

### THE MENTAL HEALTH OF YOUNG PEOPLE IN IRELAND

A report of the Psychiatric Epidemology Research across the Lifespan (PERL) Group

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

MARY CANNON, HELEN COUGHLAN, MARY CLARKE, MICHELLE HARLEY & IAN KELLEHER

OCTOBER 2013

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### FOREWORD

Minister Kathleen Lynch, Minister with Responsibility for Mental Health

I congratulate the Royal College of Surgeons in Ireland on producing this timely and apt Report and I wish also to acknowledge in particular the role of the many young people who participated in this valuable research.

It may come as a surprise to many young people that it is only in relatively recent times that mental health issues have been openly discussed within Irish society. Thankfully, times and attitudes have generally changed for the better. Nowadays, individuals and communities address mental health issues in a more positive way, notwithstanding the fact that there is still room for improvement overall. Such changes in attitude are to be welcomed, as this helps normalise mental health which should be just like any other ailment; to be diagnosed, treated and hopefully cured over time.

Everyone is familiar with the old saying "a good start is half the battle". A sound approach to early development is fundamental to one's health, including positive mental health and encouraging lifelong resilience. This does not, obviously, discount the possibility or occurrence of mental health issues. We, as a society, have a collective duty to foster a culture whereby all those in difficulty, and young people in particular, do not hesitate to seek help when needed. We should, for example, be alert to the signs and signals of distress, promote good coping skills, embrace difference, and exclude stigma. The fundamental solution to meeting mental health needs, regardless of age, lie in effective partnerships where professionals, service users, families and the wider community work together. Obviously, the Government will continue to play its part in terms of promoting policies, services and investment for this important sector. Above all, no one should have to suffer a mental illness alone. I would appeal to any young person who thinks they may have a mental health issue not to suffer in silence and to seek help from the many sources available.

Our teenagers and young people will see advances over their lifetime that my generation can only dream about. But, on the other hand, these same young people experience pressures and stresses not experienced by their predecessors. Being bullied used, in some cases at least, to stop once the school gates closed for the day. Now, social media has the potential to turn it into a 24/7 pressure but it is not inevitable and can be stopped if those affected take the most important step of seeking help.

As a caring society, we must be very careful to attend to the social and emotional needs of our young people, to ensure that they are allowed reach their full potential and develop into well-adjusted adults. It is incumbent on us to protect them and support them as necessary into the future, and enable them to contribute full to society by using their many talents.



**Ms. Kathleen Lynch**, T.D. Minister of State, Department of Health and Department of Justice, Equality & Defence with responsibility for Disability, Older People, Equality & Mental Health

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### ACKNOWLEDGEMENTS

Firstly, the PERL Group would like to thank each young person and family who took part in these studies. In sharing their experiences with us, they have made an invaluable contribution to our understanding of what it means to be a young person in Ireland today. They have also highlighted the reality of mental ill-health among young Irish people. Without their commitment to this research we would not have the information we need to guide mental health policy planning and service delivery for young people in Ireland.

The research in this report would not have been possible without the generous funding of the Health Research Board. Their support has ensured that the PERL group has been able to provide some of the only epidemiological data on rates of mental disorder among young people in Ireland.

We would also like to extend our thanks to Professor Carol Fitzpatrick and Dr Fionnuala Lynch in the Mater Hospital Dublin for supporting us in following up the Challenging Times Study cohort.

The PERL Group has been exceptionally fortunate to have a dedicated and talented team of researchers over the past seven years since our research programmes started. We would like to acknowledge the commitment and expertise of Dr. Dearbhla Connor, lead researcher on the Challenging Times Two study. We would also like to thank each of the researchers who has worked on these studies for their valuable contributions to the work of PERL: Francesco Amico, Matt Blanchard, Daniel Creegan, Nina Devlin, Paula Greally, Mark Heneghan, Niamh Higgins, Matt Hoscheit, Sarah Jacobson, Fergal Kavanagh, Charlene Molloy, Jennifer Murphy, Aileen Murtagh, Erik O'Hanlon, Emmet Power, Lucy Power, Caroline Rawdon, Sarah Roddy, Jessica Ryan, Javeria Tabish, Lauren Tiedt and Deirdre Twomey.

Our thanks too to our collaborators Dr. Richard Roche of the National University of Ireland, Maynooth and Professor Thomas Frodl of Trinity College Dublin.

We would also like to extend our thanks to our colleagues in the Communications Team of the Royal College of Surgeons in Ireland. The production of this report and its launch would not have been possible without the support of Johanna Arajuuri, Niamh Burdett and Robert Magee.

Finally, we would like to acknowledge the support of Professor David Cotter, Professor Kieran Murphy and all our colleagues in the Department of Psychiatry. In particular we would like to thank Catriona O'Grady for her work in managing and administering key aspects of these programmes of research.

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### **EXECUTIVE SUMMARY**

#### **Background to this Report**

The experience of mental ill-health can have a significant and devastating impact on the personal, family, social, vocational and economic lives of those who experience a mental disorder, on their families and on wider society. While people can experience mental ill-health at any time of their life, international evidence has demonstrated that the onset of mental disorders peaks during the adolescent and early adult years [1, 2]. It has also shown that young people carry the burden of mental ill-health with mental disorders now the leading cause of disability among young people aged 10-24 years around the world [3].

There has been a dearth of epidemiological research on rates of mental disorder among Irish people and little is known about the numbers of young people in Ireland who are experiencing diagnosable mental disorders. In the context of such limited epidemiological research in the field of mental health, the PERL Group in the Royal College of Surgeons in Ireland has conducted two studies on mental disorders and psychopathology among young Irish people. This report is the first research report from these two studies by the PERL Group. It provides data on the prevalence rates of mental disorder, substance use, deliberate self-harm and suicidality among young Irish people aged 11-24 years.

#### The Research

This report contains research findings from two epidemiological studies on mental disorders and psychopathology among young people in Ireland: the Adolescent Brain Development Study and the Challenging Times Two study. In both studies, a representative sample of young people was interviewed by trained clinicians and researchers to assess them for the presence of any mental disorder and to explore their experiences of substance use, deliberate self-harm, suicidal ideation and suicidal behaviour. Data from these two studies have enabled the PERL Group to estimate the prevalence rates of mental disorders among similarly-aged young people in Ireland.

#### **Research Findings**

Findings from our research demonstrate that high numbers of young Irish people are experiencing mental ill-health at any given time. We found that, by the age of 13 years, 1 in 3 young people in Ireland is likely to have experienced some type of mental disorder. By the age of 24 years, that rate will have increased to over 1 in 2. Based on international evidence, that means that up to one third of young Irish adolescents and over one half of young Irish adults are at increased risk of mental ill-health into their adult years.

Our findings on young adults aged 19-24 years from the Challenging Times Two study also revealed that high numbers of young Irish adults are engaged in the misuse of alcohol and other substances, with over 1 in 5 meeting criteria for a diagnosable substance use disorder over the course of their lives.

Our studies have shown that significant numbers of young people are deliberately harming themselves and that many young people have experienced suicidal ideation. We found that over 1 in 15 young people in both studies had engaged in deliberate self-harm and that, by the age of 24 years, up to 1 in 5 young people will have experienced suicidal ideation.

Findings from our studies suggest that Irish young people may have higher rates of mental disorder than similarly aged young people in other countries.

Our research has also identified a number of risk factors that are associated with the experience of mental ill-health among young Irish people. These include the experience of health, work and relationship stress, family difficulties, the experience of being in an abusive intimate relationship and having a bisexual or homosexual orientation.

Finally, our research has demonstrated that the experience of mental ill-health during adolescence is a risk factor for future mental ill-health and substance misuse in young adulthood. It is also associated with an increased risk of unemployment during the early adult years.

### **Implications of Research Findings**

Findings from this research are critical to any policy or service planning agenda, particularly in the context of limited resources and the need to maximise the efficiency and effectiveness of mental health promotion, prevention and intervention in Ireland. They point to a need to enhance mental health policy and service development strategies in order to reduce the incidence, impact and continuity of mental ill-health among young people in Ireland. Progressive early prevention and intervention initiatives in the field of youth mental health have the potential to reduce the economic burden associated with mental ill-health among Irish people. More importantly they also have the potential to minimise the personal, relational, social and vocational impact of mental ill-health on young people, their families and wider society.

