



#### www.riskyadolescentpathways.com

- Dr Kathryn Modecki
  - Developmental psychologist
  - BA (Hons.), University of Virginia
  - PhD, University of New Hampshire
  - NIMH Post-doctoral fellowship, Arizona State University Prevention Science
  - Senior Lecturer, School of Applied Psychology, Griffith University

Twitter: Kathryn Modecki@riskyadpathways

## Adolescent brain development and risk



## Prior approaches to neurological development

• Phineas Gauge (1823-1860)







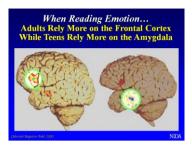
#### What is going on?

The adolescent brain is being sculpted.

Brain maturation occurs slowly over the course of adolescence, from back to front.



Last completed-prefrontal cortex



Teens and adults use different regions of the brain in responding to certain tasks

#### Adolescents have immature judgment

Adolescents unduly affected by 1,2

- Over reliance on peers
- Decreased risk perception
- · Increased sensation seeking
- · Shortened future-time perspective

Seems to be underpinned by biological and neurological changes that occur during adolescence

<sup>1</sup> Cauffman & Steinberg (2000) ; <sup>2</sup>Modecki (2008; 2009)

## All told, adolescents are "coping with inputs"



Difficulties creating "equalibrium"

- Peer influence
- · Rewards of risk
- · Emotional lability
- Stressors and strains (Luciana, 2013; Modecki, Zimmer-Gembeck, & Guerra, 2017)

1

## How does this translate to everyday behaviour?



11

### For teens, there are unique drivers of risk-taking

- Peers add to the "reward value" of risktaking (Gardner & Steinberg, 2005)
- Short-term incentives impel risk (Modecki, 2017)
- Sensation seeking is a reward in and of itself (Modecki, 2009)



12

#### Asking youth about their risk decisions.

Youth Decision-Making Questionnaire

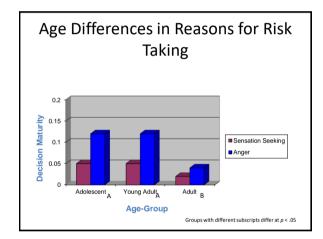
"You're out shopping with some of your close friends and they decide to take some clothing without paying for it. You don't think it's a good idea, but they say you should take something too."

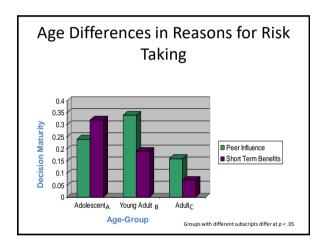
What are all the reasons that you would steal the clothes?

Modecki, 2009

#### Code responses to vignettes for:

- Peer Influence: he's my boy; made me more accepted; going along with him; my friend told me to: to be cool.
- Sensation Seeking: fun; excitement; a "rush"; just to have a good time.
- Anger: I was mad; he pissed me off.
- Lack of Perceived Risk: I won't get caught; it's easy; no chance I'd get caught.
- Short-term Consequences: because I get new clothes; I get to look good.

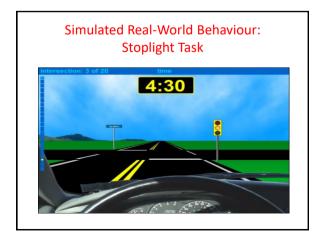


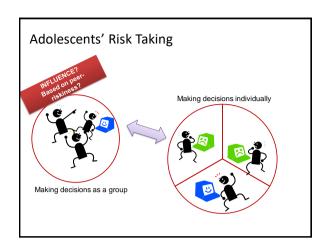


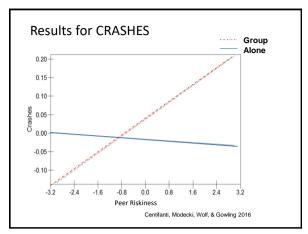
# For teens, peers play a critical role in risky behaviour

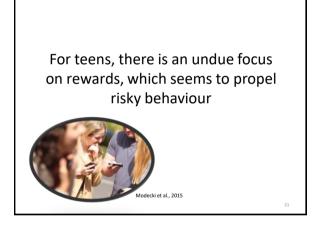


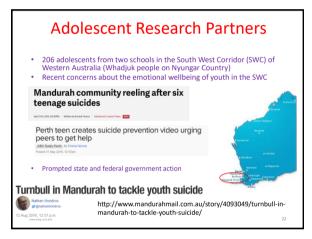
Centifanti, Modecki, Wolf, & Gowling, 2016



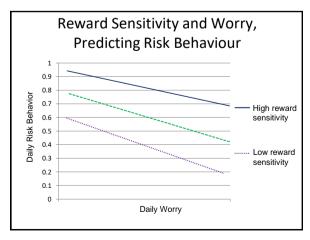


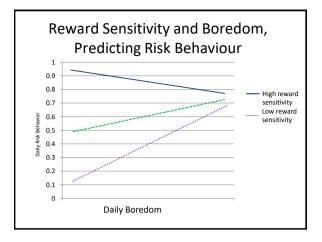












#### What does this mean for educators?

Acknowledge adolescents' strengths—their:

- creativity
- openness to emotional experiences
- positive peer influences

Assist with strategies in decision making—help them to consider :

- outsized influence of peers
- boredom often tied to problems
- need to "listen to (their) gut"
- Consider consequences stemming from those perceived rewards

26

#### What about schools?

- "Naturally occurring" interventions-for example structured, supervised, extracurricular settings (e.g. Modecki, Barber, & Eccles, 2014)
- Opportunities to mentor and take on positive identity experiences (e.g. Modecki, Neira, & Barber, 2018)
- "Arranged opportunities" for positive/different peer interactions
- · Focus on strengths, building positive identities

#### Thank you

#### Young and Well CRC

This research was funded by the Young and Well Cooperative Research Centre (CRC), an Australian-based, international research centre that unites young people with researchers, practitioners, innovators and policy-makers from over 75 partner organisations. Together, we explore the role of technology in young people's lives, and how it can be used to improve the mental health and wellbeing of young people aged 12 to 25. The Young and Well CRC is established under the Australian Government's Cooperative Research Centres Program.

Contributions to this research were also funded by a grant from the Australian Institute of Criminology through the Criminology Research Grants Program to Kathryn Modecki, Bonnie Barber, and Wayne Osgood.

Portions of this research were further supported by the Australian Government as a Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE) Project Grant (2012-2016) administered by Murdoch University entitled Murdoch's Aspirations and Pathways for University (MAP4U) Project

