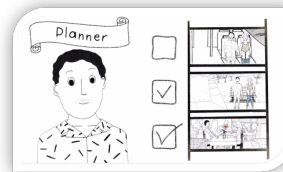
Adaptation for youth: Early intervention

- **'Inroads'**: A youth focussed **early intervention** for **transdiagnostic anxiety symptoms** and **hazardous alcohol use**
- Online, interactive delivery format to address barriers to help seeking among people
- CBT to enhance anxiety coping skills & address coping-motivated drinking
- 5-week online program + weekly psychologist telehealth support

Inroads program
www.inroads.org.au



Video 1: Realistic Thinking



Video 2: Facing Fears



Video 3: Taking Control of drinking

Funder:



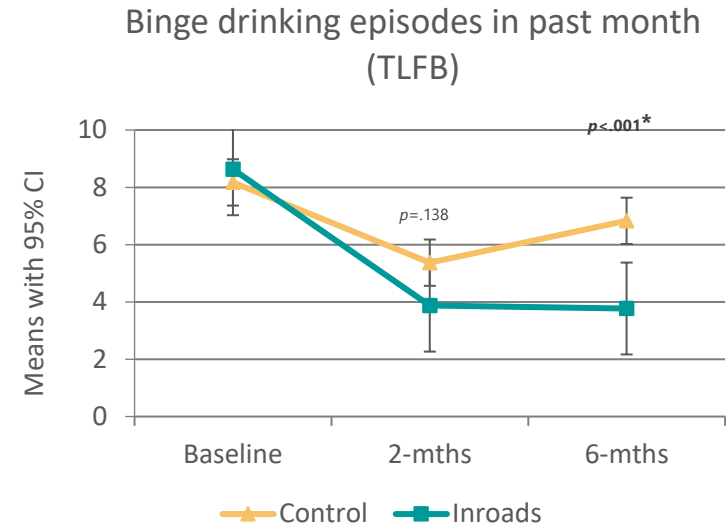
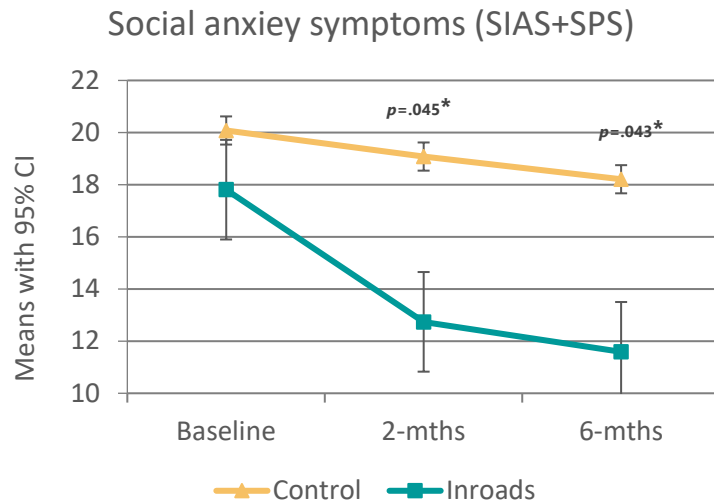
Adaptation for youth: Early intervention



QR code: [Stapinski et al 2021, eClinicalMedicine](#)

- National RCT, n=123 people aged 17-24 years (2017-2019)
- Compared [Inroads](#) vs alcohol psychoeducation

Over 6-months, receiving Inroads improved anxiety symptoms and drinking



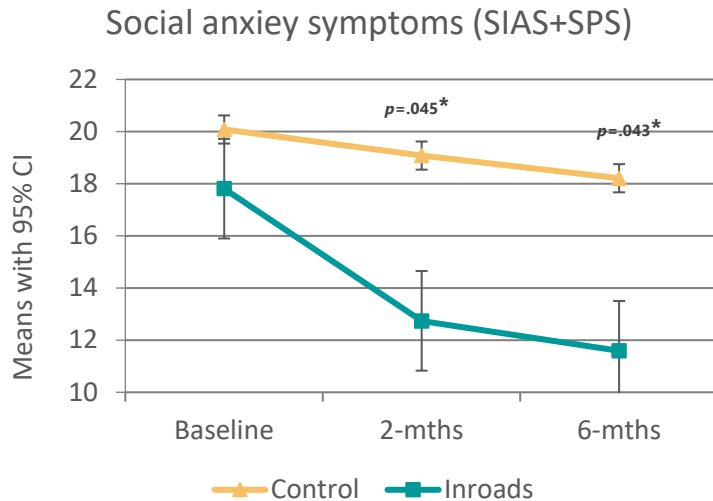
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- National RCT, n=123 people aged 17-24 years (2017-2019)
- Compared [Inroads](#) vs alcohol psychoeducation

Over 6-months, receiving Inroads improved anxiety symptoms and drinking



By 6 month follow-up, young people in Inroads group reduced their monthly drinking on average by

