

Provided by the author(s) and University of Galway in accordance with publisher policies. Please cite the published version when available.

Title	Attention Deficit Hyperactivity Disorder in adolescence: the experiences of young women and second-level teachers in Ireland
Author(s)	Lynch, Andrea
Publication Date	2017-05-13
Item record	http://hdl.handle.net/10379/6509

Downloaded 2024-05-24T00:41:35Z

Some rights reserved. For more information, please see the item record link above.



Attention Deficit Hyperactivity Disorder in Adolescence:

The Experiences of Young Women and Second-Level Teachers in Ireland

Andrea Lynch, B.A., M.A.

Dr. Kevin Davison, Primary Supervisor School of Education National University of Ireland Galway

Dr. Patricia Eaton, Secondary Supervisor School of Education National University of Ireland Galway

This dissertation is submitted to the School of Education, National University of Ireland Galway, in fulfilment of the requirements for the award of the degree of Doctor of Philosophy

May 2017



Abstract

There are numerous aspects of Attention Deficit Hyperactivity Disorder (ADHD) that are underexplored and which we do not fully understand. This is particularly true when the condition is considered in relation to the academic and social experiences of adolescents and young adults. As such, the purpose of this study was to address these deficits and to explore ADHD through the perspectives and experiences of young women (ages 13 to 20) who are formally diagnosed with ADHD, and second-level teachers who support these students.

The use of a mixed-methodology consisting of semi-structured interviews and online questionnaires produced extensive qualitative and quantitative data which provided a rich insight into the challenges that young women in Ireland can face in relation to obtaining a diagnosis, and finding understanding and support, particularly within the context of their second-level schools. It was found that young females may experience the symptoms of ADHD in ways which are different from young males, and that they are often diagnosed later in life. Additionally, this study discovered that young participants sensed a pervasive lack of understanding and acceptance of ADHD within Irish society, but most especially within their own schools—and this lack of consideration appears to have compromised their relationships with teachers and the level of support they received. Data collected with teachers revealed that they continue to feel unprepared to support students with ADHD and to meet the demands of inclusive classrooms. It was also found that negative attitudes exist in second-level schools towards students with ADHD, as they are often viewed as disruptive in the classroom, and as preventing other pupils from learning. Additionally, this study more broadly considered the various barriers which some teachers face in creating schools that are truly inclusive and welcoming of all students with special needs.

This study raised critical questions in relation to the level of legitimacy that ADHD receives in Ireland as a result of pervasive stigma towards mental illness, the influence of gendered assumptions within the classroom context, and the ability of the Irish educational system to fully embrace inclusive practices. The findings and related implications of this study hold particular insight and benefit for those affected by ADHD, and the families and teachers who support them. The results of this study may also be of interest to clinicians who are responsible for diagnosing ADHD, providers of special education services, and administrators and legislators who create and influence educational policy and practice, particularly in relation to the support of students with special needs.

Acknowledgements

There are so many individuals I wish to thank, without whom this research would not have been possible, and to whom I will be forever grateful.

Firstly, I continue to be humbled by the examples of the young women who so bravely participated in this study. It was a privilege to learn from your experiences and insights about what life with ADHD is truly like! In addition, I also wish to thank the teacher participants who graciously shared their time and professional expertise in relation to supporting students with ADHD in the classroom. Each of you should be extremely proud of the contributions you have made to our conceptualisation of ADHD in the lives of adolescents!

Much gratitude is also extended to my pilot participants who especially helped to shape the data collection instruments used in this study. Your patience, thoughtfulness, and insights truly helped to make this study the best it could be.

I also wish to offer my unending gratitude to Dr. Brendan Doody and Shona Keating for allowing me the privilege of conducting research at your organisation, and for the time and effort you invested in recruiting participants and facilitating data collection! To say that I am "eternally thankful" for your support does not even begin to scratch the surface!

Of course, I wish to extend very special acknowledgements to my supervisors, Dr. Kevin Davison and Dr. Patricia Eaton, for the time, support, and personalised attention you invested in seeing this project come to fruition. Your unending guidance from start to finish was invaluable and I will be forever grateful. Along these lines, I also wish to thank the academic members of my Graduate Research Committee, namely, Dr. Anne Byrne and Dr. Brendan MacMahon, for your invaluable expertise and for looking at the research with a fresh perspective!

A special "thank you" also goes out to the staff of the Press & Information Office at the National University of Ireland Galway. Your quick response to my advertising needs changed the entire course of participant recruitment and substantially increased the exposure of this study, so I extend many thanks!

Also, many heartfelt thanks to my parents, Larry and Judy, for your unending love and support, and the time spent discussing, reading, and proofing my work! Also, thank you for teaching me the importance of education and hard-work. This thesis is proof and testimony that these values truly do pay off!

A special word of gratitude also goes out to my partner PJ. Thank you for always encouraging me throughout these four years to "Keep er' Lit," and for always supporting and celebrating each milestone in this research journey!

I also wish to thank my fellow classmates, friends, and the other faculty members in the School of Education at the National University of Ireland Galway for considering my work, listening to my ideas, and providing advice and encouragement in the "how to" of doctoral research!

Lastly, my deepest gratitude also extends directly to the National University of Ireland Galway, for the funding provided through the *Galway Doctoral Scholarship*, which I was awarded for the full duration of this study. Without this scholarship, this research would literally not have been possible. Your gracious support truly made my dream of living and studying in Ireland come true!

Dedication

This thesis is dedicated to my grandmother, Margaret Marie McCosh (1907-2000), who always supported and encouraged me, and who came to every orchestra, choir concert, and horse show I ever had! I bet you never thought your "co-pilot" would be living in Ireland and I know you are looking down, proudly smiling and watching over all of my adventures, and those to come! I miss you every day, and I love you forever Granny.

Oh if you could see me now! - The Script

Table of Contents

Abstract	2
Acknowledgements	3
Dedication	4
۲able of Contents	5
ist of Tables	. 12
ist of Charts	. 13
ist of Schemata	. 14
Acronyms	. 15

Chapter One: Introduction to the Study

1.1 Introduction	16
1.2 Purpose of this Study	16
1.3 Research Objectives	17
1.4 Central Research Questions	17
1.4.1 Research Questions for Young Women	17
1.4.2 Research Questions for Second-Level Teachers	17
1.5 Study Rationale	18
1.5.1 Including Young Women Diagnosed with ADHD	18
1.5.2 Considering ADHD in the Second-Level Educational Context	18
1.6 Focusing on Participants' Voices & Experiences	19
1.7 Overview of Subsequent Chapters	20

Chapter Two: Models for Understanding ADHD

2.1 Introduction	22
2.2 The Medical (Deficit) Model	22
2.2.1 The Medical Model Applied to ADHD	23
2.2.2 The Medical Model Applied to Special Education	23
2.3 The Social (Sociopolitical) Model of Disability	24
2.3.1 The Social Model Applied to ADHD	24
2.3.2 The Social Model Applied to Special Education	25
2.4 The Biopsychosocial (Interactionist/Ecological) Model	25
2.4.1 The Biopsychosocial Model Applied to ADHD	
2.4.2 The Biopsychosocial Model Applied to Special Education	26
2.5 Critiques of the ADHD Construct	27
2.5.1. Questioning the Medical Legitimacy of ADHD	27
2.5.2 The Medicalisation of Human Behaviour	
2.5.3 The Usefulness of the ADHD Construct?	

2.6 Discussion and Application	30
2.7 Defining & Understanding Gender	31
2.8 Gender Stereotypes	32
2.9 Gender & Education	33
2.10 Conclusion	35

Chapter Three: Understanding ADHD

3.1 Introduction	36
3.2 Predominant Characteristics of Previous ADHD Research	36
3.3 A Brief History of ADHD	36
3.4 What is ADHD?	37
3.5 Statistical Prevalence of ADHD in Ireland	38
3.5.1 ADHD Prevalence among Males and Females	39
3.6 Core Symptomatology	40
3.7 Gender Differences in Symptomatology?	40
3.8 ADHD Subtypes: Age and Gender	42
3.9 Comorbidity	43
3.10 What Causes ADHD?	43
3.11 Diagnosis of ADHD	45
3.11.1 Gender Biases in the Diagnosis of ADHD?	46
3.12 Interventions for ADHD	47
3.13 Conclusion	48

Chapter Four: The Social & Educational Impact of ADHD

50
50
50
51
52
52
53
54
55
56
56
57
58
59

4.7 Teachers and ADHD in the School Setting	. 59
4.7.1 Knowledge of ADHD	59
4.7.2 Teachers' Attitudes & Expectations Towards Students with ADHD	60
4.7.3 Attitudes & Expectations of Irish Teachers Towards Students with ADHD	61
4.8 Conclusion	. 62

Chapter Five: Special Educational Provision in Ireland

. 63
. 63
. 63
. 65
. 67
. 67
. 68
. 69
. 69
. 70
.71
. 71
. 72
. 73

Chapter Six: Research Methodology & Design

6.1 Introduction	74
6.2 Guiding Philosophical Principles	74
6.2.1 Pragmatism in the Mixed-Methods Study of ADHD	74
6.2.2 Interpretivism and the Study of ADHD	75
6.3 Philosophical Assumptions	
6.3.1 Ontological Assumptions	77
6.3.2 Epistemological Assumptions	77
6.3.3 Axiological Assumptions	78
6.3.4 Methodological Assumptions	79
6.4 Parallel Mixed Methodology	80
6.5 Researching with Young Women and Teachers	85
6.6 Data Collection Methods: Strengths & Weaknesses	85
6.6.1 Benefits of Semi-Structured Interviews	
6.6.2 Weaknesses of Semi-Structured Interviews	
6.6.3 Benefits of Self-Completion Online Questionnaires	

6.6.4 Weaknesses of Self-Completion Online Questionnaires	
6.7 Development of Data Collection Instruments	87
6.8 Interview & Questionnaire Content	
6.8.1 Interview Content for Young Participants	
6.8.2 Online Questionnaire Content for Young Participants	
6.8.3 Online Questionnaire Content for Teacher Participants	
6.8.4 Interview Content for Teacher Participants	
6.9 Educational "For Fun" Quiz for Teachers	90
6.10 Piloting of Research Instruments	90
6.10.1 Employing Alternative Samples	
6.10.2 Instruments for Teacher Participants	
6.11 Sampling Methods	93
6.12 Participant Recruitment	93
6.12.1 Recruitment of Young Women Diagnosed with ADHD	
6.12.2 Making Contact with the Researcher	95
6.12.3 Recruitment of Second-Level Teachers in Irish Schools	96
6.12.4 Making Contact with the Researcher	
6.13 Participant Inclusion & Exclusion Criteria	97
6.13.1 Criteria for Young Participants	
6.13.2 Criteria for Teacher Participants	
6.14 Research Protocols	
6.14.1 Semi-Structured Interview Protocol	
6.14.2 Online Questionnaire Protocol	
6.15 Data Collection	100
6.15.1 With Young Participants	100
6.15.2 With Teacher Participants	100
6.16 Establishing Validity	101
6.16.1 Rich Description	101
6.16.2 Triangulation	102
6.16.3 Contrary Cases	102
6.16.4 Descriptive Audit Trail	102
6.17 Research Reflexivity	103
6.17.1 Personal Self-Reflection	103
6.18 Generalisability & Transferability	106
6.19 Ethical Approval & Considerations	106
6.19.1 Informed Consent	107
6.19.2 Risks and Consequences	107
6.19.3 Minimisation of Harms	108

6.19.4 Benefits of Participation	
6.19.5 Participant Rights, Confidentiality, and Anonymity	
6.19.6 Data Protection, Retention, and Destruction	
6.19.7 Communication of Results and Findings	
6.20 Ethical Considerations in Researching with Young People	110
6.20.1 Recognition of Vulnerability	
6.20.2 Power and Authority in Research	
6.20.3 Decision Making & Assessing Competence to Assent	
6.20.4 The Role of Parents & Guardians	
6.20.5 Child Protection & Welfare	
6.21 Disclosure of My Identity to Participants	112
6.21 Disclosure of My Identity to Participants6.22 Data Analysis	
	113
6.22 Data Analysis	113 113
6.22 Data Analysis 6.22.1 Qualitative Data Analysis	
6.22 Data Analysis6.22.1 Qualitative Data Analysis6.22.1.1 Overarching Principles	
 6.22 Data Analysis 6.22.1 Qualitative Data Analysis 6.22.1.1 Overarching Principles 6.22.1.2 Inductive Analysis 	113 113 114 114 114
 6.22 Data Analysis 6.22.1 Qualitative Data Analysis 6.22.1.1 Overarching Principles 6.22.1.2 Inductive Analysis 6.22.1.3 Determining What Constitutes a "Theme" 	113 113 114 114 114 114 115
 6.22 Data Analysis. 6.22.1 Qualitative Data Analysis	113 113 114 114 114 114 115 120
 6.22 Data Analysis 6.22.1 Qualitative Data Analysis	113 113 114 114 114 114 115 120 120

Chapter Seven: The Perspectives of Young Women Diagnosed with ADHD

7.1 Introduction	124
7.2 Young Participant Profiles	124
7.3 Online Questionnaire Demographic Information	127
7.4 Summary of Thematic Findings	131
7.5 Theme One: Invisible Hyperactivity-Impulsivity	132
7.5.1 Emotional Hyperactivity-Impulsivity	133
7.5.2 Psychological Hyperactivity-Impulsivity	134
7.6 Theme Two: Delayed Diagnosis and Treatment	136
7.6.1 Secondary Recognition of ADHD	137
7.6.2 Missed Opportunities for Diagnosis	139
7.6.2.1 Missed Opportunities in the Classroom	139
7.6.2.2 Missed Opportunities in the Clinic	142
7.6.3 Self-Understanding through Diagnosis	143
7.7 Theme Three: Absent Knowledge & Understanding	147
7.7.1 Lack of Societal Understanding & Awareness	

7.7.2 Lack of Personal Understanding	150
7.7.3 Lack of Understanding Among Teachers	152
7.8 Theme Four: Student-Teacher Relationships	154
7.8.1 Misinterpreting Students' Behaviours	154
7.8.2 Underestimating Students' Academic Capabilities & Motivations	157
7.8.3 Lack of Support in Second-Level	160
7.9 Conclusion	165

Chapter Eight: The Perspectives of Second-Level Teachers

8.1 Introduction	166
8.2 Interview Participant Profiles	166
8.3 Demographic Information for Online Questionnaire Respondents	167
8.4 Summary of Thematic Findings	171
8.5 Theme One: Inadequate Teacher Education	172
8.5.1 Deficits in ITE	
8.5.2 Dissatisfaction with CPD	
8.6 Theme Two: Trouble for Teachers	179
8.6.1 Preventing Others from Learning	
8.6.2 Using ADHD as an Excuse	
8.6.3 ADHD is Spelled B-O-L-D	
8.7 Theme Three: "Relationships" as ADHD Intervention	189
8.7.1 Personalising the Curriculum	
8.7.2 Providing One-to-One Support	
8.7.3 Positive Reinforcement & Praise	
8.7.4 Open Dialogue	
8.8 Gendered Assumptions	195
8.8.1 Suspecting ADHD in Girls	
8.8.2 Gender Differences in the Behaviour of Students with ADHD	
8.8.3 Gendered Cycle of ADHD Recognition	
8.9 Conclusion	202

Chapter Nine: Conclusion

9	.1 Introduction	203
9	.2 Key Findings	203
	9.2.1 Gender Stereotypes Compromise Teachers' Ability to Recognise ADHD in Females	. 203
	9.2.2 Young Women's Experience of Hyperactivity-Impulsivity Challenges DSM-5 Descriptions.	. 204
	9.2.3 Some Second-Level Teachers Hold Negative Attitudes Towards Students with ADHD	. 204
	9.2.4 "Relational" Interventions Benefit Students with ADHD and Teachers Alike	. 205

9.2.5 ADHD Lacks Awareness, Acceptance, and Legitimacy in Irish Second-Level Schools2	206
9.3 Recommendations 2	207
9.3.1 ITE and CPD Programmes Should Increase Teacher Education and Awareness Regarding Gender and Its Potential Influence on ADHD2	207
9.3.2 ITE and CPD Training Programmes Should Cooperate to Ensure There Are No Gaps in Teachers' Initial Training and Ongoing Professional Development	<u>207</u>
9.3.3 Proposed Changes to the Support of Students with SEN in Irish Schools Should Be Swiftly Enacted	<u>208</u>
9.3.4 Increase Provision of Educational and Social Support for Young People Diagnosed with ADHD2	<u>208</u>
9.3.5 Recognition of the Limitations of the DSM-5 Diagnostic Criteria for ADHD	209
9.3.6 Increase Public Education and Awareness of ADHD in Ireland2	209
9.4 Contributions of this Study 2	210
9.4.1 Contributions to Knowledge2	210
9.4.2 Methodological Contributions2	211
9.5 Study Limitations 2	211
9.6 Directions for Future Research 2	212
9.7 Conclusion 2	213

References

Appendices

Appendix A: DSM-5 Diagnostic Criteria	247
Appendix B: Young Participant Information Sheet	249
Appendix C: Young Participant Consent Form	252
Appendix D: Semi-Structured Interview Schedule for Young Participants	253
Appendix E: Online Questionnaire Schedule for Young Participants	256
Appendix F: Online Questionnaire Information Sheet for Teacher Participants	263
Appendix G: Online Questionnaire Informed Consent Sheet for Teachers	266
Appendix H: Online Questionnaire Schedule for Teacher Participants	267
Appendix I: "For Fun" Quiz on ADHD for Teacher Participants	273
Appendix J: Sample Email Correspondence to Schools	276
Appendix K: Semi-Structured Interview Information Sheet for Teacher Participants	277
Appendix L: Semi-Structured Interview Informed Consent for Teacher Participants	281
Appendix M: Semi-Structured Interview Schedule for Teacher Participants	282
Appendix N: Press Release/Advertisement	285
Appendix O: Child Protection/Welfare Policy & Protocol	287
Appendix P: ADHD Support Groups, Counselling Services, and Educational Supports	291

List of Tables

Table One: Adjectives Typically Associated with Women and Men	33
Table Two: Predominant Characteristics and Implications of Previous ADHD Research	36
Table Three: Characteristics and Implications of Research on the Educational Impact of ADHD	54
Table Four: Categories of Disability Recognised by the Department of Education	66
Table Five: Sample Participant Transcript Amendments	. 116
Table Six: Illustrative Sample of Initial Line-by-Line Coding	. 117
Table Seven: Examples of General Codes	. 118
Table Eight: Illustrative Sample of General Interview Coding	. 118
Table Nine: Example of Suspected Duplicate Young Participant Questionnaire Entries	. 121

List of Charts

Chart One: Ages of Questionnaire Respondents
Chart Two: Responses to the question: "How many months or years did it take for you to receive a formal diagnosis?"
Chart Three: ADHD Diagnostic Types of Questionnaire Respondents
Chart Four: Questionnaire Respondents' Current Academic Level
Chart Five: Responses to the question: "How old were you when you received your formal diagnosis of ADHD?"
Chart Six: Respondents' views regarding whether those unaffected by ADHD understand what life with the condition is like
Chart Seven: Respondents' views on whether their second-level school provides/provided them with everything required for academic success
Chart Eight: Respondents' Highest Level of Educational Attainment
Chart Nine: Respondents' Level of Teaching Experience
Chart Ten: Respondents' Present Educational Role
Chart Eleven: Responses to the question: "Have you encountered any particular challenges in working with students with ADHD?"
Chart Twelve: Respondents' views regarding whether ADHD impacts the classroom climate
Chart Thirteen: Respondents' Experience of Teaching Males & Females with ADHD
Chart Fourteen: The Gendered Cycle of ADHD Recognition

List of Schemata

Schemata A: Data Collection & Analysis with Young Participants—Phase I	.81
Schemata B: Data Collection & Analysis with Young Participants—Phase II	. 82
Schemata C: Data Collection & Analysis with Teacher Participants—Phase I	. 83
Schemata D: Data Collection & Analysis with Teacher Participants—Phase II	. 84

Acronyms

AACAP: American Academy of Child and Adolescent Psychiatry

ADD: Attention Deficit Disorder

ADD-NI: Northern Ireland Attention Deficit & Hyperactivity Disorder

ADHD: Attention Deficit Hyperactivity Disorder

ADHD-HI: Attention Deficit Hyperactivity Disorder, primarily Hyperactive-Impulsive Type

ADHD-CT: Attention Deficit Hyperactivity Disorder, Combined Type

ADHD-I: Attention Deficit Hyperactivity Disorder, Primarily Inattentive Type

ADHD-NI: Adult Attention Deficit Hyperactivity Disorder, Northern Ireland

AS: Asperger's Syndrome

ASD: Autistic Spectrum Disorder

ASTI: Association of Secondary Teachers of Ireland

CAMHS: Child and Adolescent Mental Health Service

CD: Conduct Disorder

CIOMS: Council for International Organizations of Medical Sciences

CPD: Continuing Professional Development

DES: Department of Education and Skills

DSM-4: *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition (American Psychiatric Association, 1994)

DSM-5: *Diagnostic and Statistical Manual of Mental Disorders,* Fifth Edition (American Psychiatric Association, 2013b)

ETB: Education and Training Boards

GPA: Grade Point Average

GRC: Graduate Research Committee

HADD: Hyperactivity and Attention Deficit Disorder Family Support Group

HSE: Health Service Executive

ICF: International Classification of Functioning, Disability and Health

ICF-CY: International Classification of Functioning, Disability and Health: Children and Youth Version

INCADDS: Irish National Council of ADHD Support Groups

ITE: Initial Teacher Education

JMB: Joint Managerial Body

KADDS: Knowledge of Attention Deficit Disorders Scale

LD: Learning Disability

NAPD: National Association of Principals and Deputy Principals

NBSS: National Behaviour Support Service

NCCA: National Council for Curriculum and Assessment

NCSE: National Council for Special Education

NEPS: National Educational Psychological Services

NUI-Galway: National University of Ireland Galway

ODD: Oppositional Defiant Disorder

PDST: Professional Development Service for Teachers

SEN: Special Educational Needs

SESS: Special Education Support Service

SNA: Special Needs Assistant

TUI: Teachers' Union of Ireland

VEC: Vocational Education Committee

WHO: World Health Organization

Chapter One: Introduction to the Study

1.1 Introduction

This chapter serves as a general overview and introduction to this research study. As such, it outlines the central objectives and questions, and provides an extensive rationale for the topic of focus and groups chosen for participation. Additionally, this chapter discusses and justifies the guiding principles which shaped the conduct of this study, and it concludes with a summary of the remaining chapters which follow.

1.2 Purpose of this Study

This study explores Attention Deficit Hyperactivity Disorder (ADHD) as *lived* by Irish adolescent and young adult women who are medically diagnosed with any subtype of the condition, and as *experienced* by Irish second-level teachers who have directly taught or supported students with ADHD.¹

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines ADHD as a condition which begins in childhood and is marked by "a persistent pattern of inattention and/or hyperactivity that interferes with functioning or development" (American Psychiatric Association, 2013b, p. 61). The DSM-5 also recognises that ADHD can significantly impact the educational and social experiences of those who live with the condition, and these two areas are the main focus of this study. By considering these domains, it is hoped that this research would illuminate and reduce any barriers which may prevent the full inclusion of students with ADHD in mainstream second-level schools.

However, this research is also about *gender* and the influence this social construct may have on the way young women experience and are impacted by ADHD in the following areas:

- The manifestation of their symptoms, and how these symptoms may cause young women to either reinforce, or challenge, gender-role stereotypes
- The recognition, diagnosis, and validation of their condition by others
- The educational, social, and relational consequences of the above challenges.

Additionally, this study considers how gender may potentially influence teachers' conceptualisation of ADHD, and their perceptions and interactions with diagnosed students in the Irish second-level context. All of these aspects are explored in this study.

¹ This includes both male and female students diagnosed with the condition.

1.3 Research Objectives

In light of the educational and social elements which drive this study, the following points outline the main objectives and goals of this research:

- To investigate the relationship between gender and ADHD manifestation
- To explore the impact of ADHD on academic performance and achievement
- To examine the influence of ADHD on social and interpersonal relationships
- To examine perceptions and opinions of students with ADHD
- To consider the perceived influence of ADHD in the classroom setting
- To consider the classroom and behavioural strategies currently utilized to support students with ADHD.

1.4 Central Research Questions

The central query of this research is: "How is ADHD experienced and understood by those who are diagnosed with the condition, as well as by those who care for and support them within the educational context?"

However, specific research questions were developed for each group of participants in this study. These questions were largely qualitative in nature and designed to extrapolate their perceptions and experiences.

1.4.1 Research Questions for Young Women

- Does gender influence the recognition and diagnosis of ADHD in young women? If so, how?
- How do young women experience ADHD?
- How do young women perceive the educational impact of ADHD in their lives?
- Does ADHD influence the social experiences of young women diagnosed with the condition? If so, how?

1.4.2 Research Questions for Second-Level Teachers

- What are the experiences and perceptions of Irish second-level teachers in relation to students with ADHD?
- Does ADHD influence the classroom setting? If so, how?
- What strategies and interventions, if any, do second-level teachers implement in the classroom for students with ADHD?

1.5 Study Rationale

ADHD has been cited as one of the most highly researched of all childhood conditions (Arnold, 1996) and Campbell (2000, p. 383) maintains, "it is probably safe to say that more is known about ADHD than about any other childhood disorder." However, despite the abundance of previous research, there are numerous areas of ADHD which are underexplored, particularly as related to how those living within the Irish context experience the condition (MacNeela, 2016). These deficits hold serious implications, particularly for those who are directly affected by ADHD, and as such, they provide a rationale for this study.

1.5.1 Including Young Women Diagnosed with ADHD

One of the most significant deficits in previous research exists in the area of gender, as most studies of ADHD have been conducted with young males. As a result, adolescent and young adult females are significantly underrepresented in the present body of research. Because much of what we know is based on the study of young males, our modern conceptualization of ADHD may not accurately, nor fully, represent females' experience of the condition. Researchers also believe that the present deficit in research with young women may have potentially resulted in a significant number of females living with "misdiagnosed [and] undertreated" (Sassi, 2010, p. 29) ADHD, which could seriously influence, and even limit their future outcomes and life experiences.

Indeed, as Quinn (2005, p. 579) argues, "For girls and women...ADHD is often a hidden disorder, ignored or mistreated, which causes them to suffer in silence." Therefore, the decision to specifically engage young women with ADHD in this study emerged as a result of their underrepresentation in previous research, and the related negative implications which this deficit may hold for their lives. As such, this study represents an attempt to examine and illuminate the female experience of ADHD, so that it is no longer "hidden" or "ignored." To my knowledge, *this is the first study of ADHD situated in Ireland to be conducted exclusively with diagnosed females.* It is also *one of very few studies internationally* which have included an all-female cohort of research participants.

1.5.2 Considering ADHD in the Second-Level Educational Context

Although numerous studies have considered ADHD within the educational context, it is important to recognise that the vast majority of studies have taken place with students and teachers in the primarylevel setting. As a consequence, very few studies have considered the academic impact of ADHD in second-level schools, particularly from the perspectives of diagnosed students and the teachers who support them. This is especially true in Ireland where such research is particularly scarce. It is important that we also consider the experiences of second-level students and teachers in relation to ADHD within this context, for there may be unrecognized and unaddressed issues which are preventing the full inclusion of students with ADHD in mainstream schools, and which limit their academic achievement. Additionally, it is necessary to increase research on ADHD within the secondlevel context, given that this condition can significantly influence the educational outcomes of diagnosed individuals, combined with the high-pressure and high-stakes nature of the Irish educational system, and the significant role that outcomes at this level play in determining the future opportunities available to students. Yet, because of deficits in research, we do not have a clear understanding of how these factors may combine to impact the lives and experiences of students with ADHD, and the teachers who support them during second-level.

Therefore, the decision to include second-level teachers in this study, and to examine the school experiences of the young participants, emerged as a result of the above deficits and the serious implications they hold for students' educational attainment and future outcomes. To my knowledge, there are very few studies on ADHD, both in Ireland and Internationally, which have specifically considered the experiences of students and teachers in second-level schools in relation to the condition.

1.6 Focusing on Participants' Voices & Experiences

This research was conducted with special emphasis on examining the experiences and perceptions of participants, and in listening to their voices and facilitating the opportunity for their contributions to be heard by others. Lincoln and Guba (2000, p. 183) define "voice" as "letting the research participants speak for themselves," and this was the guiding definition espoused in this study.

- This research recognised the inherent value of the voices of young women diagnosed with ADHD, and acknowledged the unique contributions that only they can make by virtue of their direct personal experiences. As such, this project meets the increasing demand for research which focuses on children "in their own right," and which considers their opinions and insights (Scott, 2008, p. 87).
- This research also recognised the inherent value of the perspectives of educators, especially as a tool for the advancement of educational equity and the increased inclusion of students with ADHD in Irish second-level schools.

The decision to focus closely on participants' voices and experiences was substantially influenced by previous studies which have failed to fully include those who are affected by ADHD. Given that ADHD is a controversial and often contentious issue (Kendall et al., 2003), it is important to hear as many

perspectives as possible. Furthermore, because ADHD has been largely medicalised, these voices have been somewhat silenced. This has resulted in a body of literature which largely speaks "about" people with ADHD (mainly facilitated with statistics and medical terminology), and fails to speak "with" them about life with ADHD. Therefore, by allowing young people and teachers to speak about their experiences, and by valuing and learning from their voices, this study recognises their role in the ADHD debate, and the value of their perspectives in advancing our knowledge and understanding.

1.7 Overview of Subsequent Chapters

The chapters of this thesis progress as follows:

Chapter Two, *Models for Understanding ADHD,* reviews the various models which shape contemporary discourse surrounding ADHD, and explores various critiques of the construct.

Chapter Three, *Understanding ADHD*, provides the reader with a basic review of the ADHD literature in relation to symptomatology, prevalence, diagnosis, and treatment. The discussion is also rooted in the topic of gender, and explores possible differences that may exist in relation to the manifestation and experience of ADHD in males and females.

Chapter Four, *The Social & Educational Impact of ADHD*, explores the influence of ADHD on social and academic outcomes largely through the view of educational psychology, and the perspectives and experiences of teachers, students with ADHD, and their peers.

Chapter Five, *Special Educational Provision in Ireland*, briefly examines the historical development of special education in Ireland, and discusses the process of contemporary special educational needs (SEN) provision, particularly in relation to second-level students diagnosed with ADHD. This chapter also raises criticisms of current SEN practice, especially regarding whether schools are "inclusive," or simply, "integrative."

Chapter Six, *Research Methodology & Design*, provides a detailed discussion of the parallel mixedmethodology used to conduct this study, while also presenting the reader with a step-by-step review of the unique process employed in data analysis.

Chapter Seven, *The Perspectives of Young Women Diagnosed with ADHD*, begins with a brief summary of the profiles for each of the young women who participated in this study. Following this, the chapter presents and discusses the four central thematic findings which emerged from the semi-structured interview and online questionnaire data.

Chapter Eight, *The Perspectives of Second-Level Teachers* follows a nearly identical format to the previous chapter, and begins with the profiles of the teachers who participated in semi-structured interviews. These are then followed by a demographic summary for the online questionnaire participants. The chapter then discusses the four central themes which emerged from the online and interview data.

Chapter Nine, *Conclusion*, begins by illuminating the key findings and associated implications of this research. Next, six recommendations are made which flow directly from these points. This chapter concludes with a discussion of the unique contributions this study has made to our knowledge base, and ends with a critical review of its inherent quality and limitations, while also providing suggestions for future research.

Chapter Two: Models for Understanding ADHD

2.1 Introduction

Despite years of research, there are numerous aspects of the ADHD construct that are not fully known, and critics have questioned not only the legitimacy of ADHD, but also the way it is conceptualised and understood.

Before proceeding further into the examination of ADHD and the related body of literature, it is important to understand the frameworks which have influenced and shaped contemporary discussion around ADHD and special educational needs provision. Therefore, this chapter explores the medical, social, and biopsychosocial models, and applies each to the topic of ADHD and special educational provision in Ireland. Lastly, the chapter concludes with a brief discussion of gender as a social construct, which aids the analysis found in later chapters of this thesis.

2.2 The Medical (Deficit) Model

The medical model has dominated the practice of Western medicine for centuries. This model measures the human person against standards or "norms" of behaviour, and asserts that any deviation from this norm is caused by "an underlying pathology or disease, which requires appropriate diagnosis so that symptoms can be effectively treated" (Purdie, Hattie & Carroll, 2002, p. 65). As such, according to the medical model, the deficit or difficulty is located *internally* within the individual. The *International Classification of Functioning, Disability and Health* (ICF) further explains:

The medical model views disability as a feature of the person, directly caused by disease, trauma or other health condition, which requires medical care provided in the form of individual treatment by professionals. Disability, on this model, calls for medical or other treatment or intervention, to 'correct' the problem with the individual (World Health Organization, 2002, p. 8).

As the above illustrates, the major assumptions of the medical model can be summarised as:

- 1. There is a "norm" or standard by which all humans can be measured against
- 2. Deviation from these norms is a sign of illness/disability/deficits within the individual
- 3. "Treatment" is the appropriate response in order to reduce or eliminate deviations from the norm.

Therefore, these assumptions drive the treatment of individuals in an attempt to restore them to functioning within accepted "normal" standards, as deviance of any kind is viewed as something to be reduced and alleviated.

2.2.1 The Medical Model Applied to ADHD

Applied to ADHD, the medical model views this condition and associated behaviours of inattention, hyperactivity and impulsivity as a "disorder" of deviance from normal standards of human behaviour, which results from biological deficits within the individual and which requires treatment, typically through pharmacological (medicinal) therapies.

The medical model is reflected in diagnostic manuals such as the DSM-5 (American Psychiatric Association, 2013b), which promote a view of ADHD through the lenses of "symptoms" and "treatment." Additionally, within countries such as the United States, insurance companies routinely utilise manuals such as the DSM-5 and the ICD-10 in making decisions about which medical conditions and treatments will be financially provided for and covered (American Psychiatric Association, 2013c). Such decisions particularly reflect the dominance of the medical model within healthcare. Lastly, it should also be noted that this model is strongly prevalent throughout the present body of ADHD research and literature, as reflected in the abundance of medical and clinical studies.

2.2.2 The Medical Model Applied to Special Education

The medical model has also influenced the area of special education, and it stipulates that all learning problems are ultimately the result of disorder and disease (Massoumeh & Leila, 2012). As a result, it is common practice within contemporary teacher training and professional development programmes to assist educators in developing skills in the recognition of students with special needs, particularly for the purpose of medical referral and assessment. Such practices are particularly common within the Irish context where teachers are expected and encouraged to actively participate in the early identification of students with special education, the medical model promotes the practice of judging students again standardised "norms" of learning and performance—any deviance is viewed something to be corrected and treated, usually by medical professionals and prescribed classroom interventions. Indeed, this model "focuses on the child's condition, seeing the problem within the child, [and] trying to find a way of treating the child to fit in with his environment" (Massoumeh & Leila, 2012, p. 5803). As such, treatments are applied to assist in this process of returning the child to "normal" levels of functioning.

As applied to students with ADHD, inattentive and hyperactive-impulsive behaviours are not accepted in the classroom because they run contrary to the passive behaviours traditionally required and expected in the classroom. Therefore, medical assessment and treatment is required in order to assist the student in conforming to the standards which are expected within the school environment, and this is where medication is viewed as particularly helpful in producing desired behavioural

modifications. Additionally, special educational provision and allotment of additional resources is often tied directly to medical assessment and declaration of diagnosed need, and such practices are also common within the Irish educational context. Therefore, students without a formal diagnosis of need often do not receive additional supports in contexts where SEN provision is driven and informed by the medical model.

2.3 The Social (Sociopolitical) Model of Disability

The social model of disability was founded on the premise that "disability" is a nothing more than a social construction which imposes numerous barriers on individuals deemed to be "disabled." As Smart and Smart (2012, p.68) maintain, "The limitations and disadvantages experienced by people with disabilities have nothing to do with the disability but are only social constructions and therefore are unwarranted." In contrast to the medical model, the social model "sees disability as a socially-created problem and not at all an attribute of an individual" (World Health Organization, 2002, p. 9). Therefore, the "problem" lies not within the individual, but rather, is located outside of them—more specifically, within society itself (Quinn, 1998). According to the social model, the proper response is not to "treat" or "fix" the individual, but rather to remove or reduce any barriers that prevent them from full participation (Quinn, 1998, xx), and to challenge social concepts such as "disability" and "normality."

2.3.1 The Social Model Applied to ADHD

As applied to ADHD, the social model would suggest the "condition" may be nothing more than a social construction, or a product of society. This model would view behaviours associated with ADHD such as hyperactivity-impulsivity and inattention as natural and unproblematic. Correspondingly, such behaviours would not be understood as symptomatic expressions of disease or illness which require "treatment," nor would they be viewed as evidence of "disability" or inherent deficits within the individual.

According to the social model, the "problem" for those labelled with ADHD is that their behaviours simply aren't accepted by society—therefore, the core issue lies distinctly within society and its limited view on what constitutes acceptable behaviour. The proper response, therefore, would be to change the narrowly defined limits of socially acceptable behaviour, and to broaden them in order to include behaviours associated with ADHD, so that individuals are no longer discriminated against and prevented from participating fully in society.

2.3.2 The Social Model Applied to Special Education

When applied to special education, the social model maintains that those deemed to have "special educational needs" may encounter educational and learning difficulties, not because of internalised shortcomings, but rather, because of the way in which schools are organised and the values they support. Therefore, given that traditional educational models demand passivity and attentiveness from students (Renold, 2006), those who struggle to meet these standards may be labelled as having a "special educational need," such as ADHD, simply because *the system fails* to support and appreciate their unique characteristics.

As previously mentioned, the social model teaches that concepts such as "impairment" and "disability" are social constructions and therefore, are open to change. Equally so is the standard of "normality" by which all others are judged (Gallagher, Connor & Ferri, 2014). As such, the social model argues that those with special needs do not require change—rather, the educational system and the above societal constructions, must be changed in order to more fully recognise and appreciate the unique differences and strengths of each individual.

