



# Youth Mental Health ACAMH National Research Conference

*RCSI 14 Oct 2011*



## Prevalence of Psychiatric disorders among young people in Dublin: a community- based study

*Mary Cannon*

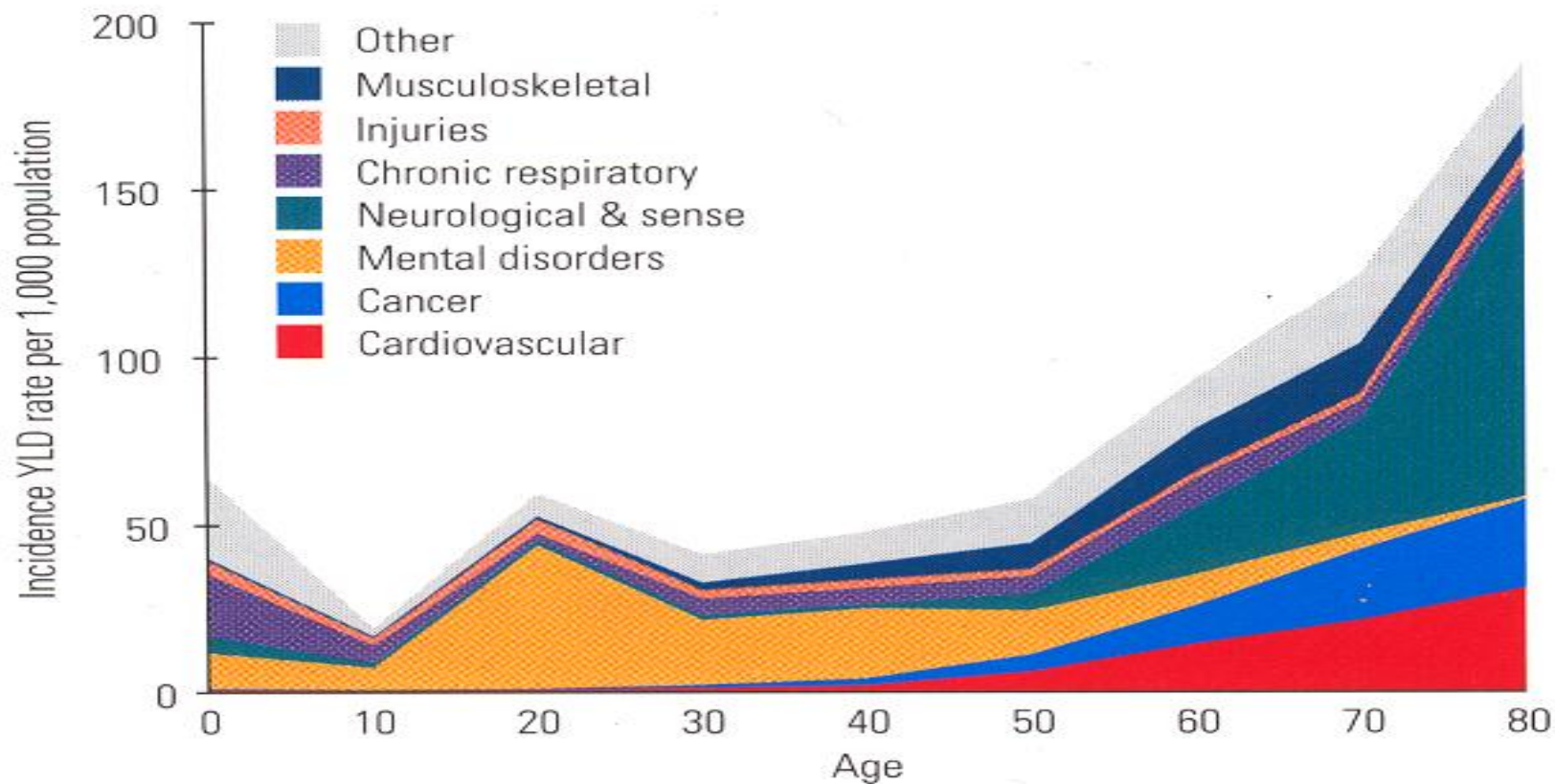
*Associate Professor, Department of Psychiatry, Royal College  
of Surgeons in Ireland,*

*Consultant Psychiatrist Beaumont Hospital, Dublin*

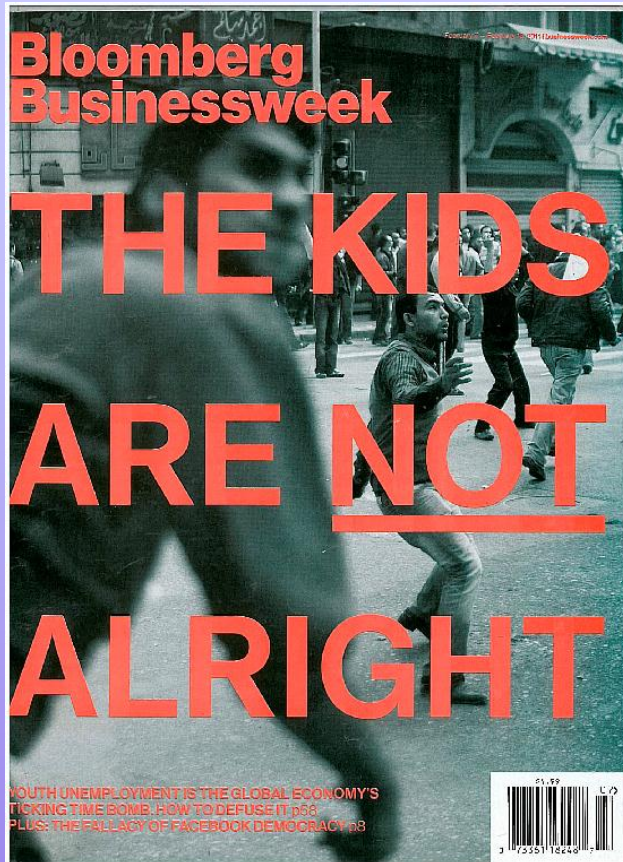
*HRB Clinician Scientist*

# The Importance of Youth Mental Health Incidence rates

*Figure 6 Incident YLD Rates per 1,000 Population by Age and Broad Disease Grouping, Victoria 1996*