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### **GLOSSARY OF TERMS**

Adolescence	-	Adolescence is a stage of development that, for most young people, takes place somewhere between the ages of 10 and 18 years. During adoles- cence young people experience a variety of changes in their brain and physical development, their sense of self and their relationships with family and friends.
Anxiety Disorders	_	Anxiety disorders cover a range of disorders related to feelings of panic, worry or fear. They include specific phobias (an irrational or excessive fear of a specific object or situation, often leading to avoidance behaviour), so- cial phobia (the experience of intense feelings of fear in social situations), panic disorder, post-traumatic stress disorder, obsessive compulsive disor- der (engaging in repetitive behaviours or rituals and/or having obsessional or intrusive thoughts) and generalised anxiety disorder.
Behavioural Disorders	_	Behavioural disorders refer to disorders that are characterised by overac- tive and poorly controlled behaviour patterns in young people that may be accompanied by difficulties with attention. Behavioural disorders emerge in childhood and are generally associated with childhood and adolescence. As a result, they are seldom assessed in adults and most diagnostic sched- ules for adults do not routinely include a formal behavioural disorder as- sessment.
Binge Drinking	-	Binge drinking refers to harmful patterns of drinking that involve drinking 6 or more standard drinks during one episode of drinking.
Current Mental Disorder	-	In this report current mental disorder refers to diagnosable mental disor- ders that young people experienced within the 4 weeks prior to and includ- ing the date they were assessed.
Deliberate Self-Harm	_	Deliberate self-harm refers to intentional acts of harm to a person's own body without any associated suicidal intent. There are numerous ways that people harm themselves including scratching their skin, cutting themselves with knives or other sharp objects, hitting or punching themselves, burning themselves with cigarettes, chemicals or lighters, ingesting toxic substanc- es and preventing wounds from healing. While acts of deliberate self-harm are sometimes life-threatening, by definition, they are not intended to re- sult in death.
Emerging Adulthood	-	Emerging adulthood (Arnett, 2000) refers to a stage of development that takes place between adolescence and adulthood. It starts during the late teenage years and ends by the mid to late 20s. People are considered to have left the stage of emerging adulthood when they have taken on the roles and responsibilities of adulthood. In this report, this stage of life is also referred to as young or early adulthood.
Epidemiology	-	Epidemiology is the study of the rates and causes of illness or disease in the general population. It aims to determine or to estimate how many peo- ple suffer from a particular illness or disease in a particular area. Findings from epidemiological research are used to inform health policy and prac- tice to better control or respond to the particular illness or disease being studied.
Lifetime Mental Disorder		In this report, lifetime mental disorder refers to the experience of a di- agnosable disorder that occurred at any time in a person's life. To meet criteria for a lifetime mental disorder, young people were asked about any previous experiences of mental ill-health and their past experiences were then assessed according to standardised diagnostic criteria. Where young people's past experiences met diagnostic criteria, these rates were com- bined with any current rates of disorder found to establish lifetime rates of disorder.

Mental Disorder	_	The definition of mental disorder used in this report and in our research studies is taken from the Diagnostic Statistical Manual (4th Edition, Text Revised) (American Psychiatric Association, 1994). There are strict criteria that a person must meet to be considered to have a mental disorder. They must be experiencing a clinically significant behavioural or psychological pattern that is either causing them distress, disabling them in some way or puts them at increased risk of suffering, death, disability or a loss of freedom. The person's psychological, behavioural or biological difficulties must be an expression of some level of dysfunction within the person. That means that emotional and behavioural experiences that are culturally accepted or expected (e.g. distress following a death) or behaviour that is simply deviant in nature (e.g. anti-social behaviour) are not mental disorders.
Mental Health	_	The World Health Organisation defines mental health as 'a state of well-be- ing in which every individual recognises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'. Therefore, mental health is not just the absence of a mental disorder. It is about having a pos- itive sense of self, being involved in meaningful activities and being able to get through difficult times.
Mental III-Health	_	The term mental ill-health is similar to that of mental disorder but it is not based on someone meeting diagnostic criteria for a mental disorder. In this report, it is used to refer to people who have moderate to severe mental health difficulties which are having a significant impact on their life and for which people are likely to require some kind of intervention or support. This definition includes young people with diagnosable mental disorders as well as those with significant mental health difficulties that do not neces- sarily meet the criteria required to be diagnosed with a disorder.
Mood Disorders	_	Mood disorders refer to a range of mental disorders related to a person's emotional state. They include a number of depressive disorders such as major depression, adjustment disorder (the experience of depression as a direct result of some form of stress or trauma) and dysthymia (the experi- ence of low mood over time but with less intensity and impact than a major depressive disorder). They also include disorders that are characterised by an elevated mood (mania) as well as disorders that involve both depression and mania (also known as bipolar disorders).
Psychotic Disorders	_	Psychotic disorders refer to a range of disorders for which the presence of psychotic symptoms is a primary feature. There are a number of diag- nosable psychotic disorders including a brief psychotic episode, delusional disorder, schizoaffective disorder (characterised by a combination of psy- chotic symptoms and a mood disorder) and schizophrenia (characterised by a range of psychotic symptoms that are enduring in nature and cause significant impairment to aspects of a person's functioning).
Psychotic Symptoms	_	Symptoms of psychosis include hallucinations (hearing, seeing, smelling or feeling things that are not there), delusions (fixed false beliefs), disorgan- ised thoughts and marked changes to a person's behaviour and function- ing.
Substance Abuse	_	Substance abuse refers to an ongoing pattern of substance use that results in repeated negative consequences in a person's personal, family, educa- tional, vocational or social life. Substance abuse can involve the abuse of alcohol and/or drugs. In this report, we report on rates of substance abuse (combined drug and alcohol abuse), alcohol abuse (referring specifically to abusive patterns of alcohol consumption) and cannabis abuse (referring specifically to abusive patterns of cannabis use)

Substance Dependence	_	Substance dependence is characterised by a physiological and psychologi- cal dependence on alcohol and/or drugs. It is more serious than substance abuse and the personal, relational and social consequences are often more serious than those that occur in cases of substance abuse. In this report, we report on rates of substance dependence (referring to addictive and dependent patterns of drug and/or alcohol abuse), alcohol dependence (referring specifically to addictive and dependent patterns of alcohol con- sumption) and cannabis dependence (referring specifically to addictive and dependent patterns of cannabis consumption)
Suicidal Acts	-	Suicidal acts refer to intentional efforts to kill oneself by any lethal means.
Suicidal Ideation	-	For the purposes of our two research studies, suicidal ideation was defined as any thoughts about suicide. This included thoughts about suicide with no associated wish to kill oneself as well as thoughts about suicide that were associated with a wish and a plan to take one's own life (suicidal in- tent).
Youth	-	In this report youth means the period between childhood and adulthood. It incorporates the two developmental stages of adolescence and emerging adulthood. Although there is no strict age range to define the phase of youth, it usually refers to a period of time somewhere between the ages of 10 and 25 years, although it can also include people over the age of 25.

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# 1. PERL INTRODUCTION

There is increasing concern about the mental health of young people in Ireland. Reports of psychological distress, substance abuse and suicide among Irish youths have become common. While we know that many young people in Ireland are experiencing mental distress, little research has been done to determine the actual number of young people who are experiencing a diagnosable mental disorder. This report goes some way towards addressing this issue by presenting findings from two research studies that have used clinical interview assessments to establish the rate of diagnosable mental disorders among Irish adolescents and young adults. These studies, funded by the Health Research Board, are part of a broader programme of research by the Psychiatric Epidemiology Research across the Lifespan (PERL) Group in the Department of Psychiatry, Royal College of Surgeons in Ireland (RCSI).

The findings in this report have relevance for young people, parents, teachers, health professionals, allied health professionals and any other individuals or groups who are concerned about the mental health of young people. They provide essential information to inform healthcare policy and to guide the development of high quality, accessible and responsive mental health services for any young person who needs them. They also highlight the need to ensure that we, as a society, are committed to the protection and promotion of young people's mental health.