- **62 standard drinks**
- **4 fewer binge drinking episodes**



Next Steps: Adapting the Inroads program for co-occurring anxiety & cannabis use

Summary: Research evidence for integrated treatments

| Disorders | Integrated CBT vs alcohol/substance use usual care: | Ref: |
|---|--|--|
| Co-occurring Social Anxiety Disorder & substance use (alcohol, cannabis) | <ul style="list-style-type: none"> - Reduced SAD symptom severity - Superior substance use outcomes on some indices | Wolitzky-Taylor et al 2022, <i>BRAT</i> ; Buckner et al 2019, <i>BRAT</i> ; |
| Co-occurring Obsessive Compulsive Disorder & substance use | <ul style="list-style-type: none"> - Better treatment retention - Reduced OCD symptom severity - Higher rates of abstinence | Fals-Stewart et al, 1992, <i>J Substance Abuse Treatment</i> |
| Co-occurring Panic Disorder & alcohol use | <ul style="list-style-type: none"> - Reduced panic symptom severity - Superior alcohol Tx outcomes on some indices | Kushner et al, 2009, <i>Addictive Behaviours</i> |
| Co-occurring PTSD & substance use (alcohol, cannabis, other substances) | <ul style="list-style-type: none"> - Reduced PTSD symptom severity - Similar substance use reductions | Norman et al., 2019, <i>JAMA Psychiatry</i> ; Mills et al., 2012, <i>JAMA</i> ; Sannibale et al., 2013, <i>Addiction</i> |

Summary: Research evidence for integrated treatments

| Disorders | Integrated CBT vs alcohol/substance use usual care: | Ref: |
|---|--|---|
| Transdiagnostic anxiety & alcohol use | <ul style="list-style-type: none">- Superior or similar anxiety outcomes- Superior alcohol outcomes; | Kushner et al., 2013, <i>JCCP</i> Morley et al 2016, <i>Alcohol & Alcoholism</i> ; Stapinski et al 2021, <i>eClinicalMed</i> ; |
| Transdiagnostic anxiety & cannabis use | <ul style="list-style-type: none">- Superior anxiety outcomes- Superior substance use (cannabis) outcomes | Buckner et al 2019, <i>BR&T</i> |
| Anxiety sensitivity & smoking | <ul style="list-style-type: none">- Similar anxiety outcomes- Similar substance use (smoking) outcomes | Smities et al 2021, <i>Addiction</i> https://onlinelibrary.wiley.com/doi/10.1111/add.15586 |

Systematic Review: Integrated anxiety-substance use treatments

- Review and meta-analysis (combining effects) from **11 trials of integrated treatment**
- Conclusions: **Integrated treatment outperformed** substance use treatment alone (small to moderate effects)
- Caveats: Review does not compare integrated treatment to anxiety treatment, or to sequential anxiety and substance use treatment (not enough studies for this)



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Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugaldep



Review

Integrated behavioral treatments for comorbid anxiety and substance use disorders: A model for understanding integrated treatment approaches and meta-analysis to evaluate their efficacy



Kate Wolitzky-Taylor^{*}

University of California, Los Angeles, United States

[Review Link](#)

Conclusions: What treatments are effective for co-occurring anxiety and substance use disorders?



Co-occurring anxiety can **interfere** with engagement and sustained recovery from **standard substance use treatments**



Available evidence (limited) suggests people with co-occurring anxiety-AUD disorders **benefit from standard anxiety treatment, but..**



Integrated treatment can have greater benefits for patients for the same number of sessions



People see their anxiety and alcohol as interrelated – integrated treatment addresses this inter-connection – **better aligned with lived experience**

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What does integrated treatment look like?

Treatment
Integration
occurs at
multiple levels



Integration of the Service

Treatment for both anxiety and substance use is provided by the same therapist at the same service.