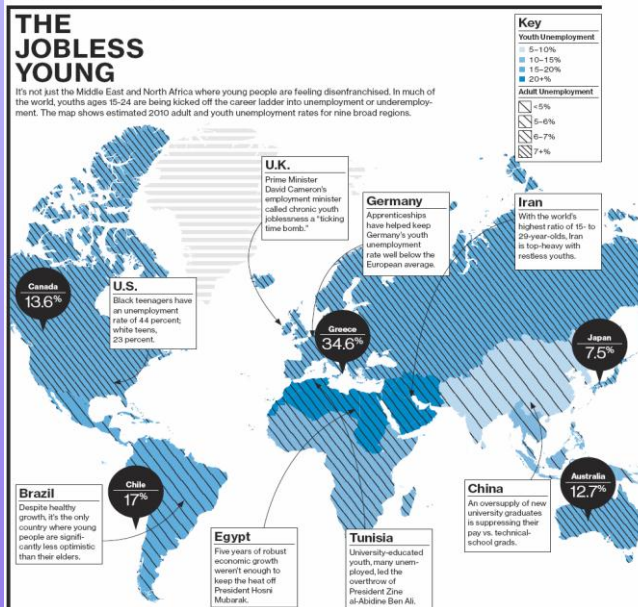
Slide courtesy of Pat McGorry



## Bloomberg Businessweek

### THE JOBLESS YOUNG

It's not just the Middle East and North Africa where young people are feeling disenfranchised. In much of the world, youths ages 15-24 are being kicked off the career ladder into unemployment or underemployment. The map shows estimated 2010 adult and youth unemployment rates for nine broad regions.



#### Labor Curves

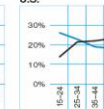
In the youngest age group, the blue line (share of the unemployed) is higher than the black line (share of the labor force). That means young people bear a disproportionate share of unemployment.

■ Share of the unemployed  
 ■ Share of labor force

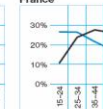
#### Greece



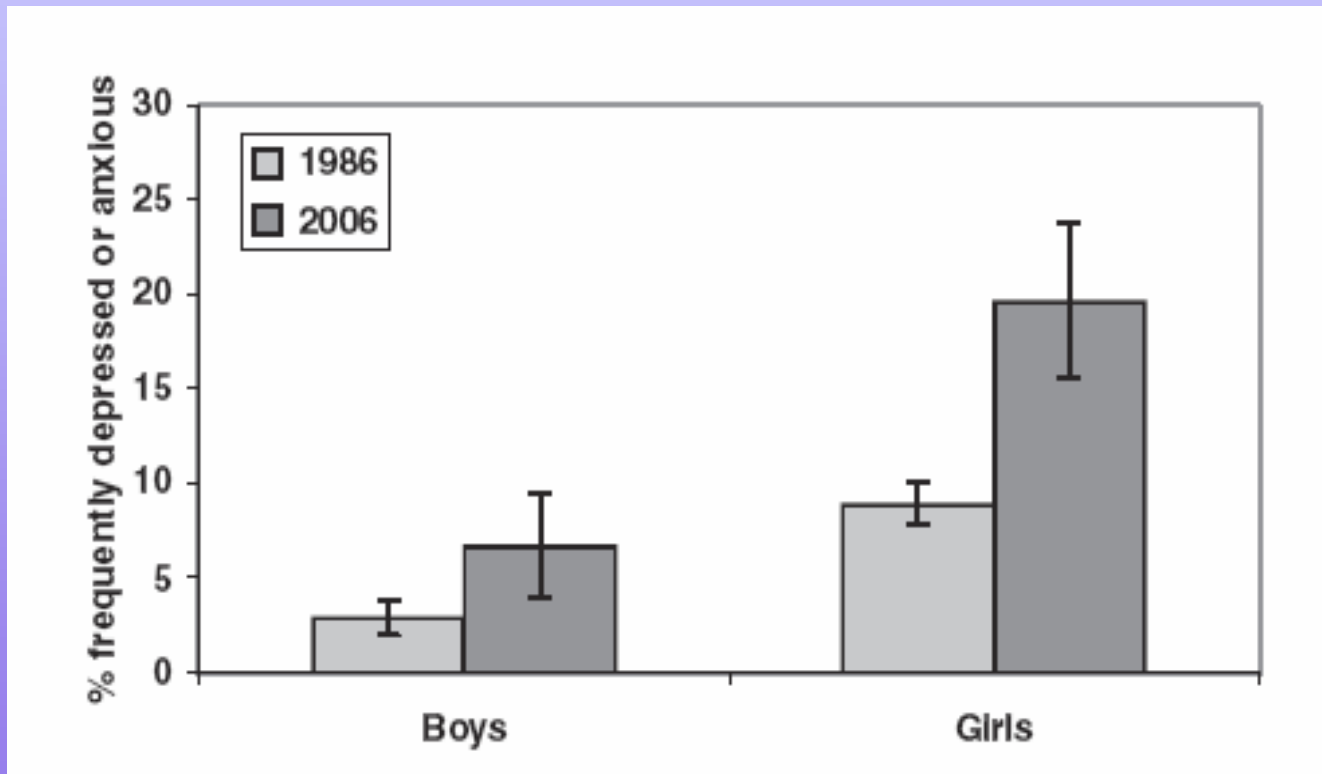
#### U.S.



#### France



# Youth Depression and Anxiety England 1996-2006



Collishaw et al, 2010

# The Challenges


**Brain  
changes**

**Life  
transitions**



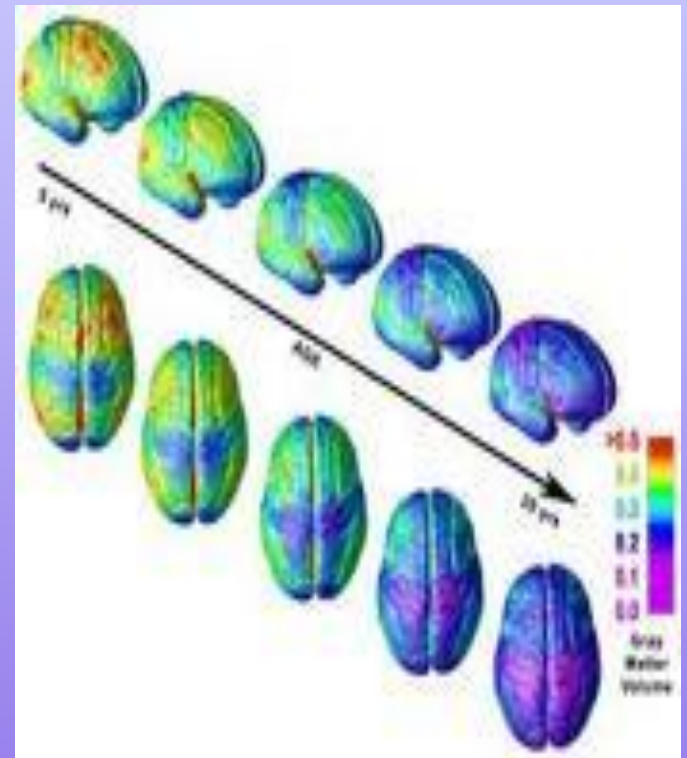
**Peer pressures**

**Hormonal  
changes**



**SECRETS OF THE  
TEEN  
BRAIN**

► Research is revolutionizing our view of the adolescent mind - and explaining its mystifying ways