Proponents of the social model have also been critical of the field of special education for espousing and promoting a medical view of disability (Reindal, 2008), and they commonly perceive such practices as "segregationist and discriminatory" (Anastasiou & Kauffman, 2011, p. 379), especially in circumstances where students with "special educational needs" are instructed separately from their "non-disabled" peers.

2.4 The Biopsychosocial (Interactionist/Ecological) Model

George Engel is credited with developing the biopsychosocial model which he first promoted in the paper, *The Need for a New Medical Model: A Challenge for Biomedicine* (Engle, 1977). Engle declared that the medical model viewed illness through a limited perspective, one of biology alone, and therefore proposed an increasingly integrated and holistic understanding of both illness and the human person.

The biopsychosocial model views all aspects of illness—including onset, course, and treatment through the lens of biology, psychology, and sociology. "Illness" is understood as a complex and multifaceted experience, as "the body, the patient's personal history, and their current social circumstances all play a role in the pathogenesis of illness and in the patient's interpretation of their symptoms" (Shorter, 2005, p. 2). Additionally, this model teaches "that psychological and social factors can both influence and be influenced by pathophysiological processes" (Smith & Nicassio, 1995, p. 6). In recent years, researchers have also suggested expanding Engle's model to include a cultural

dimension (Pham, 2015) in recognition of the influence that cultural views regarding illness and treatment can have on the individual and their experience.

The International Classification of Functioning, Disability, and Health: Children and Youth Version (ICF-CY) is based largely on the biopsychosocial model. This text asserts that factors such as "the physical, social and attitudinal environment" have particular importance and relevance for understanding children and youth, especially in relation to their functioning, health, and the experience of illness and disability (World Health Organization, 2007, xvi).

2.4.1 The Biopsychosocial Model Applied to ADHD

In recent years the biopsychosocial model has been increasingly applied to the analysis of ADHD. Viewed through this lens, the behaviours and symptoms associated with ADHD are likely the result of multiple factors—including those which are biological, psychological and social in nature. This conclusion is in line with the findings of numerous researchers who support the multiple source interaction theory of ADHD (Thapar et al., 2013; Curatolo, D'Agati & Moavero, 2010). As Salamanca (2014, p.3) explains:

It is recognized that the basic neurobiological disorder is equally determined and influenced by other multiple external and environmental factors that can not only lead to a series of clinical symptoms but also to important implications from performance in daily, functional and social activities, and exacerbate these clinical manifestations and comorbidities in different contexts.

Given that ADHD can impact areas well beyond the physical and biological functioning of the individual, and may have life-long personal, familial, and social ramifications, those like Klykylo and Klykylo (2008, p. 43) maintain that ADHD must be treated according to a biopsychosocial approach. This fits well with current practice suggesting the best ADHD treatments are multimodal and include both biological/pharmacological and psycho-social therapies (Thompson & Miller, 2012).

2.4.2 The Biopsychosocial Model Applied to Special Education

When applied to the field of special education, this model recognises that an individual's educational difficulties likely stem from a host of factors, including those which are biological, psychological and social in nature, and research suggests that the biopsychosocial model may assist educators in recognising that children with SEN have varied and multifaceted needs (Hellblom-Thibblin, Klang & Aman, 2012, p. 17).

Desforges and Lindsay (2010, p. 3) advocate the biopsychosocial model as the best perspective in which to understand SEN as it, "gives due weight to both within-person factors as well as a broad

range of environmental factors that provide support and cause stress to the individual." Correspondingly, these authors note that when SEN is viewed through this model, "the role of SEN provision is to enhance the support factors, and reduce the impact of stress factors and other barriers to learning. In doing so, it aims to enhance performance and increase participation in a range of activities" (Desforges & Lindsay, 2010, p. 3). Under this model, numerous fields can cooperate in creating a holistic approach to education which may include guidance from the medical community, the implementation of support interventions within the classroom, and addressing social factors which may limit the individual's capabilities and outcomes. As such, the biopsychosocial model is one of the most balanced means of meeting students' needs and encouraging participation in learning and education, which may potentially increase their outcomes in other areas of life and society as well, thereby showing that the benefits of this model may well extend beyond the educational realm.

2.5 Critiques of the ADHD Construct

As the frameworks above show, there are numerous ways to conceptualise and understand ADHD. However, it must also be recognised that nearly every aspect of this condition has been called into question. Some of the most popular criticisms against the ADHD construct will now be reviewed.

2.5.1 Questioning the Medical Legitimacy of ADHD

Critics have raised serious concerns about the scientific integrity and legitimacy of ADHD as a medical condition. For example, they note the enduring inability of researchers to identify the specific aetiology or cause of ADHD, the lack of any definitive physical/biological markers (although speculative ones have been identified), and the subjective nature of the diagnostic process which largely takes place through a series of behavioural checklists.² Additionally, there is no standardized checklist for ADHD diagnosis and estimates suggest there may be upwards of two dozen or more presently in use (Cohen, 2006).

Critics also question the ever increasing number of persons diagnosed with ADHD each year, especially the number of pre-schoolers (Cormier, 2008). This number seems only likely to increase, as in 2011, the American Academy of Paediatrics further reduced the age of ADHD diagnosis from 6 to 4 years (Graf & Singh, 2015). Some assert that ADHD is being regularly "overdiagnosed" (Bruchmuller, Margraf & Schneider, 2012) and yet others maintain this is a misperception fuelled by the media (Sciutto & Eisenberg, 2007). It could also be argued that many of these concerns are simply natural within the

² It is worth mentioning that ADHD is not the only condition which relies on the use of checklists in assessment, as this is a common practice in the diagnosis of many other mental and behavioural conditions, such as depression and schizophrenia, where similarly, there are no biological tests which can detect the presence of these conditions.

establishment of any "new" disorder, and that similar trends may have also been observed when other conditions as "dyslexia" and "depression" first came into awareness. Prior to definition, there would have been no diagnosed cases, but once a formalised label was used to describe and explain the symptoms of the conditions, it would have facilitated a greater number of individuals in obtaining diagnosis and treatment, particularly in cases where the medical model was dominant.

Linked to overdiagnosis is subsequent concern regarding the pharmacological treatment of ADHD, and the potential side effects of the drugs used to treat the condition. Such opposition is particularly strong in relation to the use of prescription medications in children and young adults. For example, during the ten-year period from 1994 to 2004, Methylphenidate (e.g. Ritalin) use increased an astonishing 7600% in the United Kingdom (Cohen, 2006). Writing in the United States, Cormier (2008, p. 345) similarly cites the level of concern which exists in relation to "the severalfold increase in prescription of stimulant medication" for children with ADHD. Although numerous studies support the efficacy of psychostimulant drugs in treating and controlling the symptoms associated with ADHD (Benkert et al., 2010; Forness, Kavale & Crenshaw, 1999), we must question the influence and motivations of the pharmaceutical industry and insurance companies who may benefit from such significant increases in usage (Conrad & Bergey, 2014; Ongel, 2006). It is also important to consider the potential for bias, especially in cases where pharmaceutical companies are funding research into the efficacy of drug treatments for ADHD, especially when they suggest that the benefits of such medications far outweigh the costs (e.g. Fitzgerald, 2007).

Those like Graf and Singh (2015, p. 1345) are especially critical of treating very young children diagnosed with ADHD with pharmacological interventions, and they question why some doctors seemingly disregard guidelines which clearly oppose such practices, and why parents accept and allow their very young children to be treated in this way? As such, their criticisms illustrate that the controversial nature of using pharmacological interventions in the treatment of ADHD extends well beyond the field of medicine, and raises serious social questions regarding the nature of parenting and raising children.

2.5.2 The Medicalisation of Human Behaviour

In short, much of the criticism lodged above stems from a central issue commonly termed as the "medicalisation" of ADHD. Medicalisation is defined as, "a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness and disorder" (Conrad, 2007, p. 4); this is a process which has been aided by scientific inquiry and strengthened by the prestige of the medical model.

In tracing the developmental history of ADHD, it has been argued that with modernity and the practice of "professionalized medicine," doctors were increasingly viewed as experts, even in areas which "were previously under the jurisdiction of the family," such as the behaviour of children who were increasingly viewed as "sick" rather than being labelled as "bad" (Li, 2013, p. 310). Applied to the ADHD construct, proponents of the above theory would argue that ADHD is not a legitimate medical illness or "disorder," but rather, it is an example of the medicalisation of deviant behaviours in children (and a growing number of adults) that others find challenging and annoying.

Additionally, this has become a strong critique in the area of special education too, with a seeming proliferation of "new" conditions being diagnosed in students each year, and teachers facing classrooms in which their students are labelled with a wide variety of conditions, all which educators must cater to and support in their teaching. However, those like Daniels (2006) question the usefulness of such labelling, especially in terms of how categorisations affect teaching and learning within the area of special needs education. Drawing on a number of sources, Daniels' argues that very often, categorisation and medical labelling, while viewed as a mechanism which offers "simplistic protocols and magic answers," is not always in the best interest of the child, especially when such labelling prevents the practice of good teaching and learning from occurring when the "dialogic relation between the teacher and the learner" is reduced because of the seeming simplicity of the diagnostic label (Daniels, 2006, p. 4). Therein, the danger of medicalisation and categorisation in special education may lie in viewing the child narrowly through medical labels, rather than attending to their unique needs and challenges, and finding personalised solutions to overcoming these issues.

2.5.3 The Usefulness of the ADHD Construct?

It has also been argued that the medicalisation of deviant behaviour and the subsequent development of the ADHD label is particularly useful for numerous segments of the population. In short, many of the arguments in this area relate to the suggestion that the ADHD label may allow numerous groups to escape self-blame for personal shortcomings—and to displace their difficulties and failures on ADHD itself. According to Baughman (2006, p. xiii), "ADHD is a disorder manufactured to match our times. It is a quick catch-all diagnosis with a magic bullet treatment," which most commonly takes the form of pharmacological interventions.

On a larger societal level, Timimi and Taylor (2003, p.8) argue that ADHD is particularly useful for doctors, parents and teachers alike, as it has freed them from the "social responsibility to raise well-behaved children," and it also frees them from assuming personal blame, when they fail to do so. In other words, the ADHD construct provides society with "a means of labelling and controlling children

who exhibit difficult behaviours" (Mather, 2012, p. 19), and rather than accept responsibility for the difficulties faced by today's youth, we can instead, simply blame it on the "ADHD."

Conrad (2007) maintains that ADHD can also be quite useful for the very individuals who are "diagnosed" with the condition, as the label can be a gateway to a number of additional benefits and accommodations they would not receive otherwise, particularly within the educational and work settings. Individuals may also receive psychological benefits as a result of obtaining a medical diagnosis of ADHD. For example, the label may offer a causal explanation for behaviours which they may feel are out of their control. However, those like Diller (1998) maintain that in reality, the ADHD label is "salvation" which allows them to avoid feelings of "failure" as they can blame their behaviour and related issues on brain functioning or genetics, rather than taking personal responsibility for their problems and lack of performance.

Additionally, the ADHD diagnosis can provide an increased self-understanding and a "new public identity as an individual having a particular kind of illness or disorder" (Conrad, 2007, p. 46). This sense of understanding and acceptance can be further reinforced when individuals reach out to others who also have the same diagnosis. As evidence of this, Diller (1998) cites that numerous supportive communities (e.g. ADHD support groups) now provide a sense of belonging to people whose behaviour has otherwise made them outsiders in the dominant culture—a culture which views their behaviours (especially those related to inattention and hyperactivity) as undesirable and unacceptable.

2.6 Discussion and Application

In light of the discussion presented above, including the various models and critiques of the ADHD construct, the biopsychosocial model has been chosen as the most appropriate guiding model for this present research study due to the following:

- This model is one of the most comprehensive and holistic models presently available for understanding the human experience of development, illness and disability. It recognises that humans are complex beings who are influenced by multiple factors, including those which are biological, psychological, and sociological in nature.
- 2. The biopsychosocial model also recognises the contributions that competing models have made to our understanding of ADHD. It does not deny that ADHD may be influenced by biological factors, and in doing so, gives appropriate credit to the advancements made by medical and clinical researchers. However, the biopsychosocial model also recognises that science and biology cannot necessarily provide all of the answers to questions about human

behaviour and experience, and therefore allows for the consideration that ADHD may also be influenced by psychosocial forces.

- 3. The biopsychosocial model also recognises the importance of considering the impact of society on our understanding of illness, and thereby values the contributions made by the social model of disability. Social expectations have important consequences for the ADHD construct, and those who are affected by the condition. However, if society defines the standards of acceptable behaviour, it may be the case that we need to rethink these standards, and show a greater appreciation for the strengths and contributions that those with ADHD bring to the table. This also calls us to consider viewing their behaviours through a different lens of appreciation for difference, rather than seeing them as "deviant" and therefore, undesirable.
- 4. The biopsychosocial model is also important for developing a holistic understanding of special education, which considers the unique needs of students as emerging from multiple factors. As such, this model is willing to draw on a wide variety of sources in providing each student what they personally require in order to achieve success.

In considering the three models presented earlier in this chapter, it is therefore clear that biopsychosocial model is the most appropriate choice—both in terms of understanding the complex nature of the human person and behaviour—as well as considering the complex nature of ADHD within the context of special educational provision, and more specifically, within Irish society and culture.

2.7 Defining & Understanding Gender

In addition to understanding the various frameworks used to conceptualise ADHD, another important topic to consider for this study is that of "gender," which assists in making sense of the findings that come later in this thesis. This section now provides some basic definitions of terms related to this area which are important for the reader to understand, along with discussing the interaction between gender and education.

Contemporary discourse, particularly within the areas of feminism and gender studies, commonly defines "sex" as a biological term determined by genitals, reproductive functions, and genetics (i.e. you are a male, or a female). In other words, "*Sex* is used to refer to a person's biological maleness or femaleness, *gender* to the nonphysical aspects of being female or male—the cultural expectations for femininity and masculinity" (Lips, 1993, p. 4). As such, it can be said that gender is largely a social construction (Marchbank & Letherby, 2007), however, one that cannot be fully divorced from sex, in the same way that sex cannot be fully divorced from gender. Francis (2006, p. 10) argues, "Many social

constructivists see individuals as biologically sexed, with consequences flowing from this bodily difference in terms of the way others interact with them." For example, whether a person is male or female may impact on the particular expectations that others hold of them, as well as how other people approach and treat them³ (Francis, 2006, p. 10). However, it seems that behaviours which result from sex identification can also include personal decisions and actions which the individual engages in as a result of their biological sex and gender identification (i.e. I wear dresses because I am a female).

Within public discourse, the terms "sex" and "gender" are often used interchangeably (Lips, 1993) as though they equate in meaning. Given the examples cited above, it is clear there are distinct and important differences between these terms, and to equate them results in diminishing the power of each. However, some theorists have attempted to wholly divide and separate sex and gender. Paechter (2006) likens this bifurcation of the human person and their experiences to what French philosopher Descartes attempted in developing his positioning on mind/body dualism. Paechter (2006, p. 132) also maintains that such divisions do not accurately represent the lived experiences of sexed bodies, and in her opinion, people should be considered in light of both sex and gender, "We cannot perceive or conceive of bodies except through cultural norms and understandings, but nor should we consider gender except as something that is fundamentally and always involves bodies." Similarly, feminist writer Simone de Beauvoir famously stated, "One is not born, but rather becomes, a woman" (1973, p. 301; cited in Butler, 1986, p. 35), and Butler (1986, p. 35) maintains this statement implies that the individual gradually acquires their gender over the course of a lifetime.

2.8 Gender Stereotypes

The power of gender-stereotypes can significantly influence what we think and assume about others based upon their gender. As defined by Marchbank and Letherby (2007, p. 125), "Gender stereotypes are made up of a collection of factors including personality traits, social roles and behaviours as well as physical characteristics." The following chart, taken from Lips (1993, p. 6) and complied from the work of Williams and Bennett (1975; cited in Lips, 1993, p. 6), outlines some of the adjectives which are most commonly associated with women and men, and which form the basis of common gender-stereotypes held in Western society.

³ For example, young boys commonly receive toy trucks and cars for their birthdays, while girls are often given dolls and playhouses.

Women	Affected	Feminine	Prudish
	Affectionate	Fickle	Rattlebrained
	Appreciative	Flirtatious	Sensitive
	Attractive	Frivolous	Sentimental
	Charming	Fussy	Softhearted
	Complaining	Gentle	Sophisticated
	Dependent	High-strung	Submissive
	Daydreamy	Meek	Talkative
	Emotional	Mild	Weak
	Excitable	Nagging	Whiny
			·
Men	Adventurous	Disorderly	Realistic
	Aggressive	Dominant	Robust
	Ambitious	Enterprising	Self-confident
	Assertive	Forceful	Severe
	Autocratic	Handsome	Stable
	Boastful	Independent	Steady
	Coarse	Jolly	Stern
	Confident	Logical	Strong
	Courageous	Loud	Tough
	Cruel	Masculine	Unemotional
	Cruer	wascume	onemotional

Table One: Adjectives Typically Associated with Women and Men

Reflecting on the above adjectives, many writers, particularly those working from a feminist perspective, observe that gender-stereotypes often portray women as the "weaker" and "passive" sex, with the goal of putting women into the service of men (Marchbank & Letherby, 2007). However, it is important to recognise that stereotypes are broad assumptions made about large groups of people, and therefore, they are not necessarily the "rule," nor are they representative of all group members. Men and women certainly can, and do, challenge the above descriptions; women can be seen to act in ways considered more "manly," while men can also display characteristics which are thought to be more passive and feminine.

2.9 Gender & Education

Gender plays an extremely important role in the field of education, as it strongly influences the experiences, and even the outcomes, of students at every stage of their learning (Skelton, Francis & Smulyan, 2006). For example, schools communicate important social messages regarding what it means to be a "male" or a "female," along with the gendered expectations for each sex. As Davison and Frank (2006, p. 152) assert, "Secondary schools are locations where students spend a great deal of time not only learning, but also navigating gendered identities. People grow between the ages of

11 and 18. These "tweenage" years are distinctive in the making of masculinities and femininities." Thus, as asserted by these authors, the second-level school is a powerful context for conveying social attitudes and expectations about what it means to be "men" and "women."

Often, the communication of these cultural values takes place through the "hidden curriculum" which consists of "the culture, beliefs and behaviours enacted by those within a community and [which are] passed on to students, who subsequently enact them themselves" (Giles & Hill, 2015, p. 244). In this way, the hidden curricula may serve to reinforce and perpetuate gender stereotypes and other culturally held beliefs about the "nature" and "place" of men and women. However, it can also be argued that schools promote gender stereotypes through the "active curriculum," which consists of the specific learning outcomes and subjects that students study. For example, gender stereotypes can be particularly evident in the subjects that males and females chose to study, with boys more likely to study maths and sciences, while girls are more likely to study literature and arts. As Breen and Hannan (1987, p. 37) argue, the choices that students make about which subjects are "appropriate" to study are strongly determined by cumulative factors related to their gender role socialisation, and what they've been taught from the earliest years of their life. It could even be said that such divisions in subject choice may further perpetuate the idea that women are subservient and unequal to men, as such choices can limit the ability of women to obtain jobs in certain industries, which may narrow their future opportunities and reinforce dependence on men as the primary "bread-winners."

Teacher-student interactions are another means by which stereotypes are communicated, and such interactions are often influenced by the gender role assumptions that teachers' hold for male and female students. Research has found that teachers' interactions with students often reflect gender stereotypes (Liu, 2006, p. 431), and consequently, teachers may hold very different expectations for male and female students, especially as related to their behaviours. For example, Renold (2006, p. 442) cites a study by Gordon et al. (2000) which explored how "talking back" was interpreted by teachers. When males talked back, such actions were viewed positively as evidence of "an active and enquiring mind" but in contrast, when females displayed the same behaviour, teachers often interpreted such actions as "a direct challenge to teacher authority." Thus, this simple example shows the power of gendered-expectations for influencing how students' behaviour is interpreted as a function of their gender, and correspondingly accepted or rejected, by educators.

As illustrated above, the social construction of gender and education is critically important to consider and apply in this study of ADHD in the lives of adolescents. More will be discussed on the confluence of gender, education, and ADHD in subsequent chapters of this thesis.

2.10 Conclusion

This chapter has reviewed the relevant frameworks responsible for shaping present discourse and knowledge of ADHD. Additionally, it has also raised awareness of gender, and the possible influence of this social construct on the experiences of students and teachers alike, as it holds important implications for understanding subsequent chapters of this thesis.

The following chapter addresses the question, "What is ADHD?" It is important for the reader to understand that the medical model continues to largely dominate the existing body of ADHD research, and therefore, cannot be escaped particularly when discussing ADHD through the lens of causation, symptoms, and treatment. However, in light of the biopsychosocial model, the reader should approach the findings presented in the next chapter with a critical eye, aware that the views found therein are not the only, nor necessarily the "correct" perspective, by which to define and understand ADHD.

Chapter Three: Understanding ADHD

3.1 Introduction

This chapter provides the reader with a basic understanding of ADHD and includes a brief overview of the literature pertaining to areas such as prevalence, symptomatology, causation, and interventions. This chapter also considers gender-specific issues related to these areas that are important for framing and understanding subsequent areas of this thesis which explore the "female" experience of ADHD.

3.2 Predominant Characteristics of Previous ADHD Research

Before discussing ADHD and conducting a review of the literature, it is important to understand that the representative body of research is characterised by a number of predominant features which largely form the justification for this present study. These are summarised in the following table:

Predominant Characteristics	Resulting Implications	
Dominance of medical and clinical	Mainly utilises quantitative methods. Situated largely in the positivist	
studies	perspective.	
Research conducted mainly with	Underrepresentation of females in ADHD research.	
male participants		
Minimal use of qualitative	Exploration of the experiential aspects of life with ADHD is	
methods	understudied. The "voices" of persons diagnosed with ADHD are largely	
	silent in the literature.	
Focus on ADHD in young children	Underrepresentation of older-adolescents and young adults in	
	research.	

Table Two: Predominant Characteristics and Implications of Previous ADHD Research

3.3 A Brief History of ADHD

Although some may consider ADHD to be a "new" condition, descriptions of hyperactive and inattentive children and adults have been reported in the medical literature for hundreds of years. Contemporary scholarship by Barkley and Peters (2012) cites German physician Melchior Adam Weikard (c. 1775) as providing some of the earliest descriptions of attention disorders. Indeed, Weikard may have been one of the first to describe individuals "who were inattentive, distractible, lacking in persistence, overactive, and impulsive," and these characteristics are quite similar with the symptoms we associated today with ADHD (Barkley, 2015b, p. 4). Similar portraits of "fidgety children" are also provided in the poetry of German physician Heinrich Hoffman (c. 1865) who wrote about the

conditions he witnessed in his practice. Hoffman's work portrays inattentive characters such as "Johnny Head-in-Air" and those with excessive motor activity such as "Fidgety Phil" (Stewart, 1970):

> Phil stop acting like a worm; The table is no place to squirm Thus speaks the father to his son; Severely say it, not in fun, Mother frowns and looks around; Although she doesn't make a sound, But Philip will not take advice; He'll have his way at any price. He turns and churns; He wriggles and jiggles Here and there on the chair. Phil these twists I cannot bear.

The first scientific descriptions of the condition known today as ADHD are often credited to English paediatrician George Still⁴ (c. 1902) who worked in the early twentieth century (Barkley, 2015b; Carr, 2006; Detweiler, Hicks & Hicks, 1999). However, it was not until 1968 that ADHD first appeared as a validated condition in the second edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1968).

Our modern conceptualization of ADHD comes largely from two authoritative sources: *The Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) (American Psychiatric Association, 2013b) and the *International Statistical Classification of Diseases and Related Health Problems*, 10th revision (ICD-10) (World Health Organization, 1992). The authority of the DSM-5 comes as a result of its formation and publishing by the American Psychiatric Association, and as Conrad (2007, p. 48) notes, the DSM-5 is commonly considered "the official guidebook for psychiatric diagnosis," both in the United States, and in a growing number of international countries as well. The authority of the ICD-10 results from its formation and publication by the World Health Organization (WHO), which is the United Nations' division of public health. This manual is commonly used in the classification and monitoring of diseases and related health problems in countries and populations worldwide (World Health Organization, 2016).

3.4 What is ADHD?

The DSM-5 defines ADHD as a childhood onset condition with "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development" (American Psychiatric Association, 2013b, p. 61).⁵ The ICD-10 uses slightly different terminology and classifies this

⁴ It is important to note that Still did not use the term "ADHD" in his writings, as this is a modern label.

⁵ ADHD was originally associated with 3 distinct symptoms: hyperactivity, impulsivity, and inattention. The number has been reduced to two, as hyperactivity and impulsivity are now understood to form one impairment (Barkley, 1997, p. 65).

condition under the broad heading of "hyperkinetic disorders," and more specifically as a *disturbance of activity and attention* (World Health Organization, 1992, p. 378). Within the ICD-10 (World Health Organization, 1992, p. 378), hyperkinetic disorders are defined as:

A group of disorders characterized by early onset (usually in the first five years of life), lack of persistence in activities that require cognitive involvement, and a tendency to move from one activity to another without completing any one, together with disorganized, ill-regulated, and excessive activity.

Despite the definitions provided above, the literature illustrates that researchers disagree on the precise classification of ADHD and the following labels are all concurrently used in contemporary discourse, which names ADHD as: a *neurobiologic condition* (Quinn, 2008), a *neurodevelopmental disorder* (Mrug et al. 2012; Purper-Ouakil et al., 2011), a *mental disorder* (Benkert et al., 2010), and as a *heterogeneous condition* (Biederman, 2005; Newcorn et al., 2001; Faraone & Biederman, 1998), to name but a few.

3.5 Statistical Prevalence of ADHD in Ireland

The DSM-5 estimates that ADHD affects approximately 5% of children and 2.5% of adults, and can be found in nearly all cultures (American Psychiatric Association, 2013b, p. 61).⁶ A systematic review of European and North American studies showed similar prevalence rates of approximately 5%, with variability detected only between studies conducted in North America, Africa, and the Middle East (Polanczyk et al., 2007, p. 946).

It is difficult to ascertain the exact prevalence of ADHD in Ireland as a wide range of estimates are suggested in the literature. These differences may be due to variance in research methods and the type of samples used in calculations, among other factors. Early estimates suggested that ADHD affected between 1-5% of school aged children between the ages of 5-15 years in Ireland (Fitzpatrick, Halpin, & Doody, 2000). Similar rates were also reported in a study of mental illness and suicidal ideation/intent among Irish adolescents (ages 12 to 15 years), which found that 3.7% of participants (n=723) met the diagnostic criteria for ADHD (Lynch et al., 2006). However, higher estimates were suggested in a study of psychological disorders among children had ADHD, making this the third most common condition (Martin et al., 2006). In terms of actual numbers, ADHD is estimated to affect

⁶ The DSM-5 defines "adults" as those over the age of 17 years (American Psychiatric Association, 2013a).

between 8,000 to 43,000 children under the age of 14, and approximately 6,000 to 31,000 persons between the ages of 15 to 24 years in Ireland (Reilly, 2009, p. 7).

The *Fifth Annual Child and Adolescent Mental Health Service Report 2012-2013*⁷ (Health Service Executive, 2013) provides additional statistics related to ADHD in Ireland. This report states that 31.6% of cases reported by the Child and Adolescent Mental Health Service (CAMHS) were related to ADHD/hyperkinetic difficulties—ranking this condition as the most common reason for primary-presentation at clinics (Health Service Executive, 2013, p. 7). This report further clarifies that 43.9% of children ages 5 to 9 years, who attended CAMHS, experienced ADHD/hyperkinetic issues, while only 19% of adolescents aged 16 years and older, presented with such difficulties (Health Service Executive, 2013, p. 7).

3.5.1 ADHD Prevalence among Males and Females

When considering the prevalence of ADHD, it is also important to account for the influence that gender may have on the numbers reported above. It is commonly believed that ADHD occurs more frequently in males than females (Arnett et al., 2015; Carr, 2006). Early estimates based on *clinical samples* suggested that ADHD affected males and females at a rate of 9:1 to 6:1 (American Psychiatric Association, 1987), with some estimates as extreme as 10:1 (Biederman et al., 2002).⁸

More recent statistics from the DSM-5 are significantly less dramatic and cite ADHD as occurring in male and female children at a rate of 2:1 (American Psychiatric Association, 2013b, p. 63). Such estimates more closely mirror earlier studies based on *community samples* which identified gender-based prevalence rates of 3:1 to 2:1 (Arnold, 1996).

Similar rates are also found in Ireland, as the Health Service Executive (HSE) suggests that ADHD and other attentional disorders occur in males and females at a rate of 4:1 (Health Service Executive, 2013, p. 36). However, the slight differences between Irish and international figures suggest that the gender difference in ADHD prevalence/diagnosis is more pronounced in Ireland than in other international contexts, with ADHD less prevalent in females in Ireland, as compared to males in Ireland and females in other countries.

⁷ Statistics are based on data collected from 58 Child and Adolescent Mental Health Service teams (CAMHS) during the month of November 2012.

⁸ While such odds may seem surprising, Nigg & Nikolas (2008) argue that numerous psychiatric disorders with childhood onset also appear to affect males in greater numbers than females.

3.6 Core Symptomatology

The DSM-5 (American Psychiatric Association, 2013b, p. 61) provides the following definitions for each of the core symptoms associated with ADHD:

- Inattention: Wandering off task, lacking persistence, difficulty sustaining focus, and disorganisation.
- **Hyperactivity:** Excessive motor activity, fidgeting, tapping, or talkativeness. In adults, hyperactivity may manifest as extreme restlessness or wearing others out with their activity.
- Impulsivity: Hasty actions that occur in the moment without forethought or consideration of long-term consequences, and which may include potential for causing harm to the individual. Impulsivity may reflect a desire for immediate rewards or an inability to delay gratification. Examples include social intrusiveness, interrupting others excessively and taking a job without adequate information

The above symptoms must be inconsistent with the individual's developmental level and age, and not attributable to any other cause or condition.⁹ Symptoms must impact negatively on their life and functioning, and be present within at least two distinct domains, such as at home, school, or in the workplace.¹⁰

3.7 Gender Differences in Symptomatology?

For many years, researchers have questioned whether gender affects the manifestation of the core ADHD symptoms in males and females. While they have yet to agree on this issue, it is important to note that the DSM-5 (American Psychiatric Association, 2013b) does not contain gender-specific diagnostic criteria for ADHD, despite the fact that some researchers have strongly advocated for the inclusion of such criteria (see Nadeau & Quinn, 2002b). The following section will now explore the variety of opinions regarding possible gender differences in ADHD symptomatology and manifestation.

Some researchers argue there are no gender differences across the entire range of symptomatology. For example, Biederman et al. (2005, p. 1083) examined gender effects on ADHD in a large sample of non-referred subjects and found that males and females did not differ in respect of subtypes, psychiatric comorbidity, or treatment history, while they also showed similar levels of cognitive,

⁹ Parents may first notice characteristic symptoms of ADHD such as heightened or excessive levels of motor activity when their child is very young. However, in children below the age of 4 years, it can be extremely difficult to distinguish between ADHD and the typical behaviours of very young children (American Psychiatric Association, 2013b).

¹⁰ See Appendix A for a full review of DSM-5 diagnostic criteria for ADHD.

psychosocial, school, and family functioning. Similarly, Owens, Cardoos and Hinshaw (2015, p. 241) concluded:

Despite efforts to distinguish male-like and female-like expressions of ADHD, there are few known gender differences in the developmental expression of ADHD and its core symptoms from childhood to adulthood, and there are few reliable gender differences in expected developmental outcomes of childhood ADHD.

In contrast however, other researchers maintain that gender differences do exist within the core symptoms of ADHD. For example, numerous studies suggest that males are more likely than females to experience hyperactive symptoms (Newcorn et al., 2001; Gaub & Carlson, 1997), and Waite (2007) maintains that hyperactivity is more characteristic of the male presentation of ADHD. Conversely, it has been suggested that females are more likely to experience heightened levels of inattentive symptoms (American Psychiatric Association, 2013b; Quinn, 2008; Biederman et al., 2002).

Researchers also believe that males and females may express the same symptoms in different ways. For example, while males may experience hyperactivity-impulsivity as excessive bodily/motor movement, females may illustrate this symptom as heightened talkativeness. Grskovic and Zentall (2010) studied a school-based sample of 262 girls with and without ADHD and attempted to identify the hyperactive, impulsive, social, and emotional characteristics of girls with symptoms of the condition. These researchers concluded:

The most defining feature of ADHD behavior in girls was not large motor movement, but verbal impulsivity...They interrupted others, talked too loudly, changed topics inappropriately, often lost track of their own thoughts in conversations, and said things without thinking (Grskovic & Zentall, 2010, p. 181).

Additionally, Quinn (2005) suggests that hyperactivity in females may also display as *heightened emotional reactivity*—a conclusion that was confirmed in the study cited above by Grskovic and Zentall (2010, p. 171) who described the girls with symptoms of ADHD as showing evidence of "greater moodiness, anger, and stubbornness than their peers," thereby illustrating that struggles with emotional regulation may be common among females with ADHD.

3.8 ADHD Subtypes: Age and Gender

The DSM-5 cites three distinct subtypes of ADHD which can be classified as mild, moderate, or severe (American Psychiatric Association, 2013b, p. 60):

- Combined presentation (ADHD-C): Consists of both inattentive and hyperactive-impulsive symptoms
- Primarily inattentive presentation (ADHD-I): Consists of mainly inattentive symptoms
- Primarily hyperactive-impulsive presentation (ADHD-HI): Consists mainly of hyperactiveimpulsive symptoms

Researchers also question whether age and gender differences exist in relation to the diagnosis of these subtypes. Arcia and Conners (1998, p. 81) argue that males and females are referred for clinical evaluation at relatively similar ages, but note that those who display more severe levels of hyperactivity or conduct disorder are typically referred earlier than "peers with less severe symptoms." In contrast, Zambo (2008) supports the idea that boys with ADHD are *referred earlier than girls* because of hyperactive-impulsive symptoms, and similarly, Selikowitz (2009, p. 5) associates the combined type of ADHD with greater prevalence in males, and with earlier onset and diagnosis during nursery or primary school.

Selikowitz (2009, p. 5) also maintains that inattentive ADHD is associated with later onset, in primary or secondary school, but asserts this subtype affects both genders equally. Yet, others suggest that girls are *more likely* than boys to be diagnosed with inattentive ADHD (Taylor & Keltner, 2002; Abikoff et al., 2002). It is also believed that females with this subtype may have a greater chance of living with "undetected" ADHD as, "the risk of the attention disordered girl who is passive, does not disrupt other children, and is not a 'problem' remaining undiscovered is probably high" (Berry, Shaywitz & Shaywitz, 1985, p. 808). If this is the case, then it suggests the true ratio of girls to boys with ADHD may be much closer than originally suspected, especially if there are a significant number of females who have not been formally recognised or diagnosed.

As noted above, one of the reasons suggested for later diagnosis of inattentive ADHD may be related to the fact that "inattention" is less bothersome to adults, than are the disruptive behaviours typically associated with hyperactivity-impulsivity (Quinn & Wigal, 2004). Providing an alternative explanation, Selikowitz (2009, p. 13) proposes that difficulties are present in both types of ADHD from birth, however, children with hyperactive-impulsive symptoms typically show evidence of their struggles much earlier, even during infancy. In comparison, children who experience milder forms of ADHD may manage quite well during primary school, but problems with inattention may become more apparent with the onset of puberty and hormones, and the added pressures of second-level schooling.

3.9 Comorbidity

ADHD displays high rates of comorbidity with a wide range of medical and psychological conditions which can further affect the physical, mental, and emotional well-being of individuals. Based upon their study of ADHD in the general population of school-age Swedish children, Kadesjo and Gillberg (2001, p. 491) concluded that ADHD "is associated with important comorbidities in a vast majority of all cases. This means that it is the exception, not the rule, to encounter cases with 'pure' ADHD," therefore illustrating that most individuals diagnosed with ADHD will also have other coexisting conditions.

Significant associations have been established between traumatic brain injury and ADHD (Ilie et al, 2015; Adeyemo et al., 2014), and with a host of psychological and mental conditions, such as mood disorders, anxiety disorder, obsessive-compulsive disorder, and bipolar disorder (Selikowitz, 2009). High rates of comorbidity have also been established between depression and ADHD (Semeijn et al., 2015; Sassi, 2010), and Laver-Bradbury (2012, p. 223) suggests that, "Depression can be the presenting problem in children whose ADHD was unrecognized in early childhood." Additionally, ADHD is often found co-occurring with other behavioural conditions such as conduct disorder (CD) and oppositional defiant disorder (ODD), and Selikowitz (2009, p. 42) estimates that conduct disorder is found in approximately 7% of children diagnosed with ADHD.

An association has also been found between ADHD and diagnosis of learning disability (DuPaul, Gormley & Laracy, 2013), along with numerous other developmental disorders which impact academic performance, such as those in speech, language, and reading (Mueller & Tomblin, 2012). The ICD-10 explains that "impairment of cognitive functions is common, and specific delays in motor and language development are disproportionately frequent" (World Health Organization, 1992, p. 378) in children diagnosed with hyperkinetic conditions.

3.10 What Causes ADHD?

The vast majority of medical and clinical studies conducted, both in Ireland and internationally, have the goal of discovering the cause(s) of ADHD—something which we do not presently know. Much of the research has explored the relationship between genetics and ADHD—and this area is of particular concern among Irish researchers (for example see: Hawi et al., 2013; Braet et al., 2011; Park et al., 2010; Sheehan, 2008; Lowe, 2005; Kirley, 2004; Hawi et al., 2002).

ADHD is believed to have a 60-75% heritability level (Cortese, 2012) and a significant amount of research has implicated genetic factors in the causation of this condition (Park et al., 2010; Thapar et al., 2007; Faraone & Biederman, 1998). In fact, ADHD has been cited as "among the most genetically

influenced of all psychiatric disorders" (Barkley, 2015a, p. 356). In particular, researchers are working to identify the specific genes responsible for causing ADHD and/or susceptibility for developing the condition, however, such studies are still speculative. Genes responsible for dopamine transport (DAT1) and reception (DRD4) are commonly associated with the development of ADHD (Swanson et al., 2000). After their study of 93 nuclear Irish families, Brophy et al. (2002, p. 914) concluded "the SNAP-25 gene is considered a candidate gene for ADHD susceptibility." However, the DSM-5 cautions that, "While specific genes have been correlated with ADHD, they are neither necessary nor sufficient causal factors" (American Psychiatric Association, 2013b, p. 62). Similar conclusions were reached by Kirley et al. (2002, p. 614) who suggest "the heritability of ADHD is less than 1.0." The implications of such findings may suggest that ADHD extends beyond biology, and may be influenced by factors outside of the person, as will be discussed later in this chapter.