Integrating the techniques

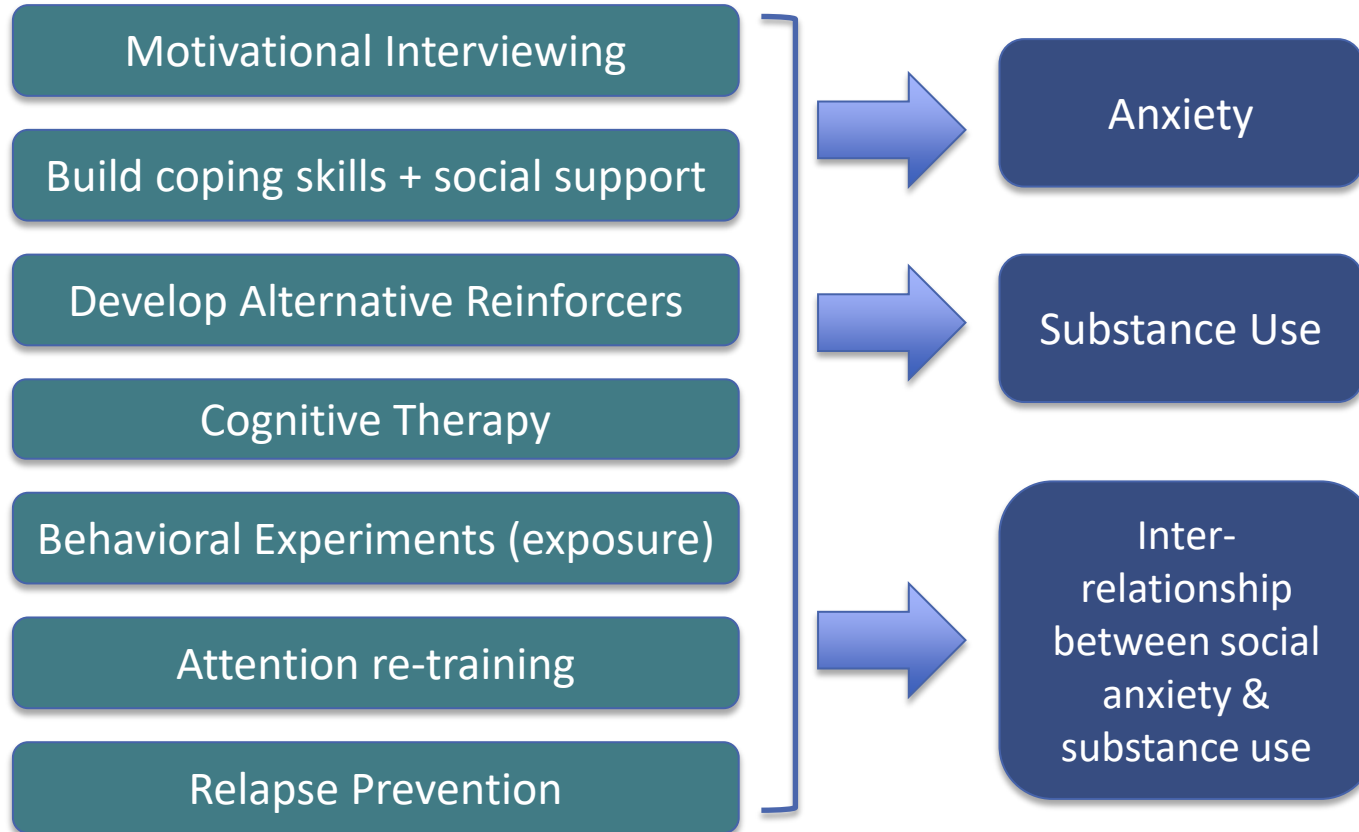
Client develops a suite of strategies and learns how they can be applied to help manage both their anxiety.



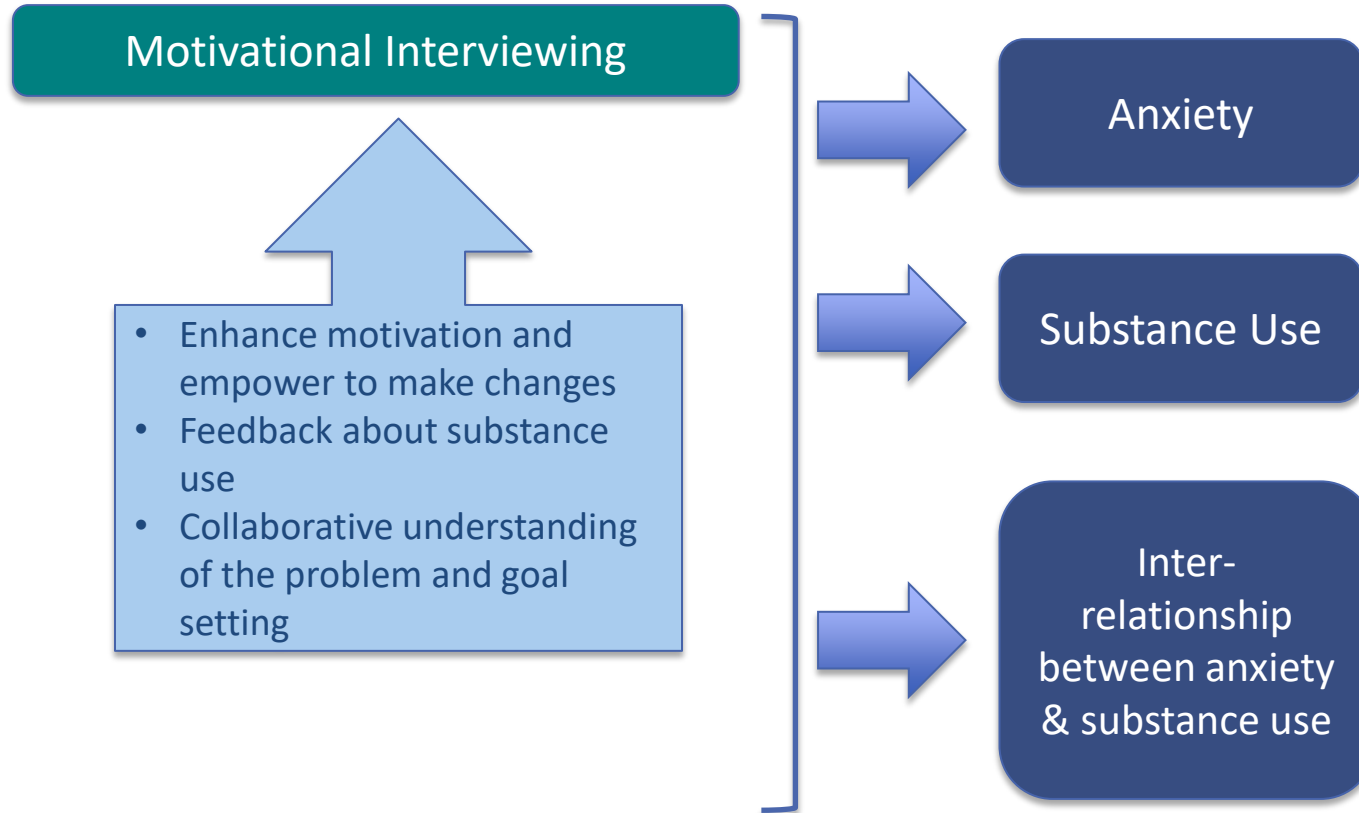
Address in the interconnection

Therapist provides explicit guidance and skill development to assist clients to identify and address the interconnection between their anxiety and substance use