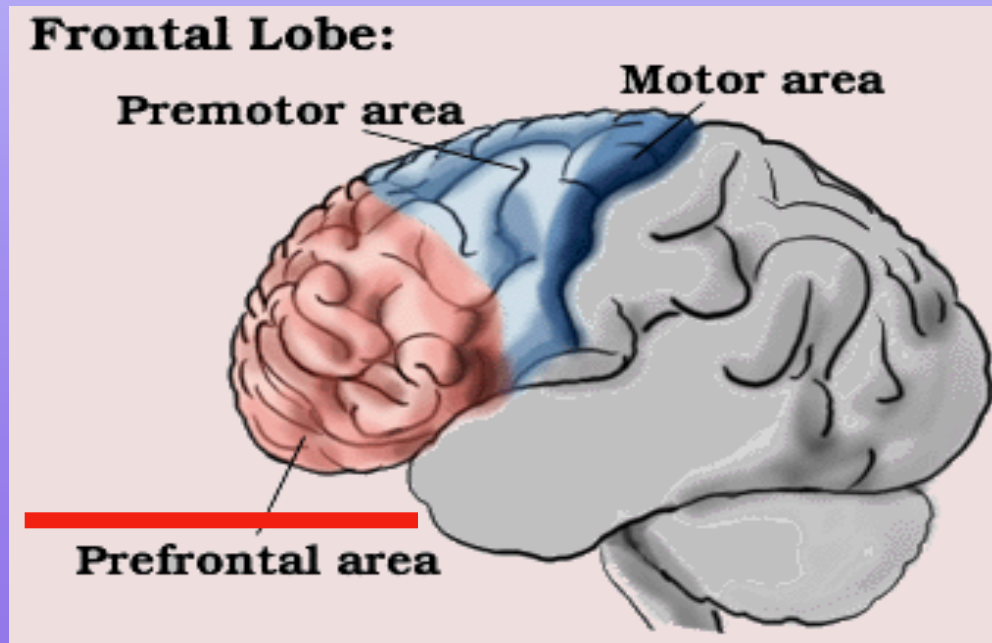


# The Changing Teen Brain

The brain develops from back to front

**The Frontal Area** of the brain grows last and changes a lot through **ages 11 or 12**

The brain doesn't stop developing until age 25



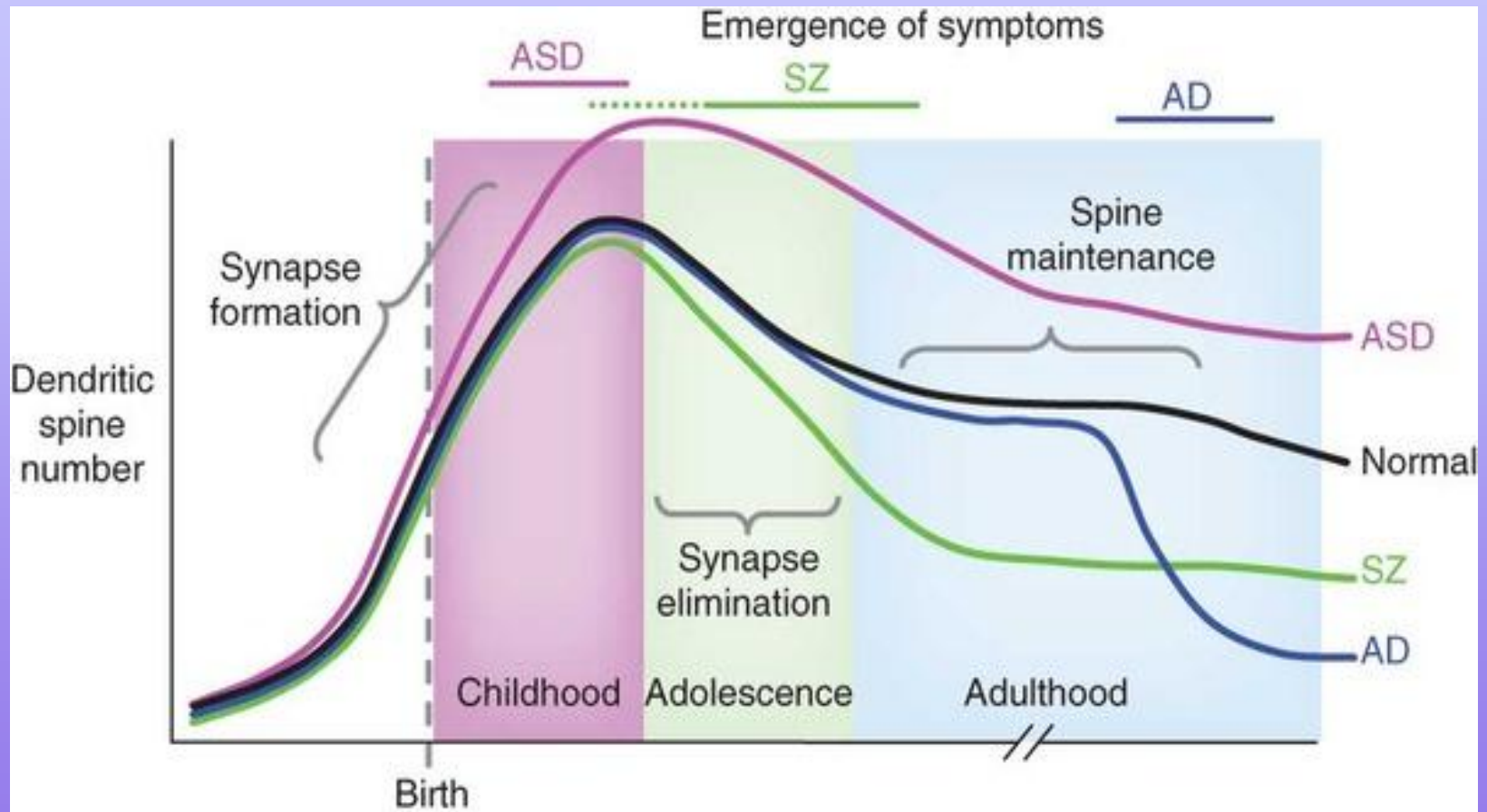
# The Neuron

Neurons are the cells in the brain that interact with one another and tell the brain what to do

The brain contains 100 billion neurons!



