The link between anxiety and alcohol use over the transition to adulthood: Implications for early intervention

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Outline

1. How does anxiety and drinking to cope affect risk of alcohol-related harm across the transition to adulthood?

2. How can we intervene to prevent escalation of anxiety and alcohol use problems?
Background: What is known?

- Alcohol is among the leading contributors to global burden of disease
- Alcohol use is widespread, but there is variation in motivations for drinking alcohol
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- Alcohol is among the leading contributors to global burden of disease
- Alcohol use is widespread, but there is variation in motivations for drinking alcohol

- Motives for drinking fall in 4 key domains: drinking for enhancement, social, conformity or coping (Cooper et al. 1994)

- Coping-motivated drinking has been identified as risk factor for alcohol-related harms and development of disorder (Stapinski et al 2006, Beseler et al. 2008; Kuntsche et al. 2005; Merrill et al 2014).
Background: What is known?

- Anxiety is associated with higher risk of alcohol problems & dependence
- In Australia, 1 in 3 people with a substance use disorder also has an anxiety disorder (Teesson et al, 2009)

Anxiety symptoms, Stress

Alcohol-related problems, Anxiety & stress

Self-medication with alcohol

Increasing reliance on alcohol to cope

More drinking

Vicious Cycle of Anxiety & Alcohol Use

Transition to Adulthood: Key Risk Period

- Increasing Autonomy, Drinking Contexts
- New Job/Study
- New relationships & friendships
- Increasing Responsibility/Challenges
- New living situation

Over 12 months, almost 1 in 3 young adults consume alcohol at very high risk levels.

Harms associated with alcohol peak in early adulthood.

Impact of Anxiety and Coping Styles (ie Drinking to cope) may become even more pronounced across this transition to adulthood...
**Study Aims & Method**

- **Developmental approach**: examine opportunities for intervention over the transition to adulthood

- **UK birth cohort study**: Avon Longitudinal Study of Parents and Children (ALSPAC), AKA “Children of the Nineties”

- **Latent Transition Analysis** – to address theoretically driven Research Questions:
  - Anxiety Disorders
  - Coping-motivated Drinking
  - **risky drinking and associated harms**

Our study focussed on assessments at **age 18 and 21** (n = 2,147; 56% female)
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<table>
<thead>
<tr>
<th>At age 18</th>
<th>Outcome: At age 18 and 21</th>
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<tbody>
<tr>
<td><strong>Anxiety Disorders:</strong></td>
<td><strong>Harmful Alcohol Use:</strong></td>
</tr>
<tr>
<td>• Clinical Interview Schedule- Revised (Lewis, 1997)</td>
<td>• Harm (incl. binge) and dependence items from AUDIT (Babor et al 2001)</td>
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<tr>
<td><strong>Drinking to Cope:</strong></td>
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<tr>
<td>• Coping Items of Drinking Motives Questionnaire (Cooper, 1992)</td>
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2-Wave Latent Class Analysis

Latent Class Analysis
- To explore underlying subgroups or typologies based on AUDIT items
- Model fit statistics used to identify the best-fitting model to the data
- Model is longitunally invariant so classes maintain the same interpretation
Results: Alcohol Use Classes at age 18

Lower risk

Bingeing
- Unable to stop
- Neglects...
- Feelings of guilt
- Impaired memory
- Recent injury
- Recent concern

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Item probabilities in each alcohol class

82% Age 18

18% Age 18
Results: Effect of Anxiety and Drinking to Cope on Risk Status

Age 18 Alcohol Status

Low Risk

Binge

Drinking to cope

Anxiety disorder

OR = 3.8*
[3.1 to 4.7]

3.8 x greater risk

OR = 1.8
[1.2 to 2.6]

1.8 x greater risk

*effect for 1 standard deviation increase in DTC scores
Results: Alcohol Use Classes at age 18 & 21

Item probabilities in each alcohol class

**Lower risk**
- Bingeing: 82% Age 18, 57% Age 21
- Unable to stop: 18% Age 18, 35% Age 21
- Neglects: 8% Age 21
- Feelings of guilt: 0% Age 18, 0% Age 21
- Impaired memory: 0% Age 18, 0% Age 21
- Recent injury: 0% Age 18, 0% Age 21
- Recent concern: 0% Age 18, 0% Age 21

