



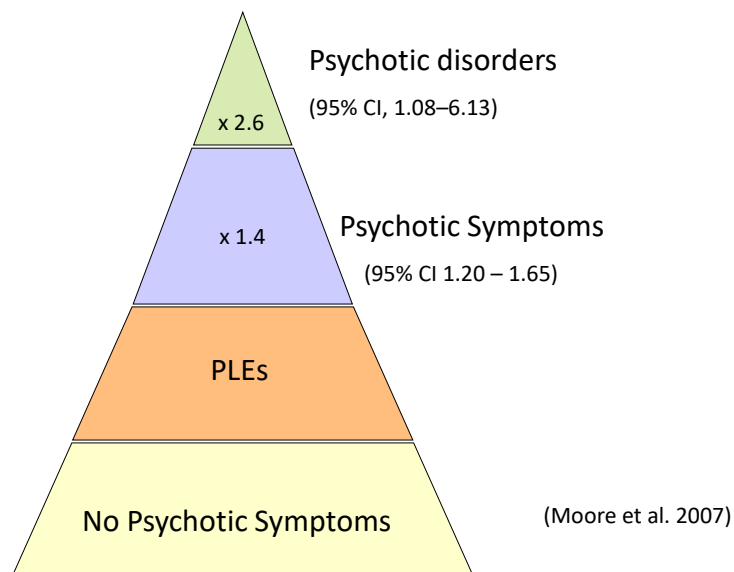
Feasibility & outcomes of a web-based program targeting PLEs among young cannabis users

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The Continuum of Psychosis





PLE'S

- subclinical psychotic symptoms, which include delusions and hallucinations.
- 12-month prevalence rates 17%—28%
- share many genetic, social and environmental risk factors with the clinical phenotype of psychosis
- Increase risk of psychosis (16-28x), depressive or anxiety disorder (5-6x) & suicide (3-4x)

(Kelleher and Cannon, 2011)

(Bak et al., 2003; Nishida et al., 2010; Poulton et al 2000; Varghese et al., 2011)

Cannabis and PLE'S

More frequent PLES

- Age of onset (< age 16)
- THC +ve hair samples/IV THC (Mason et al., 2009, Morgan et al., 2012)
- More frequent cannabis use (Miettunen et al., 2008, Hides et al., 2009, Skinner et al., 2011)
- Dose-response relationship (Henquet et al., 2005, Kuepper et al., 2011, Mackie et al., 2011)
- ESM: 90% reported PLEs in the same week (Verdoux et al., 2003)
- Over 20 years (Rössler et al., 2007)
 - Weekly cannabis users 4.3 x risk continuously high PLEs
 - Occasional cannabis users 2.3 x “



Unlikely to seek professional help

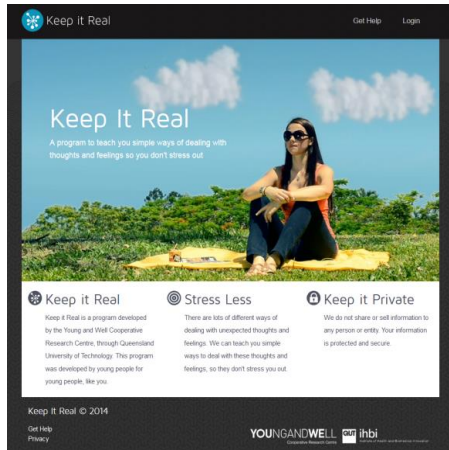
- Important opportunity for early intervention is being missed
- Many cannabis users with PLE's don't present to health services
 - receive emergency treatment without follow-up
- Web/mobile based programs provide a highly accessible, anonymous way of delivering treatment to this at-risk group to prevent a range of psychopathology



Aim

To evaluate the feasibility and outcomes of web-based program for reducing the frequency of cannabis use & PLEs in young cannabis users

Keep it Real




Project Team:
 Leanne Hides, Stoyan
 Stoyanov, Wendell Cocksaw,
 Oksana Zelenko, & David
 Kavanagh

Keep it Real

- Brief, youth friendly, customizable, anonymous, mobile-responsive web program
- Participatory design workshops guided program development

Aims:

- To improve the ability to identify, understand and reduce PLEs and distress associated with them
- To reduce cannabis use & increase understanding of its relationship with PLEs
- To teach cognitive-behavioral coping strategies
- To facilitate appropriate help-seeking.