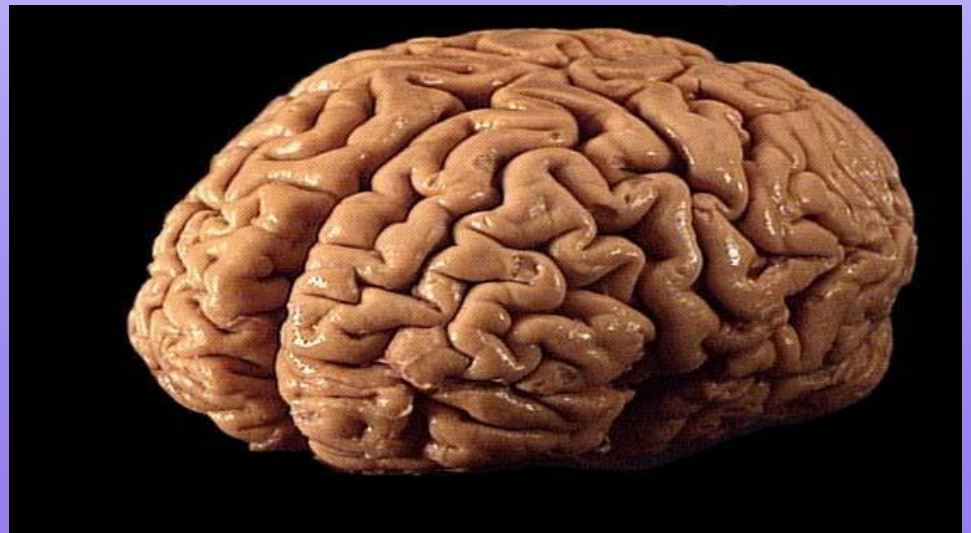
# Synaptic Pruning



# Functions of the Frontal lobe

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*Abstract thinking*  
*Attention shifting*  
*Information manipulation*  
*Planning and foresight*  
*Monitoring and error correction*  
*Decision making*  
*Inhibition*  
*Social functioning*



# The Challenges

**Brain  
changes**

**Life  
transitions**

**Peer pressures**

**Hormonal  
changes**





# Adolescent Brain Development Study

1131 children filled out questionnaires  
11-13 years old  
Parental consent  
*Strengths and Difficulties Questionnaire*



# Strengths and Difficulties Questionnaire (SDQ)

	No, Never	Maybe	Yes, definitely
I try to be nice to other people. I care about their feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am restless, I cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get a lot of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually share with others, for example CD's, games, food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get very angry and often lose my temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would rather be alone than with people of my age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually do as I am told	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have one good friend or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I fight a lot, I can make other people do what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other people my age generally like me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am easily distracted, I find it difficult to concentrate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am nervous in new situations. I easily lose confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am often accused of lying or cheating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other children or young people pick on me or bully me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often offer to help others (parents, teachers, children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think before I do things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take things that are not mine from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along better with adults than with people my own age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have many fears, I am easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I finish the work I'm doing. My attention is good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Adolescent Brain Development Study Interview Results

SDQ: Abnormal score 7%; Borderline 14%

212 children interviewed

15% *current* mental disorder (1 in 6)

37% *lifetime* mental disorder (1 in 3)

Suicidal thoughts/behaviours in 7%

# Current Mental Disorders

<i>Diagnosis</i>	<i>n</i>	<i>%</i>
Overanxious Disorder/GAD	14	6.6
Attention Deficit Hyperactivity Disorder	11	5
Oppositional Defiant disorder	8	2.3
Major Depressive Disorder	3	1.4
Adjustment Disorder	3	1.4
Obsessive Compulsive disorder	3	1.4
Conduct Disorder	2	1
Separation Anxiety Disorder	2	1

# Lifetime Mental Disorders

<i>Diagnosis</i>	<i>n</i>	<i>%</i>
Simple Phobia	20	14
Adjustment Disorder	19	9
Major Depressive Disorder	15	7
Attention Deficit Hyperactivity Disorder	12	5.6
Overanxious Disorder	12	5.6
Separation Anxiety Disorder	10	4.7
Oppositional Defiant disorder	8	3.9
Obsessive Compulsive disorder	6	2.6
Conduct Disorder	2	1

# Lifetime and Current disorders

	Lifetime	Current
Anxiety disorders	27%	9%
Depressive disorders	16%	2.8%
ADHD	5.6%	5%
Behavioural disorders	5%	3.3%

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Writer and director Len Collin (left) and Kieran Coppinger of the Blue Tessel Theatre Company, Galway, at the launch of Arts & Disability Ireland's strategic plans Policy and Strategic Direction 2012-2016, at the Seán O'Casey Centre, East Wall, Dublin, yesterday. Photograph: Eric Linn

# Study of adolescents aged 11-13 finds 15% show signs of mental disorder

CLAIRE O'CONNELL

A STUDY of adolescent children has found that about 15 per cent show signs of having a current mental disorder and that up to 37 per cent had experienced symptoms of mental health problems at some point in their lives.

The findings, which came from a study involving primary school students aged 11-13 in Dublin, Kildare and Meath, are to be presented at a research conference on youth mental health later this week.

More than 1,100 students at 19 schools contacted to fill out a questionnaire as part of the Health Research Board-funded study, said researcher Prof Mery Cannon, a consultant psychiatrist at Dublin's Beaumont Hospital and an associate professor at the Royal College of Surgeons in Ireland.

“It focused on depressive disorders, anxiety disorders and we also asked about conduct and behavioural problems and about ADHD-type symptoms,” Prof Cannon said. “There were also some questions about obsessive-compulsive symptoms and psychotic type symptoms.”