# 2. ABOUT THE PERL GROUP

### 2.1 WHO WE ARE

The Psychiatric Epidemiology Research across the Lifespan (PERL) Group is a multidisciplinary research group within the Department of Psychiatry in the Royal College of Surgeons in Ireland (RCSI), a premium provider of healthcare education and training in Ireland with a strong culture of impactful research in the field of health sciences [6]. Led by Professor Mary Cannon, the PERL Group is made up of mental health clinicians and researchers from the fields of psychiatry, psychology and the social sciences who share an interest in understanding the experience of mental ill-health among individuals and groups.



### 2.2 WHAT WE DO

The PERL Group specialises in epidemiological research in the field of mental health. At PERL we conduct research to determine rates of mental disorder among representative samples of Irish people and to uncover risk and protective factors associated with the experience of mental ill-health. We also analyse data to try to understand the factors that are associated with the continuity of mental ill-health over the course of a person's life. The PERL Group has a strong track record of collaborative research with other researchers and institutions and we are involved in the analysis of data from other national and international studies, particularly in relation to risk factors associated with psychotic disorders in the general population.

### 2.3 OUR RESEARCH STUDIES

The research presented in this report involves two HRB-funded studies on youth mental health in Ireland, the Adolescent Brain Development Study and the Challenging Times Two Study. These studies are among a very small number of epidemiological studies on the prevalence of mental ill-health among young people in Ireland. They have involved surveying and interviewing young people between the ages of 11 and 24 years to assess them for the presence of mental disorders and to examine their overall level of functioning. To date we have surveyed 1,131 young people and have conducted a total of 453 diagnostic clinical interviews. Findings from these two studies provide valuable clinically validated data on rates and determinants of mental disorder among Irish youth and offer a vital contribution to our understanding of mental ill-health among Irish young people.

Uniquely, the Challenging Times Two study is longitudinal in nature. This has allowed us to track young people's experiences as they move through their adolescent and young adult years and to gather information on the rates of mental ill-health among young people over time. It has also enabled us to explore the factors in young people's lives and their biological makeup that might help explain, not only why some young people are more vulnerable to developing mental ill-health, but why some young people continue to have mental health difficulties over the course of their adolescent and young adult lives.

#### 2.3.1 The Adolescent Brain Development Study

The Adolescent Brain Development Study is an on-going study that is gathering data on young people's mental health, brain development, neurocognitive functioning and their experiences of education, friendships, family relationships and social activities (see Appendix 1 for further information about this study). This study is particularly interested in young people's experiences of psychotic-like symptoms, like hearing voices or having delusional beliefs. Through this study, we hope to understand the impact of these kinds of experiences on young people's mental health and their level of functioning through their adolescent years.

Specifically, the aims of this study are to:

- Understand the lives of adolescents
- Assess young people's level of functioning in the context of their life experiences
- Determine the rate of mental disorders, deliberate selfharm and suicidal ideation among adolescents in the community
- Establish the prevalence of non-clinical, psychotic-like experiences among the general adolescent population and to explore the relationship between psychotic-like experiences and mental ill-health

The findings on 11-13 year olds presented in this research report come from the first round of clinical, diagnostic interviews. These interviews were conducted with 212 young adolescents who were randomly selected to attend for clinical assessment interviews following an initial study survey over 1,100 young people from North County Dublin and County Kildare.

### 2.3.2 The Challenging Times Two Study

Challenging Times Two is a follow-up study that focused on the experience of mental disorders, alcohol and substance use, deliberate self-harm and suicidality among young adults in Ireland aged 19-24 years (see Appendix 2 for further information about this study). It involved a cohort of 212 young people from North Dublin City who had previously taken part in a study known as the Challenging Times Study when they were aged 12-15 years [7, 8].

The Challenging Times Two study aimed to:

- Determine the rate of mental disorders, deliberate selfharm and suicidal ideation among young adults in the community
- Examine risk factors associated with the experience of mental ill-health in young adults
- Investigate the rate of continuity of mental disorders from adolescence to young adulthood
- Examine the impact of adolescent experiences of mental ill-health on the young adults' mental health and func-tioning

The main findings on 19-24 year olds presented in this research report come from the 169 young adults who took part in the Challenging Times Two study only. As we have access to the data from the first Challenging Times study, we will also be presenting some longitudinal analyses of the combined data from both phases of this study.

### 2.4 STUDY LEGENDS

To facilitate the recognition of data from each study, all graphics, tables and charts in this report will use the following colour codes:





ADOLESCENT BRAIN DEVELOPMENT STUDY

CHALLENGING TIMES



# 3. RESEARCH FINDINGS ON 11-13 YEAR OLD ADOLESCENTS

### 3.1 RATES OF MENTAL DISORDERS AMONG 11-13 YEAR OLDS

Young adolescents in the Adolescent Brain Development study were assessed for the presence of any diagnosable mental disorder using standardised criteria from the Diagnostic Statistical Manual of Mental Disorders, Version IV [5]. As part of the assessment, all young adolescents were assessed for both current and lifetime experiences of mental disorder. As our sample was broadly representative of young Irish adolescents aged 11-13 years, we have been able to use our findings on current and lifetime rates of disorder to estimate of the percentage of young people in this age range who are 1] likely to be experiencing a mental disorder at any given point in time and 2] who have ever experienced a mental disorder over the course of their lifetime.

### 3.1.1 Current Mental Disorders among 11-13 Year Olds

Findings from the Adolescent Brain Development Study revealed that, at the time of interview, about 1 in 6 young people aged 11-13 (15.4%) years was experiencing a mental disorder. The most prevalent types of disorders were anxiety and behavioural disorders, followed by mood disorders. Figure 3.1



CURRENT RATE OF ANY MENTAL DISORDER AMONG 11-13 YEAR OLDS

### 3.1.2 Lifetime Mental Disorders among 11-13 Year Olds

This study also found that just under 1 in 3 young adolescents (31.2%) in the 11-13 year old age range had experienced a mental disorder at some point in their life. Anxiety disorders remained the most common lifetime disorder type for this age range. Mood disorders emerged as the second most common lifetime disorders followed by behavioural disorders. When assessed for the presence of more than one disorder, we found that 1 in 10 (10.2%) young adolescents had experienced two lifetime disorders and almost 1 in 20 (4.7%) had experienced three or more types of disorder over the course of their lives. Figure 3.2



LIFETIME RATE OF ANY MENTAL DISORDER AMONG 11-13 YEAR OLDS

### 3.2 ANXIETY DISORDERS AMONG 11-13 YEAR OLDS

#### 3.2.1 Current Anxiety Disorders among 11-13 Year Olds

The Adolescent Brain Development Study found that, excluding specific phobias, about 1 in 12 adolescents (8.1%) in the 11-13 year age range was experiencing an anxiety disorder at the time of the study. Social phobia and generalised anxiety disorder were affecting approximately 1 in 20 young adolescents with rates of 5.1% and 4.7% respectively. Figure 3.3



CURRENT RATE OF ANY ANXIETY DISORDER AMONG 11-13 YEAR OLDS

### 3.2.2 Lifetime Anxiety Disorders among 11-13 Year Olds

Findings from this study also suggest that over 1 in 8 young people (13.6%) aged 11-13 years in Ireland have experienced an anxiety disorder over their lifetime (excluding specific phobias). Approximately 1 in 20 young adolescents met lifetime criteria for generalised anxiety disorder (5.5%), social phobia (5.1%) and for separation anxiety disorder (4.7%). Figure 3.4



LIFETIME RATE OF ANY ANXIETY DISORDER AMONG 11-13 YEAR OLDS

Of note, specific phobias were frequently reported by young people in this study. A total of 12.8% of the 11-13 year olds assessed were experiencing a specific phobia at the time they were interviewed and 14.1% had experienced a specific phobia at some time in their lives. When rates of specific phobia are included, the overall rates of anxiety disorders increase to 18.8% for current and 22.6% for lifetime diagnoses among young adolescents within this age range.