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Modules



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- What are weird experiences? ▾
- Why is it happening? ▾
- What are the types of weird experiences? ▾
- How does cannabis affect me? ▾
- How can I deal with stuff? ▾
- Should I seek help? ▾

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What are weird experiences?

Optus AU 4:46 PM 72%
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Have you noticed something weird happening?

Being worried that people may be out to get you

Having ideas that other people say are strange

Hearing or seeing things that other people say they can't see or hear

We call these weird experiences

Weird experiences are mostly odd or unusual ideas or experiences. People sometimes get worried about them, but a lot of the time they are nothing to worry about and **are quite common**.

Schizophrenia or psychosis is different

Weird experiences are like the symptoms people with psychosis or schizophrenia have **but** they:

Are not as severe

Don't happen as often

Are not as upsetting

Next

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What Is A Weird Experience?

Weird experiences are much more common than schizophrenia

33 out of 100 people will have weird experiences

33=100 people that's 33%

But only 1 out of 100 people will develop schizophrenia

1=100 people that's 1%

That means there is a 99% chance that you won't develop schizophrenia!

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YOUNG AND WEEL

Why are they happening?

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Why Is It Happening?

Lots of things can cause weird experiences

Research shows that the more stressed out you feel, the more likely you are to have weird experiences. Some weird experiences are due to tiredness, feeling really sad, worried or angry, or the effects of drugs.

Up to 40% of people report hypnagogic hallucinations - these are odd sensations while falling asleep and can include seeing colours or spots, hearing voices, or a sensation of falling

Next

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My weird experiences could be happening because...

What I'm Thinking

- ☐ They are part of my thoughts or worries
- ☐ Other people are experiencing the same thing
- ☐ I might be getting confused about things
- ☐ They're part of my imagination
- ☐ I have been thinking about bad memories

What I'm feeling

- ☐ I'm really upset or worried about something
- ☐ I'm really tired
- ☐ I'm really stressed

What's happened recently

- ☐ Someone has been hassling me and it's really stressing me out
- ☐ I'm really missing somebody important to me, who has died
- ☐ I've been really sick lately

How does cannabis affect me?

Cannabis is the most commonly used illicit drug in the world



Cannabis use has been strongly linked to psychosis.

People who have ever used cannabis have



Optus AU 5:08 PM 67%
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Cannabis has also been strongly linked to weird experiences



of young Australian cannabis users reported experiencing more than 3 weird experiences in the same month

Drugs like cannabis can result in feelings of paranoia, and can make you see and hear

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Home > Modules > How does cannabis affect me? > How does cannabis affect my mental health?

How Does Cannabis Affect My Mental Health?

Cannabis and your mood

Everybody experiences day-to-day life problems (e.g., relationship issues) and negative emotions. Some people use cannabis to forget their worries and/or reduce negative feelings.

While this can make you feel better in the short term, it can make some people feel worse or you can just end up going round and round in circles over time.

It can be more helpful to learn how to sort out life stuff and deal with negative emotions.

```

graph TD
    A[Life problem or stress] --> B[Negative feelings, stress, worry, sadness]
    B --> C[Cannabis use]
    C --> D[Feeling slightly better]
    D --> E[Cannabis wears off]
    E --> F[Feel worse: anxiety/panic attacks]
    F --> B
  
```

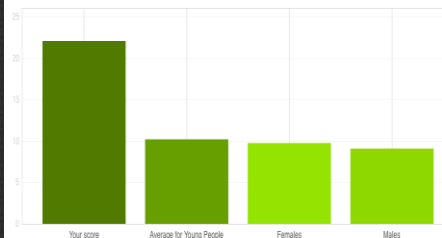
How Does Cannabis Affect My Mental Health?