The questions were soft in their approach, she said. “We might have said, ‘some children may sometimes have experi-

ences where they hear voices when there is no one at the room, have you ever had an experience like that?’ And if the child said ‘maybe’, that you would explore it.”

The study found that many of the children were hearing voices, Prof Cannon said. “This may not be anything to worry about, but we need to find out more about it.” An example of a depression question in the survey, she said, would be: “Have you ever felt sad, blue, down or empty?”

“If the answer was in the affirmative then that would be followed up with more detailed inquiries leading up to more serious questions such as ‘Sometimes children who get upset or feel bad think about dying or even killing themselves. Have you ever had such thoughts?’

“In our sample, 7 per cent had

such thoughts,” she said.

The overall finding that about 15 per cent of the children fulfilled criteria for a current mental disorder is in line with a 2001 study in Ireland of 14 17-year olds, according to Prof Cannon, who also noted that the numbers broadly matched figures from the UK and the US.

“If you take the long view, most adult mental illnesses will have started by the age of 16. We have to think of these things as adult disorders if they are not, they can start much earlier.”

The study is one of several research projects to be presented this Friday, October 14th, in the College of Surgeons at the conference Emerging Evidence on Youth Mental Health: Multidisciplinary Perspectives.

It has been organised by the Association of Child and Adolescent Mental Health.



HEALTHplus  
MENTAL HEALTH  
Alastair Campbell on coping with mental illness - then and now

## Girl (14) back in Ireland after successful liver transplant

CONOR POPE

TEATRIM IENKAOPER Meath's McGowan has arrived back in Ire-

land after a successful liver transplant being sent to her which meant she was unable to travel in sufficient time to the London hospital which has provided paediatric

services for Irish patients. He said he had been told that the Health Service Executive (HSE) would organise a private flight if the King's Hospital medical

### In short

#### Irishman shot dead in Boston reportedly from the west

■ A man in his 40s who is reportedly from the west of Ireland was shot dead in Boston early yesterday morning. The man, who has yet to be formally identified, was shot in the chest on the street in the Dorchester area of the city at around 1am

pany intends to undertake salvaged from the cargo of silver, next year. Seven tonnes were won from the SS *Merula* died, but most of the crew survived and were brought to Benny, Co Cork.

The company says the salvage contracts were awarded to it by the British department of transport. It will keep 80 per cent of the silver recovered - with Britain getting the remaining 20 per cent.

It quotes not that the British ministers of war transport paid a war risk insurance claim for £110,000 for silver on the *Merula* when it sank. “This sum would equate to more than 600,000 ounces of silver, based on silver prices in 1917,” it said.

The company said it “also discovered other projects and contracts that... may be conducted through the warner channels”. The company has been surveying northwest Irish waters where there are “errandingly” wrecks.

The Navy's *Seeforce* said it notified the company's research ship *Odyssey*, Killybeggs, that it should inform the Irish authorities when it came across the vessel surveying some 25 miles west of the Blackrock Islands, Co Kerry, on August 2nd.

Under international law, a ship undertaking scientific research should inform the relevant state. However, *Odyssey* has said it is searching for wrecks “except from land”. Wrecks are less than 100 years old and are protected by Ireland's National Monuments Act.



TEATRIM IENKAOPER Meath's McGowan has arrived back in Ire-

## '15% kids mentally ill'

A SHOCKING 15 per cent of 11 to 13-year-olds suffer from a mental disorder, new research has found.

A sample of 1,131 children from north and west Dublin and Kildare completed a questionnaire assessing their different strengths and difficulties.

Depression and anxiety were among the most common of the disorders found among the kids.

Health Research Board clinician scientist Professor Mary Cannon carried out the study.

She said: "Effective early intervention and treatment would have long-lasting beneficial impacts for both the patient and society."

## HEALTH 15% of kids have mental disorders

SOME 15% of 11 to 13-year-olds suffer from a mental disorder, new research has revealed.

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Depression and anxiety were among the most common of the disorders found among the young people.

Health Research Board clinician scientist Professor Mary Cannon, who carried out the study, said it was important to detect mental disorders at an early stage.

She added: "Effective early intervention and treatment would have long-lasting beneficial impacts for both the patient and society."



# The Challenging Times study



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

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Journal of Adolescence 27 (2004) 441–451

Journal of  
Adolescence

[www.elsevier.com/locate/jado](http://www.elsevier.com/locate/jado)

## Challenging times: a study to detect Irish adolescents at risk of psychiatric disorders and suicidal ideation

Fionnuala Lynch<sup>a,c</sup>, Carla Mills<sup>a,c</sup>, Irene Daly<sup>a,c</sup>, Carol Fitzpatrick<sup>a,b,c,\*</sup>

<sup>a</sup>Department of Child and Family Psychiatry, Mater Misericordiae Hospital, Dublin 7, Ireland, UK

<sup>b</sup>The Children's University Hospital, Temple St., Dublin 1, UK

<sup>c</sup>University College Dublin, Ireland, UK



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

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Journal of Adolescence 29 (2006) 555–573

Journal of  
Adolescence

[www.elsevier.com/locate/jado](http://www.elsevier.com/locate/jado)

## Challenging times: Prevalence of psychiatric disorders and suicidal behaviours in Irish adolescents

Fionnuala Lynch<sup>a,b</sup>, Carla Mills<sup>a,b</sup>, Irene Daly<sup>a,b</sup>, Carol Fitzpatrick<sup>a,b,\*</sup>

<sup>a</sup>Department of Child & Family Psychiatry, Mater Hospital, Eccles Street, Dublin 7, Ireland

<sup>b</sup>Department of Psychiatry, University College, Dublin, Ireland

# Challenging Times Study

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723 children aged 12-15 years in 12  
secondary schools in North Dublin  
19% met criteria for possible mental  
disorder

212 12-15 year olds interviewed  
15.6% met criteria for a mental disorder  
on interview (Lynch et al, 2006)



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

# Clonmel Study

(Martin and Carr, 2004)