### 3.3 MOOD DISORDERS AMONG 11-13 YEAR OLDS

#### 3.3.1 Current Mood Disorders among 11-13 Year Olds

About 1 in 60 11-13 year olds (1.7%) met diagnostic criteria for a current mood disorder, suggesting that only a small number of young adolescents may be experiencing a mood disorder at any given time. Most were experiencing major depression (1.2%) with a smaller number meeting criteria for dysthymia (0.4%). No young adolescent met criteria for a manic or bipolar disorder. Figure 3.5



CURRENT RATE OF ANY MOOD DISORDER AMONG 11-13 YEAR OLDS

### 3.3.2 Lifetime Mood Disorders among 11-13 Year Olds

When assessed for a lifetime experience of any mood disorder, about 1 in 7 young adolescents (14.9%) were found to meet diagnostic criteria. The most prevalent lifetime mood disorder was adjustment disorder, with almost 1 in 10 (8.9%) having experienced an adjustment disorder at some time in their lives. About 1 in 15 (6.8%) young adolescents within this age range had experienced a major depressive disorder and just 1 in 250 (0.4%) met lifetime criteria for dysthymia. As with current disorders, no young adolescent met lifetime criteria for a manic or bipolar disorder. Figure 3.6



LIFETIME RATE OF ANY MOOD DISORDER AMONG 11-13 YEAR OLDS

### 3.4 BEHAVIOURAL DISORDERS AMONG 11-13 YEAR OLDS

#### 3.4.1 Current Behavioural Disorders among 11-13 Year Olds

Our findings suggest that about 1 in 12 young adolescents (8.1%) is likely to be experiencing a current behavioural disorder. Among the 11-13 year olds who met criteria for a behavioural disorder, the majority were experiencing attention deficit hyperactivity disorder (ADHD) (5.1%) followed by oppositional defiant disorder (3.8%). Less than 1 in 100 were experiencing a conduct disorder (0.8%). Figure 3.7



CURRENT RATE OF ANY BEHAVIOURAL DISORDER AMONG 11-13 YEAR OLDS

### 3.4.2 Lifetime Behavioural Disorders among 11-13 Year Olds

Lifetime rates of behavioural disorder were very similar to current rates at about 1 in 12 (8.5%). This finding suggests that most of the young people who reported ever experiencing a behavioural disorder were experiencing that disorder at the time of the study. Figure 3.8



LIFETIME RATE OF ANY BEHAVIOURAL DISORDER AMONG 11-13 YEAR OLDS

### 3.5 PSYCHOTIC DISORDERS AND SYMPTOMS AMONG 11-13 YEAR OLDS

Young people in the Adolescent Brain Development study were assessed for any lifetime experience of both diagnosable psychotic disorders and for the presence of psychotic symptoms. The reason for assessing for both disorders and symptoms is because psychotic symptoms that persist over the adolescent years can be a risk factor for a range of mental health difficulties.

## 3.5.1 Lifetime Psychotic Disorders and Symptoms among 11-13 Year Olds

No young person from the Adolescent Brain Development study met criteria for any psychotic disorder. However, just over 1 in 5 young people in the 11-13 year age range (22.6%) reported experiencing psychotic symptoms. Auditory hallucinations (hearing voices or noises) were the most prevalent psychotic symptom reported by these young adolescents. The majority of young people (57%) who reported psychotic symptoms had at least one lifetime mental disorder. These young people were at particularly high risk of multimorbid psychopathology; that is, having more than one mental disorder. Figure 3.9



LIFETIME RATE OF PSYCHOTIC SYMPTOMS AMONG 11-13 YEAR OLDS

### 3.6 DELIBERATE SELF-HARM AMONG 11-13 YEAR OLDS

### 3.6.1 Lifetime Deliberate Self-Harm among 11-13 Year Olds

The Adolescent Brain Development study found that about 1 in 15 young adolescents (6.8%) in the 11-13 year age range had engaged in acts of deliberate self-harm over the course of their lifetimes. Figure 3.10



LIFETIME RATE OF DELIBERATE SELF-HARM AMONG 11-13 YEAR OLDS

# 3.7 SUICIDAL IDEATION AND SUICIDAL ACTS AMONG 11-13 YEAR OLDS

# 3.7.1 Lifetime Suicidal Ideation and Suicidal Acts among 11-13 Year Olds

Based on our findings from the Adolescent Brain Development study, an estimated 1 in 15 young 11-13 year olds (6.8%) will have experienced suicidal ideation at some time in their lives. One young person from this study reported a previous suicidal act, representing a lifetime rate of about 1 in 250 for this age range. Figure 3.11



LIFETIME RATE OF SUICIDAL IDEATION AMONG 11-13 YEAR OLDS

### 3.8 ALCOHOL AND DRUG USE AMONG 11-13 YEAR OLDS

### 3.8.1 Current and Lifetime Alcohol and Drug Use among 11-13 Year Olds

Findings from the Adolescent Brain Development study revealed that no young adolescent met criteria for any alcohol or drug use disorder.

### 3.9 COMPARISON OF RATES OF MENTAL DISORDER AMONG 11-13 YEAR OLDS IN IRELAND WITH SIMILARLY-AGED YOUNG PEOPLE INTERNATIONALLY

As part of our analysis, we compared the rates of disorder from the Adolescent Brain Development study with those found in a range of international studies to determine whether the rates of disorder found among young Irish adolescents are similar to rates found among adolescents of a similar age in other countries.

While there have been a number of international studies on rates of mental disorder in adolescents, very few studies have looked at young adolescents in the 11-13 year old age range and most studies have used samples of young people aged 13 years and older. From our review of international adolescent prevalence studies using standardised criteria to assess for the presence of mental disorders, we were able to find just three studies that provided findings specifically on young people within the 11-13 year age range. Two of the studies we found were conducted in the USA [9, 10] and one was undertaken in the UK [11]. All three studies involved large, representative study samples. The UK study, known as the British Child and Adolescent Mental Health Survey reported current rates among 11-12 year olds [11]. The Great Smoky Mountains Study in the USA reported 3-month rates among 11-13 year olds [10] and the Teen Health 2000 Study, also conducted in the USA, reported on twelve-month first incident rates among 11-12 year olds [9]. We were unable to find a study on young people in the 11-13 year old age range that reported lifetime rates of disorder so our comparison is based only on the current rate of disorders among 11-13 year olds from the Adolescent Brain Development study.

As Figure 3.12 shows, our findings from the Adolescent Brain Development Study show that young Irish adolescents in the 11-13 year age range have higher current rates of disorder than similarly-aged young adolescents in both the USA and the UK. Figure 3.12



COMPARATIVE RATES OF DISORDER AMONG 11-13 YEAR OLDS IN IRELAND, THE UK AND THE USA



# 4. RESEARCH FINDINGS ON 19-24 YEAR OLD YOUNG ADULTS

### 4.1 RATES OF MENTAL DISORDERS AMONG 19-24 YEAR OLDS

As with our early adolescent sample, the young adults in the Challenging Times Two study were assessed for the presence of any current or lifetime diagnosable mental disorder using standardised criteria from the Diagnostic Statistical Manual of Mental Disorders, Version IV [5]. The representative nature of our sample enabled to use our findings on current and lifetime rates of disorder to estimate of the percentage of young people in the 19-24 year age range 1] who may be experiencing a mental disorder at any given point in time and 2] who may have experienced a mental disorder at some time over the course of their lives.