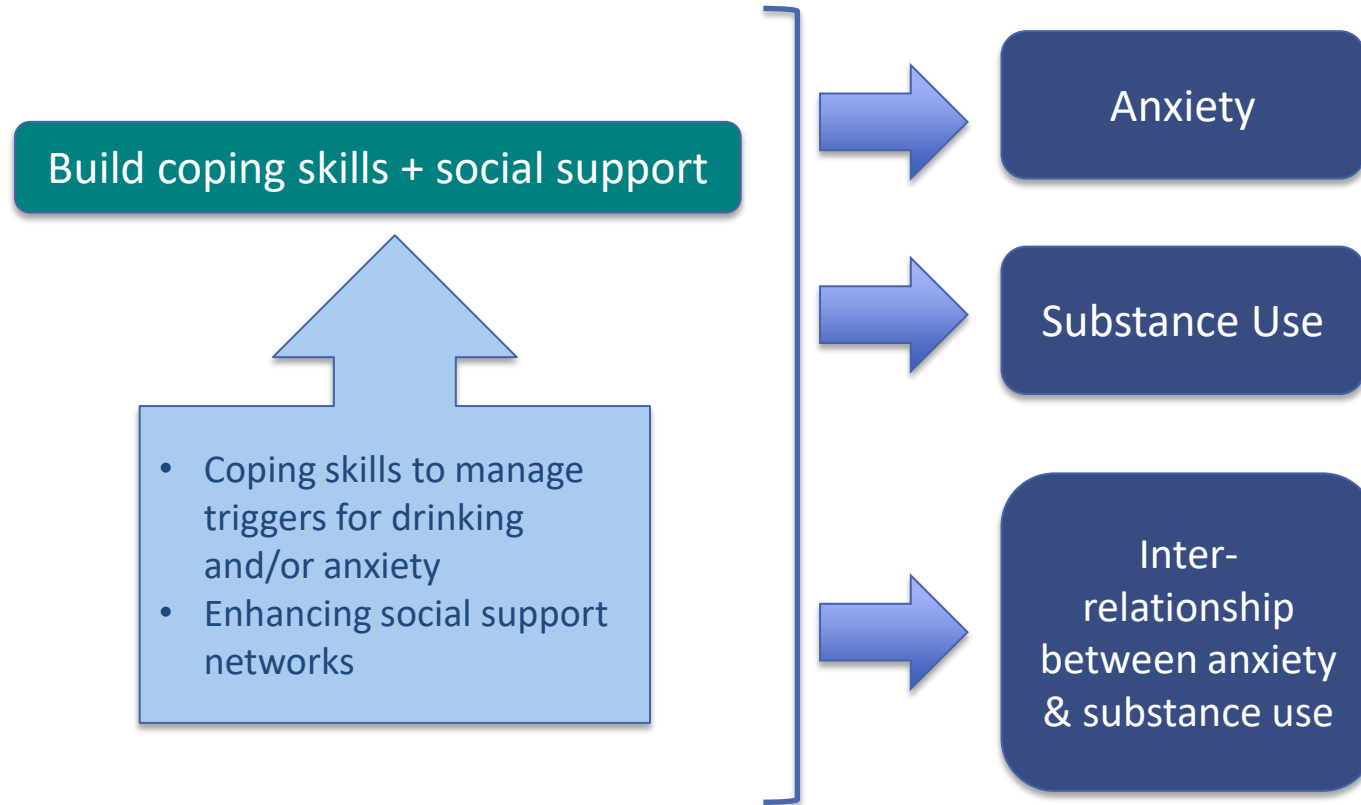
Integrated Treatment for Anxiety & Substance Use