All school children aged  
<18 in Clonmel in 2004

3374 completed SDQ  
questionnaire

17% met criteria for  
possible mental disorder

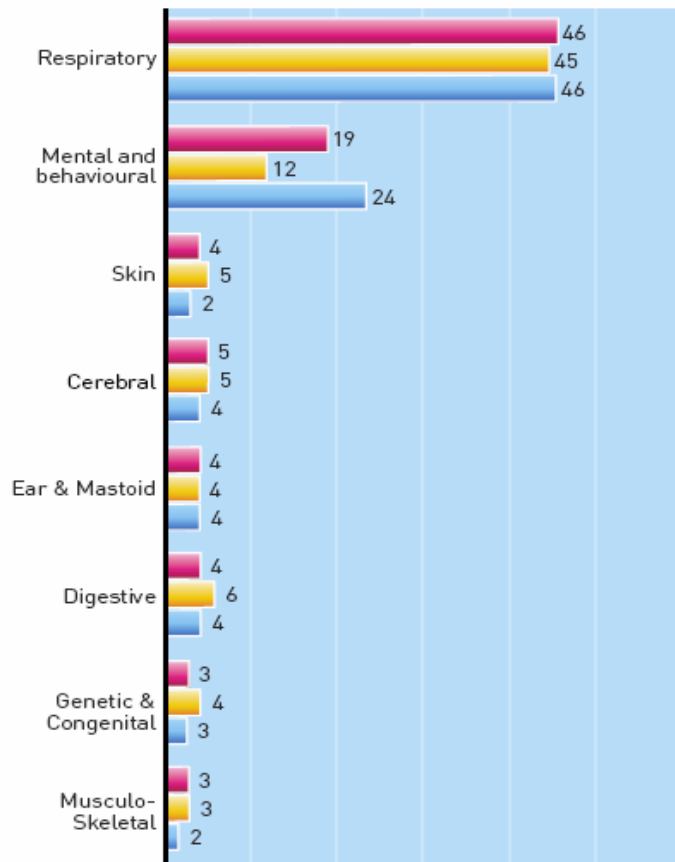
On interview 19% met  
criteria for at least one  
psychological disorder



# Growing Up in Ireland Study



Figure 4: Main chronic illness types by gender of child



8000 9 year olds and their parents surveyed.

Government funded study

“Lives of Irish children will be better understood”

19% Mental and behavioural conditions

Further follow-up at age 13

# International rates

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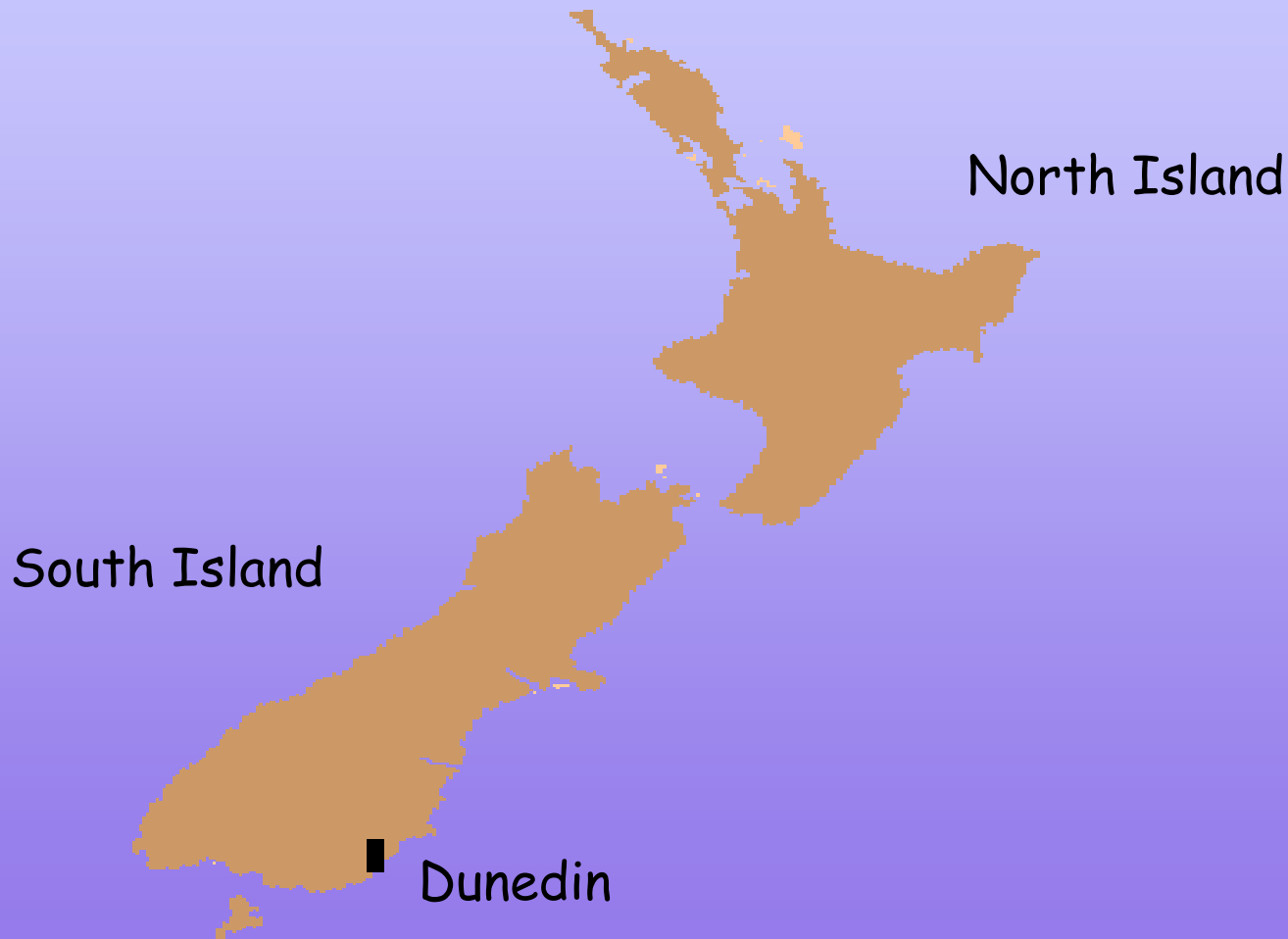
UK (*Meltzer et al, 2003*) 10,438 5-15 yr olds: 10% met criteria for a mental disorder

US: Great Smoky Mountains Study (*Costello and Angold 2003*) - 37% 9-13 yr olds had a current psychiatric disorder

US: NHANES (*Merikangas et al 2010*) 3,402 8-15 yr olds. 13% had at least one disorder. One half had sought treatment.