### 4.1.1 Current Mental Disorders among 19-24 Year Olds

The Challenging Times Two study showed that 19.5%, or almost 1 in 5, young Irish adults aged 19-24 years were experiencing a mental disorder at the time the study was conducted. Anxiety disorders were the most prevalent type of disorder within this age range followed by mood disorders. Figure 4.1



CURRENT RATE OF ANY MENTAL DISORDER AMONG 19-24 YEAR OLDS

### 4.1.2 Lifetime Mental Disorders among 19-24 Year Olds

Findings from the Challenging Times Two study also suggest that over 1 in 2 young people aged 19-24 years will have experienced some form of mental disorder over the course of their lives with a total of 56% meeting lifetime criteria for any mental disorder. Mood disorders emerged as the most prevalent lifetime disorder among this group followed closely by anxiety disorders. We also found that just over 1 in 4 (25.4%) young people in this age range had experienced more than one disorder over the course of their lifetimes. Figure 4.2

### 4.2 ANXIETY DISORDERS AMONG 19-24 YEAR OLDS

### 4.2.1 Current Anxiety Disorders among 19-24 Year Olds

Findings from the Challenging Times Two study suggest that just over 1 in 10 (11%) 19-24 year olds is likely to be experiencing an anxiety disorder at any given time. Specific phobia and social phobia were the most prevalent anxiety disorders among this group with approximately 1 in 20 (5.4%) experiencing each of these two disorders. Obsessive compulsive and generalised anxiety disorders were being experienced by about 1 in 50 young adults with rates of 2.5% and 2.0% respectively. Figure 4.3



CURRENT RATE OF ANY ANXIETY DISORDER AMONG 19-24 YEAR OLDS

### 4.2.2 Lifetime Anxiety Disorders among 19-24 Year Olds

Over 1 in 4 young adults (26.7%) in the 19-24 year age range were found to have ever experienced an anxiety disorder. Specific phobias were the most common lifetime disorder with 1 in 10 (10.5%) young adults reporting the experience of a specific phobia. Social phobia was also relatively common with approximately 1 in 14 (7.3%) young adults having experienced this disorder. About 1 in 20 young adults had experienced obsessive compulsive disorder (5.9%), post-traumatic stress disorder (5.1%) and generalised anxiety disorder (5.1%) over the course of their lives. Figure 4.4



LIFETIME RATE OF ANY ANXIETY DISORDER AMONG 19-24 YEAR OLDS



LIFETIME RATE OF ANY MENTAL DISORDER AMONG 19-24 YEAR OLDS

### 4.3 MOOD DISORDERS AMONG 19-24 YEAR OLDS

### 4.3.1 Current Mood Disorders among 19-24 Year Olds

The current rate of any mood disorder among young adults in the 19-24 year age range was 4.8%, suggesting that approximately 1 in 20 young adults may be experiencing a mood disorder at any given time. Major depressive disorder was the most common mood disorder in this age range with over 1 in 25 young adults meeting criteria for a major mood disorder (4.4%). As with the young adolescent sample, no young adult met criteria for a current manic or bipolar disorder. Figure 4.5



CURRENT RATE OF ANY MOOD DISORDER AMONG 19-24 YEAR OLDS

### 4.3.2 Lifetime Mood Disorders among 19-24 Year Olds

A high prevalence of lifetime mood disorders was found among young adults, with over 1 in 4 meeting criteria for any lifetime mood disorder (28.5%). Depressive disorders were experienced by the majority (28.3%) of young adults who reported having a mood disorder. Just 0.6%, or about 1 in 160, young adults had experienced a bipolar disorder over the course of their lives. Figure 4.6



LIFETIME RATE OF ANY MOOD DISORDER AMONG 19-24 YEAR OLDS

### 4.4 PSYCHOTIC DISORDERS AND SYMP-TOMS AMONG 19-24 YEAR OLDS

## 4.4.1 Lifetime Psychotic Disorders and Symptoms among 19-24 Year Olds

As with the young adolescent study sample, none of the young adults interviewed for the Challenging Times Two study met criteria for a psychotic disorder. However, one young person who had taken part in the original Challenging Times study was unable to participate in Challenging Times Two because of symptoms he was experiencing following a diagnosis of schizophrenia.

This study found that 1 in 10 of this young adult sample (10.1%) reported the experience of psychotic symptoms over the course of their lifetime. Figure 4.7



LIFETIME RATE OF PSYCHOTIC SYMPTOMS AMONG 19-24 YEAR OLDS

### 4.5 DELIBERATE SELF-HARM AMONG 19-24 YEAR OLDS

#### 4.5.1 Lifetime Deliberate Self-Harm among 19-24 Year Olds

The Challenging Times Two study found that about 1 in 12 young adults (8.5%) aged 19-24 years had deliberately self-harmed over the course of their lifetime. Figure 4.8



LIFETIME RATE OF DELIBERATE SELF-HARM AMONG 19-24 YEAR OLDS

# 4.6 SUICIDAL IDEATION AND SUICIDAL ACTS AMONG 19-24 YEAR OLDS

### 4.6.1 Lifetime Suicidal Ideation and Suicidal Acts among 19-24 Year Olds

The Challenging Times Two study found that, among 19-24 year olds, almost 1 in 5 (19%) had experienced suicidal ideation over the course of their lifetime. A previous suicidal act was reported by approximately 1 in 15 (6.8%) of the young adults in this study. Figure 4.9



LIFETIME RATE OF SUICIDAL IDEATION AMONG 19-24 YEAR OLDS

### 4.7 ALCOHOL AND DRUG USE AMONG 19-24 YEAR OLDS

As part of the Challenging Times Two study, young adults were asked about their experiences of using a variety of substances including tobacco, alcohol, marijuana, cannabis, stimulants, opiates, over-the counter medications and other drugs. We found that alcohol and drug use was common among 19-24 year olds with many young adults reporting abusive patterns of substance use. At the time of the study, over 1 in 20 young adults aged 19-24 years (5.3%) met criteria for a current substance use disorder (i.e. alcohol and drug use combined). Figure 4.10



CURRENT RATE OF ANY SUBSTANCE USE DISORDER AMONG 19-24 YEAR OLDS

High rates of lifetime substance use were also reported by the young adults in this study with over 1 in 5 (22.7%) meeting lifetime criteria for a substance use disorder. Figure 4.11



LIFETIME RATE OF ANY SUBSTANCE USE DISORDER AMONG 19-24 YEAR OLDS

### 4.7.1 Current Alcohol Use among 19-24 Year Olds

When assessed specifically in relation to alcohol use, almost 1 in 20 (4.8%) of the young adults met criteria for an alcohol use disorder at the time of the study. A total of 1.2% met criteria for alcohol abuse and 3.6% met criteria for alcohol dependence. Figure 4.12



CURRENT RATE OF ANY ALCOHOL USE DISORDER AMONG 19-24 YEAR OLDS

Along with rates of alcohol use disorders, almost 1 in 2 young adults (48.1%) reported current patterns of binge-drinking at the time of the study. Figure 4.13



CURRENT RATE OF BINGE DRINKING AMONG 19-24 YEAR OLDS

### 4.7.2 Lifetime Alcohol Use among 19-24 Year Olds

When assessed specifically in relation to their history of alcohol use, about 1 in 6 (17%) met criteria for an alcohol use disorder with 1 in 13 (7.7%) meeting criteria for alcohol abuse and almost 1 in 10 (9.5%) meeting criteria for alcohol dependence at some point in their lives. Figure 4.14



LIFETIME RATE OF ANY ALCOHOL USE DISORDER AMONG 19-24 YEAR OLDS

Binge drinking was extremely common among these young adults and 3 in 4 (75%) met lifetime criteria for binge drinking. Figure 4.15



LIFETIME RATE OF BINGE DRINKING AMONG 19-24 YEAR OLDS

# 4.7.3 Current Cannabis & Other Drug Use among 19-24 Year Olds

This study found that 1 in 4 young adults (25.8%) were currently using cannabis and over 1 in 20 (5.8%) reported using other drugs. When assessed for drug use disorders, about 1 in 28 (3.6%) young adults within the 19-24 year age range met criteria for a cannabis use disorder at the time of the study, with 2.3% meeting current criteria for cannabis abuse and 1.2% meeting current criteria for cannabis dependence. Figure 4.16



CURRENT RATE OF ANY CANNABIS USE DISORDER AMONG 19-24 YEAR OLDS

## 4.7.4 Lifetime Cannabis & Other Drug Use among 19-24 Year Olds

When assessed for drug use across their lifetime, we found that almost 2 in 3 young adults (64.9%) had ever used cannabis and over 1 in 3 (34.3%) reported using other drugs at some time in their lives. Over 1 in 10 of the study sample (11.9%) met criteria for a cannabis use disorder at some time of their lives with 9.8% meeting criteria for cannabis abuse and 2.3% meeting criteria for cannabis dependence. A total of 1 in 40 (2.5%) of young adults in this age range met lifetime criteria for a poly-drug use (use of more than one drug) disorder. Figure 4.17



CURRENT RATE OF ANY CANNABIS USE DISORDER AMONG 19-24 YEAR OLDS

### 4.8 COMPARISON OF RATES OF MENTAL DISORDER AMONG YOUNG PEOPLE IN IRELAND WITH YOUNG PEOPLE INTERNATIONALLY

As with the Adolescent Brain Development Study, there are limited data from international studies on young adults of a similar age to the 19-24 year olds in the Challenging Times Two study. Much of the international literature reports on 12-month rates of disorder rather than current rates, making it difficult to find data that are comparable to the current rate examined in the Challenging Times Two study. However, we were able to identify three international studies that provided lifetime rates of disorder on similarly-aged young adults that we could compare to the lifetime rates found in Challenging Times Two. These studies were conducted in the UK (Northern Ireland) [12], the USA [13] and Germany [14].