Researchers have spent a significant amount of resources investigating the brain functioning and structures of persons diagnosed with ADHD. Using technology such as neuroimaging, abnormalities have been identified in these individuals within areas of the brain related to "cognition, attention, emotion and sensorimotor functions" (Cortese, 2012, p. 422). Additionally, dysfunctions have been identified in the fronto-subcortical pathways, along with imbalances in the dopaminergic and noradrerergic systems (Biederman, 2005, p. 1215). Numerous researchers have suggested that these differences and abnormalities may be the cause of ADHD (Qiu et al., 2011; Castellanos et al., 2002; Taylor, 1999), and this is one of the most widely accepted etiological theories (Tidefors & Strand, 2012). However, despite the high level of support for this theory, it is important to remember that as of yet, the exact causes of ADHD remain unknown, and no biological (American Psychiatric Association, 2013b, p. 61) or clinical markers (Mueller & Tomblin, 2012) have been identified which can positively identify the presence of ADHD.

It is important to note that the theories cited above are certainly not accepted by all, especially by those who espouse a biopsychosocial model of ADHD, and who believe the condition may also be caused by other factors beyond biological forces. For example, Barkley (2015a, p. 371) cites, "malnutrition, diseases, trauma, and other neurologically compromising events that may occur during the development of the nervous system before and after birth" as potentially playing a role in ADHD causation. Other researchers have suggested that ADHD may be caused by the interaction of both genetic and environmental factors (Morrow et al., 2012).

Additionally, psychosocial factors have been investigated, both in terms of causation, but also in terms of exacerbating the symptoms of ADHD. As Barkley (2015a, p. 375) notes, even some of the earliest references to ADHD by Crichton (1798) and Weikard (1775) speculated regarding the potential

influence that social forces such as poor child rearing and poor teaching, may have on those who displayed symptoms of the condition. Drawing on numerous sources, Barkley (2015a, p. 375) also explains that the severity and continuity of symptoms, as well as the outcome of the condition, appear to be related to factors such as parental mental illness, substance abuse, criminality, family violence, psychical abuse, sexual abuse, neglect, and divorce, among others. However, here too, it is important to remember that although factors may be associated, it does not necessarily imply causation.

3.11 Diagnosis of ADHD

In Ireland, diagnosis of ADHD follows similar international practices and typically begins in the office of the family general practitioner with subsequent referral to specialists such as psychiatrists, clinical psychologists, paediatricians, and in some cases, educational psychologists. Because there are no biological tests (i.e. such as a blood test or genetic test) which can physically and objectively detect the presence of ADHD in the individual, diagnosis is subjectively made by medical professionals through the use of behavioural checklists and rating scales (Stead, Lloyd & Cohen, 2006).

The American Academy of Child and Adolescent Psychiatry (AACAP) recommends the following best practices in the assessment of ADHD in children and adolescents:

- Clinical interviews with parent and patient
- Collection of information from the child's school
- Evaluation for other psychiatric conditions
- Review of the patient's medical, social and family histories (Pliszka et al., 2007, p. 898).

The DSM-5 also notes the importance of cultural sensitivity in diagnostic practices (American Psychiatric Association, 2013b, p. 62). In tracing the history of ADHD, Barkley (2015b, p. 15) notes that Ross and Ross (1982) developed a theory to explain the growing prevalence of ADHD in developed countries. According to this theory, "cultural views were said to determine the threshold for deviance that will be tolerated in children, as well as to exaggerate a predisposition to hyperactivity in some children." Therefore, "consistent cultures" which provide clear and consistent norms and expectations for the behaviour of children will have fewer diagnosed individuals. In contrast, "inconsistent cultures" will likely see higher rates of children diagnosed with ADHD as these cultures are more apt to emphasise differences among individuals, and provide variable and unclear standards for behaviour. However, as Barkley (2015b, p. 15) notes, this theory remains unstudied, and the opposite could just as easily be argued, as hyperactive children may be more obvious in consistent cultures, where their behaviour clearly challenges the norm, while inconsistent cultures "may tolerate deviant behaviour to a greater degree as part of the wider range of behavioral expression they encourage." Thus, such

theories illustrate the tremendous influence that cultural expectations for the behaviour of children can potentially have on the conceptualisation and diagnosis of ADHD.

3.11.1 Gender Biases in the Diagnosis of ADHD?

Particular criticism has been lodged against the standards and procedures by which ADHD is diagnosed, as the symptomatic criteria contained in the DSM for ADHD were developed based on samples which consisted mainly of young males, and are "sex-neutral" in their application (Owens, Cardoos & Hinshaw, 2015). Therefore, the DSM-5 does not presently allow, nor account for, the possibility of gender-specific manifestations of ADHD.

Additionally, the gender-neutrality of the measures used to assess and diagnose ADHD have also been questioned. For example, the Conner-Wells' Self Report Scale (Conners & Wells, 1997) asks individuals to self-rate on questions such as, "I have urges to do really bad things" and "I like to hurt some people." In comparison however, it seems that the Conners 3[™] Teacher (Conners, 2008b) and Conners 3[™] Parent (Conners, 2008a) rating scales may contain examples of more clearly gender-biased criteria. For example, these scales ask the evaluator to consider the child's behaviour in the past month, and include evaluation of the following items:

- "Uses a weapon (for example, a bat, brick, broken bottle, knife, or gun)"
- "Physically hurts people"
- "Threatens to hurt others"
- "Intentionally damages or destroys things that belong to others"
- "Is cruel to animals."

Some argue that the examples cited above are more representative of "males," and as such, are clear evidence of gender-bias in the diagnostic practices associated with these instruments. In turn, they question the ability of these "norms" to accurately recognise and diagnose female-typical manifestations of ADHD (Arnold, 1996). Indeed, based on the examples above, it may be the case that within current practice, females with ADHD are being held to standards which more aptly describe "male-typical" manifestations of the condition. As McGee and Feehan (1991, p. 188) assert, rather than considering what is gender-normative for females, the behaviour of girls is being compared "with that of disordered boys." Consequently, there is a danger that rating scales "may not adequately capture symptom severity among females" (Mahone, 2010, p. 790) and ADHD in some females may be overlooked or missed by current diagnostic standards (Nigg & Nikolas, 2008, p. 320).

It is also thought that girls in particular may have lower normative baseline levels of inattention and hyperactivity as compared to boys. If this is true, girls may "have to deviate further from sex [sic] peers

than do boys to attain a 'diagnostic' level of problems" (Arnold, 1996, p. 559). This could potentially explain the drastic differences in suggested ADHD prevalence rates within clinical and community samples, considering that clinical referrals are commonly initiated due to disruptive behaviour (Biederman, 2005), and therefore, clinically referred females are correspondingly likely to exhibit such externalising symptoms (Gershon, 2002). This implies that, if a person is recognised as "having" ADHD, it is likely due to the display external behaviours, since these are the behaviours which can be observed by others, and which drive referrals for clinical support.

As explained by Nadeau, Littman and Quinn (1999, p. 49), "It is easiest to spot the hyperactive girls whose symptoms are similar to those of many boys with AD/HD. They compose a small percentage of girls with ADHD, although they are probably the majority of girls that are brought to clinics for evaluation." Therefore, some researchers maintain that clinically referred females with ADHD illustrate the most *severely affected* of cases and as such, *are not representative of all females* with ADHD (Soffer, Mautone & Power, 2008; Gershon, 2002; McGee & Feehan, 1991). Gaub and Carlson (1997, p. 1042) further warn that making generalisations between clinical and community populations may lead to erroneous conclusions regarding the true "nature of ADHD in girls," and they highlight the importance of studying females with ADHD in the community setting, including those who are non-referred.

Issues related to the recognition and diagnosis of ADHD in females, such as those cited above, could potentially be rectified through the use of gender normative standards which utilise and consider sex-specific norms, deviance and thresholds (Arnold, 1996) and some researchers have called for the development of gender-specific diagnostic criteria for use in the diagnosis of ADHD in girls and women (Nadeau & Quinn, 2002b), however, this goal has yet to be achieved.

3.12 Interventions for ADHD

A number of intervention and support options are available for persons with ADHD, and "ADHD Clinics" have been established in Ireland to meet the increasing demand for related services (Health Service Executive, 2013, p. 60). Pharmacological intervention remains the primary course of treatment for ADHD (Wigal et al., 2010) which commonly employs the use of stimulant¹¹ and non-stimulant medications.¹² This form of treatment has been associated with significant improvements in upwards of 70 to 80% of children diagnosed with ADHD, particularly as related to their functioning within the

¹¹ Examples of stimulant medications commonly used to treat ADHD include: Adderall, Concerta, and Ritalin.

¹² Examples of non-stimulant medications commonly used to treat ADHD include: Strattera, Kapvay, and Intuiv.

school setting in areas such as on-task behaviour, impulsivity, social behaviour, compliance, and academic productivity (DuPaul & Stoner, 2014, pg. 27).

Despite such gains, pharmacological treatment of ADHD is not a universally accepted practice and many parents and clinicians alike have voiced concerns regarding the risks and long term outcomes associated with the use of prescription medications in children (Baumgaertel, 1999). As a result, a host of alternative and complementary therapies to pharmacology have been promoted for use in the treatment of ADHD, many of which are psychological and behavioural in nature. Young and Amarasinghe (2010) suggest that parental training and classroom behavioural interventions can successfully be used as a first-line intervention for school-aged children with moderate levels of impairment. For older children and adolescents, these authors suggest a multimodal approach of combined home-school treatment, which may include social skills training. Research by Hodgson, Hutchinson and Denson (2014, p. 280) also promotes behaviour modification (e.g. positive & negative reinforcement and punishment) as efficacious in children with ADHD, producing positive gains in the areas of symptoms, behaviours, and neuro-psychological test performance. Although the effects of individual and family counselling have been debated in the treatment of ADHD, it has been suggested that Cognitive Behavioural Therapy is less effective for children with ADHD, as compared to adults (Roman, 2010).

Novel ADHD strategies and interventions include: art therapy (Stein Safran, 2002), nutritional interventions (Newmark, 2009) dietary modifications (Feingold, 1976), herbal remedies (Sarris et al., 2011), and bright light therapy (Niederhofer, 2013). Additionally, Skokauskas et al. (2011, p. 291) suggest alternative therapies such as: neurofeedback, polyunsaturated fatty acids (such as omega-3 and omega-6), chiropractic care, electroacupuncture, repetitive transcranial magnetic stimulation, anthroposophic therapy, meditation, and natural supplements such as St. John's wort, iron, zinc, magnesium, and Gingko biloba. Yet, these same authors warn, "more recent studies have generally been unsuccessful in demonstrating adequate treatment effects of complementary medicine on children who have ADHD" (Skokauskas et al., 2011, p. 291), thus showing that more research may be required in order to increase the overall efficacy of non-pharmacological treatments in the management of ADHD.

3.13 Conclusion

This chapter has reviewed the largely medical and scientific research which underpins much of contemporary discourse regarding the nature of ADHD. As shown, researchers have failed to reach consensus in nearly all areas of this construct—and because of this, the research literature is presently full of numerous contradictions.

As previously mentioned in the introduction, much of the literature presented in this chapter reflects the views of the medical model, which focuses largely on the biological deficits within the individual, and aims to "treat" these shortcomings. However, it is important to understand that this is not the only way in which to conceptualise ADHD, as many would criticise the medical model for its seeming "limited" view of the individual through the lens of biology, and its failure to consider the multifaceted nature of the human person. Perhaps as a result of their work in the classroom, many teachers would be inclined to endorse alternative views of ADHD, and students affected by the condition, through frameworks such as the biopsychosocial and social model of disability, in recognition that ADHD may be due to many more factors than just biology. Such views are important to keep in mind as we progress to the next chapter which explores the social and academic implications of ADHD and examines the impact of the condition on the lives of adolescents and adults.

Chapter Four: The Social & Educational Impact of ADHD

4.1 Introduction

This chapter discusses the social and educational impact of ADHD, and begins with a review of the difficulties that young people diagnosed with the condition often face in their peer and family relationships. Following this, the influence of ADHD on academic outcomes is considered and this includes exploration of the educational experiences of students with ADHD, as well as the perspectives of teachers. Related gender issues have been noted throughout, as well as Irish-specific research and findings.

4.2 The Social Impact of ADHD

The ICD-10 (World Health Organization, 1992) describes hyperkinetic children as reckless and impulsive, prone to accidents, and often in disciplinary trouble—these are all characteristics which can influence the quality of their social interactions. In describing the typical relationships of children with ADHD, the ICD-10 (World Health Organization, 1992, p. 378) notes, "Their relationships with adults are often socially disinhibited with a lack of normal caution and reserve. They are unpopular with other children and may become isolated." Therefore, it is clear that ADHD can negatively impact the social experiences and the interpersonal relationships that diagnosed individuals have with family, friends, and other important people in their lives.

4.2.1 The Experience & Impact of Peer-Rejection

Friendships can be particularly difficult for children with ADHD, and peer-rejection is commonly experienced by these individuals. Research suggests that children with ADHD may experience such difficulties from a very early age, particularly if they display symptoms of hyperactivity (American Psychiatric Association, 2013b). These individuals are "significantly more likely to have few or no friends...and to be rejected or avoided by other children in both the preschool and school age periods" (Berry, Shaywitz & Shaywitz, 1985, p. 805). Such findings illustrate the extreme difficulties that symptoms associated with ADHD may inflict on one's inability to form and maintain lasting friendships, as others may simply find these symptoms difficult to endure. Additionally, these findings show that friendship difficulties may begin early in life for those affected by ADHD.

Because peer relationships teach children skills necessary for successful social functioning, peer rejection can lead to a variety of negative outcomes with lasting consequence. Hoza (2007, p. 655) specifically found that peer rejection can lead to delinquency, early school leaving, substance abuse, academic difficulties, truancy, and psychological maladjustment. To this list, Mrug et al. (2012, p. 1023) add smoking, anxiety, and global impairment, especially during the period of middle

adolescence, thereby illustrating the serious implications peer-rejection can impose on those diagnosed with ADHD.

4.2.2 ADHD Subtype, Gender, and Differences in Peer Relationships

Researchers have also considered the role that ADHD subtype may play in determining the social and relational impact of ADHD, particularly among females. Children with primarily inattentive type ADHD (ADHD-I) may appear as shy, withdrawn, and passive (Hodgens, Cole & Boldizar, 2000; Maedgen & Carlson, 2000) and females with this subtype may be more likely than similarly diagnosed males to have fewer friends and experience bullying. Research has found that:

Although boys and girls with ADHD experienced difficulties in all areas, girls with ADHD, especially the inattentive subtype, were more negatively affected in academics and peer relationships. Inattentive girls were less popular and more likely to be bullied than girls without ADHD, whereas inattentive boys were not (Elkins et al., 2011, p. 532).

Aggression is another important factor in the peer relationships of children with ADHD. It is believed that girls with ADHD exhibit fewer instances of *overt* aggression and conduct problems than do boys (Newcorn et al., 2001), however, girls are also thought to be more likely to engage in *covert* forms of aggression (Sassi, 2010). Relational aggression may impose significant social costs, especially for girls with combined type ADHD (ADHD-CT), and research by Zalecki and Hinshaw (2004, p. 135) concluded:

Girls will dislike and not want to befriend other girls (with or without ADHD) who are overtly or relationally aggressive. However, in terms of being liked, ADHD-I or nondiagnosed girls who are aggressive (overtly or relationally) can still have female peers who want to be their friends. Such was not the case for girls with ADHD-CT.

Social norms and gender expectations may also influence the level of peer acceptance experienced by young women with ADHD. Behavioural deviations in girls, especially those related to hyperactivity and impulsivity, may be less socially accepted by female peers, as compared to "when boys engage in the same behaviour" (Sciberras, Ohan & Anderson, 2012, p.255). Zalecki and Hinshaw (2004) also theorize that the increased experience of peer rejection among females with ADHD-C may be due to their inability to detect and respond to subtle social cues in others, or to the lack of the inhibitory skills that would allow themselves to appropriately control their behaviour.

4.2.3 Peer Perspectives of Those Diagnosed with ADHD

A few studies have considered children's perspectives of those diagnosed with ADHD, as well as other mental health conditions. Swords, Heary, and Hennessy (2011) examined factors in the peer acceptance of children and adolescents with mental health problems among Irish children (ages 6-16 years). Using a series of vignettes describing children with characteristics of either depression or ADHD, it was determined that the level of social acceptance experienced by a child with a condition such as ADHD or depression was ultimately related to the age and gender of the child's peers, as well as how personally responsible the peers believe the child was for his or her condition. Age was a particularly significant factor for the acceptance of persons (male and female) with ADHD, as older participants typically gave higher ratings of acceptance to the vignette characters with ADHD, and less acceptance to the male depressed character (Swords, Heary & Hennessy, 2011, p. 939).

Similarly, Bellanca and Pote (2012) used a series of vignettes to examine the perspectives of children in the United Kingdom (7 to 11 years) towards ADHD, depression, and learning disabilities (LD). Participants showed more negative attitudes towards the ADHD and depression (mental health) vignettes, than towards the LD. These researchers concluded that increased levels of negativity towards those with mental health conditions may be due to the fact that children are less knowledgeable about these issues, than they are about learning disabilities, as students with LD commonly receive obvious assistance and support in the classroom.

4.3 The Impact of ADHD on Families

The research literature has firmly established that ADHD can negatively impact family functioning and relationships. Much of the research in this area includes not only persons diagnosed with ADHD, but also their siblings and parents.

A small number of studies have examined sibling relationships among persons diagnosed with ADHD, and findings suggest that these relationships can be particularly difficult. For example, Kendall's (1999, p. 117) research explored sibling perceptions of ADHD using interview and diary data. Some participants felt "victimized by their ADHD sibling" and also reported feeling that their victimization was "minimized or overlooked" by the family. This study stressed the need for increased social and mental health services for all family members, not just the individual diagnosed with ADHD. More recent work by Mikami and Pfiffner (2008) compared the quality of sibling relationships among children with ADHD, to those without. Increased levels of conflict were experienced in the sibling relationships of those diagnosed with ADHD, along with lower levels of warmth and closeness.

Parents of children with ADHD have also been engaged in a significant amount of research, and many of these studies attest to the power of ADHD to compromise the health and harmony of family relationships in the home. The *Survey of ADHD in Irish Children* (Fitzgerald, 2007) included 150 parents and explored the daily impact of ADHD on family life, among other areas. An overwhelming 83% of parents experienced stress associated with their child's condition, and 79% of parents reported that their child's symptoms "often" or "always" impacted on family life, particularly when the child was unmedicated.¹³ Similar findings were also reported by Lange et al. (2005) who researched families living in Ireland with young male children diagnosed with either ADHD, depression, or anxiety disorder. Families of children with ADHD and emotional disorders reported higher levels of stress, deficits in family functioning, lower levels of social support and lower levels of parenting satisfaction (Lange et al., 2005, p. 17). Like the research cited above by Kendall (1999), this study also emphasised the importance of providing whole-family support and parenting-skills training to families of children diagnosed with ADHD and other emotional conditions (Lange et al., 2005, p. 19).

Only one study was located which specifically focused on the experiences of parents of teenage daughters diagnosed with ADHD. Parents reported facing "significant and repeated problems" in parenting their teenage daughters and some admitted, "they were tired of being a parent and wanted someone else to take over the parental responsibility for their daughters" (Hallberg et al., 2008, p. 55). As this quote illustrates, the findings of this study draw attention to the serious difficulties that some parents faced in raising a daughter with ADHD—difficulties which were so bothersome, that some parents wished they could abdicate their responsibilities in raising their daughters, due to the severe issues that ADHD imposed. These findings help illuminate the fact that ADHD is a serious issue for some teenage girls—one which can determinately and pervasively impact family life.

4.4 ADHD in the Educational Context

A large amount of research has taken place on the educational and academic impact of ADHD, and the condition is strongly associated with poor academic performance and attainment outcomes (American Psychiatric Association, 2013b). The following chart outlines the general characteristics of

¹³ While it is clear that participants in this study strongly associated the use of pharmacological treatments with greater academic and familial outcomes, it is important to interpret these findings with caution as this study was funded by the pharmaceutical company Eli Lilly & Co. (Ireland) Ltd.

the present body of research literature in this area, many of which provide a justification for this present study.

Predominant Characteristics	Resulting Implications
Quantitative methods predominate	Main areas of study include: academic achievement and
	outcomes, and assessment of the effectiveness of school- based interventions.
Qualitative methods are employed less	Research has been conducted largely with parents and
frequently	teachers. Fewer qualitative studies have directly engaged students with ADHD.
Focus on children and younger adolescents	Most studies have been situated in primary schools. Fewer have considered the second and third level contexts. Older adolescents and young adults (ages 15+) are less frequently engaged in research.
Male participants outnumber female	Females are significantly underrepresented in educational studies of ADHD.

Table Three: Characteristics and Implications of Research on the Educational Impact of ADHD

4.4.1 ADHD and Academic Achievement

Numerous studies have examined the impact of ADHD on academic achievement and future outcomes (for example see: Barnard-Brak, Sulak & Fearon, 2011; Massetti et al., 2008; Merrell & Tymms, 2001) and the condition has been linked to numerous negative outcomes such as poor grades, poor reading and math standardized test scores, increased grade retention, increased use of school based services, increased rates of detention and expulsion, and low rates of high school graduation and postsecondary education (Loe & Feldman, 2007, p. 643). Additionally, children with ADHD have been found to underperform academically, relative to expectations given their intellectual abilities (DeShazo Barry, Lyman & Klinger, 2002).

However, the level of difficulty often differs among persons diagnosed with ADHD, as variability has been observed within the presentation, severity, and causes of academic impairments in those affected by the condition. DuPaul and Langberg (2015) suggest that some academic impairments result from behavioural issues (i.e. inattention, distractibility, and restlessness), others from skills deficits, and others from issues related to executive functioning (i.e. self-regulation and decision making). "Each of these problems alone, or in combination, can lead to the occurrence of negative educational outcomes (DuPaul & Langberg, 2015, p. 169), thereby illustrating that students with ADHD often face multiple barriers in academic achievement. Symptom severity may also impact the academic performance and outcomes of students with ADHD (Scholtens, Rydell & Yang-Wallentin, 2013). A study of children diagnosed with ADHD (ages 8-14 years) who were compared to controls, concluded that more severe behavioural symptoms may lead to a more negative impact on school performance (DeShazo Barry, Lyman & Klinger, 2002). Similar findings were also confirmed in a recent study of adolescents with ADHD (aged 15 and 16), which determined that:

ADHD symptoms were the most significant independent psychopathological predictor of academic performance, and were almost as significant as motivation and cognitive ability. The results suggest that adolescents with more ADHD symptoms are likely to encounter greater academic difficulties (Birchwood & Daley, 2012).

Unfortunately, it has also been shown that academic difficulties associated with ADHD typically persist well into adolescence and adulthood (DuPaul & Langberg, 2015; Loe & Feldman, 2007).

4.4.2. Gender Differences in Academic Performance

A number of studies have also considered whether there are gender differences in the academic performance of boys and girls with ADHD. Characteristic of the larger body of ADHD research, most studies include significantly more male than female participants, and the majority consider differences in primary-school age children, with fewer studies of older adolescents and adults.

Additionally, it is important to note that most of these studies compare the achievement of girls with ADHD, against boys with ADHD, while fewer consider the achievement of girls with ADHD against nondiagnosed females. As such, it may be the case that previous research more aptly provides an indication of whether girls with ADHD are performing better or worse, than affected boys, *rather than considering the performance of girls with ADHD relative to other females and gender-specific achievement norms*.

The early meta-analysis of gender differences in ADHD conducted by Gaub and Carlson (1997) found there were no gender differences in the academic difficulties experienced by males and females with ADHD, among other areas. Similar findings were reported by DuPaul et al. (2006) in their investigation of gender differences in the academic, social, emotional, and behavioural functioning of elementary aged children who met the diagnostic criteria for ADHD. These researchers concluded that boys and girls with ADHD showed "the same degree of impairment in school functioning" (DuPaul et al., 2006, p. 299). In contrast, the *Meta-Analytic Review of Gender Differences in ADHD* conducted by Gershon (2002, p. 143) found that girls with ADHD exhibited greater intellectual impairments than males. However, in another study which collapsed ADHD subtypes into a single unit, boys with ADHD

performed more poorly overall in school functioning (Graetz, Sawyer & Baghurst, 2005). Based on the research cited above, it is clear that researchers have failed to reach a consensus regarding whether ADHD impacts the academic performance of males and females differently. Yet, it seems clear that both genders face challenges in attainment.

4.5 School-Based Interventions

Due to the strong association between ADHD and negative academic outcomes, a significant amount of research has been conducted on school-based academic and behavioural interventions. Although pharmacological therapies are commonly prescribed in the treatment of ADHD, some believe that school-based interventions are critical components for students with the condition (DuPaul, Weyandt & Janusis, 2011).

School-based interventions have shown great promise for helping students to improve their behavior and academic achievement. A meta-analysis examining the efficacy of contingency management, academic interventions, and cognitive-behavioural strategies reported moderate to large effects, and suggested that the combination of academic interventions with contingent behavioural strategies provided the greatest outcomes and improvements for students, in both mainstream and special education settings (DuPaul, Eckert & Vilardo, 2012). It is also speculated that such evidenced-based interventions in the school setting could potentially reduce the need for special education placement and services for students with ADHD (Owens et al., 2012).

Although there's a seemingly endless number of suggested ADHD interventions and strategies available to teachers, most have not been empirically researched, and the majority are geared towards younger children—few have been developed or tested for use with older students (Evans et al., 2007). Given the young adult population included in this study, the following review of academic and behavioural interventions will focus on those solutions which are more appropriate for students in second-level schools.

4.5.1 Academic Interventions

Academic interventions typically aim to reduce the negative impact of ADHD on students' educational attainment and outcomes. Those with the highest level of effectiveness typically address specific academic skills deficits (DuPaul, Eckert & Vilardo, 2012, p. 407), thereby helping students to develop strengths in areas such as studying, note taking, and test taking.

Peer tutoring has been considered specifically for students with ADHD (Plumer & Stoner, 2005). A study of the effects of "class wide peer tutoring" on the behaviour and academic performance of children with ADHD reported overall positive gains, with participants experiencing increased

engagement with academic tasks and reductions in off-task behaviour, as a result of this intervention (DuPaul et al., 1998). Specific programmes have also been designed to address skills deficits that students with ADHD commonly encounter. Within American middle-schools, The *Challenging Horizons Program* was found to significantly reduce or delay failure experiences of students with ADHD (Schultz, Evans & Serpell, 2009), while the *HOPS: Homework, Organization, and Planning Skills* program produced lasting improvements for students with ADHD in the areas of organisation, planning and homework completion (Langberg et al., 2012).

Personal Best (PB) Goals are a newer construct for students with ADHD, and these are "specific, challenging, competitively self-referenced targets towards which students strive" (Martin, 2012, p. 91). In a study of 87 students with ADHD and 3374 non-ADHD peers, a positive correlation was found between PB goals and academic achievement and behaviour for all participants, which suggests the effectiveness of these goals may generalize across groups (Martin, 2012). However, despite reported gains, the present body of ADHD research in Ireland appears to suggest that interventions such as those mentioned above, are not commonly utilised for students within Irish schools.

4.5.2 Behavioural Interventions

Given that students with ADHD may experience behavioural issues in the classroom, which can further impact their academic achievement, a number of strategies have been developed to address these difficulties. While many of these appear more suitable to the primary school setting, some of these interventions can be modified for use with older students.

The practice of teaching self-monitoring skills to students with ADHD is an increasingly popular intervention, as students are taught to observe, record and assess their own behaviours (Harris et al., 2005). These practices are thought to promote greater levels of self-awareness and control. A recent study by Wills and Mason (2014) followed two students (ages 14 and 15) who used the self-monitoring application "I-Connect" which was delivered via a tablet. The intervention resulted in positive and stable improvements in on-task behaviours for both students.

Daily report cards (DRCs) have also proved beneficial in promoting positive behavioural change in the classroom behaviour of students with ADHD. DRCs hold a number of benefits for students and teachers alike—they are simple to use and provide descriptive and immediate feedback (Vannest et al., 2010) to students in areas specifically targeted for improvement. Additionally, they require less time than other interventions (Barkley, 1997). In one study, the implementation of a DRC system helped students with ADHD and other disruptive behaviours to experience significant benefits over the first month of implementation, with continued incremental benefits into month 4 of the intervention (Owens et al., 2012). However, research by Fabiano et al. (2010) produced mixed results

for the DRC. Although positive results were observed in areas such as classroom functioning and academic productivity, the intervention did not help to improve academic achievement, teacher ratings of ADHD symptoms or impairments, or the student-teacher relationship.

4.6 The Academic Experience of Students with ADHD

A surprisingly few number of studies have directly considered the school experiences of persons with ADHD, and those which have, largely report grim findings which appear consistent across age groups, level of schooling, and gender.

Using a case study design, Knezevic-Floric, Znkovic and Ninkovic (2012) examined the school experiences of 8 children with ADHD (2 girls, 6 boys; ages 7 to 10) living in Serbia. Children reported negative school experiences which appeared strongly linked to teacher behaviours. Teachers in this study were reported to have criticized and punished the children, and the researchers concluded that such actions were likely the result of teachers not understanding the causes of ADHD. They also called for more comprehensive training for teachers on the condition.

Students with ADHD also appear to continue to experience academic difficulties in second-level. A study which compared the high school academic experiences of males with ADHD to those without, found that those with the condition experienced significant impairment, lower overall grade point average (GPA), lower levels of class placement, and higher rates of course failure. Teacher reports also identified that students with ADHD turned in fewer homework assignments than their non-ADHD peers, and were failing to work up to their potential (Kent et al., 2011, p. 451).

Other studies have found that students with special educational needs, such as ADHD, often feel unsupported in school. In a study of support experiences among young adults with Asperger's (AS) and ADHD (ages 20 to 29 years; 10 with AS, 3 with ADHD), participants commonly experienced academic, social and emotional difficulties in school. Support for learning was often fragmented, occasional, and typically associated with specific teachers. This study concluded that "academic support, combined with support for social relations and emotional well-being at school, seemed to be crucial for the students' learning progress" (Bolic Baric et al., 2016, p. 191). Therefore, such findings emphasise the importance of ensuring that students with ADHD and other SEN, both feel and perceive they are supported, particularly during the later years of their schooling. As noted above, academic, social, and emotional supports were viewed by young people as important factors which contributed to their academic success, but which according to their experience, were often lacking.

4.6.1 The Experience of Students with ADHD in Irish Schools

Very few studies have considered the academic experience of students with ADHD in Ireland, and those which have report similar findings as noted above. Senior (2004) conducted one of the first study in Ireland to consider the views and experiences of parents and sons (ages 10 to 21 years) living with ADHD. This study included an assessment of the level of educational provision afforded to participants (Senior, 2004, p. 64) and found that many of the young men experienced serious difficulties in school, while some parents firmly believed the educational system failed to meet the needs of their child. Reasons cited for this failure included lack of knowledge and understanding of ADHD, lack of proper resources, and difficulties gaining access to entitlements, among others (Senior, 2009, pp. 96-97).

More recently, McIntyre (2012) studied ADHD through the multiple perspectives of boys diagnosed with the condition (ages 7 to 12 years), and their parents and teachers. Similarly, the young boys revealed extremely negative perceptions towards school, calling it "a torture zone," "one of my most hated things," and feeling that "it shouldn't have even been invented" (McIntyre, 2012, p. 64). Many of the boys found themselves constantly in trouble, especially within the school setting, but often failed to understand why. These studies illustrate that students diagnosed with ADHD in the Irish context also commonly encounter difficulties in their educational experiences throughout primary and second-level schooling.

4.7 Teachers and ADHD in the School Setting

A significant amount of research on ADHD has engaged teachers as participants, likely as a result of the important function they provide in supporting these students within the classroom context. Indeed, it is recognised that teachers have the potential to "play a major role in creating an environment that is conducive to the academic, social and emotional success for children with ADHD" (Topkin, Roman & Mwaba, 2015, p. 1), and therefore, teachers are clearly viewed as essential to the process of inclusion for students with this condition.

4.7.1 Knowledge of ADHD

Numerous studies have examined the knowledge and attitudes of teachers regarding ADHD (e.g. Kos, 2008; Ghanizadeh, Bahredar & Moeini, 2006; Vereb & DiPerna, 2004). Early research by Sciutto, Terjesen and Bender Frank (2000) found that exposure to a child with ADHD and years of teaching experience were some of the factors most positively related to knowledge of ADHD. However, such findings were challenged in a study which compared knowledge of ADHD among in-service and preservice primary school teachers. Although teachers with more experience often *perceived*

themselves as more knowledgeable about ADHD, there was no relationship found between knowledge of the condition and years of teaching experience (Kos, Richdale & Jackson, 2004). However, these researchers did agree with Sciutto, Terjesen and Bender Frank's (2000) assertion that direct experience of a student with ADHD significantly increased teachers' actual knowledge of the condition. Such findings may also suggest that the education of teachers about conditions such as ADHD has not yet substantially increased.

Although personal experience may lead to better understanding of ADHD, more recent studies appear to suggest that teacher knowledge of ADHD remains overall, quite poor (Perold, Louw & Kleynhans, 2010). Ward (2014) administered the *Knowledge of Attention Deficit Disorders Scale* (KADDS) to 90 teachers from 11 primary schools in Ireland, and established that while teachers appeared to understand the symptoms and diagnosis of the condition, they lacked information related to associated features and treatments (Ward, 2014, p. 489). Similarly, a study of high-school teachers' knowledge and attitudes towards ADHD and Learning Disability (LD) found that knowledge of both conditions was low, however, those working in special education were more knowledgeable and understanding than mainstream classroom teachers (Brook, Watemberg & Geva, 2000). Forty-three percent of teachers in this study believed that students with ADHD should attend special schools, and almost 40% believed that pupils with ADHD should be rebuked and/or punished in a manner similar to non-ADHD students. This is a telling statistic, which may indicate that teachers feel frustration due to the behaviour of students with ADHD, and therefore feel that punishment should be enacted. Too, it may signal that teachers feel the ADHD label should not be used as a reason to exempt students from the consequences of their behaviours.

4.7.2 Teachers' Attitudes & Expectations Towards Students with ADHD

Very few studies have considered teacher perceptions of students with ADHD, and this is particularly true of adolescent students (Rush & Harrison, 2008). However, studies in this area show that teachers commonly foster negative attitudes and expectations toward students with ADHD. Online research with public school teachers in Sydney, Australia, found that some teachers held negative feelings related to the teaching of these students. They were often irritated by behaviours associated with the condition, especially when displayed in the classroom, and perceived these behaviours as a cause of stress (Mulholland, Cumming & Yup Jung, 2015, p. 30).

Research also suggests that the ADHD label can influence teachers to view the child negatively. Batzle et al. (2010) asked teachers to read a hypothetical description of a male or female child with either a) no label, b) an ADHD label, or c) an ADHD with stimulant treatment label. Teachers rated the children with the "ADHD" and "ADHD with stimulant treatment" labels less favourably, than those

without. In their research with teachers, Ohan et al. (2011, p. 94) also found that "labeling a child as having ADHD increased participants' negative expectations about the severity of the child's problems, elicited more negative emotions, and decreased participants' confidence in their ability to instruct the child." Such findings illustrate the serious and negative effect that the ADHD label can have on teachers' views and relationships with students who bear this designation. Part of this impact may be related to the negative public press that ADHD has received, as well as the social criticisms which are commonly lodged against the construct (see Chapter Two for a review of such critiques). In light of these issues, it may be the case that teachers are consequently distrustful of the ADHD label, which they may lack understanding of, and therefore are led to see it as an "excuse" for difficulties encountered in students, rather than viewing ADHD as a valid diagnostic label with real effects for students.

4.7.3 Attitudes & Expectations of Irish Teachers Towards Students with ADHD

It appears that Irish teachers hold similar attitudes and expectations of students with ADHD as expressed in the previous section. In research by Kirby (2003, p. 104), primary school teachers reported feeling "daunted by the task of teaching children with ADHD," citing "class size" and "multiple classes" as roadblocks to providing personalised learning programmes for children. Teachers found it "extremely difficult to juggle the demands of the already overstretched curriculum and to adequately cater for the varying needs of those with ADHD" (Kirby, 2003, p. 116). Although they were generally supportive of inclusive practices in mainstream education, some teachers expressed concerns that the needs of some students may be "too great for the mainstream system as it presently existed" (Kirby, 2003, p. 116). Similar sentiments were expressed by post-primary educators in a case study conducted by Costelloe (2002). Teachers reported distressing feelings of "apprehension and disquiet" related to teaching students with ADHD, along with perceptions of personal "incompetence and stress" in coping with and meeting the needs of students with SEN (Costelloe, 2002, p. 84).

Hardiman (2015) conducted one of the first and only studies to specifically examine teacher and parent perceptions of young girls diagnosed with ADHD in mainstream Irish primary schools. Somewhat surprisingly in contrast to the views presented above, teachers in this study held generally positive attitudes towards young girls with ADHD, believing these students made "minimal" demands on them. In fact, "none of the teachers conveyed that teaching a girl with ADHD was stressful" (Hardiman, 2015, p. 48). The implications of this study suggest that gender does make a difference in how teachers view and relate to students diagnosed with ADHD. Consequently, it may be the case, particularly within the primary level, that teachers are less anxious about teaching girls with ADHD,

as compared to males who may be viewed as hyperactive and distracting, and more demanding on the teacher's time and patience.