Weird Experiences while smoking cannabis

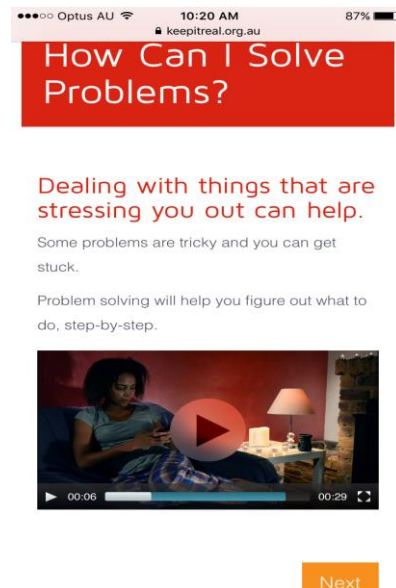
You reported the following thoughts, feelings and experiences at least sometimes while smoking cannabis.

- Paranoid **FYI**
- Deluded (believed in something which afterwards you knew not to be true) **FYI**
- Anxious for no reason **FYI**
- Losing your sense of reality **FYI**
- Having visions (like visual hallucinations) **FYI**
- Fearful that you are going crazy/mad **FYI**
- Obsessive (or fixated on something) **FYI**
- Having out of body experiences **FYI**

The following graph compares your total weird experiences score while smoking cannabis with other cannabis users aged 17-25 years.



How can I deal with stuff?



Participants

- N=213 young people (16-25 years)
- Had used cannabis in the past month
- Had at least 3 PLEs 'sometimes' or 1 PLE 'nearly always' in the past 3 months on the CAPE15 (total score of ≥ 18)
- Negative psychosis screen.
- Male: 78.1% Age: 20.9 (SD=2.30)
- Work: Unemp 9%; Empl 40%; Student 51%
- Family Hx of psychosis 14.1%

Measures

Youth Risk Behaviour Survey (YRBS)

- Lifetime cannabis, ecstasy, amphetamine and cocaine use & 12 month cannabis use (*1 or 2 to ≥ 100 times*)
- Past month cannabis use (*1 or 2 to ≥ 40 times*)
- Time since last cannabis use
- Cumulative lifetime cannabis use

Community Assessment of Psychic Experiences (not-related to cannabis use)

- CAPE15 (Capra, Kavanagh, Hides and Scott, 2013; 2015)
- CFA: 3 subscales
 - Bizarre experiences
 - Persecutory ideas
 - Perceptual abnormalities
- Assessments: baseline, 3 & 6 mths follow-up.
- High follow-up rates: 89% (3m) & 85% (6m)

Substance Use

Drug	
Cannabis	
Age of onset Cannabis	16.5 years (SD=2.19)
Past 12 month frequency	
> 10 times	18%
> 100 times	57%
Past Month frequency	
> 10 times	56%
> 40 times	22%
Last Use	
Past 48 hours	51%
Typical Alcohol in Past Year	
> 7 SDUs	16%
Lifetime	
Ecstasy	47%
Amphetamine	31%
Cocaine	30%