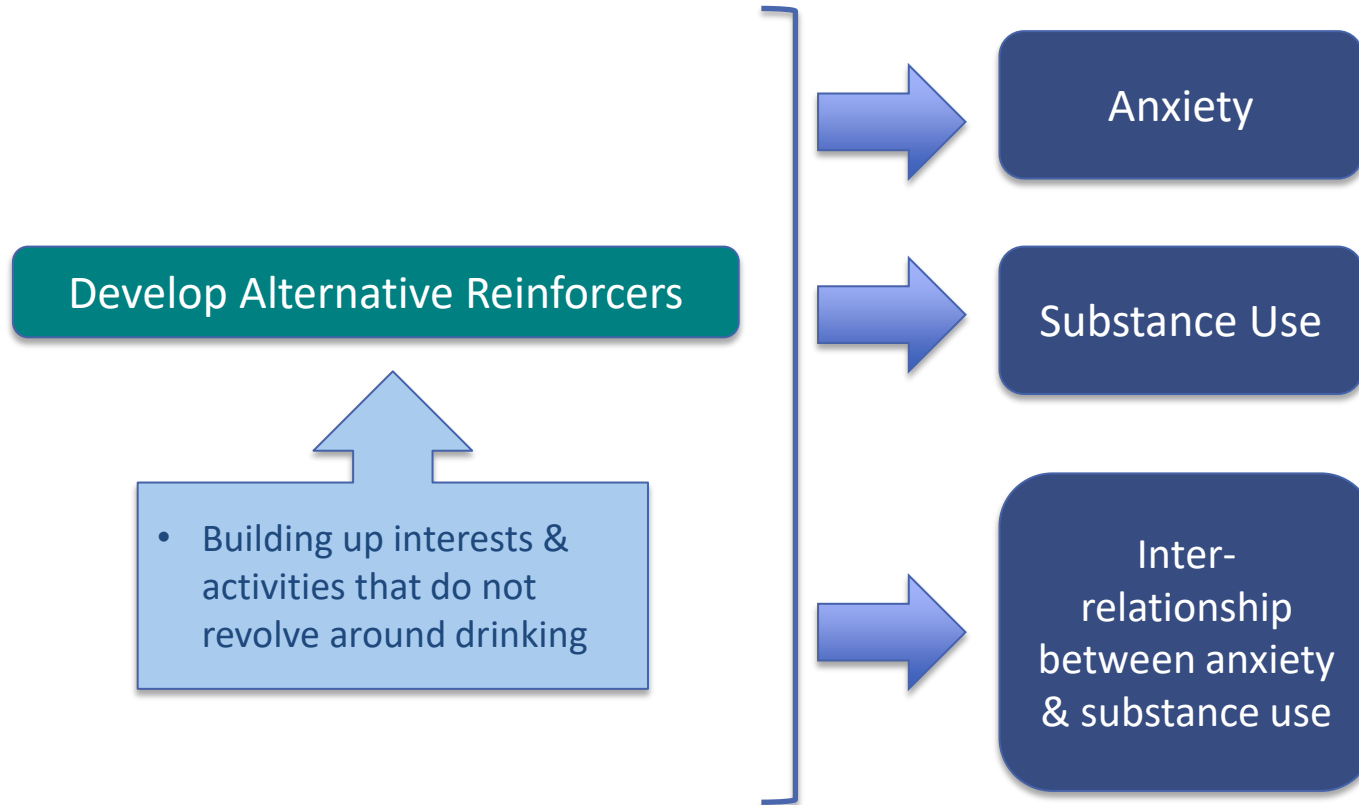
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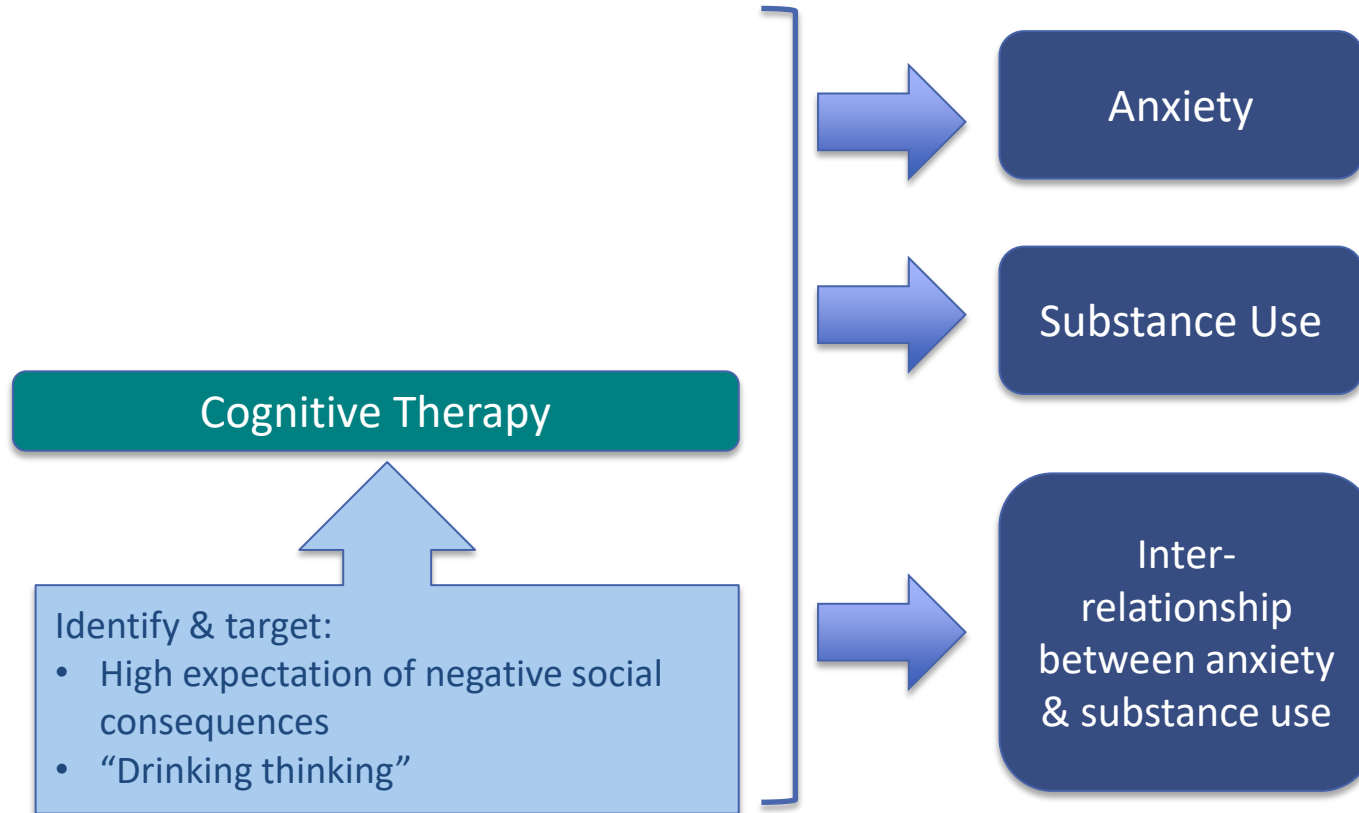
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