4.8 Conclusion

As this chapter shows, ADHD can impact the social and educational experiences of diagnosed individuals, and gender may be a particularly important and useful construct in terms of framing and understanding the issues they face. Peer relationships can be extremely difficult for young people, who may find themselves rejected by others. Additionally, ADHD can also diminish the quality of relationships that young people experience with teachers, who may be prone to viewing students with ADHD negatively because of their diagnostic label. A number of studies have also shown that persons diagnosed with ADHD may experience significant difficulties in school, which can directly affect their academic performance and outcomes. While researchers have yet to definitively determine whether gender differences exist in the academic performance of males and females diagnosed with ADHD, it is clear that academic and behavioural interventions can substantially improve their experiences and produce positive outcomes.

In light of the challenges that ADHD imposes within the educational context, the next chapter examines special educational practice and provision in Ireland, with a special focus on how the needs of students with ADHD are catered for in Irish second-level schools.

Chapter Five: Special Educational Provision in Ireland

5.1 Introduction

The Department of Education and Skills (DES) is responsible for developing educational policies and practices in Ireland (National Council for Special Education, 2011, p.9), where the mainstream inclusion of students with special educational needs (SEN) is a primary goal, and is mandated in educational law, policy, and related literature.

This chapter explores the development of special education provision within the Irish educational system and considers how "special needs" are conceptualised and supported. Difficulties and criticisms associated with such practices are also considered, particularly as related to the question of whether students with SEN are *integrated* or *included* in mainstream classrooms. Additionally, a review is conducted of newly proposed changes which endeavour to increase the equitability of SEN provision, thereby making it more supportive and responsive to the needs of students. This chapter then concludes with a brief consideration of the implications of contemporary SEN practices for students with ADHD.

5.2 Defining "Special Educational Needs"

In recent years, the definition of what constitutes a "special educational need" has rapidly evolved and expanded. The *Education of Persons with Special Educational Needs Act 2004* (the "EPSEN Act") provides the working definition of SEN utilised within the Irish context today:

"Special educational needs" means, in relation to a person, a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition (Republic of Ireland, 2004, p. 6).

The expansion of this definition has been largely influenced by policies and practices which aim to create increasingly inclusive educational systems (Banks & McCoy, 2011, p. 1). As the trend towards inclusion continues, it is likely that we will see this definition continue to grow and evolve well into the future.

5.3 Historical Development of Special Education in Ireland

Prior to the 1950s, few educational supports were available for persons with general learning disabilities, then termed as "mental handicap" (National Council for Curriculum & Assessment, 1999,

p. 5). Separate institutional provision for persons with SEN was the norm in practice, and Kenny et al. (2000, p. i) explain that "the Irish education system was developed on the basis of a narrowly defined concept of normality. In mainstream schools what the non-disabled majority required was deemed to suffice for all." Therefore, it is clear that little consideration was given to the differing needs of students at this time.

The 1950s saw the establishment of "special schools" specifically for the purpose of educating those with special learning needs, and these schools were typically run by voluntary organisations and religious orders (National Council for Curriculum & Assessment, 1999). By the 1960s, special schools could be found in nearly every county of Ireland where they largely operated independently from mainstream schools (National Council for Curriculum & Assessment, 1999, p. 5). In areas where the building of a special school was not feasible, classes for students with general learning disabilities would be offered in the local mainstream school (National Council for Curriculum & Assessment, 1999, p. 5). Education in this time period, both in Ireland and Internationally, was largely marked by segregation between "handicapped" and "normal" students (Kenny et al., 2000, p. 9), and well into the 1980s, discourse was significantly influenced by the medical model which saw special needs as a defect in the child, and thus aimed to teach the deficient skills (Costello, 1999).¹⁴ While perhaps well-intentioned, in reality however, this deficit model often "narrowed the learning opportunities afforded to pupils" (Rose, 2007, p. 299). As such, these educational approaches may not have always resulted in the greatest outcomes for students with special needs.

During the 1990s, Irish educational policy and practice witnessed dramatic shifts that would change the face of SEN provision. In 1993, the *Report of the Special Education Review Committee* called for the integration of students with SEN into "ordinary schools," and advocated the least amount of segregation possible (Republic of Ireland, Department of Education & Science, 1993, pp. 19-20). Internationally, the *Salamanca Statement and Framework for Action on Special Needs Education* promoted the inclusion, rather than segregation, of students with SEN as the new norm, and celebrated inclusive education as "the most effective means of combating discriminatory attitudes, creating welcoming communities, [and] building an inclusive society and achieving education for all" (UNESCO, 1994, p. ix). In 1995, the document *Charting our Education Future: White Paper on Education*, articulated a vision for education in Ireland, one based on the principle ideas of pluralism, equality, partnership, quality, and accountability for all students (Republic of Ireland, Department of Education & Science, 1995, p. 8). Such a vision was also supported in *The Education Act* of 1998 which issued continued calls for the full inclusion of persons with SEN, while placing special responsibility on

¹⁴ For a review of this model, see Chapter Two: *Models for Understanding ADHD*.

schools in providing for each student according to their particular needs and abilities (Republic of Ireland, *Education Act, 1998*, p. 13).

Following precedents set by earlier documents, *The EPSEN Act 2004* (Republic of Ireland, 2004, para. 2, p. 7) provided the broad definition of special educational needs which is still in use today. Additionally, this Act specifically defined the conditions under which persons with SEN shall be educated in Irish schools:

A child with special educational needs shall be educated in an inclusive environment with children who do not have such needs unless the nature or degree of those needs of the child is such that to do so would be inconsistent with a) the best interests of the child...[and/or] b) the effective provision of education for children with whom the child is to be educated (Republic of Ireland, EPSEN Act, 2004, p. 7).

The EPSEN Act also emphasized the role of professional/medical assessment and diagnosis of special educational needs, and established the National Council for Special Education (NCSE) (Republic of Ireland, EPSEN Act, 2004). Additionally, it mandated the use of Individual Education Plans (IEPs) for students with diagnosed difficulties, however this aspect of the Act has yet to be fully enacted. According to Rose et al. (2015, p. 2), this lack of full implementation "has resulted in uneven policy development on establishing inclusive schooling." This, and other critical issues, will be discussed later in this chapter.

5.4 Special Education in Ireland Today: Guiding Principles

The modern Irish educational system has articulated its goal of creating "a society where children and adults with special educational needs receive an education that enables them to achieve their potential" (National Council for Special Education, 2013, p. vii; National Council for Special Education, 2012, p. vii). To this end, the inclusion of students with SEN in mainstream classrooms is now standard educational practice in Ireland.

The Department of Education and Science presently recognizes fourteen broad categories of special educational needs including physical disabilities, emotional disturbance, general and specific learning disabilities, as well as speech and language difficulties, and disorders on the autistic spectrum (Republic of Ireland, Department of Education & Science, 2007, p. 132).

Table Four: Categories of Disability Recognised by the Department of Education¹⁵

Category	Example of Disability
Physical disability	Cerebral palsy; Dyspraxia
Hearing impairment	Partially or completely deaf
Visual impairment	Partially or completely blind
Emotional disturbance	Attention deficit/hyperactivity disorder; Obsessive compulsive disorder; Oppositional defiant disorder
Severe emotional disturbance	As above but can be more extreme and as a result of other factors
Borderline mild general learning disability	IQ range 70-80, may have difficulties in one or more areas of cognition and learning
Mild general learning disability	IQ range 50-70
Moderate general learning disability	IQ range 20-50
Severe/Profound general learning	IQ range below 20
disability	
Autism/Autistic spectrum disorders	Asperger's syndrome
Specific learning disability	Dyslexia; Dyscalculia; Dysgraphia
Assessed syndromes	Down syndrome; Tourette syndrome; William's syndrome
Specific speech and language disorder	Verbal dyspraxia
Multiple disabilities	A combination of two or more of the above

Common discourse in Irish educational policy and practice envisions special educational needs as occurring on a continuum (National Council for Special Education, 2012; Government of Ireland, Department of Education & Science, 2007). According to Kenny et al. (2000), this view stems largely from an understanding which now sees disabilities as only forming one part of the person, rather than defining their entire identity. As a result, today there are an array of educational supports for students with SEN which cater to the needs of the whole person. Supports include early education programs, special supports for students with SEN in mainstream primary and post-primary schools, programs for students in special schools and classes, home tuition, and health care provisions (National Council for Special Education, 2011, p. 11).

¹⁵ Chart borrowed from Scanlon (2011, p. 152).

5.5 Prevalence of SEN in Ireland

It is difficult to determine the exact prevalence of students with SEN in the Irish population and estimates vary widely. For example, the *Census of Population 2006* reported that 9.3% of the total population was affected by a disability, while in the same year, the National Council for Special Education nearly doubled the Central Statistics Office estimate to a staggering 17.7% (cited in Banks & McCoy, 2011, p. 82). Using the definition of SEN as promoted in the *EPSEN Act 2004,* Banks and McCoy (2011, p. 96-97) estimate that approximately 25% of Irish children have special educational needs, with boys more commonly affected than girls.

As mentioned in Chapter Three, ADHD is estimated to affect between 8,000 to 43,000 Irish children under the age of 14, and approximately 6,000 to 31,000 persons between the ages of 15 to 24 years (Reilly, 2009, p. 7).

5.6 ADHD and the SEN Spectrum

Irish educational policy categorises ADHD as an *emotional disturbance and/or behaviour problem* (EBD). Pupils with EBD are defined as those who:

Are being treated by a psychiatrist or psychologist for such conditions as neurosis, childhood psychosis, hyperactivity, attention deficit disorder, attention deficit hyperactivity disorder, and conduct disorders that are significantly impairing their socialisation and/or learning in school (Republic of Ireland, Department of Education & Science, 2005, p. 18).

It should be noted that Irish policy documents from the early 2000s, such as the one noted above, commonly distinguish between "Attention Deficit Disorder" (ADD) and "Attention Deficit Hyperactivity Disorder" (ADHD). In some cases, both are referred to as "attention control difficulties" (Republic of Ireland, Department of Education & Science, 2005, p. 3). It could be argued that the use of such terminology may have simply reflected the popular understanding of ADHD at the time these documents were published. However, writing one year later, Nigg (2006, p. 6) refers to the term ADD as the "somewhat misleading former name" for ADHD (Nigg, 2006, p. 6), and elsewhere notes that ADD is "the old term for ADHD" (Nigg, 2006, p. 3). Therefore, such considerations raise questions concerning the amount of contemporary medical and psychological scholarship which undergirded the development of Irish SEN policy documents in this time period, as the use of such terms conveys the image that understanding of ADHD in particular, may have been somewhat delayed.

Interestingly, the document cited above by the Department of Education and Science (2005), makes only one reference to the DSM-4 (the version in use at the time when the document was written) and

the ICD-10, which are both in relation to discussion on Autism/Autistic Spectrum Disorder (ASD). Beyond these notations, this document does not reference any other medical or psychological literature. Given that the above categorisation and definition of ADHD appears to focus heavily on the social and behavioural effects of the condition, it could be said that the writers failed to fully acknowledge the medical, biological, and psychological implications of ADHD. This failure may lead to some confusion around the conceptualisation of the ADHD construct, and encourage Irish educators to see the condition simply as a matter of behaviour. Additionally, this could lead some to question the medical and biological legitimacy of the condition—which could potentially hold particular negative social and educational ramifications for students diagnosed with ADHD, as will be discussed in later chapters of this thesis.

5.7 SEN Provision for Students in Mainstream Post-Primary Schools

In mainstream post-primary schools, students with SEN may be educated in regular classes with non-SEN peers, or in special classes—either individually or in a group setting. Students are largely supported by the mainstream teacher, but may also receive assistance from learning support, resource teachers, and in some cases, their care needs may be met by a Special Needs Assistant (SNA).

Post-primary educational policy clearly maintains that the support of students with SEN is not the sole responsibility of special education teachers—rather, SEN provision should take place on a whole-school level. As such, mainstream post-primary classroom teachers occupy a *key role* in the successful inclusion of students with SEN, not only in terms of developing appropriate educational programs, but also in identifying students "at-risk" for developing learning difficulties, and who may be in need of professional assessment (Republic of Ireland, Department of Education & Science, 2007, p. 71-72).

Indeed, Rose (1998, p. 34) argues that collaboration, especially between special-education and subject teachers, is extremely important, for "Unless the subject teacher accepts responsibility for collaboration with the support teacher in the provision of appropriate methods of access, the pupil may well be denied the curriculum opportunities to which he or she is entitled." In supporting a collaborative approach to SEN provision, the Department of Education encourages the formation of "special educational needs support teams" (Republic of Ireland, Department of Education & Science, 2007) in post-primary schools with the aim of merging the professional expertise of all educators to more effectively support students with SEN (Republic of Ireland, Department of Education & Skills, 2014b).

5.8 Supporting Post-Primary Educators

It is recognised that the post-primary school setting presents its own unique challenges in relation to supporting students with SEN (Republic of Ireland, Department of education & Science, 2007). As a result, a number of official resources have been developed to assist post-primary educators in the successful inclusion of students with SEN. Published in 2007, *Inclusion of Students with Special Educational Needs Post-Primary Guidelines* (Republic of Ireland, Department of Education & Science, 2007) was the first document to directly address inclusion in the post-primary setting, calling for a whole-school approach to provision, while outlining the roles and duties of educators, discussing the use of IEPs, and suggesting effective teaching strategies.

A Continuum of Support for Post-Primary Schools: Guidelines for Teachers (Republic of Ireland, Department of Education & Skills, 2010a) continues to emphasise areas such as the role of whole school support, forming student support teams, and utilising IEPs. This document and its accompanying *Resource Pack for Teachers* also cover strategies and interventions that can be utilised in more select instances, and provides documents for planning and assessment purposes (Republic of Ireland, Department of Education & Skills, 2010b).

To date, the DES has published only two other support documents for educators in the post-primary level, one which addresses mental health and suicide prevention (Republic of Ireland, Department of Education & Skills, Health Service Executive & Department of Health, 2013), and the other which aims to promote the development and evaluation of student support teams (Republic of Ireland, Department of Education & Skills, 2014b). However, it should be noted that other support documents for second-level teachers have also been published by organisations such as The National Behaviour Support Service (NBSS) and the Professional Development Service for Teachers (PDST).

5.9 Criticisms of SEN Policy & Practice

As this chapter has shown, tremendous developments have occurred in Irish special education over the last sixty-five years, evidenced by the transition from no provision, to segregated provision, to provision for students with SEN in mainstream schools. Indeed, as Rose (2002, p. 67) asserts, "an increase in our understanding of how pupils with special needs learn and our endeavours to establish an education system which is more receptive to a greater range of learning difficulties may be heralded as one of the most significant developments within our education system." However, despite such gains, numerous criticisms have been lodged against both the policy and the practice of SEN provision in Ireland, which the following section now addresses.

5.9.1 Integration or Inclusion?

While policy documents articulate the goal of *full educational inclusion* for all members of Irish society, and they envision an educational system where individuals are "accommodated and celebrated" (Republic of Ireland, Department of Education & Science, 2007, p. 38), the road to the formation of inclusive schools in Ireland has not been easy. Indeed, "inclusion" is a contentious issue and debate continues regarding whether Irish educational policy has supported the "integration" or the "inclusion" of students with SEN in mainstream classrooms.

Ainscow (1999, p.218) defines inclusion "as a process of increasing the participation of pupils in, and reducing their exclusion from, the cultures, curricula and communities of their local schools." This is a process which places responsibility for continual flexibility and reorganisation on all members of the school community in an attempt to accommodate and meet the changing needs of students. This practice of inclusion is contrasted with that of integration, in which schools refuse to change in order to meet the needs of students. Instead, it is the responsibility of the student with SEN to conform and change in order to meet the demands of the school culture.

Although Irish policy documents promote the idea of inclusion as "rights-based" and "studentfocused," many question the level of inclusivity currently practiced within Irish schools. Considerable variability has been observed in both the level and degree to which such practices are utilized for students with special educational needs (Drudy & Kinsella, 2009, p. 659; Shevlin, Kenny & Loxley, 2008), and Kinsella (2009, p. 73) notes that inclusion presents particular difficulties for the Irish educational system given its unique characteristics and academic demands. Based upon the results of their case study, Drudy & Kinsella (2009, p. 659) unfortunately concluded:

[T]here is no consistent model of integrated or inclusive practice evident across the majority of Irish schools, as practices tend to vary considerably from school to school. It does not appear that Irish schools in general have undergone the restructuring that is required to effectively meet the needs of the vast majority of pupils who are presenting with difficulties. The indications are, therefore, that the practices generally adopted to respond to the needs of pupils with disabilities/special educational needs are derived more from the integrationist rather than from the inclusionist perspective.

Additionally, a recent study of longitudinal study of the experiences and outcomes of students with special needs in Irish schools found that while many schools reported to support inclusive practices, at the same time, they faced numerous challenges in terms of securing and providing the resources required for students with special needs (Rose et al., 2015, p. 53). Such findings therefore indicate that Irish schools and the educational system may indeed require significant additional reorganisation

before the inclusive and celebratory vision of the DES is truly recognised. However, despite such challenges, Rose (2003, p. 7) also acknowledges that the development of inclusive schools is important, not only from an educational standpoint, but also because such institutions can help to create a more inclusive society overall.

5.9.2 Lack of Teacher Training & Preparedness

Sharp criticisms have also been raised regarding the level of training and preparedness teachers receive for supporting students with SEN in inclusive classrooms. The National Council for Special Education (NCSE) asserts that students with special needs must have access to teachers who are qualified and experienced in the area of SEN (National Council for Special Education, 2013; National Council for Special Education, 2011). Historically, not all Irish initial teacher education (ITE) programs included SEN training. However, this trend has shifted in recent years and presently all ITE courses in Ireland must include input on inclusive educational practice and provision for special needs (The Teaching Council, 2011). Yet, significant inconsistencies have been identified between ITE courses which can vary significantly in terms of SEN content and theory, as well the level of personal interaction and practical experience afforded to pre-service teachers in working directly with SEN students (Ware et al., 2011, p. 16).

It has been argued that such inconsistencies in SEN teacher training may have led to the development of a teaching force that is largely ill-equipped to face the realities of inclusive classrooms. Critics have observed that "some classroom teachers lack basic knowledge of the educational implications of particular disabilities and/or SEN" (Shevlin, Kenny & Loxley, 2008, p. 146). Additionally, in-service teachers have perceived a lack of professional development offerings in the area of SEN that are directly relevant to their work (Ware et al, 2011, p. 145) and the particular needs of their students, thereby indicating that numerous improvements may be needed in both ITE and the professional development of teachers as related to special needs provision.

5.9.3 Support Allocation Based on Medical Assessment & Diagnostic Labelling

Historically, Irish SEN practice and provision has relied substantially on the psychological assessment of students in determining their particular needs and in allocating the appropriate supports (Griffin & Shevlin, 2011). This system was originally designed to ensure the availability of educational resources for those individuals who needed them most (National Council for Special Education, 2013, p. 5). In recent years however, a number of serious criticisms have been raised regarding the linking of medical diagnosis to the provision of educational supports. Researchers suspect that such practices may "reinforce advantage and confirm disadvantage" (National Council for Special Education, 2013, pp. 5-6), especially between families who can afford to pay for a private diagnosis, and those who cannot

and must therefore must wait, sometimes years, for assessment in the public healthcare system (National Council for Special Education, 2014; National Council for Special Education, 2013). Under this present system, students are also being labelled, sometimes at very early ages, with various medical conditions. This raises serious concerns regarding the impact of labelling on the child, and some critics question whether parents may use medical diagnosis solely for the purpose of obtaining additional educational supports, rather than primarily for health reasons (National Council for Special Education, 2014, p. 3; National Council for Special Education, 2013, p. 5).

As previously noted, while policy documents largely recognise that SEN typically occur on a spectrum, and no two children diagnosed with the same SEN will have identical needs, the present system uses a blanket approach to resource allocation and provides identical levels of support to all children within the same category of disability. As such, the system fails to appropriately recognise the differing level of needs that students may have (National Council for Special Education, 2014, p. 3; National Council for Special Education, 2013). According to Travers (2006, p. 157), this system of allocation was often rigidly applied and "ignored the differential needs of the children and militated against approaches such as small group work, paired work and, crucially, a range of appropriate in-class support methods to facilitate inclusion." This suggests that increased flexibility is needed in the classroom in order to more readily and appropriately respond to the unique needs of students—characteristics which the present system may be lacking.

5.10 A New Model of Resource Allocation

In response to these and other criticisms, a new model of resource allocation has been proposed for Irish schools (National Council for Special Education, 2014) based on the belief that it is unfair to require children to obtain professional diagnosis of difficulty before providing additional teaching supports (National Council for Special Education, 2014, p. v). The redesigned model of allocation aims to provide students with additional resources that are timely and efficient, and in levels which meet their individual requirements (National Council for Special Education, 2014, p. 4). This new model hopes to increase the flexibility of the educational system, while allowing schools to be proactive, rather than reactive, in identifying and responding to the needs of students (National Council for Special Education, 2014, p. 4).

Under the newly proposed model, allocation of resources to post-primary schools will no longer be determined by the number of enrolled students (National Council for Special Education, 2014, p. 5). Alternatively, allocation will be based on a holistic understanding of the school's "educational profile component" which considers the number of students with complex needs, the level of student attainment, and school demographics (National Council for Special Education, 2014, p. 6).

In summary, the NCSE believes such proposed changes will ultimately allow for the creation of an equitable system which allocates resources in a timely manner while removing the need for professional diagnosis and ensuring that students with SEN receive supports that are specifically tailored to their precise level of need (National Council for Special Education, 2014, p. 11).

Given that these proposed changes have yet to be enacted, we can only surmise the potential benefits that may come to students with ADHD. However, one of the greatest benefits may result from reduced reliance upon medical diagnosis, which in theory could deliver more timely support and assistance to students, particularly females, who may be living with undiagnosed ADHD. This may reduce instances where students are denied supports as they wait to obtain a formal diagnosis, thereby ensuring that they receive the assistance they require.

Additionally, increasing focus on the *individual needs* of each student could potentially support the development of a system which also *equally recognises the strengths* that each student possesses. By assuming a more balanced view of the individual, the system may be enabled to more aptly recognise and value all forms of learning and expression equally. This could potentially reduce instances of sheer "integration," whereby the system refuses to change and accommodate all learners, thereby more fully supporting the development of schools which are truly and fully "inclusive" of all students.

5.11 Conclusion

This chapter has attempted to provide a systematic exploration of the development of special education policy and practice in Ireland as related to the mainstream second-level context, while also calling attention to systemic weaknesses and gaps in provision. It has also examined the possible implications that proposed changes to the system of SEN provision may bring to those diagnosed with ADHD and other forms of SEN.

The following chapter now provides the reader with a detailed discussion of the mixed-methodology employed in this study of ADHD.

73

Chapter Six: Research Methodology & Design

6.1 Introduction

This chapter explores the research methodology utilised in this study, and begins with a discussion of the philosophical principles and the methodological implications which guided this exploration of ADHD. Additionally, research design and implementation is examined, along with the step-by-step process of data analysis, and the features included to ensure the validity of the research. This chapter then closes with a review of the ethical considerations and procedures developed to ensure the safety of all participants.

6.2 Guiding Philosophical Principles

This section considers the basic philosophical principles upon which this study rests, as these assumptions significantly shaped and influenced all aspects research design and implementation—from the questions of inquiry, to the methodology chosen, to the interpretation of findings (Creswell, 2013).

As such, this research is situated within the Pragmatic and Interpretivist paradigms. These situational choices represent an important break with tradition in the field of ADHD research, and emerge from a deliberate choice to operate outside of Positivism, which is the philosophy that has, and continues to dominate this area of inquiry to date. This following sections of this chapter will now explore each paradigm in detail as they apply to this research.

6.2.1 Pragmatism in the Mixed-Methods Study of ADHD

Because of the mixed-methods nature of this research, this study was firstly influenced by the Pragmatic paradigm, a philosophy based largely on the works of Charles Pierce, William James, and John Dewey, among others (Margolis, 2006, p. 1). The word "Pragmatism" comes from a Greek root meaning "action," from which we correspondingly derive the terms "practice" and "practical" (James, 1981, p. 26).

In recent years, Pragmatism has emerged as a paradigm centred foremost on the questions, goals, and aims of research (Creswell & Plano Clark, 2007). Instead of adherence to any one view of knowledge and truth, Pragmatism employs a "what works" strategy in the conduct of research, and acknowledges and appreciates both objective and subjective forms of knowledge (Creswell & Plano Clark, 2007). Pragmatism also allows for the combination of a variety of philosophical positions in the pursuit of knowledge, as it "opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection" (Creswell, 2014, p. 11). Therefore, given the understudied nature of ADHD in Ireland, Pragmatism was an appropriate choice because:

74

- This paradigm allowed the research questions, goals, and aims to be the central focus and the driving force which directed the conduct of research in this study
- It facilitated the collection of both qualitative and quantitative data
- It was hoped this study would create positive change for students and teachers affected by ADHD, which resonates with the "action" orientation of Pragmatism which looks towards the "fruits [and] consequences" of research (James, 1981, p. 29).

As such, these objectives and realities made it clear that Pragmatism offered several supportive benefits to this investigation of ADHD, that other paradigms, such as Positivism, could not.

Returning to the Pragmatic position of using "what works," and considering the nature of the research questions, goals and aims of this study, it was also deemed that Interpretivism offered many benefits which were helpful to this research, especially given its dedication to viewing ADHD through the experiences and perceptions of participants. Interpretivism will now be explored in more detail.

6.2.2 Interpretivism and the Study of ADHD

The history of Interpretivism can be largely traced back to the work of German historians and sociologists, many of whom supported the notion that distinct and important differences existed between the "human" and "natural" sciences (Schwandt, 2000, p. 191). As such, Interpretivism, like Pragmatism, is often largely characterised as being anti-Positivist in nature (Humphrey, 2013), and based on the central principle of "concern for the individual" with the goal of understanding their subjective human experiences (Cohen, Manion & Morrison, 2011, p. 17). Therefore, it can be said that Interpretivism finds inherent value in the study of our social worlds.

While there are many different forms of Interpretivism (Yanow & Schwartz-Shea, 2006), some of the core philosophical premises of this paradigm and its variants, include the following:

- "Reality is multilayered and complex
- Events and individuals are unique and largely non-generalizable
- There are multiple interpretations of, and perspectives on, single events and situations
- We need to examine situations through the eyes of participants rather than the researcher" (Cohen, Manion & Morrison, 2011, p. 17).

Given the above principles, it is important to recognise that a central underlying assumption of this present research is that for too long, ADHD has failed to be examined through the voices and views of those directly affected by the condition. Thus, this research aimed first and foremost, to elicit the views and experiences of participants in relation to ADHD as it directly affects their lives and work. It

also assumed that the lived "reality" of ADHD, would by its very nature, be a complex phenomenon expressed through a multitude of varied perspectives.

During the process of analysis and interpretation, I aimed to mediate these varied perspectives to make sense of, or better understand the experience and impact of ADHD. Additionally, I included a wide variety of views within the discussion as a means of further grasping and representing the multiple truths of life with ADHD.

Given the assumption that "events and individuals are unique and largely non-generalizable" (Cohen, Manion & Morrison, 2011, p. 17), it was also realised that the findings of this study would not necessarily be generalisable to larger populations, at least, not in the traditional sense as understood in Positivism. However, given the scarcity of information as related to the impact of ADHD in the lives of young women and teachers, it was believed that insights gained from this study may still be of value to others. Thus, rich description of the events, people, and places of research are provided in later sections of this thesis, to assist individuals in determining whether this research could apply to, or be useful in their particular lives and situations.

In summary, it quickly became evident that Interpretivism was ideal for this research study. As noted above, the use of Interpretivism in the exploration of ADHD is quite rare, given that Positivism has dominated this field of research to date. However, in more recent years, an increasing number of studies have found value in exploring ADHD through the experiences and insights of those directly affected by the condition (for example see: MacNeela, 2016; McIntyre, 2012; Senior, 2004; Kendall et al., 2003).

The following section will now provide a summary of the ontological, epistemological, axiological, and methodological assumptions of this study which flow from Pragmatism and Interpretivism.

6.3 Philosophical Assumptions

Choosing Pragmatism and Interpretivism as the situational paradigms for this research directly influenced the conduct of this study because of the ontological, epistemological, axiological, and methodological implications which flow from these paradigms. Following guidelines provided by Creswell (2013, pp. 20-22) each of these concepts will now be discussed as they were specifically adopted and utilised in this research.

6.3.1 Ontological Assumptions

Ontology considers the nature and characteristics of "reality." The Interpretivist paradigm rejects the concept of "one" objective reality, and instead, claims there are "multiple" subjective versions. These

76

multiple realities are based upon each person's unique individual experiences, which furthermore, are shaped by their social interactions with others.

Given this assumption, this research aimed to include as many participants as possible, as a means of examining the multiple realities of life with ADHD. Additionally, the findings and discussion chapters reported the wide array of participants' perspectives, including contradictory cases which sometimes challenged the majority view. By doing this, it allowed the research to convey not just "one" version of reality, but rather, the range of experiences and perceptions as expressed by the research participants. It was hoped that this approach would ultimately facilitate this study in more fully understanding and representing the varied truths of life with ADHD.

6.3.2 Epistemological Assumptions

Epistemology relates to the question of "what is knowledge?" Accordingly, the Interpretivist paradigm supports the belief that "knowledge is known through the subjective experiences of people" (Creswell, 2013, p. 20). Given this assumption, this mixed-methods research relied heavily on the use of qualitative semi-structured interviews as a means of gaining deeper insight into participants' subjective knowledge and experiences of ADHD.

Additionally, Creswell (2013, p. 21) notes the importance of conducting qualitative research in the "field," in places which are familiar to participants, so they are comfortable in sharing their perceptions and experiences. In this study, participants determined where and when their interviews would be held. At the start of each interview, time was invested in developing a rapport with them, so they would feel confident in sharing their experiences of ADHD with me.

It was believed that tapping into these subjective experiences was critically important for numerous reasons:

- This approach was a direct means of addressing the current deficit in qualitative inquiry within the field of ADHD research
- By examining the experiences of young women diagnosed with ADHD, their insights could potentially lead to multiple improvements for other females who may be affected by the condition, such as increased recognition of their symptoms and improved diagnosis
- Additionally, this research could potentially improve the educational support of students with ADHD—particularly within the second-level context, while also providing additional insights for educators.

In summary, it was determined that the above points could be best addressed through a mixedmethods approach with a strong emphasis on qualitative inquiry, thereby potentially providing answers that quantitative and clinical studies alone, could not.

6.3.3 Axiological Assumptions

Axiological assumptions relate to the role of "values" in research. The Interpretivist paradigm rejects the Positivist notion that research can be entirely objective, and instead, acknowledges the importance of transparency in reporting the researcher's values and biases, particularly because these concepts can substantially influence the analysis, interpretation, and outcomes of research. Additionally, the axiological position of Pragmatism supports the notion that "values are discussed because of the way that knowledge reflects both the researcher's and the participants' views" (Creswell, 2013, p. 37). In summary, this position acknowledges the inherent significance of the values and beliefs of all who are engaged in the research process.

Because of these assumptions, I engaged in a process of reflexivity which deeply considered and revealed the personal values and biases that I may have potentially brought to this study. As Gough (2017, p. 311) writes, "Reflexivity is sometimes regarded as a defining feature of qualitative research, a point of contrast from quantitative research where research subjectivity is viewed as a source of contamination or bias." In contrast, Jootun, McGhee, and Marland (2008, p.42) maintain that reflexivity is a tool which enhances the rigour and reliability of qualitative research as it "promote[s] the understanding of the phenomenon under study and the researcher's role." As a means of increasing the rigour and reliability of this research study, my reflexivity included a transparent account of the following areas:

- My personal background and identity
- Beliefs regarding the purpose and conduct of education
- Motivations for research
- Potential cultural differences, assumptions, and experiences by virtue of my positioning as an "outsider," both in Ireland, and in relation to the Irish educational system.

Such critical interrogation was important, as it forced me to consistently question my initial reactions to, and thoughts about the data, and it encouraged me to consider alternative views and interpretations, which at first, I may have simply dismissed. It also forced me to explore and understand the specific "values" and "assumptions" inherent in Irish society, particularly in relation to concepts such as education, disability, and mental illness. These considerations are discussed in more detail within the "personal self-reflection" which is provided in later sections of this chapter.

By disclosing my preconceptions in a transparent manner, it can be argued that this process of reflection and discussion ultimately added credibility to this present research (Jootun, McGhee & Marland, 2009, p. 42), and further acted to facilitate the reader in reaching conclusions regarding the validity of the findings and potential application to other contexts and situations.

6.3.4 Methodological Assumptions

Methodological assumptions relate the "process" of research. Based upon the research questions, aims, and goals, along with the understudied nature of ADHD in the Irish context, it was determined that a mixed-methods approach was the most appropriate methodology for this study.

Firstly, it was believed that the use of an online questionnaire would allow me to reach a higher number of participants, and more versions of "reality," than would be possible if using semi-structured interviews alone. This was important considering the dearth of previous studies on ADHD within the Irish context.

However, it was also realised that online questionnaires contain certain limitations, especially in relation to their ability to fully capture participants' experiences and insights. As such, this is where semi-structured interviews proved especially beneficial in illuminating these aspects. Significant benefit was gained from listening to the participants' oral testimony, and the process of repeatedly reviewing these stories against the experiences of other participants. This process allowed the "human" side of life with ADHD to be exposed, and revealed the struggles that both sets of participants often experienced as they grappled with the true meaning and implications of this condition, either for themselves as diagnosed individuals, or for their students. This insight, is often lacking in previous studies of ADHD, where the focus is on the clinical and medical evaluation of the individual.

Additionally, the choice of Pragmatism and Interpretivism also influenced the process of data analysis. Firstly, it is important to note that all analysis was conducted solely by myself as the researcher, with no input from participants. This practical decision resulted mainly due to difficulties encountered in participant recruitment and engagement. Therefore, particularly in reviewing the qualitative data, I engaged in the process of making sense of, and finding meaning in participants' insights and experiences. I examined their words closely, and made interpretations using "inductive logic." This approach is supported by both Pragmatism and Interpretivism, whereby the researcher works with the particulars of the data, before making conclusions (Creswell, 2013, p. 21). As explained in later sections of this chapter, data analysis began with a close, line-by-line assessment of each transcript, and gradually, common themes and subthemes emerged. Once these findings were established, a variety of theories were introduced and used in a supportive fashion to enhance understanding of the

phenomena. Therefore, this research drew on the most appropriate theories available, and has included theoretical discussion from areas such as gender, education, and disabilities studies.

In summary, the mixed-methods combination of qualitative and quantitative data allowed this research to achieve richer detail and deeper understanding, than would otherwise be possible using either method alone. The remainder of this chapter now more closely examines the specifics of the research methodology employed in the conduct of this study.

6.4 Parallel Mixed Methodology

This study utilised a parallel mixed-methodology. In a parallel design, data collection methods are conducted "simultaneously but independently" (Cohen, Manion & Morrison, 2011, p. 25). This specific approach was chosen due to anticipated difficulties in participant recruitment, participation, and associated time constraints. More will be discussed on these issues later in the chapter.

Within this research study:

- Qualitative data were collected via semi-structured interviews
- Qualitative and quantitative data were collected via self-completion online questionnaires.

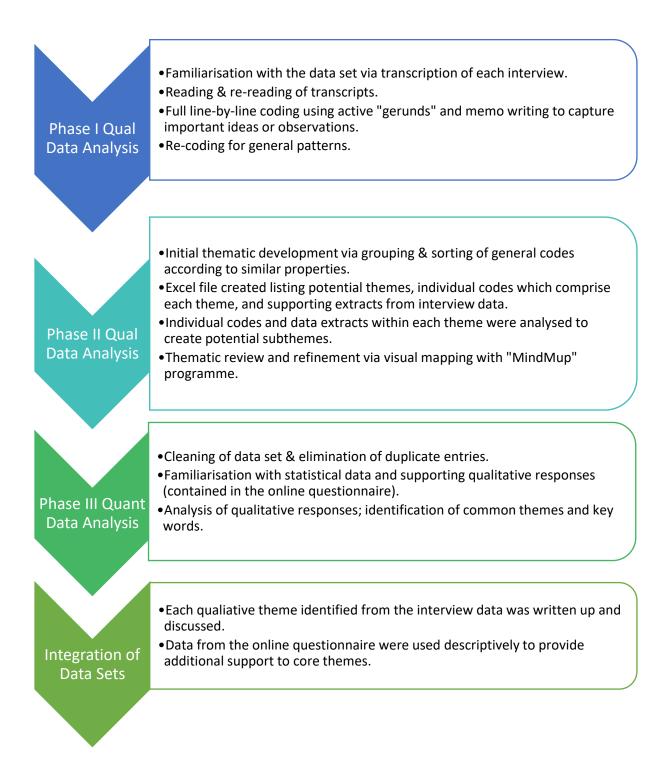
This combination of approaches helped to achieve a richer and more complete understanding of ADHD than would be possible using any singular method (Creswell & Plano Clark, 2007), and it also balanced the strengths and weakness inherent in each method of data collection.

Prior to examining the details of data collection and analysis, the following schemata offer a summary of this process for each group of participants, from instrument development and data collection, to coding, code reduction, and analysis.

Schemata A: Data Collection & Analysis with Young Participants—Phase I

Instument Development	 Initial formation of online questionnaire & semi-structured interview schedule based on literature review, previous studies of ADHD, and research questions, aims, and goals. Piloting of instruments with alternative samples. Instrument refinement based on pilot feedback.
Participant Recruitment	 Data collection begins in October 2013. Calls for participants initiated according to original inclusion criteria. Low response rate triggers revision of inclusion criteria. Recruitment continues. Press-release and coverage in national newspapers yields greatest response rate.
Data Collection	 Potential participants individually initiate contact with the researcher. Information & consent sheets are emailed to each for review. After agreeing to participate, each participant completes 1 semi-structured interview. Following the interview, the URL link to the online questionnaire is emailed to each participant for independent completion. Data collection closes in February 2015.