When we compared our findings on lifetime rates among Irish 19-24 year olds with those from the three comparable international studies, we found that young Irish adults had similar rates to young people aged 18-29 in the USA [13] but higher rates than similarly-aged young adults in both Northern Ireland [12] and Germany [14] (see Figure 4.18) Figure 4.18



COMPARATIVE RATES OF DISORDER AMONG 18-34 YEAR OLDS IN IRELAND, THE UK, GERMANY AND THE USA

# 5. RISK FACTORS ASSOCIATED WITH MENTAL ILL-HEALTH AMONG YOUNG PEOPLE IN IRELAND

# 5.1 RISK FACTORS FOR MENTAL DISORDERS IN YOUNG ADULTHOOD

Understanding risk factors associated with mental disorder and psychopathology among young people in Ireland was a key part of the Challenging Times Two study. As part of this study, the demographic details of each participant were collected along with data on a range of intrapersonal, familial and social experiences among the sample. Using these data, our analyses to date have yielded important information about a number of factors that are associated with mental ill-health among young Irish adults (see Figure 5.1).

### 5.1.1 Gender

We found that gender was not associated with young adults' overall experiences of mental ill-health. However, when we examined the association between gender and each specific disorder, we identified an association between gender and both mood and substance use disorders. Females were more likely than males to experience a mood disorder in the 19-24 year age range while males in this age range were more likely than females to meet criteria for substance use disorders.

### 5.1.2 Sexual Orientation

Our findings suggest that having a minority sexual orientation (i.e. being gay, lesbian or bisexual) increases young people's risk of psychopathology and mental ill-health in the 19-24 year age range. Young people who were bisexual and homosexual were over 4 times more likely to have a diagnosable mental disorder at the time of the study than their heterosexual counterparts.

We also found that bisexual or homosexual young adults were over 7 times more likely to have experienced suicidal ideation, have engaged in suicidal acts or experienced a mood disorder than young people with a heterosexual orientation. The incidence of deliberate self-harm was also found to be substantially higher in this group and they were 10 times more likely to have engaged in deliberate selfharm than their heterosexual peers. As a group, they were also 10 times more likely to have had contact with psychiatric services than heterosexual young people.

### 5.1.3 Stressful Life Events

We found that young adults who reported higher levels of stressful life events were more likely to experience a mental

disorder than those with lower levels of stressful life events. This was particularly evident in relation to both anxiety and mood disorders among young adults in the Challenging Times Two study. The death of a family member or friend was reported as the most stressful life event by the study sample. Young adults who reported higher levels of death-related stress were more likely to have experienced a mental disorder than those who reported lower levels of stress related to the death of a loved one.

Over 9 in 10 young adults reported experiencing stress related to health, work and relationships and those with higher stress scores in each of these areas were more likely to have experienced a mental disorder than those whose scores were lower. The experience of stress in these three areas was particularly associated with the experience of either a mood or an anxiety disorder.

### 5.1.4 Family Functioning

We found that there was an association between young adults' perceptions of their families' overall level of functioning and their own mental health. Young adults who reported lower rates of family functioning within their families were more likely to have experienced a mental disorder than those who considered their family to be functioning well. Lower reported levels of family functioning were particularly associated with both mood and anxiety disorders

### 5.1.5 Experience of Abusive Intimate Relationships

A small number of young adults from the Challenging Times Two study reported that they had experienced psychological and/or physical abuse within the context of an intimate relationship. Both males and females reported these experiences and identified themselves as victims, perpetrators and both as victims and perpetrators of psychological or physical abuse within an intimate relationship.

Young adults who reported the experience of an abusive intimate relationship were found to be over 12 times more likely to be experiencing a mental disorder and 10 times more likely to meet criteria for an alcohol use disorder at the time of the study than young adults who had not been in an abusive relationship. They were also found to be 7 times more likely to have experienced an anxiety disorder and 4 times more likely to have experienced more than one mental disorder over the course of their lives than young adults who did not report the experience of intimate relationship abuse.



SELECTED RISK FACTORS FOR MENTAL DISORDERS AMONG 19-24 YEAR OLDS

### 5.2 RISKS ASSOCIATED WITH THE EXPERIENCE OF MENTAL ILL-HEALTH IN ADOLESCENCE

The Challenging Times Two study is the only longitudinal study of its kind in Ireland and has enabled us to assess young people's experiences of mental ill-health over time. This has provided us with vital information, not only about risk factors associated with the experience of mental ill-health among young people, but also about the later impact of mental ill-health during adolescence. This has meant that, for the first time in Ireland, we have been able to examine the risks associated with mental ill-health and psychopathology during adolescence on young people's mental health and life experiences during their young adult years.

# 5.2.1 The Association between Having a Mental Disorder in Adolescence and Having a Mental Disorder in Young Adulthood

Our analysis has shown that the experience of a mental disorder in mid-adolescence (12-15 years) increases the chances of having a mental disorder in young adulthood (19-24 years).

Specifically, we found that young people in the mid-adolescent age range who had a diagnosable mental disorder in adolescence were 1.3 times more likely to have a diagnosable mood, substance use or alcohol disorder in young adulthood than those who did not (see Figure 5.2).

### 5.2.2 The Association between Having a Mental Disorder in Adolescence and Suicidal Ideation and Suicidal Acts in Young Adulthood

Having a mental disorder in adolescence was found to be a risk factor for suicidal ideation and suicidal acts in young adulthood. Specifically, we found that young people who had a mental disorder in adolescence were 1.5 times more likely either to experience suicidal ideation or to engage in suicidal acts in young adulthood than those who did not have an adolescent disorder (see Figure 5.2).

# 5.2.3 The Association between Having a Mental Disorder in Adolescence and Deliberate Self-Harm in Young Adulthood

Our analysis found that young people who experienced a mental disorder in adolescence were 1.8 times more likely

to engage in deliberate self-harm in young adulthood. Young people who had experienced a mood disorder in adolescence were 1.5 times more likely to engage in deliberate self-harm in young adulthood than young people who did not have a mood disorder during their adolescent years. For young people who had an anxiety disorder in adolescence, the likelihood of them engaging in deliberate self-harm in young adulthood was 1.3 times higher than young people without an adolescent anxiety disorder (see Figure 5.2).

### 5.2.4 The Association between Having a Mental Disorder in Adolescence and Employment Status in Young Adulthood

We examined whether or not there was any vocational impact on young adults who had experienced a mental disorder in mid-adolescence. Young people who had experienced a mental disorder during their mid-adolescent years were almost 3 times more likely to be unemployed when compared to those young adults who did not experience mental ill-health during adolescence (see Figure 5.2). Figure 5.2



INCREASE IN ODDS OF EXPERIENCING MENTAL ILL-HEALTH, SUICIDAL IDEATION, DELIBERATE SELF-HARM & UNEMPLOYMENT AMONG YOUNG ADULTS WHO HAD A MENTAL DISORDER IN ADOLESCENCE

### 5.2.5 The Association between Intervention for Mental III-Health in Adolescence and the Burden of Mental III-Health in Young Adulthood

Young people in the Challenging Times Two study were asked about their experiences of help-seeking and intervention for emotional and mental health difficulties. Although 56% of the young adults in this study met lifetime criteria for a mental disorder, we found that just 39% had accessed professional support at some time in their lives. That means that approximately one-third of young people who had experienced a mental disorder had never received any professional support or intervention for their difficulties. Among the sample, 1 in 8 young people (12.4%) reported that they had been advised by someone to see a mental health professional at some point in their lives but had refused to access help or treatment (see Figure 5.3). Figure 5.3


HELP-SEEKING TRENDS AMONG 19-24 YEAR OLDS

Of those young people who met criteria for a current mental disorder, only 1 in 4 (27%) was accessing some form of medical or therapeutic intervention at the time of the study (Figure 5.4). Figure 5.4



PERCENTAGE OF 19-24 YEAR OLDS WITH A CURRENT MENTAL DISORDER WHO WERE NOT IN TREATMENT AT THE TIME OF THE STUDY

For those young people who had ever accessed professional support, counsellors and therapists were the professionals most frequently attended followed by psychologists and psychiatrists. Young people were least likely to attend their GPs for emotional or mental health support (see Figure 5.5). Figure 5.5



PROFESSIONALS ATTENDED BY 19-24 YEAR OLDS FOR MENTAL HEALTH SUPPORT OVER THEIR LIFETIME

When we examined the impact of accessing professional support on young people's experiences of mental ill-health in young adulthood, we found that, for those young people who had experienced multiple disorders over their lifetime, the experience of engaging in professional therapeutic or medical intervention was a protective factor. Professional help-seeking was found to have reduced the impact and burden of mental ill-health for those young people in their young adult years.