# Dunedin Multidisciplinary Health and Development Study

Total birth cohort born 1972/73 in Dunedin (N=1037)





Age 3



Age 11



Age 26

# Psychiatric diagnoses in childhood and adulthood

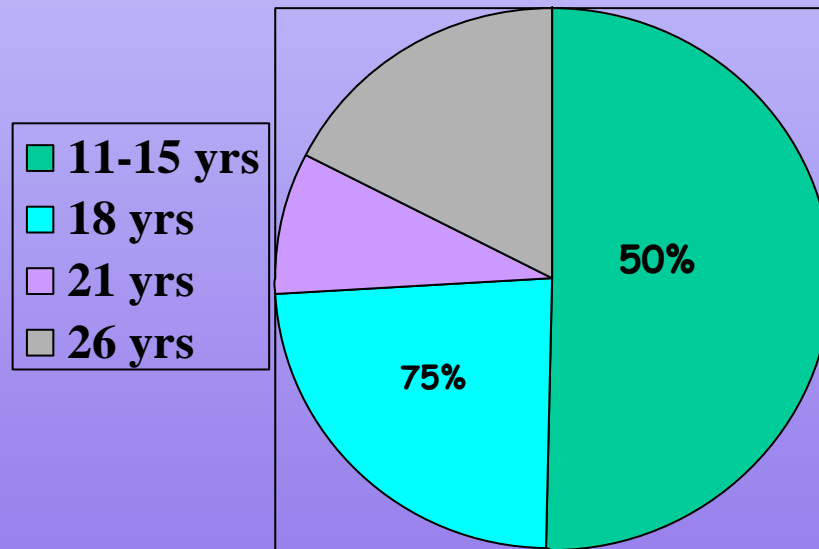
## Adult disorder

Anxiety  
Depression  
Substance Use  
Antisocial personality disorder  
Mania  
Schizophreniform disorder  
Eating Disorder

## Childhood disorders

Anxiety  
Depression  
ADHD  
CD/ODD  
Subs Use (18)

# Age at first diagnosis among persons meeting criteria for mental disorders at age 26



**DSM-IV  
mental disorder**

# Proportion of adult disorders attributable to any psychiatric disorder in childhood

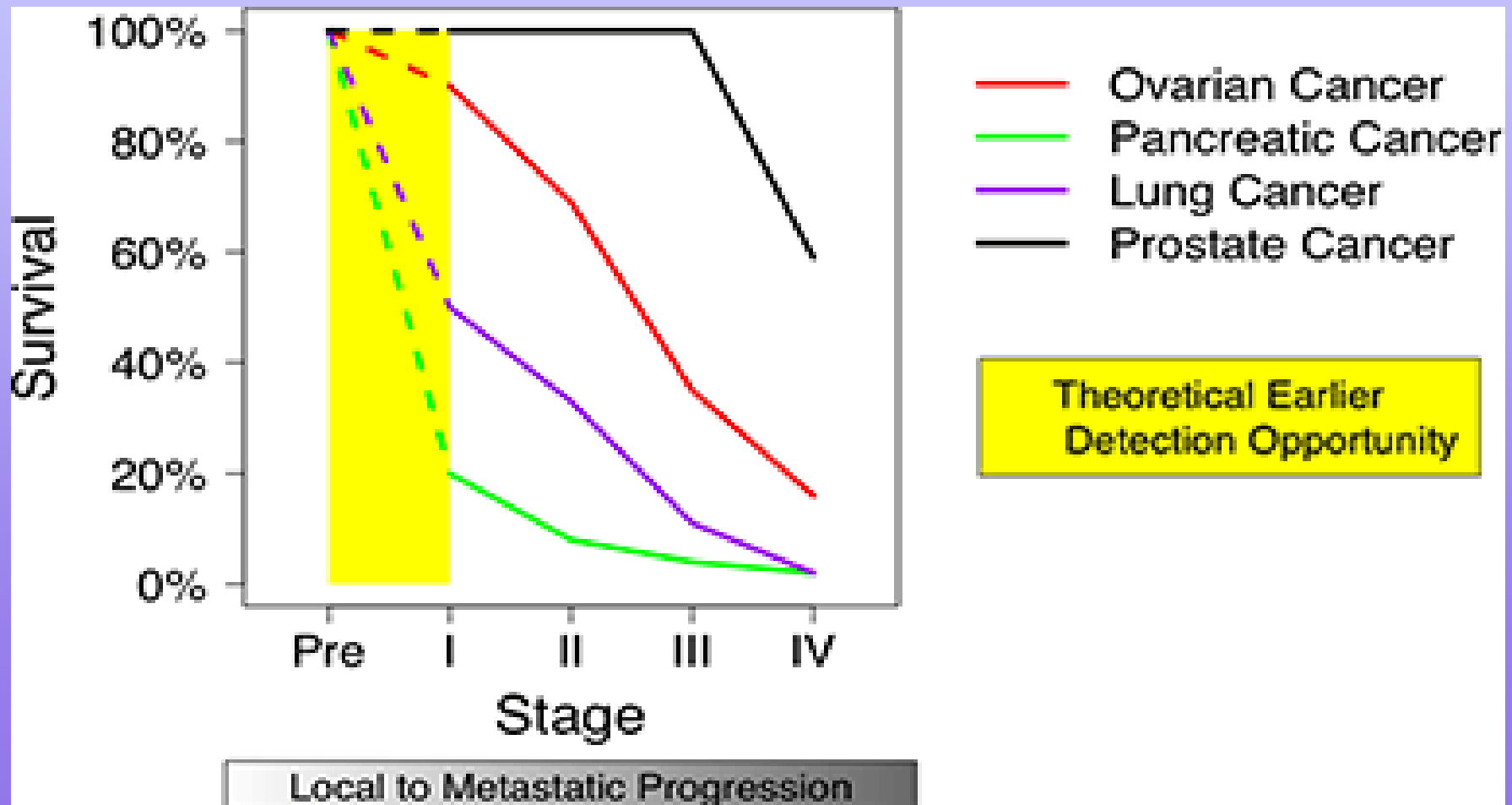
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<u>Adult disorder</u>	<u>% AFP</u>
Anxiety	26
Depression	23
Substance Use	24
ASPD	41
Mania	32
Schizophreniform disorder	25
Eating Disorder	46