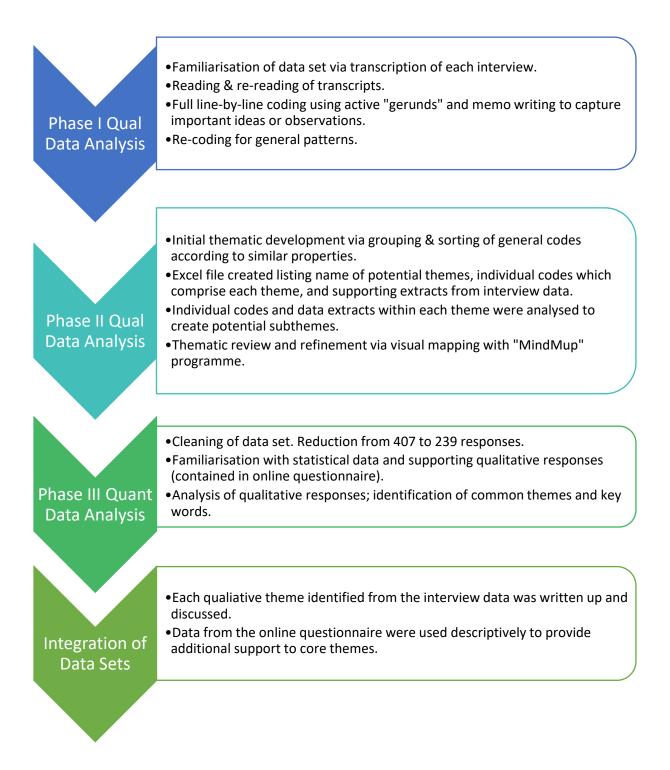
Schemata B: Data Collection & Analysis with Young Participants—Phase II



Schemata C: Data Collection & Analysis with Teacher Participants—Phase I

Instrument Development	 Initial formation of online questionnaire & semi-structured interview schedule based on literature review, previous studies of ADHD, and research questions, aims, and goals. Phase I and Phase II of piloting instruments with second-level teachers. Refinement of instruments based on pilot feedback.
Participant Recruitment	 All second-level principals in Galway, Mayo, & Clare were sent an email with an invitation to participate and a link to the online questionnaire. Principals were asked to forward this information to teachers for their consideration. Low response rate triggered revision and expansion of inclusion criteria to include all second-level teachers in the Republic of Ireland. All second-level and special school principals in the Republic of Ireland were sent an email with an invitation to participate and a link to the online questionnaire for forwarding to their teaching staff.
Data Collection	 Round I Online Data Collection: Opened in March 2014. Round II Online Data Collection: Resumed in September 2014 and closed in November 2014. The online questionnaire informed teachers of the opportunity to complete a semi-structured interview. Potential participants contacted the researcher directly. Interview information & consent sheets emailed to interested persons. Each interview participant completed 1 semi-structured interview at a time & place of their choosing.

Schemata D: Data Collection & Analysis with Teacher Participants—Phase II



6.5 Researching with Young Women and Teachers

This project involved two independent groups of participants: young women diagnosed with ADHD (hereafter referred to as "young participants") and second-level teachers working in Irish schools (hereafter referred to as "teacher participants"). A unique set of data collection instruments was developed for each group.

- Young participants were asked to complete one semi-structured interview and one online questionnaire
- Teacher participants were asked to complete one online questionnaire. All teacher participants were *invited* to complete a semi-structured interview.

6.6 Data Collection Methods: Strengths & Weaknesses

Interviews and questionnaires are commonly used in both educational and mixed-methods research. The following section addresses the rationale for choosing these methods and provides an assessment of their strengths and weaknesses, while also discussing strategies employed to reduce associated deficits.

6.6.1 Benefits of Semi-Structured Interviews

Semi-structured interviews were chosen as a novel means of data collection as this method has rarely been used in previous studies of ADHD. In this method, data are collected through discussion, listening, and personal interaction. Yin (2011, p. 135) notes that semi-structured interviews are particularly useful in studies, such as this, where the central aim is "to understand a participant's world."

Semi-structured interviews incorporate a flexible design with some predetermined questions, but support inter-personal exchange by allowing both the interviewer and participant to follow the natural flow of discussion (Green et al., 2015). This style of interviewing is particularly useful when each participant is interviewed only once (Savin-Baden & Howell Major, 2013), as in this study, and allows participants the freedom to speak at depth on those topics which are most personally salient (Barbour, 2014, p. 113). Patton (2002, p. 349) also notes that because participants are asked the same questions, the semi-structured format also allows for increased levels of comparison among respondents,

promotes data organization and analysis, and can reduce interviewer effect and bias when used with multiple informants.¹⁶

6.6.2 Weaknesses of Semi-Structured Interviews

Some weaknesses are inherent in semi-structured interviews, many of which are related to power differences between the interviewer and participants. Interviews are face-to-face interactions and it can be difficult to ensure the interviewer does not influence or lead respondents to answer in a particular way (Gall, Gall & Borg, 1996, p. 290). Additionally, the quality of data collected is often dependent on the skills of both the interviewer and interviewee, as well as the level of interaction between them. However, as Wellington and Szcerbinski (2007, p. 85) note, bias may also occur in situations where the level of "social involvement" between these parties is too high.

Given that many of the weaknesses noted above are related to participant-researcher interactions, the following steps were taken to reduce power imbalances, to promote feelings of safety and security, and to encourage participants to enter into open and honest discussion:

- I self-disclosed information to participants about my background, such as being a former second-level teacher, along with personal motivations for conducting the study
- Participants were informed of the value of their unique insights, contributions, and perspectives, and were respected as "collaborators" and "co-creators" of knowledge
- All participants were viewed as reliable sources of information on the phenomena at study.

To hone my skills in data collection and interviewing, I engaged in numerous mock interviews with colleagues; to combat difficulties associated with recreating qualitative data exchanges, all interviews were audio recorded, and notes were taken during each session to assist others in reviewing and understanding this process of data collection.

6.6.3 Benefits of Self-Completion Online Questionnaires

Self-completion online questionnaires offer numerous benefits to researchers and participants alike such as: time benefits (Wright, 2006), quick and straightforward data analysis, reduced human error (with the use of automated data collection and analysis programmes), monetary/cost benefits (Wright, 2006), convenience benefits, and the potential for reaching and engaging larger numbers of participants.

¹⁶ Patton (2002, p. 349) terms this type of interview as a "standardized open-ended interview" in which the wording and sequence of questions are predetermined, and all participants are asked the same questions in the same order.

Given the dominance of quantitative method in previous studies of ADHD, it was recognised that the inclusion of questionnaire data could potentially facilitate the cross-comparison of this study with others.

6.6.4 Weakness of Self-Completion Online Questionnaires

Online questionnaires also contain a number of weaknesses that must be addressed. For example, researchers are typically unaware of the factors which influence participants' response choice, and it is nearly impossible to determine if participants gave serious attention and consideration to each item on the questionnaire, or if they simply chose answers at random (Robson, 2002, p. 253). As such, the following steps were integrated into the design of the online questionnaires in order to combat associated weaknesses:

- Questionnaires were as short as possible, focused and logically organised, and avoided the use of technical terms. They were also anonymous to facilitate participant openness and honesty (Gall, Gall & Borg, 1996)
- At any point during the questionnaire, participants could save their work and complete the measure at a later time, thereby avoiding participant fatigue. This feature was especially important for participants who may experience difficulties in concentration, or who may have a short-attention span
- The questionnaire was composed of a combination of open and closed-ended questions. Most close-ended questions triggered an option which allowed participants to explain or provide a rationale for their choice, if they wished, thereby illuminating the factors which influenced their thinking.

6.7 Development of Data Collection Instruments

All instruments were developed in consultation with previous studies of ADHD, research methods literature, and in light of the questions, aims, and goals of this study. Based on input from these sources:

- A general list of questions was created for each participant group. Following guidance from Patton (2002) a variety of question types were developed, including: experience and behaviour, opinion and values, feelings and knowledge, background and demographics.
- 2. Questions were refined and sorted to either measure depending on the suitability of each:
 - a. Those which encouraged discussion, description, and elaboration were placed on the interview schedule.

b. Those which could be answered according to Likert scales were placed on the questionnaire.

All instruments underwent a series of revisions under the guidance of my academic supervisors and the members of my Graduate Research Committee to ensure clarity and reduce instances of "leading" questions which could potentially influence participant responses.

6.8 Interview & Questionnaire Content

The following section briefly outlines the content areas included in the data collection instruments for each participant group.

6.8.1 Interview Content for Young Participants

The semi-structured interview schedule for young participants contained a total of 49 core questions¹⁷ and was divided into the following content areas:

- Daily life experiences
- Receiving a diagnosis
- School & social experiences
- Future plans and goals

The interview closed by allowing participants the opportunity to speak freely on any topics they wished. Often, participants were urged to offer advice and words of wisdom to others, such as young people and teachers, who are affected by ADHD. A copy of the semi-structured interview schedule for young participants can be found in Appendix D.

6.8.2 Online Questionnaire Content for Young Participants

The online questionnaire for young participants contained 27 core questions consisting of both open and closed formats. The following outlines the order and progression of question content:

- Demographic information
- ADHD diagnosis
- Impact of ADHD on daily life
- Perceptions of ADHD in Irish society
- Rejection and discrimination as a result of ADHD
- Academic and educational experiences

¹⁷ It is unlikely that any participant would be asked every question on this measure as most were conditional and based on the response given to previous items. Additionally, conversation followed a natural flow and unanticipated questions were asked as they surfaced.

• Impact of gender on experiences of ADHD

The online questionnaire closed with the opportunity for participants to free-write about any additional points they wished to express about life with ADHD. A copy of the self-completion online questionnaire schedule for young participants can be found in Appendix E.

6.8.3 Online Questionnaire Content for Teacher Participants

The online questionnaire for teachers contained a total of 29 questions core questions consisting of both open and closed formats. The following outlines the order and progression of question content:

- Demographic information
- Initial Teacher Education (ITE) and Continuing Professional Development (CPD)
- The influence of ADHD on the classroom setting
- Classroom strategies and interventions for students with ADHD
- The needs and requirements of teachers in supporting students with ADHD
- Observed gender differences of boys and girls with ADHD
- Communication with colleagues and parents

The topic of ADHD was discussed in a gender-neutral manner, except for those questions which were expressly gender specific in their application.¹⁸ The online questionnaire closed with the opportunity for teachers to free-write about any additional points they wished to express as related to the topics discussed in the measure. A copy of the online questionnaire for teachers can be found in Appendix H.

6.8.4 Interview Content for Teacher Participants

The interview schedule for teacher participants contained a total of 46 core questions and was divided into the following sections:

- Demographic information
- Characteristics of a typical teaching day
- Initial teacher training and continuing professional development
- Views and experiences of teaching students with ADHD
- Gender differences in students with ADHD
- Support for students with ADHD

¹⁸ This questionnaire could have been limited to discussing only teachers' experiences of female students with ADHD. However, considering the potentially small number of females formally diagnosed with ADHD in Ireland, it was assumed that the number of teachers with experience of supporting these students in the classroom would be equally small and difficult to recruit.

- Supports for teachers of students with ADHD
- Communicating with others

The interview closed by allowing participants the opportunity to speak freely on any topics they wished. Often participants were encouraged to share any advice they had for other teachers who support students with ADHD. A copy of the semi-structured interview schedule for teachers can be found in Appendix M.

6.9 Educational "For Fun" Quiz for Teachers

As a means of increasing the educational value of this study, participants were invited to complete a voluntary quiz on ADHD after they submitted their responses to the online questionnaire.

This measure addressed common misconceptions and stereotypes surrounding ADHD and was justified by previous studies which indicate that teachers may lack understanding of the condition (see: Oronoz, 2011; Arcia et al., 2000). The quiz consisted of 9 true/false questions in the areas of causation, diagnosis, symptoms, treatment, gender differences, and academic performance. Immediately after selecting an answer, the participant was provided with educational feedback which offered additional information that may be useful for enhancing their knowledge and understanding of ADHD.

Data collected in this measure were not analysed, nor used in this study, and a total of 139 participants completed this assessment. A copy of the "For Fun" Quiz for Teacher Participants can be found in Appendix I.

6.10 Piloting of Research Instruments

Every data collection instrument underwent rigorous piloting prior to use, and a variety of methodological resources were consulted for examples of best-practice.

Piloting was used in this study to evaluate the content and practical design of the research instruments,¹⁹ to ensure they were user-friendly and non-intrusive (Sarantakos, 2005), and to evaluate the potential amount and quality of data that would be collected by each instrument (Gall, Gall & Borg, 1996, p. 317).

All pilot participants were provided with structured guidance regarding the type and quality of feedback required from them, which included information on the following:

¹⁹ i.e. Order of questions, content, wording, length of instruments, quality of collected data, etc.

- The usability of the instruments
- The length, order, and content of questions
- Level and ease of comprehension
- Additional topics that should be included/addressed in the research

The pilot was also a chance for me to develop and refine my interviewing skills while learning to collect data in a flexible, yet focused manner.

6.10.1 Employing Alternative Samples

I anticipated there would be a very small number of young women medically diagnosed with ADHD, who would be available and willing to participate in this study due to the following factors:

- The research literature suggests that females with ADHD are underrecognised and underdiagnosed²⁰
- Previous studies of ADHD have included a low number of females. This characteristic is particularly true of research conducted in Ireland
- Within the Irish context, researchers like Senior (2004) previously testified to the difficulties encountered in recruiting young women to their studies
- The relatively small population of Ireland combined with estimates that ADHD affects a mere 2.5% of adults (American Psychiatric Association, 2013b, pg. 61).

Given influence of these factors, it was deemed necessary and appropriate to pilot the instruments for young participants with an "alternative" or "judgment sample." Such samples are typically comprised of respondents who are similar to the target group in their knowledge and thinking (Oppenheim, 2001, p. 62). By utilising a judgement sample, the pilot would not deplete from the already scarce pool of potential research participants.

Careful consideration was given to the prerequisite characteristics members of the judgement sample should possess. Due to ongoing recruitment difficulties, the semi-structured interview schedule for young participants was piloted with two representatives of an ADHD support group located in the northwest of Ireland. Both of these individuals had adolescent children diagnosed with ADHD, and given their personal experience as parents, and professional association with the support group, were deemed to be knowledgeable in the topic.

I personally met with these two individuals at their local primary school, and together we conducted a structured and thorough review of the interview schedule. Positive feedback was received and only

²⁰ For a review of this literature, please see Chapter Three, Understanding ADHD.

minor revisions were identified. Discussion spurred reflection on the participants' experiences of rearing children with ADHD and raised the possibility of including parents in the study.

The online questionnaire was piloted with a mature male student diagnosed with ADHD, who was recruited through the Disability Support Service (DSS) at NUI-Galway. Although he did not complete his second-level schooling in Ireland, his personal experience of living with ADHD was viewed as the essential characteristic required to successfully utilise and review the online questionnaire.

Due to the nature of the self-completion online format of this measure, the participant completed the questionnaire independently, without my aid. Once finished, the participant raised concerns regarding the length of time required for completion, and thus, the instrument was streamlined to reduce any repetition which may have existed between this measure and the interview schedule. The participant also noted concerns related to querying young people about the topic of "gender." Although the task might be difficult for some, I did not believe this negated the value of the exercise, nor did it signal that they *shouldn't* be asked about such topics. I also felt that such questions could be novel and interesting to participants, and therefore, questions relating to their personal experiences of gender as a "female" with ADHD were included in the final version of the questionnaire.²¹

6.10.2 Instruments for Teacher Participants

The piloting of instruments for teacher participants was conducted in two phases with educators presently working in Irish second and third level institutions.

Phase 1 Pilot

Four second-level teachers from the Midlands region of Ireland took part in Phase I of the pilot, some of whom were actively working in the area of special education. Participants were provided with printed copies of the interview and online questionnaire schedules. Substantial and detailed feedback was received which resulted in significant improvement of the instruments.

Phase II Pilot

In Phase II of piloting, the revised online questionnaire was tested in its electronic format with two second-level teachers who worked in Galway City. Participants completed the questionnaire and provided feedback on their experience of using the instrument. The feedback received was mainly positive, but general and unspecific. As a result of this process, further clarification was added to the

²¹ Questions such as, "Do you feel that a person's gender affects the way they experience ADHD" were removed because they asked participants to *assume knowledge* of how others may experience ADHD.

opening instructions of the questionnaire to ensure that participants understood that all questions were in reference to their personal experience of teaching students with ADHD, either male or female, unless stated otherwise. Additionally, it was deemed that participants would require some direct experience of students with ADHD in order to complete this assessment, given the nature of the questions asked. Therefore, this clarification was added to the participant inclusion criteria.

The revised semi-structured interview schedule was piloted in a mock interview held with a research colleague at the School of Education at NUI-Galway, and positive feedback was received, signalling that no further changes were required. At this point, all research instruments were ready for use and the study proceeded to the sampling and recruitment of participants.

6.11 Sampling Methods

Purposive sampling was used in the recruitment of participants. This type of sampling was justified given that ADHD is understudied in Ireland, and it is particularly useful in cases, such as this, where "the goal or purpose for selecting the specific study units is to have those that will yield the most relevant and plentiful data" (Yin, 2011, p. 88). Purposive sampling was also an acceptable choice for this study as there was "no intention or need to make a statistical generalization to any population beyond the sample surveyed" (Robson, 2002, p. 264). Therefore, it was felt that this method of sampling was the most appropriate in terms of recruiting participants who had both experience and knowledge of ADHD, either directly through diagnosis, or indirectly as a result of their work with students affected by the condition.

6.12 Participant Recruitment

The following section discusses the various strategies employed in the recruitment of participants to this study. Those who engaged in this research were not offered any tangible incentives for their work.

6.12.1 Recruitment of Young Women Diagnosed with ADHD

The initial goal for the recruitment of young participants was set at 10 to 15 individuals, and the rationale for this number emerged from a desire to gain a substantial amount of rich qualitative data, yet it was also tempered by anticipated difficulties in recruiting young women *formally* diagnosed with ADHD.

As expected, numerous challenges were experienced in the recruitment of young participants. Because females with ADHD are underrepresented in previous studies and have proven to be difficult to access, each *successful* recruitment method utilised in this study will now be discussed in detail, so as to potentially facilitate other researchers in future work with this population.^{22 23}

The following methods successfully recruited young participants to this study, and typically yielded between 1 to 3 individuals:

- Advertisement with ADHD support groups
- Public advertisement in online, social, and print media
- Partnership with the Child and Adolescent Mental Health Service (CAMHS)
- Advertisement with Disabilities Services Offices at Irish third level institutions

Advertisement with National & Regional ADHD Support Groups

A call for participants was issued on the websites and Facebook pages of the three national support groups in the Republic of Ireland: The Hyperactivity and Attention Deficit Disorder Family Support Group (HADD), The Irish National Council of ADHD Support Groups (INCADDS), and ADD Midwest Support Group. Information on this study was also presented at an ADHD seminar hosted by INCADDS in November 2013 in Galway.

A list of regional and local support groups was obtained through the websites of HADD and INCADDS, and these organisations were contacted by phone or post, as electronic communication was largely unavailable with many of these smaller support groups.

Three support groups operating in Northern Ireland were also asked to post a call for participants on their websites and social media outlets. This included the following organisations: Adult ADHD-NI (Northern Ireland), The Phoenix ADHD Project, and Northern Ireland Attention Deficit & Hyperactivity Disorder (ADD-NI).

Public Advertisement in Online, Social & Print Media

Calls for participants were publicly advertised via electronic and print forms of media, and this was the most successful method of participant recruitment.

The "Study of ADHD in Ireland" Facebook page was created for this study and geared towards
potential young participants. This page included copies of all relevant study information
sheets and was routinely updated with information detailing the progress of the research,
along with continued calls for participants.

²² It should be noted that other strategies were employed, however, those which were unsuccessful in recruitment are not included in this discussion.

²³ Due to reasons of gatekeeping, privacy and confidentiality, second-level schools were not contacted for the purpose of young participant recruitment.

- A press-release outlining the purpose of this study and a call for participants was issued through the *Press* and *Information Office* at NUI-Galway, and national media coverage was gained in outlets such as *The Journal.ie*, *The Irish Independent*, and *The Irish Examiner*. This release also secured a number of interviews with local and regional radio stations such as: *Connemara Community Radio, Highland Radio,* and *Midwest Radio*. A copy of this press release is included in Appendix N.
- Through personal email contact, I gained coverage for this research in local and regional news outlets such as *The Tuam Herald* and the *Galway Independent*.

Partnership with CAMHS

Research was also carried out in partnership with a CAMHS Unit at an urban hospital in Dublin, after a member of staff learned about the study via coverage in a national newspaper. Relevant ethical approval was secured prior to conducting research with clients, and it was agreed that findings would be communicated formally with staff members who acknowledged the potential of this research to influence how young women with ADHD are identified, assessed, and treated at this clinic in the future.

Disability Support Services at Third Level Institutions

Email contact was made with the Disability Support Services²⁴ at all third level institutions in Ireland. Correspondence included a call for participants, along with relevant ethical and study information sheets. Each office was asked to forward the information to *all* of their student contacts—not just those who specifically declared a diagnosis of ADHD, as some students may not have self-disclosed. It was also hoped that that if the information was not directly applicable to the recipient, they might also share it with someone to whom it would relate.

6.12.2 Making Contact with the Researcher

The majority of young participants initiated contact with me by email or phone to express their interest in participating. Following this, I then emailed each individual a copy of the study information and consent/assent sheets. Participants were given as much time as they required to read the documents and consider taking part, and they were advised to contact me again after reviewing the materials, if they still wished to continue in the study.

The only exception to this procedure was in relation to contacts made with participants recruited through CAMHS, as all correspondence was arranged through the social worker at this organisation.

²⁴ Disability Support Services are organisations which work to support University students with SEN, including those diagnosed with ADHD.

6.12.3 Recruitment of Second-Level Teachers in Irish Schools

The number of second-level teachers at the time of data collection during the 2013/2014 school year was estimated at 25,626 (Republic of Ireland, Department of Education & Skills, 2014a, p. 2). No limit was placed on the number of participants allowed to complete the *online questionnaire*, as it was desirable to gain as much data as possible given that second-level teachers in Ireland have rarely been engaged in research on ADHD. A goal of 10 to 15 teacher participants was set for the semi-structured interviews, as it was believed this number would produce a sufficient, and yet reasonable amount of qualitative data for this study.

The primary method of teacher participant recruitment was via email correspondence sent to all second-level and special schools in Ireland. Special schools were included in this study because many retain students until their eighteenth birthday. The "Finding a School" section of the website of the Department of Education and Skills (http://www.education.ie/en/find-a-school) provided the details for all schools contacted during recruitment.²⁵

Each recruitment email was personalised and addressed to the principal and teaching staff of the school, and contained an overview of the study along with a live URL link to the online questionnaire. Principals were asked to forward the email and URL link to members of the teaching staff for their consideration, and a sample copy of this correspondence can be found in Appendix J.

After clicking the URL contained in the email, potential participants were directed to read the study information and informed consent sheets which were embedded into the beginning of the questionnaire. At this time, potential participants were also informed of the opportunity to complete a voluntary semi-structured interview, if they so wished.

Similar email correspondence was also sent to teacher unions and support organisations throughout Ireland, including the following:²⁶

- Education and Training Boards (ETBs), Education Centres, and Vocational Education Committees (VECs)
- The National Association of Principals and Deputy Principals (NAPD)
- The Joint Managerial Body (JMB)
- Teachers' Union of Ireland (TUI)
- Association of Second-level Teachers of Ireland (ASTI)

²⁵ Personal and work emails for teachers were unavailable and were not used in recruitment.

²⁶ These organisations were also asked to forward on the email to their second-level contacts. This method of recruitment was met with some difficulty and resistance, and to the knowledge of the researcher, was largely unsuccessful.

- Special Education Support Service (SESS)
- National Council for Special Education (NCSE)

However, to my knowledge, this method of recruitment did not yield any participants.

6.12.4 Making Contact with the Researcher

Teachers who only wished to participate in the online questionnaire were not required to contact me, as they could complete this anonymous measure in a time and place of their own choosing. Those wishing to participate in a semi-structured interview were asked to initiate contact with me to express their interest, and my contact details were provided in numerous places, such as within the email correspondence to schools, and at the beginning and end of the online questionnaire.

Once a teacher initiated contact to express interest in completing the interview, an information sheet and informed consent tailored to this measure was sent to them, and they were asked to review the materials, and make contact again to set up a time for the interview, if they still wished to continue in this study. A copy of the semi-structured interview information sheet for teacher participants can be found in Appendix K, and a copy of the informed consent sheet for this measure can be found in Appendix L.

6.13 Participant Inclusion & Exclusion Criteria

This section now examines the inclusion and exclusion criteria for both groups of participants. Due to low initial response rates among both young participants and teachers, it was determined that the original criteria were too restrictive. Thus, they were gradually broadened to facilitate the inclusion of a larger number of participants.

6.13.1 Criteria for Young Participants

The *original inclusion criteria* for young participants was limited to: females with a medical diagnosis of ADHD,²⁷ between the ages of 14 to 18 years, having completed at least 1 year of second-level school, and who resided in the counties of Mayo, Galway, and Clare.

Potential participants meeting any of the following *exclusion criteria* were prohibited from participating in the study: males; individuals lacking a medical diagnosis of ADHD; those outside the age range of 14 to 18 years; anyone living outside of counties Mayo, Galway, and Clare; individuals

²⁷ As no tangible incentives were provided for participation, formal proof of an ADHD diagnosis was not required, as the ability to speak about the experience of life with ADHD was considered "proof" enough. Therefore, participants were accepted on their word.

diagnosed with co-existing conditions where there are serious behavioural, emotional, or learning difficulties in addition to ADHD.²⁸

Due to ongoing recruitment challenges, the inclusion criteria were slightly modified:

- 1. The catchment area was opened to participants living in any area of the Republic of Ireland and Northern Ireland.
- The lower age limit for participation was decreased to 13 years of age, and the requirement of having completed 1 year of secondary schooling was removed. This allowed participants in their first year of second-level to participate.
- 3. The upper age limit for participation was increased to 20 years of age. This was justified because these individuals a) would be likely to recall their second-level school experience with clarity, and b) could potentially offer reflections and insights resulting from their additional life experience and distance from second-level.

6.13.2 Criteria for Teacher Participants

The *original inclusion criteria* for participants was limited to: teachers presently employed in Irish second-level schools, who were actively teaching in the calendar year in the counties of Mayo, Galway, and Clare, and who possessed experience of teaching students with ADHD, even if minimal.²⁹

If potential participants were working outside of Galway, Mayo or Clare, were engaged in the primary or third levels, and/or lacked experience of students with ADHD, they would automatically be excluded from the study.

Due to a low initial response rate and to mirror changes made to the inclusion criteria for young participants, the catchment area was gradually expanded to include teachers in all second-level and special schools throughout the Republic of Ireland.

²⁸ This originally included conditions such as Autism, Bi-Polar Disorder, Major Depressive Disorder, and Conduct Disorder, among others. However, as depression is commonly co-morbid with ADHD, and displays characteristics which are unique and different to ADHD, the decision was made to allow persons with a diagnosis of depression to participate. This decision was also based on research which suggests it is difficult to find individuals with a "pure" diagnosis of ADHD, given that co-morbidities with other conditions are common in the majority of cases (Kadesjo & Gillberg, 2001). This finding also facilitated the inclusion of a participant who was diagnosed with a brain injury during childhood, as researchers have found that brain injury and ADHD often co-occur (Barkley, 2015a).

²⁹ No specific parameters were set on the "amount" of experience a participant must have in teaching students with ADHD. Even those with a minimal level of experience were welcome to participate as this would provide a range of experiences and perspectives.

6.14 Research Protocols

The following section now provides a detailed account of the protocols that were followed in the conduct of the interviews and questionnaires used in this study.

6.14.1 Semi-Structured Interview Protocol

Interviews began with a review of the study information sheets and discussion of the participant's right and responsibilities. Participants were encouraged to ask questions, and following this, informed consent/assent sheets were explained and signed. As recognition of their data ownership, participants were given the opportunity to choose the pseudonym by which their contributions would be represented in the study. Most participants asked me to choose their pseudonym, but a few did avail of this opportunity. As such, any names contained in this study are not the real names of participants.

Interviews were typically between 30 to 90 minutes in length and were held in a variety of settings such as the campus of The National University of Ireland Galway, in hotels, family homes, and in the clinical setting of CAMHS. Except in two cases,³⁰ all interviews were conducted privately with participants.

Interviews opened with questions that were factual and demographic in nature, and then proceeded to those deemed more complex or personal, thereby allowing rapport and familiarity to be built with participants (Gall, Gall & Borg, 1996, p. 318). Discussion proceeded in a natural, conversational style to help participants feel safe and at ease. All interviews were audio recorded on two devices and notes were taken to assist in identifying important keywords while aiding recall of follow-up points.

6.14.2 Online Questionnaire Protocol

Online questionnaires were hosted and administered via the online program "Survey Gizmo" (www.surveygizmo.com) and all participants received an email link to their respective online questionnaire:

- Young participants received an email containing the link to the online questionnaire after completing the personal interview
- Teacher participants received a link to the online questionnaire from their school principal via the email correspondence that was sent.

Participants were allowed to independently complete the online questionnaire in a place and time of their choosing, and I was not present while any participant completed their measure.

³⁰ The mother of the youngest participant was present during her daughter's interview and also joined in the discussion. A young participant from CAMHS also wished for her social worker to be present during the interview, and this was allowed.

Questionnaires began with a review of the related study information sheets and led participants through the process of informed consent. Formal data collection began as soon as the participant consented to participate and declared their understanding of the research and their role as a participant.

6.15 Data Collection

This section provides an overview of the process of data collection that was conducted with each group of participants.

6.15.1 With Young Participants

Data collection with young participants was conducted during a 16-month period from October 2013 to February 2015. A total of 17 young women diagnosed with ADHD, between the ages of 13 to 20 years, participated in this study; 16 resided in the Republic of Ireland and one resided in Northern Ireland, representing all four provinces.³¹ Expanded participant profiles can be found at the start of Chapter Seven. Of the total number of participants:

- Seventeen completed the personal interview.
- Fourteen completed the online questionnaire, although all participants were asked to take part in this measure and were provided with the corresponding URL link.

6.15.2 With Teacher Participants

Online questionnaire data collection took place with teachers in two rounds.

Data Collection: Round I

The first round of data collection opened in March of 2014. All second-level school principals in Galway, Mayo, and Clare were contacted via email correspondence sent from my personal NUI-Galway address. Because the initial response rate was low, second-level schools in counties Sligo and Limerick were additionally contacted. A total of 71 responses were received from this attempt, and in anticipating that a second round of data collection would be required:

- The questionnaire remained open so as not to exclude latecomers to the research.
- A follow-up/reminder email about this research was not sent to schools.

³¹ One interview was conducted with a young woman who subsequently was unable to complete the online questionnaire due to lack of internet access. During the course of this interview, questions were raised regarding the "voluntary" nature of her participation as she was largely disengaged during the exchange and answered most questions with simple "yes" or "no" reply. As a result, no substantial data was collected from this measure and due to these factors, this interview has not been included in the young participant data set.

Data Collection: Round II

Round II of data collection took place from September to November of 2014. All principals of secondlevel and special schools, as well as teacher unions and support organisations in the Republic of Ireland, were contacted via email correspondence sent through Survey Gizmo's automated system, as this allowed for the collection of additional data and statistics related to response rates and participation levels.

Due to the amount of time elapsed between the first and second round of data collection, and the low initial response rate, schools included in the first round were contacted again. Each school and organisation received an invitation to participate, which was followed by a reminder email, typically sent two to three weeks later.

Eight teachers participated in semi-structured interviews between the months of April to December 2014, and these followed the practices as outlined in the section "Semi-Structured Interview Protocol."

6.16 Establishing Validity

In research, the concept of "validity" is related to the idea of "truth" (Silverman, 2000) and espouses the notion that findings are "accurate, or correct, or true" (Robson, 2002, p.170). Based on guidance from Maxwell (2005), numerous strategies were embedded into the design of this research in order to strengthen its level of validity, such as:

- Provision of rich description
- Triangulation in data collection
- Searching for discrepant, negative, and contrary cases
- Maintenance of an audit trail
- Researcher reflexivity

Each of these aspects will now be discussed in more detail in the following section.

6.16.1 Rich Description

Rich description is achieved by providing the reader with a detailed discussion of the events, influences, and actions taken by the researcher. Koch (2006) argues that provision of such details increases the trustworthiness or rigour of the study.

Transparent and rich description was provided throughout this thesis, but was especially emphasised within the methodology in order to facilitate the possibility of future replication, and to allow readers to judge the appropriateness of the chosen methodological actions taken (Meyrick, 2006).

Additionally, within the findings and discussion chapters, qualitative findings were supported with descriptive quotes taken directly from participants, while quantitative findings were illustrated through the use of graphic visuals such as pie charts and word-clouds to create a "coherent explanation of the phenomena under scrutiny" (Mays & Pope, 1995, p. 110), and to assist readers in making their own decisions about the level of validity associated with the findings.

6.16.2 Triangulation

Triangulation is the process of using multiple methods and types of data collection within one study, and is a common method of enhancing validity, especially with Interpretivist methods (Mabry, 2008, p. 221) which aim to make sense of human behaviour and experience.

Both data and methodological triangulation were used in this study (Denzin, 1988). Data triangulation occurs when a phenomenon is studied with multiple types of data. This was achieved within this study by the collection of both quantitative and qualitative data. Methodological triangulation is the combination of methods, and this was achieved through the mixed-methods approach of using online questionnaires and semi-structured interviews.

6.16.3 Contrary Cases

The exploration of "rival thinking" (Yin, 2011), or discrepant/negative/contrary cases, is another technique which assists in establishing validity. In this practice, the researcher explores data which is contrary to, or which contradicts majority findings. According to Creswell (2014, p. 202) "By presenting this contradictory evidence, the account becomes more realistic and more valid." Findings in this study were presented in an honest and transparent manner, including contrary cases, as these were considered to be an additional means of illustrating the diverse range of participant views.

6.16.4 Descriptive Audit Trail

A full and detailed record of the research process (Robson, 2002) was maintained throughout this project, to facilitate readers in following the natural progression and development of this study. The audit trail for this project includes the following information and documents:

- Pilot data
- Audio recordings & transcripts of interviews
- Drafts of all research documents
- Copies of all written and electronic correspondence with participants
- A journal which chronicles the steps, decisions, and changes made throughout the research process, along with justifications.

6.17 Researcher Reflexivity

Wilkinson (1988, p.493) defines reflexivity simply as, "disciplined self-reflection." This process of reflection can assist in unveiling any potential biases (Robson, 2002, p. 173) as the researcher considers their personal characteristics and values which may have influenced how and why the research was conducted. According to Jootun, Mcghee and Marland (2009, p. 42), "the process of one's research and trying to understand how one's own values and views may influence the findings adds credibility to the research." Reflexivity also illustrates an understanding that:

Researchers are in the world and of the world. They bring their own biographies to the research situation and participants behave in particular ways in their presence. Qualitative enquiry is not a neutral activity, and researchers are not neutral; they have their own values, biases and world views, and these are lenses through which they look at an interpret the already interpreted world of participants (cf. Preissle, 2006, p. 691; cited in Cohen, Mannion & Morrison, 2011, p. 225).

In summary, reflexivity is an essential aspect of "critical" research (Fontana, 2004), and I felt it was important to consider how my background, social experiences, and values may have influenced the way I conducted and interpreted this study. More specifically, I engaged in what Wilkinson (1998, p. 494) terms "personal" reflexivity, which views the topic of research and methods utilised as "an expression of personal interests and values." The following section now provides my personal account of reflexivity which contains discussion of the personal characteristics I feel the reader should be aware of, and which may have potentially influenced the conduct and analysis of this research. This reflective process was used throughout this study as a means of guiding and enlightening the research.

6.17.1 Personal Self-Reflection

I was born and raised in the United States, and my own second-level and collegiate education took place in Catholic ethos schools. I attended a Jesuit Catholic University and trained in the areas of theology and philosophy. Upon graduating with my Bachelor of Arts degree, I became a second-level theology teacher and taught in a number of private, fee-paying Catholic schools.

Given the Christian context in which I was educated and professionally trained, my personal teaching praxis was shaped by the idea of "vocation," a word that stems from the Latin *vocare*, which means, "to call." Therefore, I was taught to view teaching not just as a career choice, but as a calling of "service" to others. In my more than ten years of teaching experience, I was privileged to work with extremely talented and bright students, and taught in some of the most academically rigorous schools in the region.

In particular, my last school of employment, prior to moving to Ireland, was a private all-girls school. It was my experience in this school (or lack thereof) that ultimately led to the choice to conduct my research on the topics of SEN and ADHD in females. In this school, we rarely had students with SEN, simply because most would not be able to survive in the high pressured, competitive nature of the academic model espoused here. However, occasionally we would encounter students with ADHD. Yet, in reflecting on my experience and response as a teacher to these students, the record was dismal. There was little to no discussion about the type of interventions we should provide to students with ADHD, nor were we given any type of SEN training, professional development, or support. If we wanted these things, we had to source them in our own time. Communication between administration and faculty regarding students with SEN and their needs was nearly non-existent, in fact, this lack of communication led me to *assume* that my students simply didn't have any special needs—an assumption I now know was likely erroneous, given the high prevalence rate of SEN among our youth. Sadly though, because of such assumptions and lack of communication, it is my belief that students with SEN were largely left to fend for themselves in this particular school. And if they couldn't make it, they would simply leave and go somewhere else—they really weren't "our" problem.

Too, in thinking back to the various schools I had taught in (some of which were co-educational) it was the male students with ADHD who were clearest in my memory. This led me to wonder if females were largely unaffected by the condition, if they simply weren't coming to our school, or if we just didn't recognise the symptoms displayed by females as readily? These initial questions spurred on my research.

Beyond this school affecting my choice of ADHD as a research topic, it also impacted me in others ways which may have influenced the conduct of this project. For example, this particular school espoused a strong culture modelled on the "love of Christ," where there was a prevalent Christian ethos in which students and teachers expressed a mutual respect and understanding for one another. In fact, I wasn't just a "teacher" or "mentor" to my students—we saw each other more as colleagues, and eventually, as friends. This is illustrated by the fact that, even though I am now living in Ireland, thousands of miles away from most of these students, I still keep in touch with a large number of them via social media, such as Facebook. Former students have also come to visit me here in Ireland, and I've had the privilege of showing them around the country, as many of them have been studying abroad in Europe during their time at University. These are relationships which were formed well over five years ago or more, and still continue even today.