#### 5.2.6 Continuity of Mental Disorders from Adolescence into Young Adulthood

We examined whether or not young people who experienced a particular disorder in adolescence went on to experience the same disorder in their early adult years. Findings from our analysis demonstrate that having a mental disorder during adolescence increases young people's risk of having a mental disorder in young adulthood.

Young people who had a mood disorder in mid-adolescence were almost 2 times more likely to experience a mood disorder in young adulthood than those who had not. Our analysis also uncovered that the experience of a mood disorder in mid-adolescence is also a risk factor for the experience of a substance use disorder in young adulthood. Young people with an adolescent mood disorder were 2.2 times more likely to have a substance use disorder in young adulthood and over 1.2 times more likely to have an alcohol use disorder specifically (see Figure 5.6). Figure 5.6



INCREASE IN ODDS OF EXPERIENCING A MOOD OR SUBSTANCE USE DISORDER AMONG YOUNG ADULTS WHO HAD A MOOD DISORDER IN ADOLESCENCE

We found that young people who had an anxiety disorder during adolescence were almost 1.9 times more likely to have an anxiety disorder in young adulthood. The experience of an adolescent anxiety disorder was also found to be associated with an increased risk for the experience of a mood disorder in young adulthood. Young people who had an anxiety disorder during their mid-adolescent years were almost 2 times more likely to have a mood disorder in young adulthood (see Figure 5.7). Figure 5.7



INCREASE IN ODDS OF EXPERIENCING AN ANXIETY OR MOOD DISORDER AMONG YOUNG ADULTS WHO HAD AN ANXIETY DISORDER IN ADOLESCENCE

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# 6. SUMMARY AND IMPLICATIONS OF **RESEARCH FINDINGS**

## 6.1 INTRODUCTION

This first report of the PERL Group, RCSI, provides some of the only epidemiological data on rates of mental disorder, substance misuse, suicidal ideation and deliberate self-harm among young people in Ireland. It also presents findings from the first longitudinal analysis of mental illhealth among a representative sample of young people in Ireland, providing vital information on the risks associated with the experience of mental disorder during the formative adolescent years.

## 6.2 KEY FINDINGS

- Our research provides evidence that mental disorders, deliberate self-harm and suicidal ideation are common among young adolescents and young adults in Ireland. Based on our findings, we estimate that by the age of 13 years almost 1 in 3 young people will have experienced some form of mental disorder. Our findings also suggest that over half of young Irish people will have experienced a mental disorder by the age of 24 years.
- 2. Our findings demonstrate that anxiety and mood disorders are the most frequently experienced disorders across the lifetime of young people in Ireland. Approximately 1 in 8 young adolescents had experienced an anxiety disorder and 1 in 7 had experienced a depressive disorder by the age of 13 years. By the age of 24 years 1 in 4 young adults had experienced either a mood or anxiety disorder at some time of their lives.
- 3. While we found no evidence of substance use disorders among young adolescents, substance use and misuse were common among young adults. By the age of 24 years, almost 3 in 4 young adults had engaged in binge drinking and 1 in 5 met criteria for a substance use disorder at some time in their lives.
- 4. Our research points to high levels of self-injurious behaviour and suicidal thoughts among Irish youth. Deliberate self-harm and suicidal ideation had been experienced by 1 in 15 of the 11-13 year olds we interviewed at some time in their young lives. For young adults, just under 1 in 10 had engaged in deliberate self-harm and 1 in 5 had experienced suicidal thoughts over their lifetime.
- 5. A finding from both of our studies was that many of the young people who were experiencing mental health difficulties had not sought help, a finding that is consistent with much of the national and international literature on

help-seeking among young people. An important finding from our longitudinal analysis from the Challenging Times study was that young people who had accessed specialist mental health intervention and support were less likely to continue to experience mental health difficulties into their young adult years.

- 6. Our research has identified a range of risk factors that are associated with the experience of mental disorder in youth. We found that experiences of family discord, intimate relationship abuse and stress related to death, health, work and relationships were implicated in young people's risk of experiencing a mental disorder. We also found that being of a minority sexual orientation was associated with mental ill-health among young adults.
- 7. Finally, for the first time in Ireland, we have longitudinal evidence showing that the experience of a mental disorder during adolescence is a risk factor for future mental ill-health in young adulthood. It is also a risk factor for the experience of unemployment during young people's early adult years.

## 6.3 IMPLICATIONS OF RESEARCH FINDINGS FOR IRISH MENTAL HEALTH POLICY AND PRACTICE

In the context of limited resources, there is an urgent need to maximise the efficiency and effectiveness of mental health promotion, prevention and intervention in Ireland. Based on the research findings presented in this report, we believe that the following policy and service development strategies could have the potential to contribute to a reduction in the incidence, impact and continuity of mental ill-health among Irish youth.

- Include mental health literacy as a core part of the educational curriculum in primary and second level education.
- 2. Develop school-based interventions that promote and support help-seeking skills among young people.
- 3. Ensure that, when young people do seek help, quality, youth-friendly mental health services and supports will be available and accessible to them.
- 4. Develop comprehensive, specialist youth mental health services that provide continuous care through the adolescent and emerging adult years.

#### 6.4 CONCLUSION

The data in this report are critical to any policy or service planning strategies as they provide some of the only epidemiological evidence on the prevalence and continuity of mental disorders among Irish youth. Our findings are consistent with much of the international evidence on the emergence of mental disorders during the adolescent and early adult years, the risks associated with mental ill-health during youth and young people's reluctance to seek professional help when experiencing mental ill-health. They highlight the need to ensure that early prevention, detection and intervention are available for young people to protect against the risks associated with mental ill-health during the period of youth. They also provide a strong rationale for investing in targeted mental health services for young people in Ireland.

We recognise that tackling the reality of mental ill-health among Irish young people requires collective action from families, communities, educators, health and mental health professionals, policy-makers, budget holders and our political leaders. Importantly, it also requires the input and expert advice of young people themselves and it is essential that we facilitate young people in having their voices heard so that they can contribute to the development of mental health services and supports that will meet their needs. By finding ways to minimise the experience and impact of mental ill-health among Irish youth, not only will we positively impact the lives of young people themselves, but we will also positively impact the lives of all Irish citizens by reducing the burden associated with the experience of enduring mental ill-health across the lifespan.

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## **APPENDIX 1:**

## THE ADOLESCENT BRAIN DEVELOPMENT STUDY METHODOLOGY

#### STUDY COHORT:

The Adolescent Brain Development study cohort is a representative, non-clinical (i.e. taken from the general population) sample of young people from North Dublin County and Kildare. At the time the study began, the sample was aged between 11 and 13 years and was accessed using an opt-in recruitment process through primary schools. In total, 1,131 adolescents from 16 schools took part in the study.

## STUDY METHODOLOGY:

#### Phase 1: Survey

Phase 1 involved surveying the 1,131adolescents who had agreed to take part in the study to assess them in relation to their emotional, behavioural and social strengths and difficulties using the Strengths and Difficulties Questionnaire [15]. The study sample consisted of 50.2% males and 49.8% females. Surveying adolescents was an important part of the research process. Not only did it provide us with information on young people's subjective views of their emotional, behavioural and social strengths and difficulties, but it also gave us an indication of the potential rate of mental ill-health among Irish 11-13 year olds.