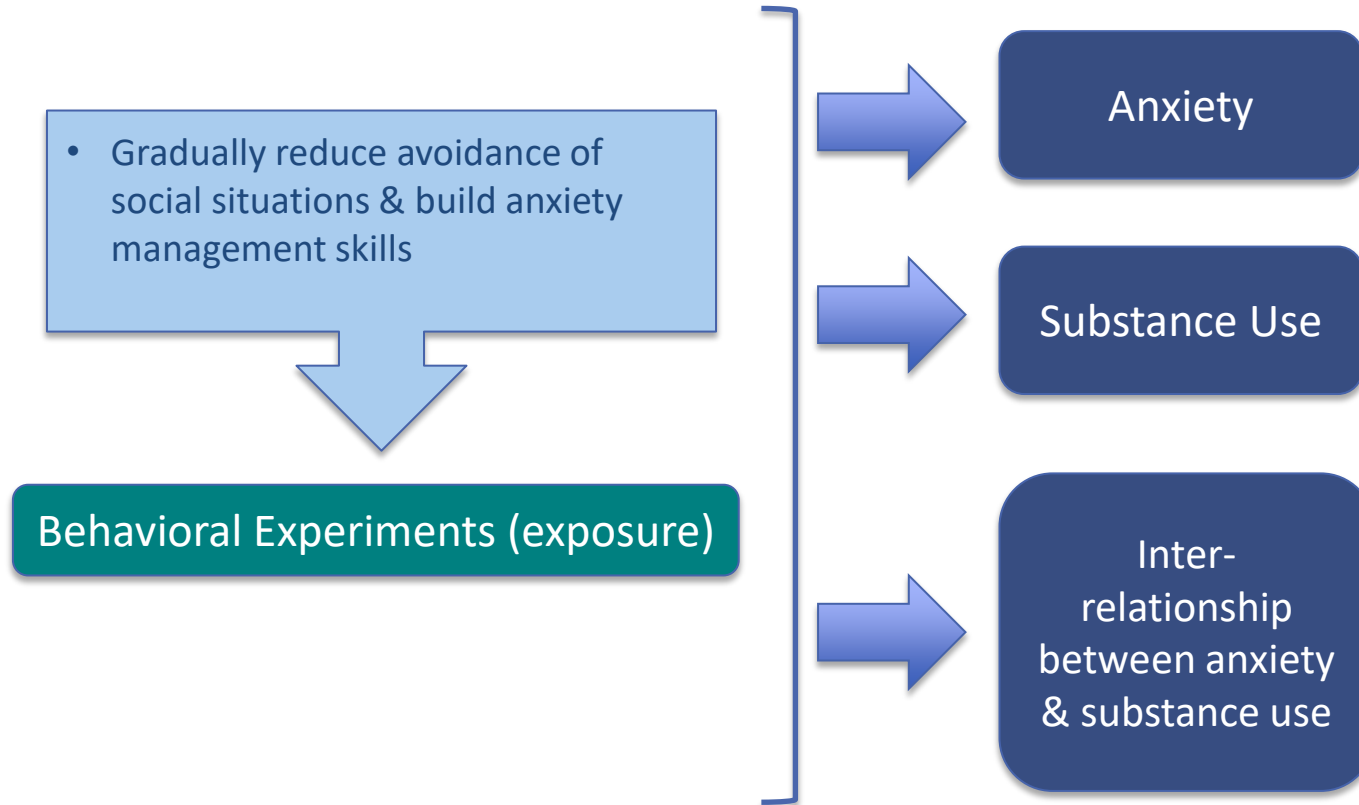
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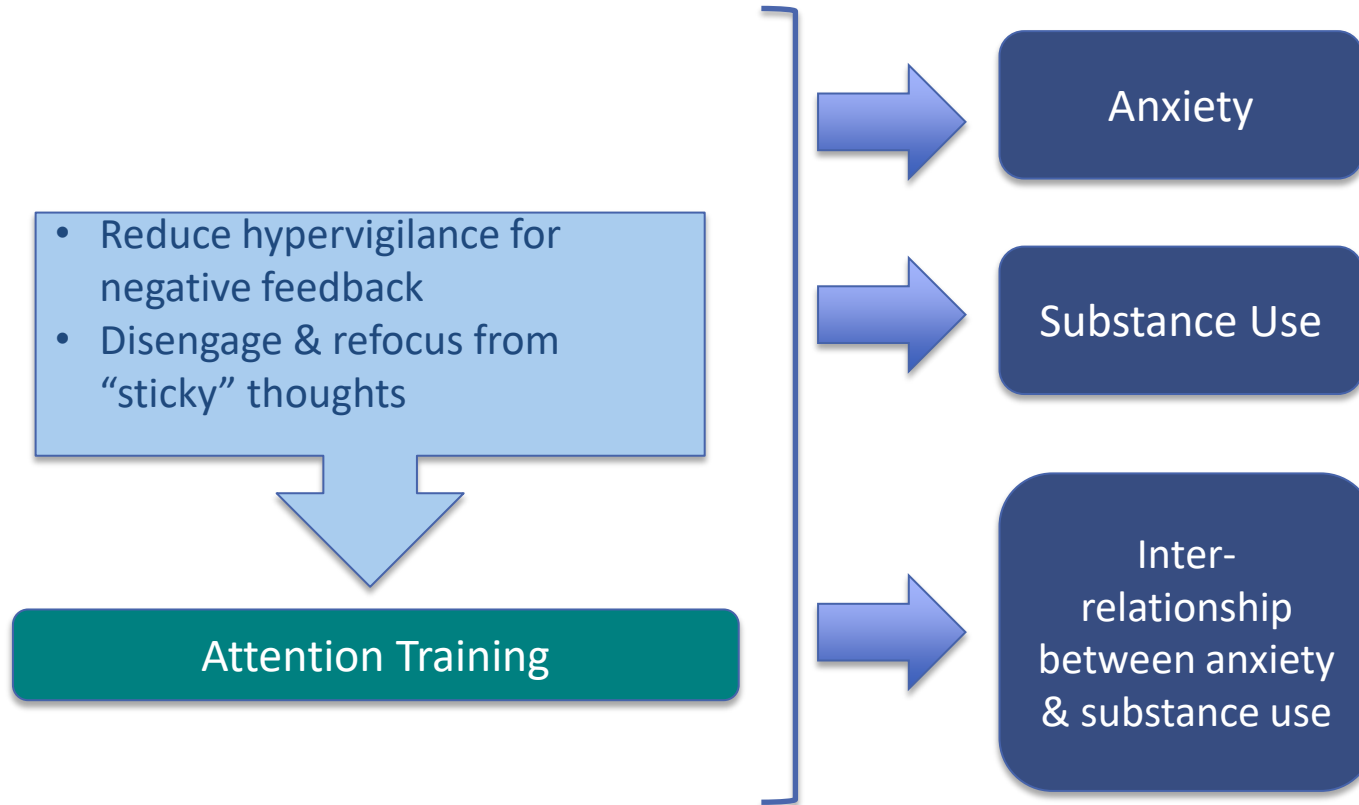
Integrated Treatment for Social Anxiety & Alcohol Use