I am aware it is difficult to distance myself from these notions regarding the purpose of education, and I am cognisant that my own upbringing, experience as a teacher, and relationship with my students may have influenced the ways in which I viewed and analysed the data. For example, as I read over the interviews, I often thought about myself as an educator and the type of relationship I strove to have with my students. I was particularly struck, disappointed, and even saddened by the many difficulties encountered between students and teachers as they described their often troubled relationships. As an educator, I believe teachers are there to support and nurture students, and yet, the young women commonly described difficult and even hostile scenarios that failed to meet these expectations. In fact, I was also disappointed by some of the attitudes that teacher participants displayed towards students with ADHD, especially within the online questionnaire content. I personally believe that no student should ever feel their teachers do not like, care for, or want to help them, and worse yet, students should never be blamed for the academic difficulties which result from their special needs. Yet, this is precisely what so many of the young participants reported, and it is also what some teachers testified to, as the reader will see in the following chapters.

It is also important to realise that, as a private school teacher working in a system very different to Ireland, we were given a significant amount of flexibility and freedom in terms of supporting the growth, learning, and needs of students. In fact, the high academic achievement of students was always at the core of our mission and values. While I am cognisant that the Irish system is designed quite differently as compared to the American, it is often difficult to remain non-judgmental and uncritical towards a system that, from the outside, appears to be driven firstly by the national exams, and secondly, by student needs. Thus, as young participants described the lack of freedom they often felt underneath a system that seemed inadequate in supporting their needs, I sometimes felt myself taking "sides" with them, moved by compassion as they struggled to succeed in a school system which simply appeared to fail them.

I also realise that all of the above could be further compounded by the reactions I've seen from the Irish society at large regarding both ADHD, and the educational system. It wasn't until moving to Ireland that I first heard the expression "ADHD is spelled B-O-L-D," and on top of that, it being so freely used. After hearing the stories of the young women in this study, it was also difficult not to become defensive and judgmental about a society in which this concept seems so ingrained, and quite frankly, appears to emerge out of simple ignorance about the realities of this condition. This, combined with the fact that I've heard story after story from older generations about the neglect and abuse they suffered at the hands of teachers—that it further compounds the difficulties in remaining unbiased while attempting to separate fact from fiction.

As the reader can likely see, I am very aware of these internal feelings, as well as the strength of my convictions. However, I've tried not to let these views immediately influence my perceptions of teachers, or the Irish educational system, as I also realise I am an outsider with little to no direct experience of Irish second-level schools.

In summary, these are personal aspects of my own background and vocational training which I feel could have potentially influenced the way in which I approached the conduct of this study and interpreted the results of this research. It is my hope that by being completely honest and transparent regarding these issues, it will help the reader to further judge the quality of this research.

6.18 Generalisability & Transferability

Generalisation is "an act of reasoning that involves drawing broad inferences from particular observations" (Polit & Tatano Beck, 2010, p. 1451). The ability of researchers to make statistical generalisations from samples to the larger population is a standard mark of quality in quantitative/positivist research. However, the application of this principle to qualitative studies is controversial (Polit & Tatano Beck, 2010) largely because exact future replication is nearly impossible given the subjective and flexible nature of the research process.

Alternatively, the concept of "transferability" (Denzin & Lincoln, 1994) has been promoted as more suitable to the field of qualitative research and is commonly viewed as a hallmark of quality in such studies (Polit & Tatano Beck, 2010).³² Transferability is defined as a process which is *facilitated by the researcher* who provides thick and substantial descriptions of the research, and which is *carried out by readers* who judge the suitability and application of findings to other scenarios (Polit & Tatano Beck, 2010). This process is also known as "case-to-case" transferability, and this is the goal of this study given the small number of participants. As defined by Firestone (1993, p. 17), "case-to-case transfer occurs whenever a person in one setting considers adopting a program or idea from another." In order to facilitate this process, I provided readers with a detailed discussion of the entire conduct of research to assist readers in making judgements regarding the applicability of this study to other persons or groups. According to Lincoln and Guba (1999, p. 404), this is where "the responsibility of the original investigator ends in providing sufficient descriptive data to make such similarity judgements possible," and it is my hope that this goal has been accordingly achieved throughout each chapter of this study.

6.19 Ethical Approval & Considerations

This research was granted ethical approval by the National University of Ireland in September of 2013, and by the ethics board of the CAMHS Unit at the participating hospital in Dublin, in November of 2014. This section now discusses the ethical considerations included in this study.

³² It is important for readers to realise that "generalisation" and "transferability" do not necessarily equate, and may have slightly differently meanings. In fact, Cohen, Manion & Morrison (2011, p. 242) argue that generalisation implies "far more" than does transferability.

6.19.1 Informed Consent

As previously noted, study information sheets were created specifically for each participant group in order to promote the informed consent/assent of participants. Informed consent is defined as "the process whereby someone voluntarily agrees to participate in a research project, based on a full disclosure of pertinent information" (Morrow & Richards, 1996, p. 94). Information sheets were written in language appropriate to each audience and followed best-practices advocated by the US Department of Health, Education and Welfare (1971; cited in cited in Cohen, Manion & Morrison, 2011, p.78) and disclosed the following information:

- Aims and purpose of the research
- Expectations of participants & the topics to be discussed
- Possible risks, consequences, and potential benefits of participation
- Participant rights
- Confidentiality, anonymity, and data protection
- Communication of results and findings
- Contact details of the primary researcher and academic supervisor

The following section now discusses these points in greater detail.

6.19.2 Risks and Consequences

This project was fully committed to the ethical principle of beneficence which was adhered to at all times. However, all types of research contain possible risks and consequences. As Morse (2007) argues, one should not be so naive as to assume that qualitative studies are "safer" or "less risky" than clinical or experimental research.

There are a number of probable harms common to qualitative studies such as, inconvenience and time lost, emotional costs, and difficulties which may arise from the misreporting/misrepresentation of personal views. Given the personal nature of the topics explored in this research study, the potential existed that participants might experience emotional distress.

- For young participants, this could be especially true in relation to emotive topics such as ADHD diagnosis and labelling, academic performance and struggles, social issues and complications, frustrations with peers, family, and authority figures, as well as concerns about their future.
- For teacher participants, reflecting upon their opinions and classroom practices towards students with ADHD, or considering the educational system in which they work, could be potentially unsettling—especially in cases where their experiences and perceptions have been negative or unfavourable.

I also recognised that participants may have concerns which I did not consider or anticipate, and these "perceived risks" could be just as concerning for participants (Allen, 2005, p. 21).

6.19.3 Minimisation of Harm

Every effort was taken to minimise the probability of harm occurring by respecting the autonomy and authority of participants, and maintaining open lines of communication with them. In addition, the following steps were taken:

- 1. For their convenience, participants chose the time and place of their interview to minimise feelings of time-lost and/or inconvenience
- 2. All perceived risks were discussed with participants in an open and transparent manner
- 3. Participants were encouraged to voice any concerns they might have, and when concerns were raised, together we discussed options for a possible solution
- 4. Throughout the research process, I queried participants regarding their feelings and experiences of participation, along with any areas of difficulty
- 5. A list of ADHD support groups, counselling services, and educational supports was developed for any participant who experienced adverse emotional or psychological reactions due to participation in this study. Thankfully however, this list was never required nor used during the conduct of this study. A copy of this resource can be found in Appendix P.

6.19.4 Benefits of Participation

No monetary or tangible rewards were offered to participants, however numerous personal and altruistic benefits were associated with this project, such as:

- The opportunity to reflect upon their life, work, and experiences
- Young participants could experience a sense of psychological and emotional satisfaction in knowing they are not alone in their experience of ADHD
- A chance to have their "voices" and opinions heard by a larger audience
- The ability to make contributions to an area of research which is understudied in the Irish context, and knowledge that these contributions may help others in the future

In summary, it is acknowledged that such benefits may provide participants with satisfaction in knowing they have contributed to science and obtained a greater understanding of the area of inquiry (Cohen, Manion & Morrison, 2011, p. 75).

6.19.5 Participant Rights, Confidentiality, and Anonymity

All participants were informed that their work within this study should be entirely voluntary and should not occur under duress or pressure of any kind. Among others, participants held the right to:

- Refuse to answer any questions
- To have their identity protected
- To ask any questions of the researcher
- To cease participation, and to re-join the study at any time.

Confidentiality was assured to all participants, including young participants, except where there was probable concern of harm, such as suspected or real abuse and/or neglect of any kind. A specific "child protection protocol" was developed for use in this study, and is discussed later in the chapter.

In recognition that this research will be published and available to the public, a number of steps were taken to promote and protect the anonymity of interview participants, such as assigning pseudonyms and omitting any features from the data which could potentially lead to their identification such specific places, names, and other key characteristics. Anonymity within the online questionnaires was achieved by virtue of the fact that they were designed as *anonymous* measures. Participants were never asked to state their name, nor to disclose any specific details about their personal identity to the researcher, beyond general demographic information related to their teaching experience.

6.19.6 Data Protection, Retention, and Destruction

Procedures for data protection were informed by the *Data Protection Acts* of 1988 and 2003 (Republic of Ireland, Office of the Data Protection Commissioner, 2003, p. 5). Most of the data collected in this study were compiled in electronic formats and stored in password protected files on my personal computer. Electronic files were also backed-up in password protected cloud storage. Written data (such as notes taken during interviews) were stored in a locked cabinet at the School of Education at The National University of Ireland Galway.

Best-practices advocate that data should be kept for a reasonable amount of time so that other researchers can check the results, or use the data for other purposes (Steneck, 2007, p. 94). In accordance with policy advocated by the National University of Ireland Galway (2006), following the completion of this research project, all data will be securely retained for a minimum period of five years. After this period, all data will be erased and destroyed.

6.19.7 Communication of Results and Findings

Beyond this thesis, the findings of this research will likely be disseminated in scholarly and professional journals, at educational conferences, and to organisations and other interested persons who support young people with ADHD. The purpose of such communications is to promote the desired outcome of this research in supporting positive change for young people through increased education on ADHD,

which is in line with best practices advocated by the Department of Children and Youth Affairs (Republic of Ireland, 2012).

As a matter of ethics, where possible, results should also be reported to research participants (Morrow & Richards, 1996) and the findings, conclusions, and recommendations of this study will be shared with participants in formats which are appropriate and accessible. A full copy of this thesis will also be provided to any participant who requests it. To ensure this process is easily completed, all attempts have been made to keep the contact details of participants up to date.

6.20 Ethical Considerations in Researching with Young People

One of the overarching goals of this study was to conduct research "with" young people, rather than "on them, about them, or without them" (O'Kane, 2008, p. 126). Because of this decision, a number of special ethical considerations surfaced in the areas of:

- Vulnerability
- Power and authority
- Decision-making and assessing capacity to assent
- The role and authority of parents and guardians
- Child protection and welfare

It was hoped that by considering these issues, along with the specific needs and requirements of young participants, their successful participation in this study would be ensured, which according to the Department of Children and Youth, is a particular responsibility of researchers (Republic of Ireland, 2012, p. 5).

6.20.1 Recognition of Vulnerability

Within the Republic of Ireland, the term "child" applies to any person under the age of 18 years (Republic of Ireland, 2001) and this same categorisation was used within this study. The Council for International Organizations of Medical Sciences (CIOMS) defines vulnerable persons as those who "are relatively (or absolutely) incapable of protecting their own interests [due to factors such as] insufficient power, intelligence, education, resources, strength, or other needed attributes" (CIOMS, 2002). Children, by virtue of characteristics such as their age, level of maturity, and reduced ability to exercise autonomy, may therefore be rendered as "potentially vulnerable" (Felzmann et al., 2010, p.2) and especially "worthy of protection" (Luna, 2009, 122). However, it is important to note that vulnerability does not diminish the value of the contributions that can be made by young participants. In fact, it is recognised that, while children may "require specific protection [they] also have the

capacity for independent agency that necessitates respect from researchers" (Felzmann et al., 2010, p. 2), and therefore, young participants were equally respected in their work throughout this study.

6.20.2 Power and Authority in Research

Issues of power and authority in the researcher-participant relationship are important concepts in any study, but particularly in those which include young people, and Randall (2012, p. 40) argues that "the claims of any research to represent the 'voices' of children are necessarily affected by the relationship between adults and children." Therefore, I was keenly aware of my role as a researcher, and that perceived levels of authority could potentially influence my relationship and interactions with young participants, and ultimately, the findings and outcome of this study. For example, young participants could be inhibited in their responses and afraid to share their true thoughts, or alternately, they could feel tempted to "please" me by giving responses which they feel are acceptable or desirable.

As previously mentioned, a number of steps were taken to minimize the impact of any power and authority imbalances which may have existed between myself and participants. Regardless, some readers may question the value and reliability of children's perspectives, especially given their vulnerability, age, and level of maturity. However, it is recognised that children can be extremely reliable research participants, especially when the topic of exploration relates directly to their lives. Scott (2005, p. 88) precisely maintains, "the best people to provide information on the child's perspective, actions and attitudes are children themselves." Additionally, it is important to recognise that many of the young participants in this study struggled to obtain a diagnosis of ADHD, and as a result of their difficult experiences, had a vested interest in sharing their stories of living with ADHD, especially as a means of helping other young women who may be going through similar experiences. Therefore, it can be trusted that young participants in this study were able to provide reliable responses in relation to queries about life with ADHD.

6.20.3 Decision Making & Assessing Competence to Assent

According to longstanding best-practices in research advocated by the World Medical Association (1964), informed consent should be obtained from all children who participate in research, given they have the required understanding and capacity to assent. Indeed, children have *a right* to give their informed consent before participation in research, as doing so contributes to their sense of wellbeing and promotes individuality, autonomy and privacy (Weithorn & Sherer 1994; cited in Morrow and Richards, 1996, p. 95).

Prior to participation, steps were taken to assess each participant's competence to give full assent which included discussing the information and assent sheets with them, along with their reasons for wanting to participate. Factors such as age and perceived levels of maturity were also considered in

assessing their level of competence to assent (Alderson & Morrow, 2011, p. 109). All young participants were deemed competent and personally signed the assent sheet, and were provided with a copy of the completed declaration.

6.20.4 The Role of Parents & Guardians

In recognition that parents and guardians have a right and a voice in what happens to their children (Tymchuk, 1992; cited in Morrow & Richards, 1996), parental/guardian permission for participation was also obtained for all participants under the age of 18. Procedures for the informed consent of parents and guardians followed the same steps as outlined for participants.

6.20.5 Child Protection & Welfare

Child protection and welfare was at the centre of this research project, and I received personal Garda/police vetting prior to the recruitment of any participants.

Young participants were guaranteed the fullest levels of confidentiality and anonymity, except in cases where information was revealed which signalled they were "at-risk," or which raised concerns regarding their welfare and safety. Abuse or neglect of any kind—including emotional, physical and/or sexual—would be reported to the proper authorities (National University of Ireland Galway, 2011, p. 6). Confidentiality would be breached only in relation to the specific pieces of information related to the suspected or real instances of abuse or neglect. All other areas of participant data not related to the at-risk disclosures would continue to be kept in the strictest of confidentiality. All young participants were informed of this protocol and exception in the study information sheet. A full discussion of the Child Protection Protocol developed specifically for this study can be found in Appendix O. No instances of abuse were suspected or reported while conducting this research.

6.21 Disclosure of My Identity to Participants

As part of the ethical conduct of this study, I felt it was particularly important to disclose my identity to interview participants—both as former teacher and as an outsider to Irish education.³³ Such disclosures commonly took place at the start of each interview, particularly when discussing the reasons and rationale for conducting this study. From my own professional experience, I know that teachers can be quite suspicious of outsiders who may question them about their educational knowledge or personal practice in the classroom. It was hoped that by virtue of my identification as

³³ Given that the online questionnaire was anonymous in nature, I did not include any self-disclosure of my personal information for these participants, as it was assumed that they would already be more comfortable in speaking truthfully and honestly about their experiences given that they did not need to self-disclose their identity, unlike interview participants.

an American—who was educated and worked outside of the Irish system—as well as my professional experience, teachers might be more comfortable in speaking to me about their experiences and perspectives, and any suspicions might be eased. Too, some teachers might worry that their job or position within the educational system could be compromised by speaking freely, especially if they were critical of their school or the system. It was hoped that my position as an "outsider" to the Irish educational system might serve to ease such fears.

Additionally, I hoped that self-disclosure would help to break down any barriers that might exist between young participants and me. I was concerned that some might see me more as a "clinician" given their previous experiences of ADHD diagnosis, or be tempered in their discussions, or worried about providing the "right" answers. Therefore, by emphasising my role as a "teacher," rather than a "researcher," I attempted to establish a friendly and caring rapport with participants by showing interest in them as the "experts" on ADHD and their experience of the condition. Also, I hoped that the experience of participating in research would give them confidence and a sense of pride for making an important contribution to our knowledge, and thus, the value of their work was emphasised.

6.22 Data Analysis

This section provides a detailed discussion of the data analysis methods employed in this study, beginning with a step-by-step review of the processes used in the examination of qualitative data, and then proceeding to a discussion of the approach utilised in the analysis of quantitative data.

It should be noted that all data analysis was conducted wholly by the researcher, with no input from participants. This approach was deemed most realistic given the difficulties encountered in participant recruitment and engagement.

Overall, the process of data interpretation began with a qualitative analysis of the semi-structured interviews in each data set. Once the central themes were identified, the quantitative data were then analysed, and used in a descriptive and supportive manner to further illuminate these themes. This approach is discussed in more detail in the following sections.

6.22.1 Qualitative Data Analysis

Cohen, Manion and Morrison (2011, p. 537) maintain, "There is no one single or correct way to analyse and present qualitative data." Given this consideration, qualitative data were analysed thematically and largely informed by Braun and Clarke (2006). Where helpful, best-practices were utilised from other methods of qualitative research such as Grounded Theory (Charmaz, 2014). This approach of creating a unique method of data analysis by combing practices is supported by Yin (2011, p. 186) who advises, "You can disassemble your data in many ways...you also can devise your own peculiar disassembling process because there is no fixed routine," thus showing that flexibility and originality are key components in qualitative data analysis.

6.22.1.1 Overarching Principles

The following principles exerted substantial influence on decisions made regarding how to proceed with the analysis of qualitative data:

- 1. The goal of learning from the experiences and insights of participants
- 2. A desire to allow participant "voices" to speak for themselves and be heard
- 3. A commitment to truthfully and accurately represent the perspectives of participants
- 4. Resistance to "fitting" the data into any preconceived theories or frameworks.

These principles were held in consideration throughout the entire process of analysis and the presentation of findings and discussion.

6.22.1.2 Inductive Analysis

In light of the points listed above, inductive and semantic forms of thematic analysis were used in the derivation of themes. Inductive analysis is described as "a process of coding the data without trying to fit it into a pre-existing coding frame, or the researcher's analytic preconceptions. In this sense, this form of thematic analysis is data-driven" (Braun & Clarke, 2006, p. 83). As such, every code developed in this study was directly related to participants' own words, rising directly from their perspectives and experiences.

6.22.1.3 Determining What Constitutes a "Theme"

According to Braun and Clarke (2006, p. 82), "A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set." However, it is important to recognise that what is considered "important" in the data set is often a highly subjective decision, as is the enterprise of qualitative data analysis. Therefore, while the derivation of themes was data driven, there were a number of guiding criteria which helped to determine the themes and subthemes included in the final report:

- The nomothetic properties of the data set were reviewed, including patterns, commonalities, and similarities across the interviews (Cohen, Manion & Morrison, 2011, p. 542)
- The numerical strength, coherence, and representational "fit" of themes across the data set

 Consideration of novel, surprising, or unexpected concepts—even if they lacked numerical or statistical relevance.³⁴

As such, it is clear that "quantity" of support was not the sole indicator of whether an element of the data should constitute a theme for inclusion. Braun and Clarke (2006, p. 82) also acknowledge, "there is no hard-and-fast answer to the question of what proportion of your data set needs to display evidence of the theme for it to be considered a theme," and they further note that such decisions are ultimately left to the judgement of the researcher.

6.22.2 Thematic Analysis: A Step-by-Step Review

This section provides the reader with a step-by-step review of the stages and progress of qualitative data analysis followed in this study, which can be summarised as:

- 1. Familiarisation with the data
- 2. Line-by-line Coding
- 3. Re-coding for General Patterns
- 4. Initial Thematic Development
- 5. Thematic Review & Refinement
- 6. Writing-Up.

The process of analysis was fluid in nature, and not strictly linear. Rather, data analysis was a "recursive" process and moved back and forth through the stages as required (Braun & Clarke, 2006, p. 86).

Stage 1: Familiarisation with the Data

This stage began during the process of data collection. After personally conducting all of the interviews with participants, I then transcribed each. This personal immersion in the collection and transcription processes allowed me to acquire an in-depth knowledge and familiarity with the data sets. Interviews were transcribed from the recorded audio files within one to two months after collection using the online application "Transcribe Wreally" (<u>https://transcribe.wreally.com/app</u>). Every interview was transcribed in full, and re-checked against the audio recording to ensure accuracy.

All participants were emailed a copy of their personal transcript for review and approval. Participants were informed they had one month from the time of receipt in which to make any desired changes and to return the revised transcript. Only one participant made amendments to her transcript and the changes generally consisted of minor clarifications. The chart below illustrates some of the textual

³⁴ All such instances of themes & subthemes which lacked numerical or statistical strength across the data set are clearly denoted for the reader.

changes made in the document. It should be noted that any changes made by the participant were typed in red font and easy to identify.

Original Transcript Text	Amended Transcript Text		
"Well it's kind of a long story, um well I was	"Well it's kind of a long story, um well I was in		
in one school first which was very close to	one school first which was very close to my		
my home and um, up until junior cert"	house and um, up until junior cert"		
I: And what age were you at this point?	I: And what age were you at this point?		
P: I was sixteen	P: I was sixteen, <i>almost seventeen</i> .		
"It's just, it's so like, silly, it's just I can't	It's just, it's so like, silly, it's just I can't		
concentrate," It's like, "no one can	concentrate," It's like, "no one can		
concentrate," so basically have a problem.	concentrate," so basically have a problem.		
	Everyone has trouble paying attention		
	sometimes or staying interested in things, but		
	that's normal. That doesn't affect your life on		
	a daily basis, that isn't as extreme as what I		
	and other ADDers have to deal with all the		
	time.		

Table Five: Sample Participant Transcript Amendments

In the concluding phases of stage 1, I conducted numerous readings of the transcripts to further increase my familiarity with the basic properties and characteristics of the data sets.

Stage 2: Line-by-Line Coding

In stage 2 of data analysis, each transcript underwent full line-by-line coding following best practices as advocated in Grounded Theory. Codes took the form of "gerunds," which are succinct labels that usually end in "-ing," and which aim to describe the actions or processes evident in the selected piece. The development of gerunds was data driven and closely adhered to the exact words of participants (Charmaz, 2014, pp, 120-121).

The following chart illustrates a selected piece of text from a young participant interview, and the specific codes, or gerunds, that were applied to each line:

Data-Driven Initial Codes	Sample Interview Text
Putting in long days at school	Literally I was in school from like 9 [am] until 8
	or 9 [pm], and I had to get up really early as
	well because school was like an hour away or
	whatever. So I had to go from 9 until 3 and then
Attending after school study	3 until 9 it was an after school study and I just
Doing poorly on mocks Failing half of subjects	did so bad on my mocks I failed like half my
Scraping by	subjects and just like scraped by my other ones,
Failing to "get it"	and I didn't get it, well expect for English and
Doing well in English and art	art because their like, those are the two I'm
Being interested in literature, writing, art and history	really interested in like literature and writing
	and art history and everything.

Table Six: Illustrative Sample of Initial Line-by-Line Coding

This process of line-by-line coding facilitated a close scrutiny of the data, as this type of immersion forces the reader to interact more closely with the text, and to consider the processes at work (Charmaz, 2014).

Additionally, I also engaged in memo writing. Memos are "ideas which have been noted during the data collection process" which are helpful in assisting the researcher with later recall (Goulding, 2002, p.65), and in illuminating ideas, relationships, and problems encountered in analysis (Glaser, 1978). Memo writing was also an opportunity to reflect upon and note interesting features of the data, such as emergent patters, similarities and connections between interviews, and unexpected points raised by participants. Additionally, memo writing provided an opportunity to consider my own reactions to, and thoughts about the data. This is an important step, as "grounded theorists recognise that the researcher and her or his experience cannot be removed from the process" (Schreiber, 2001, p. 61). At the end of this phase, a number of initial trends were identified across the data set. A "OneNote" file was created to log such trends, along with possible instances of support from each participant. This file also facilitated further reflection on the potential meaning of identified trends.

Stage 3: Re-coding for General Patterns

In stage 3 of data analysis, the entire data set underwent a full re-coding with more general codes which were applied to larger sections of data. Where possible, these larger codes continued to utilise the "-ing" suffix in the identification of active processes in the data.

Each data set was coded for as many potential themes/patterns as possible (Braun & Clarke, 2006, p. 89). The young participant data set yielded over 500+ codes, while the teacher data set yielded over 250+. Many of the codes identified at this stage continued to be in agreement with initial trends and patterns identified in earlier phases of analysis. The following chart provides an illustration of common codes taken from both data sets:

Table Seven: Examples of General Codes

Sample Codes from Young Participant Data Set	Sample Codes from Teacher Data Set
 Feeling teachers won't/don't understand Getting diagnosed by accident Feeling approved 	 Wanting more CPD on SEN Engaging students through active learning Difficulty getting students to
Feeling annoyedSelf-motivating	 Difficulty getting students to focus/concentrate/pay attention

The following chart illustrates a selected piece of text from a teacher interview and how the general codes were applied:

Table Eight: Illustrative Sample of General Interview Coding

Application of General Codes	Sample Interview Text
Feeling Frustration	Well, I suppose, I acknowledge the frustration at times with dealing with these students, but I do sometimes think that we need to remember that
ADHD as BOLD	they're not being bold. I don't, from my
Having empathy for students	experience, feel that they choose to act this way. And I do sometimes feel, if we look at the
System does not suit the child	constraints we put on them, they're a little bit fraught asking somebody to sit at a desk for how
Classes are too long	many hours? That's not natural for a lot of different types of people. If we look historically, a lot of people would have become farmers, or builders, they didn't have to go to college and they didn't have to stay in school until they were 16, and maybe these students, maybe they're
Not recognizing other ways of learning Changing teaching methods	not suited to certain types of education, and maybe we should be trying to teach them in different ways, you know?

Stage 4: Initial Thematic Development

In stage 4 of data analysis, each list of general codes was analysed in a lengthy period of sorting and grouping according to similar properties. Codes which were duplicate in nature were either combined/collapsed, or deleted if appropriate. As sorting continued, potential themes began to emerge. Next, Excel files were created for each data set which contained the following information:

- 1. The name of each potential theme
- 2. All the individual codes which created and supported the theme
- 3. Collated extracts from the data set to provide specific evidence and support for the theme and individual codes.

The individual codes and data extracts were then analysed for shared properties, and in turn, used to create potential "subthemes" for each theme.

This phase was essentially a process of disassembling and regrouping the data in order to provide support to potential themes and helped to determine which themes and subthemes lacked support, and should be either removed or combined with others. By the end of this phase, strong support was gathered for a number of candidate themes and subthemes which were now, more clearly defined.

Stage 5: Thematic Review & Refinement

In stage 5, each potential theme, corresponding subthemes, and related points for discussion were visually mapped using the online program "MindMup" (www.mindmup.com). This mindmapping program assisted with the visual organisation of each theme.

After mapping, each theme was compared back to the data set and reviewed for the overall level of support, which included identifying each specific participant who contributed to the theme. This process of individual thematic comparison to the larger body of data helped to ensure the "fit" of each theme with the entire data set, and provided an additional review process which ensured that nothing important or interesting had been overlooked. Throughout this entire process, themes and subthemes were continuously reworked and refined.

Stage 6: Writing-Up

Stage 6 of writing-up commenced after each "mindmup" was complete with subthemes and supporting documentation. Each theme and subtheme was described, and corresponding quotes were taken from supporting interviews. This process of writing helped to develop my thinking around each theme, while allowing them to be further refined. Writing also assisted in identifying links and connections *between* themes, thus creating an overall conceptual understanding of the data.

The final themes which emerged from the young participants can be briefly summarised as:

- 1. Invisible Hyperactivity-Impulsivity
- 2. Delayed Diagnosis & Treatment
- 3. Absent Knowledge & Understanding
- 4. Student-Teacher Relationships.

The final themes which emerged from the teacher participants can be briefly summarised as:

- 1. Inadequate Teacher Education
- 2. Trouble for Teachers
- 3. "Relationships" as Intervention
- 4. Gendered Assumptions.

All of the themes listed above will be discussed in greater detail in Chapters Seven and Eight of this thesis.

6.22.3 Quantitative Data Analysis

Since the findings of this study are not intended for generalisation to the larger population, quantitative data was used purely for descriptive purposes and to provide additional support and validation to the themes and findings which emerged firstly from the qualitative data contained in the semi-structured interviews.

Quantitative data also served to enhance the reader's understanding (Onwuegbuzie & Combs, 2010) of participants' demographic characteristics, along with their responses and thinking in relation to the points queried. This descriptive use of statistical data is line with O'Dwyer and Bernauer (2014) who note that such analysis is one means of understanding the data.

The specific steps employed in the analysis of the quantitative data are now discussed in more detail in the following sections.

6.22.3.1 Cleaning the Data Sets

Prior to analysis, every data set went through a process of cleaning and reduction as a means of ensuring that those responses used in analysis were accurate, and that possible instances of duplicate entries did not compromise or skew the representativeness of the data.

Cleaning the Young Participant Data Set

The anonymous young participant questionnaire contained a total of 29 responses. Given that only 17 participants were provided with the URL link to the online questionnaire, it was clear that some may have submitted their survey numerous times. Therefore, the following steps were taken to clean the

young participant data set so that the questionnaires used in analysis represented only one contribution from each respondent:

- 1. Questionnaire responses that were disqualified, blank, or contained only answers to the informed consent questions were removed from the set. This totalled (n=10) responses
- 2. Questionnaires with only demographic information (n=1) were also removed
- 3. Duplicate entries were deleted from the dataset (n=4). Duplicates were determined by considering the starting and submission dates, along with the content of answers. In most cases, the duplicates had identical answers, particularly word-for-word qualitative answers. Of the duplicates, one survey was always more complete than the other(s) and this was the one retained, while the other(s) were deleted from the data set. The following chart illustrates one example of a suspected duplicate entry. Note the identical starting and submission dates, as well as identical demographic information. In this case, response ID #15 was deleted and #16 retained, given that it was more complete.

Response ID	Time Started	Date Submitted	Status	City	What is your age?	What level are you in school?
15	22/08/2014 18:50	22/08/2014 19:02	Partial	Dublin	14	Third Year
16	22/08/2014 19:03	22/08/2014 19:34	Complete	Dublin	14	Third Year

 Table Nine: Example of Suspected Duplicate Young Participant Questionnaire Entries

The process outlined above resulted in a total of (n=14) questionnaires remaining in the data set which were used in data analysis.

Cleaning the Teacher Data Set

The entire set of responses amassed during both rounds of data collection were used in analysis, given the unlikely event of busy teacher participants taking the time to complete the measure more than once. Prior to cleaning, this data set contained a total of n=407 responses.

The following steps were used in cleaning the teacher online questionnaire data set:

- 1. All blank questionnaires were removed (n=122)
- 2. Any questionnaires containing only the answers to the informed consent declaration were eliminated (n=27)

- 3. Respondents who answered "no" (n=6) or "I am unsure" (n=6) to the question, "Have you ever worked with or taught a student with a formal diagnosis of ADHD?" were removed because the pilot revealed that experience of students with ADHD was a necessary prerequisite for understanding and completing the questionnaire. Additionally, one (n=1) questionnaire was excluded because the participants failed to answer this question and therefore, their experience could not be determined³⁵
- 4. Questionnaires with only demographic information (n=2) were also removed
- 5. Four (n=4) questionnaires which indicated the respondent was a Special Needs Assistant (SNA) were eliminated. Although SNAs can provide extremely valuable input given their close work with students, these responses were excluded because the SNA fulfils a caring role and is not considered to be a "teacher." The National Council for Special Education (2015, n.p.) maintains, "SNAs are not qualified teachers and are not allocated to teach students or provide educational support."

The process outlined above resulted in a final number of n=239 responses used in analysis, with 100% of participants declaring they had direct experience of working with or teaching a student with a *formal diagnosis* of ADHD.

6.22.3.2 Analysis of Qualitative Data Contained in Questionnaires

Questionnaire responses contained a significant amount of qualitative data as most questions allowed participants to provide written feedback or explanations for their answer choices. Most of the qualitative responses were short in length, and easily reviewed and tallied by hand. Additionally, SurveyGizmo produced visual word-clouds which helped to quickly identify the most common responses received to any given question. Examples of these word clouds have been included where appropriate to enhance the visual representation of qualitative data contained in the online questionnaires.

6.23 Conclusion

This chapter has outlined the principles applied in this mixed-methods study of ADHD. This chapter illustrates the significant difficulties encountered in researching a topic that is understudied in the Irish context, with participants that have been largely disengaged in previous research. As shown in

³⁵ It is also recognised that participants may have worked with students with "suspected" or "undiagnosed" ADHD, however, this study was specifically about students formally diagnosed with the condition.

this chapter, multiple approaches and creative solutions were often required in order to assist this project in coming to fruition.

The following chapter now examines the thematic findings and discussion which emerged from data collected with young participants regarding their experiences and perspectives of living with ADHD.

Chapter Seven: The Perspectives of Young Women Diagnosed with ADHD

7.1 Introduction

This chapter explores the perspectives and experiences of young women diagnosed with ADHD in relation to how the condition impacts their daily lives, and academic and social experiences. First, this chapter begins with a summary of personal profiles for the 17 young participants who completed semi-structured interviews. These profiles were created from details provided in a variety of sources such as interview data, email correspondence with participants and/or their parents/guardians, and in some cases, from medical records obtained either directly from participants and/or their medical carers. Additionally, demographic statistics are provided for the 14 individuals who also completed the anonymous online questionnaire. This information is provided in order to offer readers a characteristic overview of the cohort of young participants.

The remainder of this chapter is dedicated to discussing the four central themes which emerged from the analysis of participants' experiences and perceptions of living with ADHD. Quantitative data obtained in the online questionnaire was used in a supportive and descriptive fashion to further illuminate these themes. Because these findings are based on a relatively small number of participants, they must be carefully considered and interpreted with caution, yet I believe they do offer important insight into the lives of some young women diagnosed with ADHD.

7.2 Young Participant Profiles

Ailish: Seventeen years of age and recently diagnosed with ADHD a few months prior to our interview. Excelled in the musical arts. Believed she was diagnosed with ADHD "by accident" because her condition was only recognised after attending counselling for emotional and relationship difficulties. Strongly felt that teachers should have played a more significant role in recognising her difficulties and initiating earlier referral.

Ashling: Eighteen years of age at the time of our interview. Was diagnosed with ADHD at age 17, approximately two months before her Leaving Certificate examinations. In her first year of University studying creative and artistic subjects. "Self-diagnosed" her ADHD and struggled to obtain a diagnosis as her GP maintained that "girls can't have ADHD." As a result of her experiences, she was dedicated to raising awareness about ADHD, especially for others going through similar situations.

Amelia: Was diagnosed with ADHD at the age of 15, and one of only two participants to report that teachers were responsible for recognising her struggles and referring her for assessment. She always struggled in school, and felt that teachers consistently emphasised shortcomings and faults associated

with her ADHD, such as disorganisation and handing in work late. In her view, ADHD is not a "disability, it is a different ability."

Anna: Sixteen years of age and was diagnosed with ADHD just 6 months prior to our interview. Was preparing to begin Transition Year in the autumn. Like others in this study, Anna struggled to find a physician who understood ADHD in young women, and she saw a host of doctors prior to receiving her diagnosis. She also felt somewhat disadvantaged at her "late" diagnosis, and questioned why her condition wasn't recognised earlier.

Aoife: Nineteen years of age and studying art and design at a Technical Institute. Was diagnosed with ADD two years earlier, and believed that she self-diagnosed her condition. Refused to cast blame for her late diagnosis and displayed a "get on with it" attitude towards life. Emphasised the importance of parental support, and was one of the few participants who declined pharmacological treatment of her condition.

Catriona: Fifteen years old, in her fourth year of second-level schooling, and had been diagnosed with ADHD for about a year. Was greatly concerned about the effects of medication, particularly in relation to the social impact which sometimes influenced her interactions with friends. The formal diagnosis of ADHD was a largely positive experience for her, as she explained, "I knew that I had it now and I wasn't just guessin'."

Emma: Twenty years of age and studying sciences at a Technical Institute. Was diagnosed with ADHD approximately three months before our interview. She was assessed for ADHD as a teenager, but was not diagnosed. After entering college, she self-advocated by declaring her concerns about struggles with suspected ADHD to school officials. After diagnosis, she made the decision not to use medication in the treatment of her condition.

Faye: Was entering her third year of second-level in the autumn, and had been diagnosed with ADHD approximately a month and a half prior to our interview. Commonly experienced anger towards friends, teachers and parents, and discussed having to deal with "mean girls" in her school. Expressed concerns about being treated differently by teachers, and being viewed differently by family members, as a result of the ADHD diagnosis.

Fiona: Nineteen years of age and in her first year of college, studying sciences at a Technical Institute. Experienced all of the core symptoms of ADHD, but most especially hyperactivity-impulsivity. Although she "hated" second-level, she was generally complimentary of her teachers, describing some as "miraculous" and "so good" to her, which she felt may have been due to the brain injury she sustained at 6 years of age. *Clodagh:* In her third year of second-level and preparing for her Junior Certificate exams. Was 8 years old at the time of her diagnosis, and her initial symptoms were largely recognised by her mother. Like others, she also experienced anger issues as a child and often let her frustrations out on teachers. She believed this was one reason why teachers labelled her as a "bold" child. Emphasised the positives that ADHD can bring to a person's life, such as enhancing their creativity, imagination, and ability to think quickly.