Results

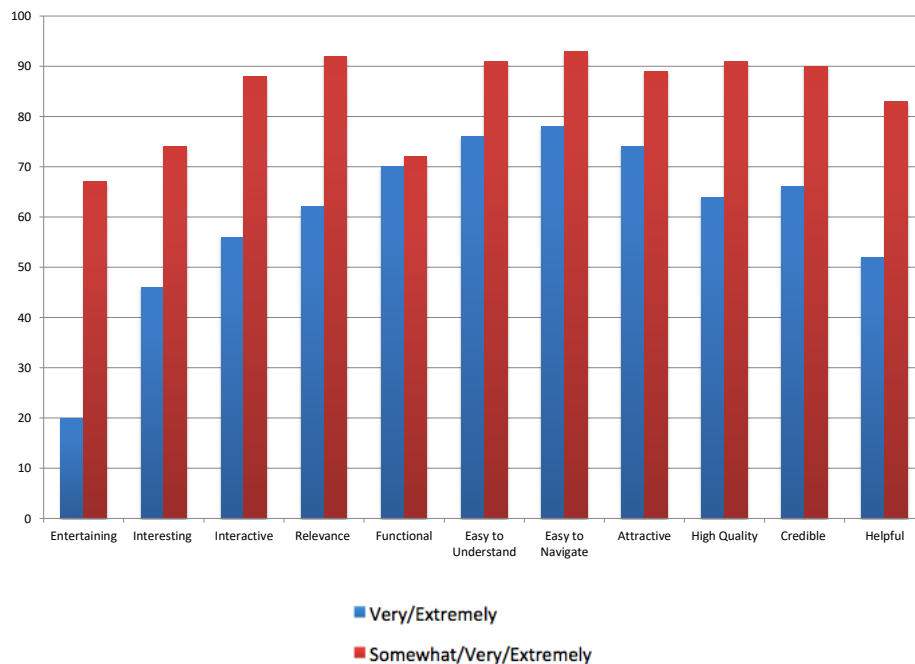
Program use

- 95% accessed the CAPE15 feedback
- Mean of 2.94 (SD=1.82) of the 6 modules

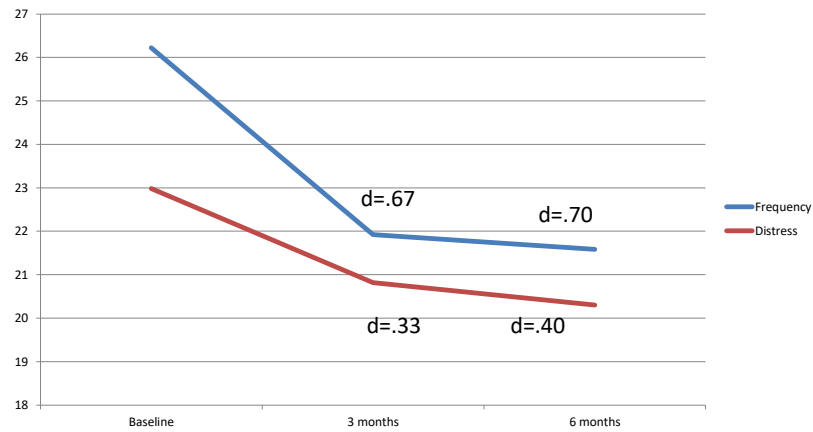
Feedback

Overall rating	75%	Pretty good/Excellent
Helpful	83%	Somewhat/Very/Extremely
Credible	91%	“
Easy to understand	91%	
Relevance	92%	

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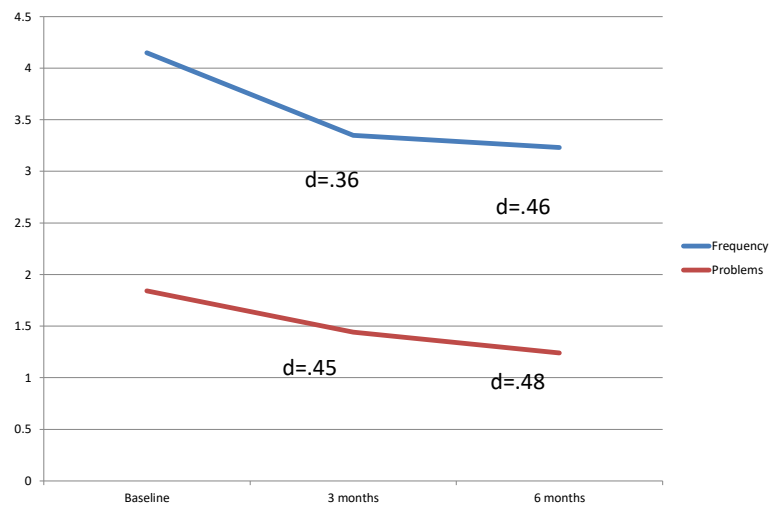
Reductions in PLEs



8/11/2016

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Reductions in Cannabis Use



8/11/2016

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Conclusions

- Preliminary evidence for the feasibility, acceptability and positive impact of KiR on PLEs and cannabis use
- Cannabis users achieved:
 - Significant, moderate to large reductions in cannabis use and related problems as well as PLEs & associated distress
- A full scale RCT is required to establish program efficacy relative to no/delayed-access, web-based information/programs & as an adjunct to face-to-face treatment

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Thank you!

Email: leanne.hides@qut.edu.au



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