#### **Phase 2: Diagnostic Clinical Interview**

During Phase 2 of the study a sub-sample of the 1,131 adolescents who had completed the initial survey was interviewed to assess them for mental disorders. The interview schedule used was the Schedule for Affective Disorders and Schizophrenia for School-Aged Children, Present and Lifetime Version (K-SADS-PL) [16]. The K-SADS-PL is a validated diagnostic clinical interview schedule that assesses for all mental disorders, deliberate self-harm, suicidal ideation and suicidal acts in children and adolescents according to DSM-IV [5] criteria. It assesses for both current (defined as occurring within the past month) and lifetime (defined as having ever occurred and includes a current experience) experiences of mental disorder. Specifically, it assesses for:

- Attention Deficit Disorder
- Behavioural Disorders (oppositional defiant disorder, conduct disorder)
- Tic Disorders
- Anxiety Disorders (panic disorder, specific phobias, generalised anxiety disorder, obsessive compulsive disorder)
- Elimination Disorders (enuresis (urinary incontinence and bedwetting) and encopresis (faecal incontinence)
- Mood Disorders (depressive disorders and mania)
- Sub-clinical Psychotic Experiences (for example, the experience of hearing voices, having visual hallucinations,

holding fixed false beliefs about themselves or the world and paranoia)

- Psychotic Disorders (psychosis and schizophrenia)
- Eating Disorders (anorexia and bulimia)
- Deliberate Self-harm
- Suicidal Ideation and Intent
- Suicidal Acts
- Cigarette Use
- Alcohol and Drug Use
- Post-Traumatic Stress Disorder

The K-SADS-PL also explores the health, family, social and educational experiences of children and adolescents along with their overall level of functioning.

In total, 212 adolescents and their parents were interviewed using the K-SADS-PL. Given that the sample was broadly representative of other 11-13 year olds in Ireland, this meant that we were able to use our findings to estimate the rate of mental disorders among the wider population of adolescents in Ireland within this age range. Each interview took between 2 and 4 hours and interviews were conducted by a number of psychiatrists and psychologists from the PERL Group.

Data in this report were taken from the clinical interview phase this study.

## ANALYSIS:

Statistical analyses were conducted using STATA version 11.1 for Windows. Statistical results were calculated with 95% Confidence Intervals.

#### ETHICS:

Ethical approval for the Adolescent Brain Development Study was granted by the Medical Research Ethics Committee of Beaumont Hospital, Dublin.

## **APPENDIX 2:**

# THE CHALLENGING TIMES TWO STUDY METHODOLOGY

#### STUDY COHORT:

The Challenging Times Two sample was a representative, non-clinical sample of 19-24 year olds from North Dublin City. The sample was drawn from an existing cohort of young people from a previous phase of this study. This cohort had previously taken part in a study known as the Challenging Times Study that was conducted by Professor Carol Fitzpatrick and colleagues from the Mater Misericordiae Hospital Dublin and University College Dublin [7, 8]. The original Challenging Times study was undertaken in two phases. In Phase 1,723 adolescents aged 12-15 years were surveyed for emotional behavioural and social difficulties using the Strengths and Difficulties Questionnaire [17] and the Children's Depression Inventory [18]. During Phase 2 a sub-sample of 212 of these adolescents were assessed for mental disorders and suicidality using the Children's Version of the Schedule for Affective Disorders and Schizophrenia (K-SADS) [19], the Scale of Suicidal Ideation [20] and the Suicide Intent Scale [21]. The original study team estimated that about 1 in 6 Irish adolescents aged 12-15 years was experiencing a mental disorder at the time of the study and that 1 in 5 had experienced a mental disorder over the course of their whole lives. About 1 in 50 was found to have experienced suicidal ideation.

Challenging Times Two took place eight years after the original Challenging Times study. Out of the cohort of 212 young people from the original study, 169 took part in Challenging Times Two (53.8% were female and 46.2% were male), where they were assessed for the presence of mental disorders, personality difficulties, deliberate self-harm, suicidal ideation and intent and substance misuse.

### STUDY METHODOLOGY:

The Challenging Times Two study achieved a high follow-up rate of 80%, which reduced bias due to differential loss to follow-up, a major source of bias in cohort studies. This level of follow-up is considered a good outcome for a cohort study. In those not followed up, detailed information was available from the original study so that it was possible to carry out analyses to check for selective loss to follow-up in relation to baseline variables. The researchers who carried out the interviews for Challenging Times Two were blind to the exposure status of the participants at the time of interview, thus reducing the likelihood of observer bias. Data were collected by different methods and collateral information was sought from parents thus increasing the validity of information collected.

Study participants were assessed for mental disorders using the Structured Clinical Interview for DSM-IV Psychiatric Diagnoses I (SCID-I) [22]. The SCID-I is a validated clinical interview schedule that assesses for Axis 1 mental disorders among adults according to DSM-IV [5] criteria. It assesses for both a current (defined as occurring within the past month) and lifetime (defined as having ever occurred and includes a current experience) experiences of mental disorder. Specifically, it is used to assess for:

- Mood Disorders (depression and manic disorders)
- Anxiety Disorders (panic disorder, obsessive compulsive disorder, phobias, generalised anxiety disorder, agoraphobia, stress disorders)
- Psychotic Symptoms and Disorders (hallucinations, delusions, delusional disorder, brief psychotic disorder, schizophreniform disorder, schizoaffective disorder, schizophrenia and other psychotic disorders)
- Substance Use Disorders (alcohol dependency, alcohol abuse, drug dependency, drug abuse)
- Eating Disorders (anorexia, bulimia and binge-eating disorders)
- Somatic Disorders (hypochondriasis, conversion disorders, body dysmorphic disorder and other somatic disorders)
- Adjustment Disorder

Study participants were also interviewed using the Stressful Life Events Schedule for Children and Adolescents [23], a semi-structured interview with good psychometric properties. This schedule was used to explore a range of stressful life events that young people may have experienced in the areas of education, work, money, housing, crime, health, deaths, intimate relationships and in other areas of their lives.

#### ANALYSIS:

Statistical analyses were conducted using STATA version 11.1 for Windows. Prevalence rates were weighted as young people who were assessed to be at risk of mental ill-health in the screening phase of the original Challenging Times study were over-represented in the Challenging Times Two sample. Statistical results were calculated with 95% Confidence Intervals.

#### ETHICS:

Ethical approval for Challenging Times Two was granted by the Research Ethics Committees of the Mater Misericordiae Hospital, Dublin and the Royal College of Surgeons in Ireland.

# **APPENDIX 3:**

# **COMBINED SUMMARY PREVALENCE RATES**

TYPE OF PSYCHOPATHOLOGY/ DISORDER	CURRENT (%)		LIFETIME (%)	
	11-13 years	19-24 years	11-13 years	19-24 years
ANY MENTAL DISORDER	15.4*	19.5	31.2*	56.0
ANXIETY DISORDER (excl. Specific Phobia)	8.1	-	13.6	-
ANXIETY DISORDER (incl. Specific Phobia)	18.8	11.0	22.6	26.7
MOOD DISORDER	1.7	4.8	14.9	28.5
BEHAVIOURAL DISORDER	8.1	-	8.5	-
SUBSTANCE USE DISORDER	0	5.3	0	22.7
ALCOHOL USE DISORDER	0	4.8	0	17.0
ALCOHOL ABUSE	0	1.2	0	7.7
ALCOHOL DEPENDENCE	0	3.6	0	9.5
BINGE DRINKING	0	48.1	0	75.0
CANNABIS USE DISORDER	0	3.6	0	11.9
CANNABIS ABUSE	0	2.3	0	9.8
CANNABIS DEPENDENCE	0	1.2	0	2.3
POLY-DRUG USE			0	2.5
DELIBERATE SELF HARM			6.8	8.5
SUICIDAL IDEATION			6.8	19.0
SUICIDAL ACTS			0.4	6.8
PSYCHOTIC SYMPTOMS			22.6	10.1

\* Rate excludes Specific Phobias

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