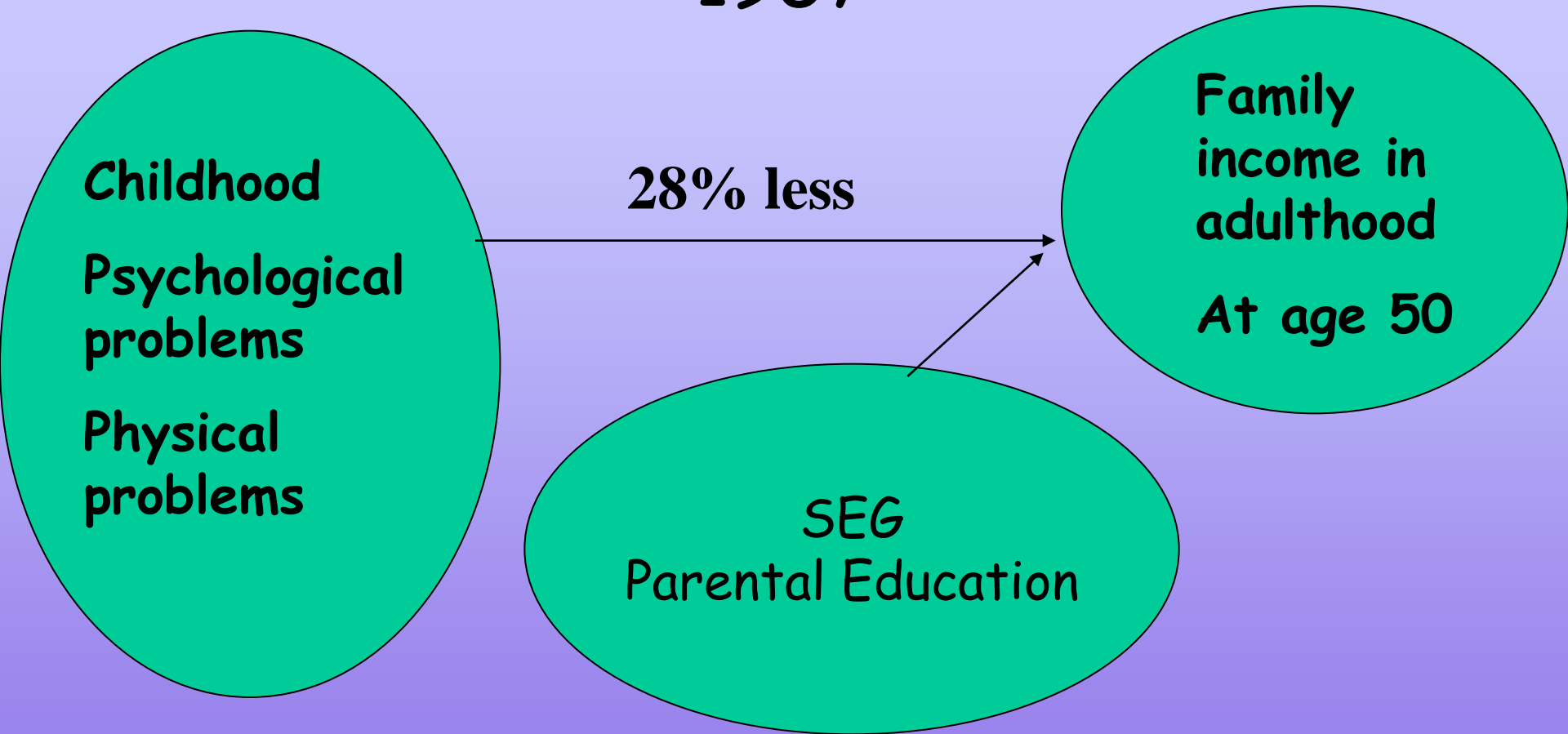
# The case for early detection...

*"Cancer - Don't try to cure it. Just find it"*

*Wired magazine Jan 09*



# National Child Development Study 1957



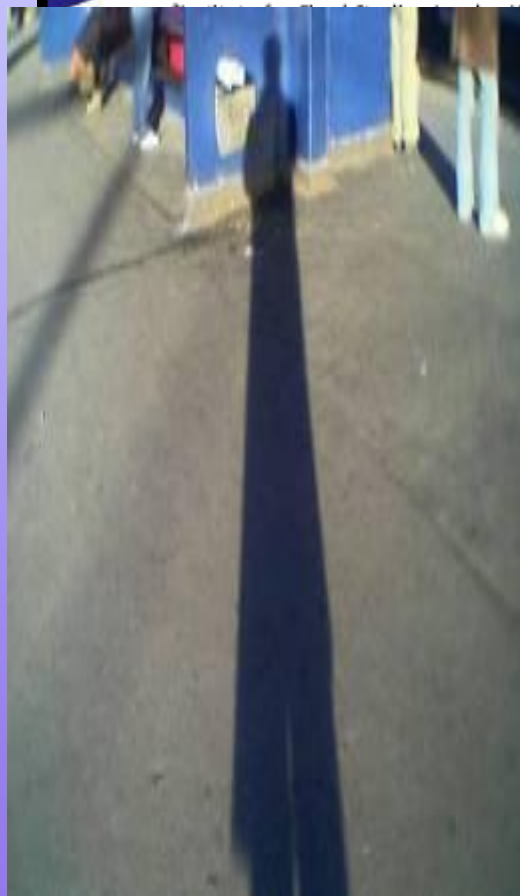
# The long shadow cast by childhood physical and mental problems on adult life

Alissa Goodman<sup>a</sup>, Robert Joyce<sup>a</sup>, and James P. Smith<sup>b,1</sup>

<sup>a</sup>Department of Health, Behavior, and Society, IC1E 7AE, United Kingdom; and <sup>b</sup>RAND Corporation, Santa Monica, CA 90407-2138

University of California, Berkeley, CA, and approved February 8, 2011 (received for review November 11, 2010)

Compare long-term adult socioeco- Model



as well as the affected person.

The economic costs related to childhood mental disorders are far more important than physical illnesses during the childhood years, largely because the impacts of mental health problems occur early in adulthood whereas the physical health problems have a delayed impact. Effective treatments targeted to children that lower the risk of experiencing these psychological conditions or that mitigate adult psychological and economic consequences are likely to have long-lasting payoffs and to be very cost-effective.



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Jennifer Murphy  
Erik O'Hanlon*

Dept Child and Adolescent  
Psychiatry, Mater Hospital and  
UCD

*Prof Carol Fitzpatrick  
Dr Fionnuala Lynch  
Dr Michelle Harley*

