NOVEL APPROACHES TO THE PREVENTION OF DEPRESSION IN YOUNG PEOPLE

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PREVALENCE

(Second Australian Child & Adolescent Survey of Mental Health & Wellbeing, 2015)
FUNCTIONAL IMPACT

(Second Australian Child & Adolescent Survey of Mental Health & Wellbeing, 2015)
Current treatments may reduce the burden of disease associated with depression by 13 – 36%

Prevention could reduce this burden by a further 22%

(Andrews et al., 2004; Cuijpers et al., 2008)
WHY FOCUS ON PREVENTION IN YOUNG PEOPLE?

• Adolescence is the peak time for the onset of mental health difficulties

• Prevention can change the course of an individual’s mental health trajectory
CURRENT APPROACHES TO PREVENTING DEPRESSION IN YOUNG PEOPLE
CURRENT PREVENTION PROGRAMS

• Based on cognitive behaviour therapy
• Universal and targeted
• Face-to-face group format in school settings
• Facilitated by mental health professionals or researchers
• Modest but positive effect of depression prevention programs in young people (Merry et al., 2011), particularly those based on CBT (Hetrick, Cox, & Merry, 2015).

• Generally larger effects detected for targeted relative to universal programs (Calear & Christensen, 2010).

• School-based depression prevention programs demonstrate small but robust effect ($g = .23$) (Werner-Seidler et al., in prep).
ISSUES WITH CURRENT PROGRAMS

STIGMA

COST & RESOURCES

ENGAGEMENT
NOVEL APPROACHES TO PREVENTING DEPRESSION IN YOUNG PEOPLE
eHEALTH

✓ Private
✓ Delivered en masse
✓ High fidelity
✓ Cost effective
✓ Increased engagement

(Sheehan et al., 1998; Calear & Christensen, 2010)
JANE is positive, generous, but gets fazed in social situations and is sensitive to criticism.

Maybe we are all a bit like JANE sometimes.
Serious games are designed for a primary purpose other than pure entertainment.

Serious gaming interventions show promise for treating or preventing depression in young people (Fleming et al., 2014).
SPARX

Participants navigate their way through a series of challenges within a fantasy world overrun by GNATS

Equivalent to TAU in help-seeking adolescents with depressive symptoms

(Merry et al., 2012)
Aim: To examine whether a serious game can prevent the development of depression in final year high school students
• Preliminary outcomes indicate significant results for depression at post-intervention and 6 month follow up

• Full results will be published in 2016
MOBILE SENSOR TECHNOLOGY

Smartphones now come equipped with a range of sensors that can be used to detect:

- motion
- specific activities (e.g., walking, sleeping)
- proximity to others etc.
MOBILE SENSOR TECHNOLOGY

• Passive data collection:
  – Reduce burden on participant
  – Increase objectivity of data
  – Diversify sources of data

• Data can be used:
  – To map social networks
  – To determine early warning signs for mental health difficulties e.g. withdrawal, reduced activity
  – As cues for automated interventions
SUMMARY

• Depression is a significant issue in young people
• Prevention approaches offer great promise
• Traditional prevention approaches are somewhat effective
• Novel methods may combat difficulties associated with stigma & cost, and improve engagement