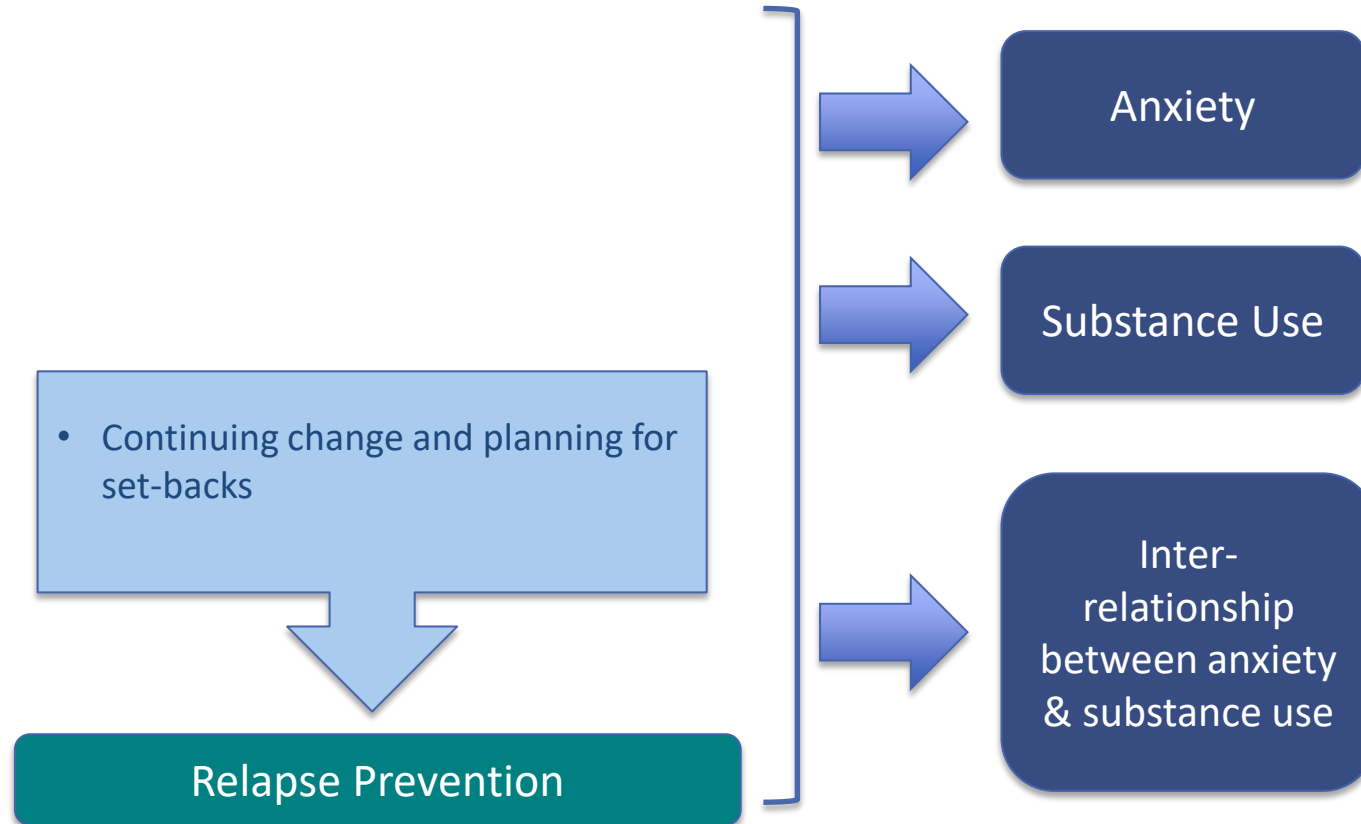
Integrated Treatment for Social Anxiety & Alcohol Use