Harley: Fifteen years of age and has been diagnosed with ADHD for approximately one year. Her diagnosis came as a complete shock, as she admitted, "I never would have thought that I would have it." Often, she "hid" her hyperactive symptoms, particularly in school, and felt this may have resulted in her being misdiagnosed with the wrong type of ADHD, which she blamed herself for.

Kaitlin: Fifteen years of age and in her third year of second-level schooling. Diagnosed with ADHD at age 7, and implicated teachers as the first to recognize her difficulties. She struggled with "anger issues" which she attributed partly to the frustration of being misunderstood by others, and experienced difficulties in peer relationships from an early age, often because she felt her peers used her as a scapegoat.

Laura: Sixteen years old and in Transition Year of second-level. A few years prior to her ADHD diagnosis, she was engaging in anti-social behaviours which resulted in her being arrested. After CAMHS services were sought for her, she was subsequently diagnosed with ADHD. Described an exceptionally close bond with her Year Head, who played a supportive and protective role in her life, and emphasised the importance of taking medication properly.

Molly: Sixteen years of age and preparing to begin her Fifth Year of second-level in the Autumn. Was diagnosed with ADHD at age 8, and credits her mother with being the first to notice her hyperactive symptoms. Molly is also the younger sister of participant Róisín. Experienced difficulties in school, particularly in her relationships with teachers, some of whom she felt were quite "mean."

Phoenix: Was the youngest participant at 13 years of age, and in her first year of second-level. Diagnosed with ADHD around 9 years of age, and displayed difficulties quite early in school, being labelled with "behavioural issues." She was born two months premature, and had received therapy at a local clinic for many years, however, was diagnosed with ADHD only after a physician reviewed her files and put the pieces together. Like others, displayed a vivid interest in art and creativity.

Róisín: Twenty years old and studying languages in college. Was diagnosed with ADHD at 5 years of age, and like her sister Molly, credited her mother with recognising her symptoms. Described herself as a "very difficult" child, who displayed symptoms of hyperactivity and inattention.

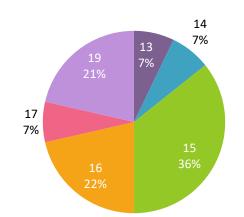
Rose: Fifteen years of age, in her third year of second-level, and preparing for her Junior Certificate exams later that year. Comes from a family steeped in the creative arts, something that she excels in as a talented musician. Received her diagnosis of ADHD secondarily, after experiencing bullying in school and attending the local CAMHS for support. Expressed a negative self-image related to her abilities to perform academic tasks such as studying and concentrating.

7.3 Online Questionnaire Demographic Information

The following information summarises participants' demographic information as collected in the online questionnaire. As a reminder to the reader, all participants were asked to complete *both* the personal interview and online questionnaire, however, only 14 of the 17 participants completed the online measure. It is also important to remember that the 14 individuals represented in the anonymous questionnaire data *are the same individuals* represented in the interviews.

Age of Participants

The majority of participants who completed the online questionnaire were between 15 and 19 years of age:



VALUE	PERCENT	COUNT
13	7.1%	1
14	7.1%	1
15	35.7%	5
16	21.4%	3
17	7.1%	1
19	21.4%	3
	Total	14

Chart One: Ages of Questionnaire Respondents

Length of time to obtain a diagnosis of ADHD

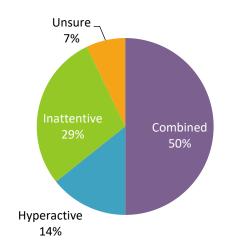
As the chart below illustrates, most online participants reported obtaining a diagnosis of ADHD in less than a year from the time when professionals were first contacted about their symptomatic concerns. However, estimates varied widely from "less than one month," to "5 weeks," to "6 months." Twenty-one percent (n=3) of participants reported waiting 1 year to receive their formal diagnosis.

COUNT	RESPONSE
3	1 year
1	5
1	5 weeks
1	6 months
1	A few months
1	I have no idea.
1	I'm not sure of this
1	Less than 1 month
1	Less than a year
1	Several months
1	Unsure
1	few weeks
TOTAL: 14	

Chart Two: Responses to the question: "How many months or years did it take for you to receive a formal diagnosis?"

Type of ADHD diagnosis

The majority of online participants were diagnosed with Combined Type ADHD, which was followed in numbers by the Inattentive Type. Seven percent (n=1) of participants were unsure of their particular diagnosis.

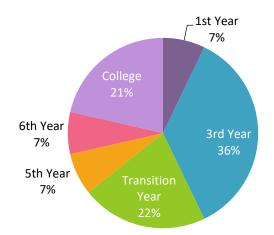


VALUE	PERCENT	COUNT
COMBINED TYPE	50.0%	7
HYPERACTIVE TYPE	14.3%	2
INATTENTIVE TYPE	28.6%	4
UNSURE	7.1%	1
	Total	14

Chart Three: ADHD Diagnostic Types of Questionnaire Respondents

Educational Information

The following chart illustrates participants' current academic level at the time of completing the online questionnaire, and shows that a cumulative of 93% (n=13) of participants were in their third year of second-level schooling, or higher.



VALUE	PERCENT	COUNT
1ST YEAR	7.1%	1
3RD YEAR	35.7%	5
TRANSITION YEAR	21.4%	3
5TH YEAR	7.1%	1
6TH YEAR	7.1%	1
COLLEGE	21.4%	3
	Total	14

Chart Four: Questionnaire Respondents' Current Academic Level

7.4. Summary of Thematic Findings

Theme	Summary
Theme #1: Invisible Hyperactivity-Impulsivity	Participants commonly experienced hyperactivity and impulsivity in mental and emotional forms, which challenged symptomatic descriptions of ADHD in the DSM- 5. Although these symptoms were largely "invisible" to outside observers, participants were keenly aware of their difficulties and the manner in which they were personally affected.
Theme #2: Delayed Diagnosis & Treatment	The vast majority of participants were not diagnosed with ADHD until they were adolescents and young adults. Most participants were clinically referred due to social and emotional difficulties, and were rarely sent for assessment specifically due to concerns about ADHD. The process of delayed diagnosis often led to a greater sense of self- understanding and identification with the ADHD label.
Theme #3 Absent Knowledge & Understanding	Participants perceived a lack of societal understanding and awareness of ADHD in Ireland, fuelled by the belief that some people do not accept the condition as medically valid. Some participants also sensed a personal lack of knowledge about ADHD, despite living with the condition on a daily basis. Overwhelmingly however, participants sensed a lack of ADHD understanding and awareness among their teachers.
Theme #4 Student-Teacher Relationships	Participants commonly experienced stressed and strained relationships with their teachers. It appears that difficulties often surfaced because they felt misunderstood by their teachers who often misinterpreted their behaviours and underestimated their academic capabilities. Additionally, participants felt largely unsupported in second-level and believed that some of their teachers didn't take their diagnosis seriously, while others simply didn't want to help them.

7.5 Theme One: Invisible Hyperactivity-Impulsivity

Participants often experienced ADHD related hyperactive-impulsive symptoms in ways which were "invisible" and unobservable to those around them. However, this did not lessen the seriousness or the impact of symptoms on participants.

Thematic Key Points:

-The majority of participants experienced hyperactivity-impulsivity, which often affected their mental and emotional functioning.

-The DSM-5 (American Psychiatric Association, 2013b) does not adequately account for the way in which participants experienced hyperactivity-impulsivity and described associated symptoms.

Surprisingly, the majority of young participants experienced some form of hyperactivity-impulsivity, evidenced by the fact that 10 participants discussed such symptoms within their interviews, and 64% of online participants reported a diagnosis of either combined (n=7) or hyperactive type ADHD (n=2) in the questionnaire. These are both types in which the symptom of hyperactivity-impulsivity is more prevalent. For participants like Fiona, struggles with externalised hyperactivity were "massive" and earned her the nickname "Duracell."³⁶ These findings somewhat challenge typically held beliefs about ADHD in females, such as the notion that they are more commonly diagnosed with inattentive ADHD (Quinn, 2008) than other subtypes, and that females are less affected by hyperactive-impulsive symptoms (Nussbaum, 2012; Quinn, 2008).

Even some participants diagnosed with inattentive-type ADHD also experienced difficulties with "fidgetiness," which the DSM-5 (American Psychiatric Association, 2013b) recognises as a form of hyperactivity. Interestingly however, despite her fidgety nature, Ashling did not personally consider this as being hyper. As she explained, "I'm not hyperactive, I might fidget a bit or whatever." Such a view may indicate that she conceptualised and equated hyperactivity with large physical movements, and thus, the subtler properties of fidgeting did not serve as evidence of this symptom to her. However, this conceptualisation may also reflect gender stereotypes of ADHD as commonly portrayed in males, who are thought to be more prone to externalised behaviours (Gaub & Carlson, 1997).

The above findings may lend some support to previous research conducted with 127 adolescents with ADHD (ages 13 to 16 years/24 females and 35 males) in which parent and teacher reports suggested

³⁶ Duracell is a brand of long-lasting batteries.

females with ADHD experienced *more difficulties than boys* in the areas of hyperactivity, oppositional behaviours, and conduct problems (Rucklidge & Tannock, 2011, p. 538). One possible explanation for such findings may be due to the fact that these young women likely challenged gender stereotypes which define how young women should behave (i.e. as passive and obedient) and therefore, these girls may have appeared as more greatly impaired than boys with ADHD, because such externalised behaviour is more socially acceptable for males.

7.5.1 Emotional Hyperactivity-Impulsivity

However, despite the stereotypical descriptions of externalised hyperactivity-impulsivity provided above, it is important to recognise that the symptomatic experiences of participants were not limited to physical manifestations which are readily observable to outsiders. Rather, a number of participants reported that their symptoms took on more "invisible" qualities.

For example, within their interviews, three participants mentioned experiencing what appears to be hyper-emotionality. Amelia testified that ADHD is "massively connected to your emotions," and she further articulated:

[If] I feel a wee bit anxious that's gonna make me feel 10 times anxious, like and it definitely affects it. And then when it comes to relationships um...if I get attached to a person that's fine, but if that breaks off, I can like, be like feeling like 10 times down and like then I've lost trust 10 times more and it, like it definitely goes quite deep.

Similarly, Harley believed that, "the H [in 'Hyperactivity'] stands for Hyper-Reactive," and like her, Ailish also found that she had difficulty in controlling her emotions prior to diagnosis, as she explained, "my emotions would kind of burst out whenever they could." In particular, six participants also described the experience of struggling with depression-like symptoms, and Ashling remembered, "I was moody...I suppose I was a bit depressed really...I lost interest in a lot of things I was creative in." Additionally, four participants described struggles with anger, which was reported to be intensified by ADHD. As Harley testified, "When I'm angry, I'm really angry." Kaitlin agreed and stated, "We [people with ADHD] tend to have anger issues," thereby further illustrating the struggles with anger and emotion that appear to be a common feature of life with ADHD.

These findings lend support to previous research which suggests that persons with ADHD may experience difficulties in emotional regulation (Van Cauwenberge et al., 2015; Biederman et al., 2012). This characteristic may be especially true of teenage girls with ADHD as they "tend to be more emotionally reactive than other girls, and to have a harder time moderating their responses" (Nadeau, Littman & Quinn, 1999, p. 180). However, it is important to note that studies have found that emotional dysregulation is strongly associated with other conditions which are frequently comorbid

with ADHD (Bunford, Evans & Wymbs, 2015, p. 210), and conditions like bipolar mood disorder, anxiety disorders, and post-traumatic stress commonly occur in women with ADHD (Nadeau & Quinn, 2002a, p. 152). Interestingly, all of these conditions are closely tied to the individual's emotional regulation and affect. Therefore, it could be argued that difficulties with emotion may not solely be related to ADHD, and this may be one reason why the DSM-5 (American Psychiatric Association, 2013b) fails to specifically address emotional functioning within symptomatic descriptions of ADHD.

7.5.2 Psychological Hyperactivity-Impulsivity

Six participants also experienced what could be described as invisible hyperactivity-impulsivity through psychological or mental manifestations, which assumed a variety of forms such as:

- An inability to control the rate/speed at which their brain operates
- Difficulty in controlling the direction of their thoughts
- An inability to "calm" their minds down.

Although the DSM-5 maintains that "unrelated thoughts" may be a feature of *inattention* (American Psychiatric Association, 2013b, p. 59), nowhere in the description of hyperactivity-impulsivity does this text examine the *hyper-psychological* experiences which participants sometimes reported. For example, Ashling admitted, "Yeah, there was so much going on in my head," while Amelia noted, "My brain's working so fast, and it does work very fast, that's a given." For Anna, the intensity of her mental activity often continued even at times of rest:

I'm just like "go, go, go" in my head, but like my body's just like "no." So like even going to bed I'm kind of just always like, have energy, but it's weird, like I just think a lot and stuff like that.

In many ways, Anna's experience highlights the lasting and pervasive impact of psychological hyperactivity-impulsivity, which often continue to affect the individual, even after their levels of bodily energy have depleted. This implies that such high levels of psychological hyperactivity may create difficulties for the individual in getting enough sleep, which will likely impose additional consequences in their daily functioning, particularly within school.

Weyandt et al. (2003) note that other studies have also found that adults with ADHD commonly report mental restlessness, and in light of present findings in this doctoral study, it may indicate that such effects may be characteristic of adolescents and young adults as well. This also lends some credibility to the work of Sibley et al. (2012) who note that it is possible for adolescents to experience difficulties associated with ADHD which are more common in adults.

Clodagh also described the experience of being unable to control the direction of her thoughts, despite the desire to listen and engage in other activities:

[You] have to deal with not being able to concentrate and listen to your friends talking. You really want to, inside you are like, "I really wanna listen to, I really wanna listen to them." Like, "Why is my mind doing this? Please stop going in different places!" And the different directions it takes you is something completely irrelevant to what your friends are saying to you.

In light of Clodagh's experience, it seems reasonable to infer that mental hyperactivity-impulsivity could potentially impact on the quality of their interpersonal relationships, especially if others perceive the individual with ADHD as "not paying attention" or as not caring about what they are saying. Again, this emphasises the pervasive nature of ADHD which impacts not only the individual, but also their relational functioning.

Five participants also reported that ADHD fostered a tendency to "overthink" and "overanalyse" things, which sometimes directly impacted their ability to learn in school—something Harley personally experienced as her thoughts would multiply and build progressively:

I kind of do this thing where I think about something and progress on the thought and then progress and progress until it's like this big disaster. So I'd go into the class and if I didn't understand the last class, I'd be worryin' about that, then I'd be worryin' about homework, and then I'd be worryin' about a certain test that would be comin' up and then because I'm worryin' about that I'm not learnin' what's happening in the class.

As this quote illustrates, such high levels of mental activity had detrimental effects on Harley's ability to engage with the learning activities in the classroom. However, the hidden nature of this psychological disruption could be particularly troublesome, as the teacher is likely incapable of observing the mental difficulties which the student is encountering, and therefore, may not readily understand why these individuals are struggling. This implies that it may be important for young people with ADHD to speak with their teachers about their experiences, and how their symptoms may be impacting their mental health, and their ability to function successfully in the classroom.

In summary, this theme challenges us to consider adopting a broader conceptualisation of ADHD one which allows for, and is sensitive to the ways in which females may experience ADHD differently from the "typical" male presentation. It also highlights the fact that symptoms of ADHD may be experienced internally, in ways that are hidden and invisible to outsiders. Additionally, this theme calls attention to the fact that the DSM-5 clearly fails to adequately capture or emphasise the emotional

and psychological manifestation of hyperactivity-impulsivity in its symptomatic descriptions.³⁷ The closest the DSM-5 comes to discussing the impact of such symptoms on young people is a brief mention that, "During adolescence, signs of hyperactivity (e.g., running and climbing) are less common and may be confined to fidgetiness or an inner feeling of jitteriness, restlessness, or impatience" (American Psychiatric Association, 2013b, p. 62). The implications of this theme point to the fact that the experience of hyperactivity-impulsivity as reported above by participants, ultimately challenge the typical symptomatic portrait as painted by the DSM-5, and may signal a need to reconsider whether gender-separate diagnostic criteria for ADHD should be included in future revisions of this text.

7.6 Theme Two: Delayed Diagnosis and Treatment

The majority of participants experienced delayed diagnosis and treatment of ADHD which did not occur until their adolescent and young adult years. In the context of this discussion, "delayed" is relative to age-norms for ADHD diagnosis in males who are often diagnosed earlier during childhood.

Thematic Key Points:

-Very few participants were referred for clinical assessment specifically due to concerns about ADHD, and many experienced missed opportunities for earlier diagnosis.

-ADHD was often recognised secondarily, after participants sought clinical assistance for other difficulties, usually related to social and emotional needs.

-Numerous participants achieved greater self-understanding as a result of their ADHD diagnosis and label.

³⁷ See Appendix A for a full review of DSM-5 diagnostic criteria for ADHD.

As the following chart illustrates, 71% (n=10) of online participants were diagnosed with ADHD between the ages of 13 to 17 years, while 29% (n=4) were diagnosed earlier.

COUNT	RESPONSE
4	14
3	15
2	17
1	7
1	9
1	Five years old
1	My mom noticed when I was young
1	Thirteen or fourteen years
TOTAL: 14	

Chart Five: Responses to the question: "How old were you when you received your formal diagnosis of ADHD?"

As such, it can be said that the majority of participants experienced "delayed" ADHD diagnosis.³⁸ These findings appear to confirm previous research which indicates that diagnosis of ADHD in females can be significantly delayed into adolescence and young adulthood (see Nussbaum, 2012). Statistics also indicate that, "By school age, males are diagnosed with ADHD three to four times as often as females" (Mahone, 2010, p. 790). Researchers suggest that gender differences in the age of ADHD diagnosis may be related to the nature of symptomatic expressions, with boys more likely than girls to exhibit externalising problems (Gershon, 2002; Gaub & Carlson, 1997). It is theorized that, because these behaviours may be bothersome for others, such as teachers and pupils in the class, boys may therefore be more likely to experience earlier referral for suspected ADHD. In comparison, girls may internalise their symptoms, as evidenced in Theme One, and because these symptoms are less bothersome to others, they may be correspondingly less likely to experience early referral, and more likely to experience delayed diagnosis of ADHD.

7.6.1 Secondary Recognition of ADHD

When asked about who was responsible for first recognizing their difficulties and struggles prior to diagnosis, six participants implicated a parent, while another six implicated medical professionals. In comparison, only two participants named their teachers as being active in the process of identification and referral for clinical support.

³⁸ It is important to note that this phenomenon is not limited only to ADHD, as other conditions such as Autism, also show similar trends of delayed diagnosis in females, and are thought to be diagnosed more frequently in males (National Association for Special Educational Needs, 2016).

Surprisingly, three participants claimed to "self-identify" or "self-diagnose" themselves with ADHD. As Aoife recalled, "I pretty much diagnosed myself...I kind of narrowed it down and I figured it out." Research among adults with ADHD in Ireland also found that participants shared similar experiences of self-diagnosis (MacNeela, 2016, p. 59), which suggests this may be common practice among adolescents and adults who may be inclined to use internet-based sources in researching personal medical issues.

In being the first to recognise their own symptoms, the young women in this present doctoral study showed a significant level of self-awareness, self-determination, and self-advocacy in researching their experiences and reaching out for help. They also directly challenged stereotypical notions of women as "passive" and "dependent," as they took personal responsibility for finding a solution to their difficulties. It is also interesting to note that all three of these young women attended single-sex all girls' schools. Advocates of single-sex schooling for females argue that these schools typically challenge culturally embedded gender-stereotypes, for example, by encouraging participation and achievement in areas which typically have a higher male presence (Patterson & Pahlke, 2011), such as in sciences and maths. Citing numerous sources, Smyth (2010, p. 51) notes that studies have shown girls in single-sex schools "are more positive about their own abilities and their control over their lives, have less stereotyped gender role attitudes and hold higher aspirations for the future." Thus, the actions taken by participants in this present doctoral study certainly seem to support such conclusions, as they clearly took control over their lives, and their experiences, and sought help when it was required.

While the three participants who "self-diagnosed" sought clinical help specifically due to concerns about ADHD, this was not the norm. Even most parents did not automatically "suspect" ADHD in their daughters—they simply knew she was in need of assessment. Instead, the majority of participants were initially sent for clinical evaluation as the result of social and emotional difficulties, and this was true for eleven participants. Typically, it was only upon closer inspection that clinicians were able to realise, secondarily, that ADHD could be present. Consider the following:

- Rose attended her local CAMHS as a result of being bullied in school
- Ailish first sought counselling due to "very bad emotional problem"
- Fiona and Harley both sought services due to depression related issues
- Prior to clinical assessment, Laura engaged in severe anti-social behaviour and was even arrested. Her diagnosis was only realised after seeking CAMHS services due to these issues.

Ailish opined that her ADHD diagnosis came about "by accident," and she furthermore believed, "The only reason I got tested [for ADHD] was because I was going through a hard time." As her comment,

and the examples above illustrate, concerns specifically about "ADHD" were not typically the primary reason why participants sought clinical help, and subsequently, the condition was detected only after seeking medical assistance for other reasons.

7.6.2 Missed Opportunities for Diagnosis

Another reason why so many participants were not diagnosed with ADHD until adolescence and young adulthood appears related to their experience of numerous missed opportunities for diagnosis, whereby teachers and medical professionals were unable to correctly detect the presence of ADHD in their symptoms.

7.6.2.1 Missed Opportunities in the Classroom

As previously mentioned, only two participants stated that teachers were responsible for initially recognising their difficulties and drawing attention to the need for further assessment. However, for the other participants in this study, it appears that such proactivity on the part of teachers was rare.

In addition to struggles with hyperactivity-impulsivity, all 17 participants in this study reported experiencing difficulties with "inattention," particularly within the classroom setting. This symptom was described in a multitude of ways such as: daydreaming and "zoning out," being off in their "own world," an inability to focus or concentrate, and feeling distracted. Fifty-seven percent (n=8) of online participants reported that ADHD impacts their functioning in daily life, and again, issues with "focus" and "distraction" were at the heart of their struggles, as the following quotes from the anonymous questionnaire illustrate:

- "Hard to focus on what people are saying as I get easily distracted"
- "Find it difficult to focus, especially at school"
- "Stops me from concentrating...stops me from learning, stops me from listening, affects memory."

For some, like Ashling, struggles with inattention were a consistent feature, even as a young child:

In primary school if you looked at my report cards it was like, "Excellent, excellent, excellent, excellent." But then you look at the comments section, like "Ashling...needs to focus more...she's drawing all over her copies...she's staring out the window," or "she's making up stories when she's supposed to be doing something else," or you know, something like that. So like I was great at the work I just you know, couldn't focus.

Ailish also experienced similar patterns like those described above, starting in primary school. But, rather than call attention to her problems, she felt as though teachers remained silent, and she explained, "They never really said, 'We think your daughter has a problem.'" In her opinion, teachers

should have recognised her condition earlier and advocated for her needs. As evidenced in her testimony, and in others like her, although teachers were able to observe struggles with inattention and concentration, they rarely understood these characteristics to be symptomatic of ADHD, nor did they consider them serious enough to warrant further assessment. This may therefore be one of the primary factors which led 71% (n=10) of participants in this study to experience delayed ADHD diagnosis in their teenage years.

Additionally, it is important to note that one of the reasons for the above difficulties may relate to the fact that participants' associated behaviours with inattention were likely less troublesome for teachers and other students in the classroom.³⁹ Citing numerous sources, Sciutto, Nolfi and Bluhm (2004, p. 247) note that because girls with ADHD often exhibit fewer disruptive behaviours and higher levels of inattentiveness and internalising symptoms, "This pattern of symptoms is less likely to disrupt the classroom and may be more readily overlooked." Similarly, Nadeau, Littman and Quinn (1999, p. 198) maintain, "Because they [girls with ADHD] are not usually disruptive, most teachers will, quite naturally, focus on those students, more often boys, who are causing problems for the teacher and for other students." Therefore, this seems to illustrate that teachers are more greatly concerned with maintaining classroom order as their first priority, and as a result, learning difficulties which result from inattention may take on a lower urgency because of their less disruptive nature.

Additionally, social gender-role expectations may have prevented teachers from being able to correctly recognise and identify ADHD in these young women, and researchers suggest that a student's gender does influence the likelihood of referral for ADHD (Sciutto, Nolfi & Bluhm, 2004). For example, as noted in Chapter Two of this thesis, "Daydreamy" is a characteristic most closely associated with women. It may be the case that teachers viewed daydreaming and related behaviours as "natural" for young girls, and therefore, they would have not considered it a "difficulty," nor would they have felt it required further assessment. This would potentially explain why, for both Ashling and Ailish, teachers never suspected there was a medical problem, and never raised any concerns. In light of such conclusions, it may be reasonable to suggest that young women who internalise their ADHD, and who exhibit passive and less disruptive forms of the condition, thereby reinforce gender stereotypes of teenage girls as "carefree," "daydreamy," and "ditzy." If so, this would be an added reason why participants with more prevalent inattentive features were not recognised sooner.

³⁹ It is recognised that the same could be argued for boys with primarily inattentive features as well. However, since girls are thought to be affected more significantly by such features, the discussion of this chapter will focus largely on girls.

It may have also been the case that teachers held deeply embedded gender stereotypes of ADHD as a condition of "hyperactive and impulsive young boys" (Sassi, 2010, p. 29), and this could have directly impacted their ability to identify female students who were struggling with the condition. For example, as a result of this stereotype:

- 1. Some teachers may have believed that ADHD largely, or only, affects males. This belief could have been further validated by their own experiences in the classroom, especially if they had previously taught mostly males diagnosed with the condition. As a result, teachers may have been less inclined to suspect that a student was affected by ADHD when that student was *a female*.
- 2. Some teachers may have strictly associated ADHD with hyperactivity in all cases, and thereby, would be *less likely* to see inattentiveness (particularly in a girl) as an indicator of the condition.⁴⁰ If so, this could also partially explain why the inattentive features displayed by participants, which were outwardly observable, did not "signal" the presence of ADHD to teachers.
- 3. Second-level teachers in particular, may have conceptualised ADHD strictly as a childhood condition, and therefore, would not have necessarily considered that adolescent and young adults could be diagnosed given their advanced age—this may also imply that teachers would be less likely to consider that older students may be living with undetected ADHD.

In some ways, the above findings also call to question teachers' actual level of knowledge and understanding of ADHD, and they conflict somewhat with Ward (2014, p. 489) who concluded that Irish primary school teachers were knowledgeable about ADHD symptoms and diagnosis. If this is true of Irish primary school teachers, it raises doubts regarding the level of symptomatic awareness of teachers in Irish second-level schools, particularly in relation to ADHD in females. Too, it may be the case that teachers are aware of ADHD, but because of public discourse which largely focuses on ADHD in boys, teachers may lack understanding that girls can have ADHD, and/or that ADHD may manifest differently in girls, as the above findings tend to support.

It is also important to consider that gender expectations may have also played a role in the *early diagnosis* of some participants. Interview data revealed that 100% of the participants who were diagnosed with ADHD during primary school (n=5) reported experiencing outward bodily

⁴⁰ This assumption is somewhat understandable, in light of clinical stereotypes, and given that the very name of the condition itself, "Attention Deficit *Hyperactivity* Disorder," is somewhat misleading and may cause others to believe that hyperactivity is a necessary feature for an ADHD diagnosis.

hyperactivity-impulsivity. As such, they may have challenged stereotypical notions of what young girls "should" act like (i.e. as quiet, compliant, and passive) and thus, their difficulties and "difference" stood out more clearly to those around them. Such notions are supported by Nadeau, Littman, and Quinn (1999, p. 49) who argue:

It is easiest to spot the hyperactive girls whose symptoms are similar to those of many boys with AD/HD...Because their behaviors are in stark contrast to the quiet and compliant stereotype of a "typical" girl, such girls will be very visible to teachers and parents.

In many ways, the hyperactivity experienced by participants visibly marked them as "different," and as such, they (because of their ADHD) challenged cultural gendered stereotypes of what it means to be female, and they were correspondingly identified and properly diagnosed.

In light of the discussion presented above, some may question the level of parental responsibility in identifying disorder within their children. They may also question whether it is fair to place responsibility for diagnostic recognition on teachers who are not medically or clinically trained, and cannot be reasonably expected to know every condition that might be encountered in their classrooms. It is important to remember, as previously reported, parents were responsible for recognizing their daughter's struggles in most cases. Yet, a few participants felt that it can be difficult for parents to "recognise" disorder when it is within their child. As Ailish explained, "You know...it's very hard for parents to diagnose you with something because they've known you all your life they're just saying 'that's just you." This implies that parents may have a limited view of their child because of their longitudinal familiarity, and this may complicate their ability to recognise when something is "amiss," as compared to when something is "natural" for the personality and behaviour of their child. In comparison, teachers have the advantage of personal distance, as they are not as intimately connected to the child. They also see the child outside of the home setting, and can compare the individual to other peers in the classroom. In theory, these factors may help teachers in identifying when students exhibit behaviours which are a-typical for their age and developmental level, and it is a recognition of the important role that teachers play in identifying students with special needs, as well as the value of their experience in the classroom. These findings also highlight the importance of parents and teachers working cooperatively to identify when a child is in need of assessment.

7.6.2.2 Missed Opportunities in the Clinic

Within the clinical setting, participants encountered a number of issues which resulted in further missed opportunities for ADHD diagnosis, such as the following:

- Physicians tested for other conditions, but did not evaluate the individual for ADHD. Ailish was tested for Dyslexia, and this came back negative. After this she reported, "they never tested me for anything else."
- The individual could be tested for ADHD, and given a negative result. ADHD was initially ruled out for both Anna and Emma.
- The individual may receive a diagnosis for other conditions. Physicians suspected that Anna's difficulties were related to anxiety and depression. She was diagnosed with ADHD only after seeing a doctor *who specialised* in this area.
- ADHD can be ruled out *without any testing or evaluation*. Ashling was the only participant to report this experience. After raising her suspicions about ADHD with her GP, the doctor told her bluntly, "I'm sorry dear, but girls can't have ADHD."⁴¹ Similar to others, she attended a specialist to obtain her diagnosis.

In all of these cases, it is worth considering whether gender influences the diagnosis of ADHD within the clinical setting. For example, a vignette study of child psychologists, psychiatrists, and social workers concluded that gender significantly predicted whether an individual would receive a diagnosis, as "the odds of clinicians making an ADHD diagnosis in the boy vignette was more than twice as high" than diagnosis for the female vignette (Bruchmuller, Margraf & Schneider, 2012, p. 134). These findings also raise questions regarding the ability of Irish clinicians to accurately recognise ADHD in girls. Here too, Sassi's (2010, p. 29) clinical stereotype of ADHD as a condition of "hyperactive and impulsive young boys" may be one reason why clinicians did not take a more proactive approach to suspecting and evaluating ADHD in participants. If they believe ADHD mainly affects young males, then clinicians would be more likely to suspect other conditions first, before thinking about ADHD in females. This appears to have been the case with many participants, given that their ADHD was only recognised secondarily, sometimes after they were tested for, and diagnosed with, other conditions.

7.6.3 Self-Understanding through Diagnosis

Participants who received a delayed diagnosis of ADHD revealed a variety of responses to, and thoughts about, being diagnosed with the condition. For example, six participants initially experienced a range of negative emotions in relation to their ADHD diagnosis. Negative feelings ranged from annoyance (Anna), to feelings of being a "weirdo" (Fiona), to sadness and guilt (Faye), to shame

⁴¹ This example points to clear *misinformation* regarding the condition and raises questions in relation to the level of knowledge and understanding that medical professionals have about ADHD, particularly as it affects girls. Yet, some may argue that "girls can't have ADHD," at least, not according to DSM diagnostic standards, if they are indeed gender biased in favour of males.

(Kaitlin). In comparison, Harley was initially quite surprised at her diagnosis, and had never considered that she might have ADHD. As she recalled, "like I never would have thought that I would have it. When the doctor said it to me, I thought she was talkin' about somebody else like, I just didn't see it at all." When pressed further, it was clear that gender-stereotypes of ADHD may have played a role in creating Harley's level of surprise at receiving the diagnosis, as she thought ADHD was about "throwin' chairs across the class." Because she didn't engage in such physical behaviours, she didn't recognise the condition in herself, or consider the possibility that she might also have it. While little has been written on the topic of ADHD diagnosis and influence on identity, similar perceptions were also found in research examining the negotiation of identity in adolescents following diagnosis, "as they did not recognise themselves in the general cultural image of children with ADHD" (Jones & Hesse, 2014, p. 7). This finding provides further testimony to the power of culture, as well as the power of cultural stereotypes, in shaping how ADHD is viewed and understood by the general public, and even by those who are diagnosed with the condition.

Returning to this present doctoral study, other participants like Ashling expressed a sense of relief at receiving an ADHD diagnosis. For six participants, this label also helped to confirm what they already knew, or suspected, about themselves. As Catriona said, "It was good that I knew there was something...I knew that I had it now and I wasn't just guessin'." It appears that for these individuals, the diagnosis was largely a positive experience which helped them to make sense of themselves, their identity, and their experiences, as it provided them with a reason for their difficulties—for which they previously had no explanations. In other words, it helped them to understand that their struggles were not simply due to innate personal shortcomings and deficits. As Amelia testified:

Before [the diagnosis] there was no reason for me like having my homework not done, or there was no reason for maybe me telling my mum that "I'm gonna be back at this time," and not being back till later...there was no reason for my impulsiveness...When the ADHD came along there was like a name...or there was just maybe a slight explanation as to why things happened.

Here too, connections can again be made with Jones and Hesse (2014, p.7) who reported that for their adolescent participants, "the ADHD diagnosis was eventually welcomed as an explanation for their difficulties, it had a positive impact on the way they felt about themselves and their shortcomings." Similar positive reactions were also found among adults who experienced late diagnosis of ADHD (Hansson Hallerod et al., 2015). Taken in total, such findings indicate that for adolescents and adults who are diagnosed later in life, the ADHD label can serve a positive function in aiding their self-understanding.

Additional parallels can also be drawn between the above findings and the experiences of persons diagnosed with mental illnesses. Tekin (2011, p. 357) argues that, "the DSM diagnosis may function as a source of narrative that affects the subject's self-concept," and in most cases, it can be said that the diagnosis of ADHD served to positively enhance and normalise the self-concepts of the young women in this present research. Furthermore, Tekin (2011, p. 358) maintains that among those diagnosed with a mental disorder, "a DSM diagnosis may have positive ramifications on the subject's self-concept, since it appropriates the subject's experience in an established classificatory system, thus facilitating her self-understanding by shedding light on her experience with the mental disorder." Again, the findings of this present doctoral study would appear to support such conclusions, and further illustrate how the diagnosis of ADHD, even if delayed, can aid in promoting a positive sense of self-understanding and awareness in young women.

Beyond self-understanding, seven participants appear to have self-identified with the ADHD label, therefore defining their very self-concept by this condition. In other words, not only did they accept they were "diagnosed" with ADHD, they saw the condition as an essential part of their identity—ADHD makes them who they are. As such, it appears that some of these young women did not separate their "ADHD" from their "identity." For example, both Catriona and Fiona expressed nearly identical thoughts about ADHD as a condition that "doesn't go away" and which "is a part of you." The same was true for Ailish, "This is me, this is part of who I am." In some cases, it seems that the young women seamlessly assumed the label of "ADHD" into their self-identity, like Aoife who explained, "To be honest...like at this stage I've forgotten that I even had it, like it's just there." Emma too, expressed similar sentiments and gave little thought to her condition now, "I don't really think of it, I just think of it as just, just the way I am." According to Jones and Hesse (2014, p. 1) this process of assuming the label into one's very identity is quite common, "By being conceived as a brain dysfunction, ADHD becomes an understanding that is applied not only to the difficulties of inattention, hyperactivity, and impulsivity, but also in some sense to the person as a whole, to their self-image, and to their identity." This, in some part, may explain the reasons for which ADHD was absorbed so intimately into the very identity and self-definition of the young women in this doctoral study.

Although the above examples illustrate the way in which many participants identified with the ADHD label, this was not true for all. For example, Anna personally struggled in an attempt to distinguish between the condition and her genuine personality, or self. She verbalised this struggle as, "like, what is me...and what's the ADHD?" This was particularly true in relation to her hyperactivity, as she explained, "like when I get hyper, I'm like "Is that me?" Based upon Anna's explanation, it seems that ADHD was something "separate" from her identity. As Brinkmann (2016, n.p.) argues, following ADHD diagnosis, some individuals may come to "a self-understanding of oneself as 'possessed' by some

entity with power to create problems in one's life," and this perspective may help to explain why Anna viewed ADHD as separate from her true self. Additionally, it is important to consider that Anna had just recently been diagnosed with ADHD six months prior to our interview. In comparison, the participants who had absorbed the ADHD label into their identities had been, on average, living with the diagnosis for a much longer period of time. This fact may suggest that close identification with ADHD is not something that happens instantly following a diagnosis, and may take an extended period of time, particularly for those diagnosed as teenagers and young adults, as they grapple with the meaning of their condition and its relation to self-understanding. Similarly, qualitative research conducted in Ireland with adults diagnosed with ADHD also revealed that participants experienced an array of thoughts regarding the relationship between the diagnostic label and their self-concept (MacNeela, 2016). This suggests that the development of one's self-understanding in relation to ADHD may be an ongoing process which for some, can continue well into adulthood.

7.7 Theme Three: Absent Knowledge & Understanding

The majority of participants perceived a lack of knowledge and understanding about ADHD on numerous levels within Irish society.

Thematic Key Points:

-Participants expressed concern that ADHD lacks understanding, awareness, and acceptance as a "legitimate" medical condition within Ireland.

-Some participants also felt they lacked personal understanding of ADHD, despite living with the condition on a daily basis.

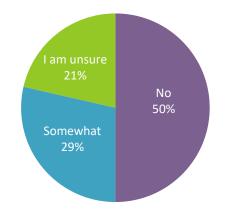
-Of all social groups discussed, participants most readily perceived a lack of knowledge and understanding of ADHD among their teachers.