**Bingeing**
- Bingeing: 0% Age 18, 0% Age 21
- Unable to stop: 0% Age 18, 0% Age 21
- Neglects: 0% Age 18, 0% Age 21
- Feelings of guilt: 0% Age 18, 0% Age 21
- Impaired memory: 0% Age 18, 0% Age 21
- Recent injury: 0% Age 18, 0% Age 21
- Recent concern: 0% Age 18, 0% Age 21

**High-risk use**
- Bingeing: 0% Age 18, 0% Age 21
- Unable to stop: 0% Age 18, 0% Age 21
- Neglects: 0% Age 18, 0% Age 21
- Feelings of guilt: 0% Age 18, 0% Age 21
- Impaired memory: 0% Age 18, 0% Age 21
- Recent injury: 0% Age 18, 0% Age 21
- Recent concern: 0% Age 18, 0% Age 21
2-Wave Latent Transition Analysis

Transition in class memberships from Time 1 to Time 2
Results: Effect of Drinking to Cope on Transitions

Age 18 Alcohol Status

- Low Risk
- Binge

Age 21 Alcohol Status

- Low Risk
- Binge
- High Risk

Anxiety

*effect for 1 standard deviation increase in DTC scores

n.s.
Results: Effect of Drinking to Cope on Transitions

Drinking to Cope

Age 18 Alcohol Status
- Low Risk
- Binge

Age 21 Alcohol Status
- Low Risk
- Binge
- High Risk

2 x greater risk
OR=2.0*

1.4 x greater risk
OR=1.4*

*effect for 1 standard deviation increase in DTC scores

www.inroads.org.au
Results: Summary

1. How does anxiety and coping-motivated drinking affect risk of alcohol-related harm across the transition to adulthood?

Young people with anxiety disorders at age 18 were

- 1.8 x more likely to binge-drink at age 18
- However, no evidence of an effect on transition between classes from 18 to 21

Drinking to cope at age 18 was linked to:

- Three-fold risk of binge-drinking class at 18
- Greater risk of transitioning from low-risk use at 18 to high-risk use at age 21

Next steps:

- Replicate analysis in Australian sample
Outline

1. How does anxiety and coping-motivated drinking affect risk of alcohol-related harm across the transition to adulthood?

2. How can we intervene to prevent escalation of anxiety and alcohol use problems?
So what can we do about it?

- Opportunity for early intervention
- Previous work with adults shows promise for approaches that target anxiety and alcohol together

Motivational Interviewing
Build coping skills + social support
Cognitive Therapy
Behavioral Experiments (exposure)
Attention Re-training
Relapse Prevention

Social Anxiety
Alcohol Use
Inter-relationship between anxiety & alcohol use
So what can we do about it?

- Opportunity for early intervention
- Previous work with adults shows promise for approaches that target anxiety and alcohol together (Stapinski et al 2015; Baillie et al 2013)

Social Anxiety Symptoms*

- Alcohol focussed CBT
- Integrated CBT

Alcohol consumption (30 days)

Overall functioning & quality of life*

*Integrated Tx – significantly greater improvements in anxiety symptoms & overall functioning

Inroads: Early intervention tailored for young adults

- Early intervention to enhance anxiety coping skills, & address coping-motivated drinking
- Drawing from existing alcohol and anxiety programs
- Adapted to unique challenges & drinking contexts relevant to young adults
- Delivery format to address barriers to help seeking among people:
  - Internet delivered, interactive
  - youth-focused design & vignettes
  - Preferred by young people
  - Reduced stigma
  - Convenience / flexibility
  - Low cost

Boydell et al 2014
Inroads: A youth focussed early intervention

MODULES
An overview of your modules

1. Jumping in
Understanding what fuels anxiety and drinking
Complete: 100%

2. Reflections
The way you think matters
In progress: 80%

3. Navigating Obstacles
& Making Choices
Incomplete: 75%

4. Confronting Challenges
Facing fear to overcome fear
Incomplete: 88%

5. Moving Forwards
Continuing Changes
Incomplete: 27%

NDARC
National Drug & Alcohol Research Centre

www.inroads.org.au
Inroads trial launch: 26th October

Recruitment: 26th October 2017 to 2018
- Aged between 17 and 24, living in Australia
- Experiencing anxiety symptoms & drinking alcohol above recommended guidelines

Online Screening

Baseline assessment (n=118)

Ineligible/Referral

Inroads Program (n=59; 8 weeks)
Control (n=59; 8 weeks)

1-month post-intervention

6-month follow-up assessment

Primary Outcomes:
- Alcohol-related harms, including binge drinking
- Anxiety symptoms

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Thank you

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