Integrated Treatment for Anxiety & Substance Use



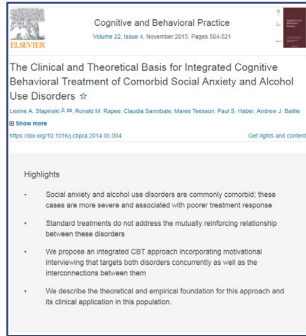
Integrated Treatment for Anxiety & Substance Use



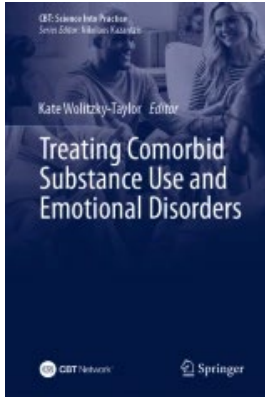
Common Challenges

- Assess for risk of complicated/severe withdrawal, work in partnership with a medical provider who can support
- Motivation and ambivalence – fluctuating, needs to be revisited
- Cultural, social or cognitive barriers to treatment engagement
- Shame and stigma

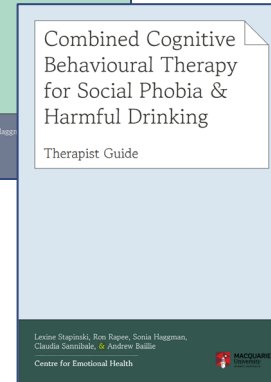
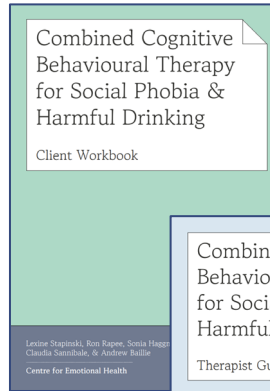
Resources: Integrated Treatment for Social Anxiety & Alcohol Use



Stapinski et al ,
2015 [Cognitive and Behavioural Practice](#)



Stapinski, Guckel, Prior & Kelly, 2024, [CBT for SAD and AUD](#)

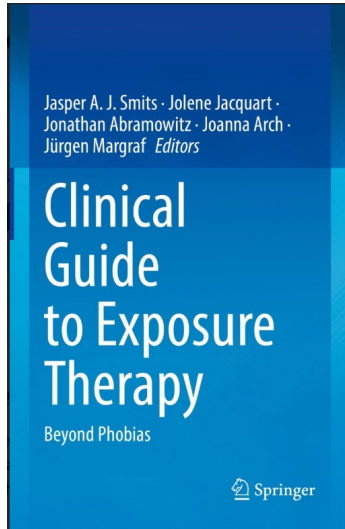


Access:
[Client Workbook](#)
[Therapist Guide](#)

Visit OSF (QR code) or contact lexine.Stapinski@sydney.edu.au for free access to the client and therapist workbook:

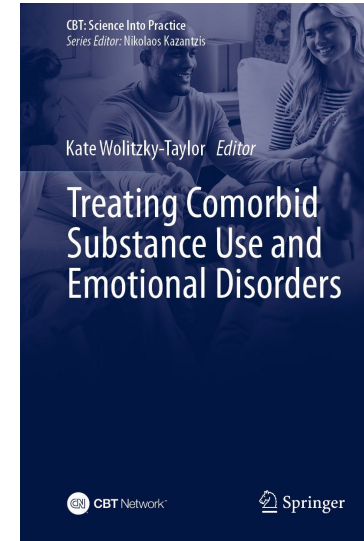


Resources: Integrated Treatments for Anxiety & Substance Use more broadly



Exposure Therapy when Patients Present with Comorbid Substance Use Disorders

Harvey, Saraiya, Mills, Brown, Jarnecke, Beck & Stapinski, 2022



Thank you

Collaborators:



Andrew Baillie, Katrina Prior, Nicola Newton, Paul Haber,



Ron Rapee, Claudia Sannibale, Mark Deady, & Maree Teesson

More information:



Client &
Therapist
Manuals:



The University of Sydney
The Matilda Centre for Research in Mental Health and Substance Use

Funding Support:



Email:
Lexine.Stapinski@sydney.edu.au