7.7.1 Lack of Societal Understanding & Awareness

Within their interviews, seven participants felt they had perceived a general lack of understanding about ADHD within Irish society, and only 14% (n=2) of online participants believed that ADHD is viewed as a legitimate medical condition within this context. This perceived lack of understanding and legitimacy appeared to stem from the sense that some people do not believe the condition is "real," that ADHD is often viewed as an "excuse" for personal failings, and that some simply misunderstand the true nature of the condition, as evidenced in the following anonymous quotes from online questionnaire:

- "They just think we're annoying or stupid"
- "A lot of people don't believe it's a real condition"
- "ADHD in my opinion is misunderstood in girls. People who don't know about it [and] presume that the person just wants to run around the whole time, which is not the case"
- "That we use our disorder as an excuse for everything and that it isn't as bad as we explain it is."

When asked, "In your opinion, do others without ADHD understand what life with the condition is like," 50% (n=7) of online participants answered negatively, and none responded affirmatively, thereby indicating that participants may have especially perceived a lack of understanding, and perhaps even a lack of empathy for their situation, from those who are personally unaffected by ADHD.



VALUE	PERCENT	COUNT
NO	50.0%	7
SOMEWHAT	28.6%	4
I AM UNSURE	21.4%	3
	Total	14

Chart Six: Respondents' views regarding whether those unaffected by ADHD understand what life with the condition is like

However, one online participant mentioned the importance of *personal experience* in aiding understanding of ADHD, and expressed the opinion that no one can fully understand their lives, unless they too, are diagnosed with the condition:

I personally think that nobody can fully understand, even professionals, unless they have it themselves. I think that a person who doesn't have ADHD but knows exactly what it means to have it can accept how it feels to have ADHD but cannot understand how it feels because no feeling can be understood until it's felt personally.

During her interview, Ashling expressed the belief that there is a lack of awareness and discourse regarding ADHD in Ireland. As she explained, "I hadn't heard about anything in Ireland you know...no awareness about it, you know, no one had ever mentioned it to me, or whatever even though it seemed to be so common like in the statistics and everything." Similar sentiments were also expressed by an online participant who commented, "It's not really spoken about or taught to make people understand it more clearly." If this lack of communication and discourse about ADHD accurately represents the present situation in Ireland, it may potentially explain the deficiencies in societal understanding and knowledge observed by participants, as it is difficult for people to understand a condition which has little public awareness and is not discussed openly.

Additionally, it is important to consider the psychological impact that participants may experience as a result of living with a condition which they feel is not fully understood or accepted by the larger society in which they reside. As Theme Two illustrated, a number of participants closely assumed the ADHD label into their very self-concept and identity. Yet, if they perceive their "condition" is misunderstood or rejected, they may internalise these feelings *personally* and feel similarly misunderstood or rejected, because as they conceptualise it, "the condition and the self," are inseparable. This may also partially explain why a number of participants, as noted in the introductory profiles, were especially passionate about the need to educate others about ADHD and raise awareness about the condition. They were often willing to engage in this task personally, and some viewed participation in this study as one means of accomplishing this goal.

The historical development of ADHD in Ireland should also be considered in making sense of participants' experiences as shared above. The first references to ADHD within the Irish context were made in the 1980s (Edwards, 2014), however, ADHD was still being referred to as "a relatively new phenomenon" even in the late 1990s (Republic of Ireland, House of the Oireachtas, 1998, para. 3). It would be easy to assume that, at the writing of this thesis in 2016, the construct is much more well-known within modern Ireland, yet the views of participants challenge us to consider otherwise. In light of their perceptions, it may be possible to argue that, although ADHD has been in Irish consciousness for nearly forty years, it has not *fully entered* societal awareness due to a lack of discourse, and therefore, public understanding and acceptance of the condition remains low.

In addition, there may be other factors which have confounded the social understanding and acceptance of ADHD in Ireland. For example, as noted in Chapter Two of this thesis, the ADHD construct is quite controversial and debateable, and such criticisms, particularly when perpetuated by the media, can powerfully influence how people come to conceptualise conditions, especially those that appear "new" to the scene. As Edwards (2014, p. 55) notes, this may be particularly true of the Irish context, where discourse surrounding ADHD:

has been shaped by contention in the popular media and from the outset, parents of children with the condition have seen themselves as fighting to correct 'faulty' constructions of ADHD by raising awareness of the condition as a legitimate medical disorder.

In addition to the influence of the media, Irish attitudes and societal stigma towards mental illness may also be impacting acceptance of ADHD, thereby causing people to question the very legitimacy of the condition. Although no studies were identified which specifically measured the level of social acceptance that ADHD receives in Ireland, a report by Barry et al. (2009, p. 7) states that "stigma in

relation to mental health problems still persists in Irish society," and this may be yet another reason why ADHD has been slow in coming to full social acceptance.

Additionally, MacNeela (2016, p. iv) has observed that within the Irish context, ADHD "is not well known or acknowledged." Such stigma towards ADHD may result, not only because some view it as a "mental" disorder, but also because it is an "invisible" condition and they cannot see physical "proof" of its existence to validate it as a "real" and legitimate condition. Therefore, by virtue of its invisible and mental natures, people may struggle to accept ADHD, and by extension, those who are diagnosed with the condition, thereby creating a barrier of discrimination which prevents the full social acceptance of those who are diagnosed with the condition, and others like it.

However, it is also important to consider that females with ADHD in Ireland may face "double discrimination," first as a function of their diagnosis, and secondly as a function of their gender. As Wehmeyer and Rousso (2006, p. 393) explain: "[N]egative assumptions about girls and women combine with negative assumptions about people with disabilities, so that disabled women are perceived less favourably than either nondisabled women or disabled men." Therefore, young women diagnosed with ADHD who are living in Ireland may face similar challenges, because of their gender combined with having a diagnosis that is not fully understood or socially accepted. Indeed, 23% (n=3) of online participants reported experiencing rejection or discrimination as a result of their ADHD, and 31% (n=4) felt they had "somewhat" experienced these difficulties. This implies that young women with ADHD do perceive some level of social rejection in Ireland, which may be resulting from their gender and diagnostic label combining to create a layered and reinforced barrier which they may need to break through in order to find full acceptance and understanding in society.

7.7.2 Lack of Personal Understanding

Within their interviews, four participants expressed having a personal lack of understanding about ADHD, despite living with the condition on a daily basis. Interestingly, the length of time since diagnosis does not appear to have influenced participants' level of knowledge about their condition, as a perceived lack of knowledge was equally expressed by those who were recently diagnosed, as it was among those who had been living with the diagnosis for many years. For example, newly diagnosed Anna explained, "I don't really know what it [ADHD] is," while Molly, who was diagnosed in early childhood, also expressed similar sentiments, "No, I still don't quite [understand ADHD]. It's kind like, whatever, its fine. But no, I don't exactly know what it affects, other than like studying and focus and stuff like that." Such views may indicate there is an ongoing lack of education and knowledge regarding ADHD among young women who are diagnosed with the condition, especially pertaining to comprehension of what ADHD is, and how it might affect them.

In fact, two participants reported that their medical professionals did very little to educate them about ADHD in the time following their diagnosis. Clodagh testified, "I hadn't been educated by any doctors," and when asked whether she received any education about ADHD following diagnosis, Amelia replied, "Eh no. Like that's like a basic 'no." In three cases, participants were provided with pamphlets to help explain their new diagnosis, however, these materials were neither gender nor age appropriate for adolescent and young adult females. For example, Ailish reported that her doctor, "gave me this leaflet of everything I needed to know. But he said, 'you have to be aware that it's for 6 year olds,' cause they didn't have anything for people my age." Similarly, Clodagh recalled that after diagnosis, "I started getting more pamphlets about ADHD and I started learnin' more, but I learnt it more from the 'male side' of ADHD." These findings clearly illustrate that a male gender bias appears present in the types of educational materials that are produced on ADHD, and this may signal that more age and gender appropriate materials are needed which are specifically written for girls and women who are diagnosed with the condition. Additionally, similar findings were also reported by Bussing et al. (2012) in their study of psychoeducational approaches for ADHD among a community sample of diagnosed adolescents and their parents. These authors speculate that medical professional may have directed educational efforts towards parents, or that information may have not been delivered "in an ageappropriate format to teens" (Bussing et al., 2012, p. 599). As these authors conclude, education about ADHD must shift to increasingly include young people, and it is reasonable to infer that such practices should also be implemented within the Irish context as well.

As a result of the deficits identified above, five young women reported engaging in "self-education" about ADHD, along with their parents, typically by conducting research on the internet. Once Amelia was given the "label" of ADHD, researching was a means of calming her mind so that she would "not be thinking about it [ADHD] so much." In contrast however, Anna noted that she, "did loads and loads of research on it," but in retrospect admitted that, "I probably shouldn't have," because her research exposed her to numerous sites which attempted to discredit the legitimacy of her diagnosis, and which expressed an excessively broad scope of attitudes and opinions about ADHD. Despite the varied outcomes of self-education attempts, these examples highlight the level of self-agency displayed by some young women with ADHD in addressing the knowledge void they encountered, and in some ways, the deficit in educational materials may have forced this level of agency and independence. However, here too, these young women continued to challenge "passive" gender role stereotypes of women, as they were independent and self-motivated in obtaining the knowledge they required about ADHD.

7.7.3 Lack of Understanding Among Teachers

Of all the social groups considered, twelve participants expressed strong convictions that their teachers lacked understanding and awareness of ADHD. For example, when asked if her teachers were knowledgeable about the condition, Amelia emphatically replied, "No. If there was a more powerful word than 'no,' I'd say zero, zero! Zero!" Rose also expressed similar views, and after her diagnosis was even cautioned by the Special Needs Coordinator at her school that, "certain teachers may not understand ADHD." Significant parallels can be drawn with Senior (2004, p. 227) who studied, among other areas, the school experiences of ten males diagnosed with ADHD in Ireland.⁴² This study reported that seven of the ten participants perceived their teachers "had no understanding of the difficulties associated with AD/HD." Similar sentiments were also expressed by the boys' parents, who felt that teachers did not know enough about the condition (Senior, 2004, p. 179). As noted in Chapter Four of this thesis, lack of teacher knowledge about ADHD is not only found in Ireland, as other international studies have also suggested that teachers' overall understanding of ADHD may be poor (see: Brook, Watemberg & Geva, 2000), and this may indicate that second-level teachers especially require additional training and education regarding this condition. However, MacNeela (2016, p. iv) particularly emphasises that within the Irish context, there is a "need for teachers to be better prepared to recognise and respond to AD/HD in the school system," which is a finding this present doctoral study also confirms.

While it is certainly reasonable to argue that teachers are not clinicians, and therefore cannot be responsible for having familiarity with every condition that students might be diagnosed with, it is important to recognise that ADHD is one of the more common conditions that teachers are likely to encounter within the classroom, given that it affects approximately 5% of children (American Psychiatric Association, 2013b, p. 61). Therefore, some level of familiarity may be reasonable to expect. Additionally, this finding highlights the important role those in the larger educational community, such as SEN teachers, educational psychologists, and organisations such as the National Behaviour Support Service (NBSS), have in educating and informing teachers about the conditions of the students in their classrooms. This is especially true in terms of developing appropriate interventions, as medical clinicians may have little understanding of what can be done to help students in the educational context, and they may see their role as limited to the diagnosis and treatment of the condition.

⁴² In this sample, four student-participants were in primary school, four were in second-level education, and two had completed second-level schooling. This is one of the only studies situated in Ireland which included young adults with ADHD and specifically considered the second-level educational context in its findings and analysis.

However, other participants expressed mixed perceptions regarding teacher knowledge of ADHD. For example, Clodagh believed that some have a good level of understanding "because they've dealt with it so much." However, she also noticed a lack of knowledge among others, "Some teachers don't understand that I've got ADHD and some teachers don't understand that ADHD is an actual problem I'm trying to deal with at the moment." Beyond factual knowledge deficits, it seems that Clodagh may have also sensed a lack of empathy and emotional understanding among her teachers, particularly in relation to the difficulties the condition imposed on her. This may suggest that students with ADHD want their teachers to be both factually informed, as well as emotionally supportive and understanding.

Three participants reported that some of their teachers directly admitted to them that they lacked knowledge of ADHD, and all of these individuals were diagnosed in second-level. For example, Aoife observed that many of her teachers had never even heard of ADHD prior to her diagnosis, and she estimated that "Two, out of eight or nine, actually knew what it was." Similarly, when Ailish informed her guidance counsellor about her new diagnosis of ADHD, the counsellor admitted that she didn't "know anything about ADHD." Ailish was also somewhat surprised by this lack of knowledge, considering this individual was working in the area of SEN in her school. In contrast, Ashling reported that her diagnosis was a learning opportunity for her guidance counsellor, who previously believed that only boys could be diagnosed with ADHD. As he explained to her, "When girls come to me anymore [sic], and they think they have a problem, I'll know, I'll be able to recognise the symptoms and I'll be able to know what's happening." Such a revelation was of particular importance, considering that Ashling was attending an all-girls school, but it also shows that her teacher was willing to learn from her experience, and apply new knowledge to the needs of future students. In many ways however, these experiences of Ailish and Ashling stand in stark contrast to findings reported in research by Rose et al. (2015, p. 3) who found that within the post-primary sector, guidance counsellors were particularly helpful and valuable for their knowledge of students with SEN.

As a result of this knowledge deficit among educators, a minority of participants were given the responsibility of self-disclosing their diagnosis of ADHD, and of informing the teachers about the meaning and implications of their diagnosis. This was especially true in cases where it seems that principals and other school officials failed to carry out their responsibilities in this area. As French (1994, p. 25) writes:

Disabled people with hidden impairments are in a position to decide whether or not to reveal them. In every situation they must determine how the impairment will be received, whether or not it is relevant to mention it, how likely it is to be discovered, and what the consequences of discovery will be.

Unfortunately, participants' self-disclosure of ADHD diagnosis was not always a positive experience. For example, Aoife described meeting with each of her teachers for this purpose as "the worst" because, in her opinion, some teachers "just don't understand" ADHD. In many ways, such situations forced participants to engage in a role-reversal by acting as a "teacher" to their teachers, especially in cases where there was a perceived knowledge deficit.

It is also important to consider that negative experiences of disclosure within the school setting may reduce students' willingness to disclose their ADHD in future situations. This could have a particularly negative impact on their future learning outcomes in contexts like Ireland, where allocation of additional educational supports are linked directly to formal diagnosis, and therefore require such disclosure in order to obtain appropriate resources. Therefore, this implies that teachers must be especially sensitive and supportive of students who choose to self-disclose their medical diagnosis, in order to ensure they feel safe and secure in reaching out for help.

7.8 Theme Four: Student-Teacher Relationships

Participants often experienced stressed and strained relationships with their teachers, as they felt largely misunderstood and unsupported in second-level.

Thematic Key Points:

-Teachers commonly misunderstood and misinterpreted participants' behaviours, which were often associated with the symptomatic expression of ADHD.

-Some educators underestimated participants' academic capabilities, and even communicated their low expectations to participants.

-Some participants felt their teachers failed to take the ADHD diagnosis seriously, which often resulted in few to no observable changes in the level of support received in second-level.

7.8.1 Misinterpreting Students' Behaviours

Eight participants expressed the belief that teachers consistently misunderstood their behaviours, many of which were symptomatic of ADHD such as inattention, disorganisation, and forgetfulness. Sometimes, teachers would also publicly reprimand them for their difficulties in these areas. For example, Róisín recalled one teacher shouting at her, "'Pay Attention!! You have to pay attention to me!!" Similarly, Emma explained:

[The teacher] used to get irritated at me because you know my, my maths work would be all over the place or might not have my homework done, I wouldn't have a calculator. She used to get very irritated cause, she thought you know, "Higher Level maths is serious, you need to put the work in, and it's not fair on everybody else when they have all their stuff," and I don't type of thing.

Aoife also remembered being told to "listen more in class," but she explained that such behaviours were not done on purpose, as she was actively trying to meet her teacher's expectations. This may indicate that her ability to focus and concentrate was not necessarily fully within her control.

Given the evidence above, it seems that symptoms such as inattention and disorganisation, especially when displayed within the classroom, were bothersome to teachers, and this may be one reason why participants' felt that their educators were sometimes hostile towards them. Indeed, research suggests that ADHD may negatively impact the quality of student-teacher relationships, thereby potentially creating a barrier to academic achievement (Rogers et al., 2015).

However, there could be other factors as work which affected the quality of participants' relationships with their teachers. For example, it may be the case that teachers *underestimated* the influence of ADHD on participants' academic performance and behaviour, and in turn, attributed them with a greater internal locus of control, *than they actually had in reality*. Given that participants were older adolescents, teachers may have also felt that they *should have been* able to exert greater control over their behaviours, and were correspondingly frustrated when they did not act in ways deemed "age appropriate." Yet, it is important to realise that ADHD may have compromised the actual levels of behavioural control that participants could exert, and as a result, they would have directly challenged these teacher expectations. If so, this may partially explain why teachers often responded negatively to the behaviours associated with ADHD, acting as if the young women possessed the capability to be more organised, focused, and attentive, when perhaps, they lacked some control over these characteristics due to their diagnosis. Indeed, participants consistently remarked that they "tried" to meet teacher expectations, but often failed to do so.

The behaviours associated with ADHD can also be quite contextually and situationally variable (American Psychiatric Association, 2013b). For example, when in an active and physically engaging learning environment, students with ADHD may flourish; when asked to learn passively, they may struggle and disengage. Yet, such variance is not unique to ADHD, as disabled people are often impacted by situational factors which can directly influence their functional abilities (French, 1994, p. 28). However, teachers may find it difficult to understand behavioural variability among students with ADHD, and they may fail to comprehend why related impairments are not stable and lasting,

irrespective of context. Such difficulties may again, lead the teacher to believe that students with ADHD can exert more control over their condition, than they actually can, and in turn, may lead to blaming of the student for difficulties that may not be fully within their locus of control.

In addition to considering stereotypes, it is important to reflect on how the typical classroom environment may diminish the quality of student-teacher relationships, as well as learning outcomes for pupils diagnosed with ADHD. The traditional classroom is largely a "regulatory and normalizing space," which encourages and demands passivity and obedience in students (Renold, 2006, p. 440). Students with ADHD, given their associated symptoms of inattention and hyperactivity-impulsivity, may struggle to conform in a setting which requires passivity, and fails to meet their needs for active learning and engagement. However, it is important to recognise that active methods of teaching and learning are beneficial for all students—not just those with ADHD. Numerous educational theorists such as Piaget, Pestalozzi, Froebel, and Montessori, among others, have all recognised that true learning must be, and is, an active process (Kamii, 1974).

The above considerations are particularly relevant for the Irish school system which has been criticised in numerous studies for adherence to didactic and passive forms of teaching and learning (see Ball, 2004). Indeed, "The Irish education system, particularly at second-level, is characterised by rigid structured and traditional subject-based rote-learning" (Conneely, Lawlor & Tangney, no date, p.1). While the newly revised framework for Junior Cycle has been designed to promote active and collaborative learning, and to allow for increased classroom-based assessment (Republic of Ireland, Department of Education & Skills, 2015, p. 7), similar reforms at the Senior Cycle have not been implemented. This lag in the development of learning and teaching methods for older students is worrisome, and may explain some of the difficulties that participants experienced in trying to meet teacher expectations, and "fit" into a system that, at least from the outside, appears to be somewhat unsupportive of their particular needs. It is also possible that staunch adherence to traditional forms of instruction may influence and promote early-school leaving among those with ADHD and other forms of SEN, who cannot conform to the dictates of the system. Indeed, Kinsella (2009, p. 73) acknowledges the difficulties and challenges which the second-level presents in meeting inclusive goals for students with special needs, due to the system's "unique characteristics." However, it is important to recognise that these difficulties do not make the need for reform and increased inclusion of students with special needs, any less important, or any less possible.

Six participants in this doctoral research also believed that teachers misunderstood the true nature of ADHD, simply viewing it as a matter of "bad" and "bold" behaviour. Clodagh recounted that teachers in her school "denied anything that said I had ADHD, and had said that I was just a 'bold' child."

Similarly, Phoenix was labelled as having "behavioural issues" prior to her diagnosis. While Clodagh and Phoenix both experienced hyperactivity, which could have contributed to teachers' perceptions of ADHD as "bold," it is important to note that even those diagnosed with inattentive type ADHD could also be labelled in this way. As Aoife testifies, "I was like a bad behaviour kind of thing, they thought I was kind of like a bad student." Teachers' perceptions as highlighted above may simply indicate a lack of understanding about ADHD, but they may also reflect cultural stereotypes which diminish the validity and legitimacy of the ADHD construct by reducing it to deliberate "bad" behaviour. It is also possible that such labelling occurred because teachers viewed participants, and their behaviours, as a "threat" to their authority and classroom order. Indeed, "The ability to 'keep order' has often been regarded as a pre-eminent aptitude" of teachers (Griffin & Shevlin, 2011, p. 111). This may be especially true if participants were understood as *wilfully refusing* to comply to teacher expectations and behavioural standards.

It is important to realise that the labelling of students with ADHD, as illustrated above, could have potentially negative consequences on the quality of student-teacher relationships. Griffin and Shevlin (2011, p.14) explain that while labels can be a helpful means of categorising and understanding our world, "Difficulties arise when these names become associated with negative, stereotypical imagery of the individual or group concerned." As explained in Chapter Two the idea of ADHD as "bad" behaviour is certainly a common stereotype, which appears to have been wrongly applied to the young women in this present study, who often tried to meet teacher expectations, yet failed to do so. By labelling students with ADHD as "bad" or "bold," teachers could be further enticed to adopt additional negative stereotypes about these individuals, which may then create a cycle of degradation that may be extremely difficult for students to overcome.

7.8.2 Underestimating Students' Academic Capabilities & Motivations

Five participants reported that teachers commonly underestimated their academic capabilities, and often shared these views with them. For example, Emma struggled through her first few years of second-level, and voluntarily chose to repeat Fifth Year. However, she felt that one teacher held her past against her. In front of the class, this teacher told Emma, "I think you're wastin' your time repeatin." When Emma did well on a pre-exam for this teacher, her academic capabilities were again underestimated as the teacher told her, "I wouldn't take that for granted, it was marked very easy." Catriona also related a similar experience which occurred during her Junior Certificate examinations, "Me teacher kept saying I was gonna fail me exams, and I got an 'A' in the end." When asked what she attributed her positive result to, she replied, "It was just, her being negative about it saying that I wasn't gonna achieve a high grade." As noted in Chapter Four, it is well accepted that ADHD can negatively impact a person's academic achievement and outcomes—and awareness of these effects

may have been one reason why teachers conveyed such negative expectations to participants. However, it is also important to consider the role of gender in moderating teachers' academic expectations for female students.

According to Liu (2006, p. 431) research indicates that teachers hold gender-based assumptions about students' academic capabilities; "when girls succeed academically, it is through effort. When they fail, it is just natural; on the other hand, when boys fail academically, it is because they have not applied themselves. When they succeed, it is natural." These gendered assumptions may explain why some teachers underestimated participants' academic capabilities. Not only was it a matter of "having ADHD" that may have influenced teachers' belief, they may have also *assumed* that these young women would be prone to failure, because failure is more "natural," and likely, for females. Furthermore, teachers could have been reinforced in their in gendered thinking, especially if participants had already established a pattern of failure in the past, like Emma described above.

Participants responded in a variety of ways to the negative feedback received from teachers. Catriona did not allow such negativity to impede her-rather, it spurred her on to success. Exceeding the expectations of others was a source of great pride for Amelia, "I was proud that I proved them proud because they thought that I was only going to get a B, and I got an A." Yet for others like Ashling, such negativity was an ongoing source of anger, which she even felt now in college, "There are still a few remnants of anger left in me from being told I just wasn't up to the standard of the other pupils." Aishling's enduring feelings of anger over her second-level experiences may indicate that negativity resulting from educational disappointment can be an enduring feature for individuals diagnosed with ADHD. While it is true that many students experience anger and frustration with teachers, it is important to consider how and why the experiences of students with ADHD might be qualitatively different. ADHD may impose an added layer of difficulty on students, particularly within the academic realm, where they must work through this added challenge in order to find success. Therefore, the anger experienced by participants, like Ashling, may have resulted from years of frustration due to consistently expending energy, and yet, failing to find success. For these students, it may not be as simple as to say "more effort = greater success," at least, not when your body, mind, and emotions are seemingly preventing you from doing so.

Four participants also reported that some teachers mistakenly believed they "didn't care" about school or their academic progress. For example, as Aoife reported, "they [teachers] thought I was kind of like...a bad student, you know. Yeah, they thought I didn't care but like I, I actually, I tried my best." Amelia's teachers also sent a similar message and consistently reinforced this to her, "They constantly told me this, 'I don't care.'" As a result, Amelia also believed that some teachers eventually "lost a wee bit of hope" in her, yet she also questioned how they could not have recognised her difficulties? "I

don't know how a teacher can't tell when there's someone who doesn't care and someone who like has these constant problems?" Such questioning may indicate that Amelia observed a disconnect between her self-awareness of difficulty, which she understood to be a real and impacting factor in her life, and a perceived lack of comprehension and awareness among teachers, which she struggled to understand. Similar sentiments were also reported by Senior (2004, p. 232), as male participants recalled teachers saying they were "lazy, stupid or apathetic," in other words, that they didn't care about their academic performance. Given the similarities expressed among both genders, this may indicate that teachers are equally likely to misinterpret the behaviours of students with ADHD, irrespective of the student's gender. Additionally, qualitative research among Irish adults with ADHD also found that many participants had similar negative recollections of their teachers, and for one participant in particular, such difficulties directly influenced his decision to leave school early (MacNeela, 2016, p. 84). Such findings certainly illustrate the powerful influence that perceived teacher negativity can have on the academic outcomes of students with ADHD.

However, it is also important to consider the reasons why teachers may have erroneously believed that participants didn't care about their schooling. One reason may be related to teachers' conceptualisation and expectations of the "good pupil." This type of pupil is defined as, "hard-working, rule-following, cooperative, conscientious and academically able" (Renold, 2006, p. 441). These are also the properties which teachers most closely associate with expectations for female students. Conversely, male pupils are often characterised as "dominant, disruptive, underperforming and generally challenging" (Renold, 2006, p. 441). In light of such expectations, it immediately becomes clear that female students with ADHD, regardless of subtype, will naturally challenge the image of the "good female pupil," particularly if they struggle with tasks such persistence, organisation, paying attention, and following the rules. As a consequence of their ADHD symptoms, young women may unknowingly contradict these gendered expectations, especially if teachers view them as disruptive, underperforming, and generally more challenging. In failing to meet expectations, teachers may simply assume that females with ADHD do not "care" about their work, and some teachers may interpret this lack of concern personally, as disrespectful to their authority and their class. When understood by teachers in this way, it could have additional negative influences on their relationship with the student, as well as their willingness to support and meet their special needs. As such, all of these issues may help to partially explain the level of difficulty that participants experienced in their relationships with teachers.

Nadeau, Littman and Quinn (1999, p. 176) also confirm that gender expectations and ADHD characteristics often come directly into conflict. "Girls are typically encouraged to be neat, 'feminine' (controlled and passive), carefully groomed (in order to be attractive to the opposite sex), sensitive to

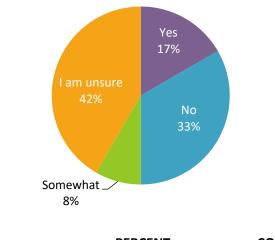
the feelings of others, and compliant towards adults." Furthermore, "AD/HD-like behaviors, such as risk-taking, arguing, defiance, and being action-oriented, are more socially acceptable for boys. Similar traits in girls, however, can be met with criticism, and even ostracism" (Nadeau, Littman & Quinn, 1999, p. 177). These considerations further clarify some of the social and relational difficulties young participants faced in their relationships with teachers, however, they do not explain why the males in Senior's (2004, p. 232) study also reported nearly identical experiences. One possible explanation may be related to gendered expectations for boys. While it is true that teachers somewhat expect boys to disrupt the classroom, and be more aggressive and less cooperative, it may be the case that boys with ADHD push accepted boundary levels too far, and this may be why their relationships with teachers were also strained. Too, the similar student-teacher relationship experiences between males and females with ADHD may indicate that *both* externalised and internalised behaviours associated with ADHD can cause disruption and misunderstanding between teachers and students who are diagnosed with the condition.

7.8.3 Lack of Support in Second-level

Participants consistently perceived a lack of support in second-level. Twenty-three percent (n=3) of online participants reported they received no supports or special services as a result of their ADHD diagnosis,⁴³ and 15% (n-2) were unaware of receiving any supports. Resource hours (39%, n=5) and withdrawal classes (23%, n=3) were the most common supports provided to participants.

When asked if they felt their second-level school provided them with everything required for academic success, only 17% (n=2) of participants answered affirmatively. Forty-two percent (n=5) were "unsure," and this may indicate that these individuals were somewhat unaware of the supports they personally required. This may also signal that these individuals could benefit from developing a deeper self-awareness of their personal learning style, so that these needs could be more clearly communicated to those who support them.

⁴³ For some participants, it may be the case that they were diagnosed with ADHD after leaving second-level school. For others, the diagnosis came at a time of year (such as on holidays/break periods) and as such, they may have not yet received support, but would in the future.



VALUE	PERCENT	COUNT
YES	16.7%	2
NO	33.3%	4
SOMEWHAT	8.3%	1
I AM UNSURE	41.7%	5
	Total	12

Chart Seven: Respondents' views on whether their second-level school provides/provided them with everything required for academic success

In comparison, a firm 33% (n=4) of online questionnaire respondents reported their schools failed to provide them with everything they need to succeed. Qualitative anonymous responses which explained their reasoning identified that participants felt unsupported largely due to a number of *attitudinal deficits* identified within the school system, such as an unwillingness among some teachers to provide support, and a lack of individualisation and understanding of ADHD among educators:

- "They don't even try to help"
- "More support from the teachers and more individual approach to pupils"
- "My secondary school refused to acknowledge ADHD as a condition and were almost vehemently against having support on hand. Better educated teachers was all I needed I think."

Similar findings were also contained in the interview data, and perceived negative attitudes on the part of teachers may have further contributed to the difficult relationships that participants encountered with their educators. For example, Molly stated that teachers, "don't pay attention to you at all," and compared to primary-level, Kaitlin felt that support in second-level was non-existent. As she explained, "There is none. At all. They don't help me" (Kaitlin). Similar perceptions were also reported by six of the male participants in Senior's (2004, p. 228) study who also felt that teachers did nothing to help them with their difficulties. The continuity between Senior's study and this present

work is important to note, as it highlights that students with ADHD continue to perceive a deficit in the level of support they receive in Irish second-level schools. As such, this may be an area which requires further investigation and future change.

Six participants in this present study also expressed the perception that some teachers were unsupportive of their needs. Their evidence ranged from the belief that some teachers couldn't be "bothered" with providing additional support to students, to the perception that teachers lacked the "time" required to provide them with extra help. Similar views were also discovered in a study by Krueger and Kendall (2001, p. 66) who observed that both male and female adolescents with ADHD reported they did not receive as much attention from their teachers as they desired. These researchers concluded that such perceptions may be directly related to the emotional functioning of participants, who appeared "self-centred" and self-oriented. However, research by Shattell, Bartlett and Rowe (2008, p. 53) indicates that personalised attention can result in positive academic and relational benefits for students with ADHD, such as increasing their sense of inclusion in the school community, while decreasing "feelings of difference and isolation." Therefore, it is important that teachers do not underestimate the positive benefits of investing time in students with ADHD.

Five participants in this present research also voiced concern that teachers dismissed their ADHD diagnosis and did not take it seriously. Such perceptions appear to be based on the observation that teachers rarely took the time to discuss their diagnosis directly with them. As Rose explained, "I've never talked to them [teachers] about it and they haven't, they don't really seem to say anything to me about it." The same was true for Ailish who reported, "none of the teachers ever said it to me...they never really said like that they knew [about the diagnosis]." In many ways, this suggests that students may have expected to engage in conversation with their teachers about their diagnosis, and they were often left disappointed when such conversations did not occur. This finding also raises questions regarding how teachers feel about engaging in discussions with students about their medical diagnoses, and whether these conversations take place at all? Based upon participants' reactions, it may be helpful for students and teachers to more readily and openly engage in ongoing conversation about students' special educational needs. Such conversations could be particularly helpful with second-level students, as they may be able to communicate important information to teachers about the effects of their diagnosis and their particular needs in the classroom. Griffin and Shevlin (2011, p. 108) also acknowledge the benefits of involving students with special educational needs in their own learning, particularly as an effective means of moving students "out of the failure cycle" — a cycle in which students with SEN can easily become entangled. Therefore, it is reasonable to assume that this personalised approach may be particularly effective in empowering students with ADHD to achieve similar goals.

Six participants in this present study expressed concern that their ADHD diagnosis made little difference in the level of support they received at school, and most reported there were few to no changes in their classroom experience following diagnosis. Indeed, many participants reported being treated "exactly the same" after the diagnosis, as they were before it. As Rose recalled:

And [name of teacher] even after she like knew about it, if I didn't have my homework, she treated me the exact same way as everyone else, or if I forgot something, she treated me the exact same way as everyone else.

Such experiences led Rose to conclude, "I don't think she really took any notice of it [the ADHD diagnosis." Similarly, Aoife remembered, "[This teacher was] just kind of like 'Yeah, yeah, it's ok.' Then after that then, never heard anything about it from her again. It was all just, it was all just the same as it'd always been." Again, similar connections can be made to Senior's (2004) study, as numerous participants also perceived little change in their educational experiences as a result of their ADHD diagnosis, and they continued to be "treated the same" as everyone else in the class. By emphasising the *sameness* in their experience pre- and post-diagnosis, it shows that students clearly observed a lack of change in their school experiences, and this further implies that individuals may hold expectations that a medical diagnosis will result in real and visible changes within their educational experience. It may also imply that changes were expected in the ways that teachers would treat them within the classroom, and they may have been disappointed or frustrated when these expectations went unmet, which could cause further demoralisation and related academic decline.

Although Ailish hoped the diagnosis would help teachers to better understand her, she also felt they continued to relate to her with the same negativity as before, "It was still the same thing, 'You're not listening, you're not concentrating', and I was kind of saying, if they knew, they would have kind of understood why I was doing all this stuff like." For Ailish, it appears that she believed the diagnosis would serve as an explanation to teachers for the shortcomings in her classroom performance, and would result in greater understanding on the part of teachers'. In many ways, this may have led to a sense of frustration that either the information about her diagnosis wasn't passed on properly to teachers received the information but failed to implement any changes in their practice towards her. These failed expectations may signal that confusion exists regarding the role of medical professionals in the field of education, as physicians typically do not view communication with teachers as central to their function of providing a diagnosis. Rather, such communication. Typically, within Ireland, if a student receives a diagnosis of SEN, it is the role of the educational psychologist to discuss appropriate support with the school, and the responsibility of the principal to ensure that appropriate information

reaches all relevant teachers. Therefore, the experiences of participants may indicate there was a breakdown in this chain of command, with the relevant information never reaching the classroom teachers.

The above findings also appear to infer that participants' may have encountered pain and frustration as a result of unrealistic expectations regarding the failure of their diagnosis to directly impact and change their school experiences. It is understandable why these young women expected changes. As noted in Theme Two, once the diagnosis was given to them, it was typically viewed as an explanation for years of difficulties and struggles. Armed with this knowledge and explanation, it seems natural that a solution would be readily clear and implementable. Yet, this was not typically what they encountered, and despite the diagnosis, many continued to experience the same difficulties with teachers, and the same barriers to learning. It is also interesting to consider that the young women, who often struggled to obtain a diagnosis, somehow expected that their teachers would be more quickly responsive to their needs. Such expectations may come from the level of respect they hold for their teachers, as well as the closeness with which they interact with them on a daily basis, seeing them as central figures in their lives, who would hopefully offer additional solutions to those obtained in the clinic. Obviously, such failures could have resulted in significant frustration, and even demoralisation among the young women, who often fought to receive a diagnosis, and yet, failed to see any different outcomes in the time following.

However, while the above views suggest that students generally wanted to see differences in their school experience following diagnosis, this is not true of all participants. Anna expressed an alternative view as she was concerned that any changes made in the classroom might "draw attention" to herself, and this was something she wanted to avoid.

I didn't like drawing attention to myself, and I was like "No, I don't want like any change kind of thing." So none of the teachers really said anything to about me and like I was kind of, that kind of makes me think that they didn't do anything, but like I didn't want them to so, I don't really know like.

Anna's view indicates that teachers must be especially careful in whether, and how, they implement changes for students with a diagnosis of special need, and sensitivity must be employed to make sure that any changes are in align with students' needs and wishes. Shevlin and Rose (2008, p. 427) also cite the importance of involving students with SEN "in some of the critical decision-making processes" that directly affect them, particularly as a means of enacting the EPSEN Act of 2004 and adopting "child-centred educational practice." Again, this implies the importance of communicating with students, and listening to their views as related to their desired learning supports and outcomes.

In summary, this theme calls attention to the fact teachers must be particularly aware of the impact that student-teacher relationships can have upon *both male and female* students with ADHD, particularly in relation to their behaviour and academic achievement. However, it also asks teachers to be increasingly aware of their gendered expectations, and how these expectations may create conflict between themselves and their students—not only those with ADHD, but all who they are entrusted to care and teach.

7.9 Conclusion

This chapter has explored the impact of ADHD in the lives of young women diagnosed with the condition. As their perspectives show, the female experience of ADHD often challenges stereotypes on numerous levels—from how the condition is conceptualised, to the gender role assumptions that are held for young women on a societal level, and which are strongly prevalent in the school context. Overall however, this chapter illustrates that there is a pervasive lack of knowledge, awareness, and understanding of ADHD in Ireland, particularly in relation to how the condition affects females. This lack of consideration appears to be prevalent within the educational system, where it creates numerous difficulties in the academic performance of affected individuals, and in their interpersonal relationships with teachers. Such academic difficulties may impose a lasting impact on those affected by ADHD. For example, research by MacNeela (2016, p. 103) found that for Irish adults with ADHD, "Negative experiences at school posed great difficulties for later adjustment, sowing the seeds for low-self-esteem and a feeling of personal failure," thus highlighting the importance of creating positive academic and educational experiences for students with ADHD.

The following chapter now explores ADHD through the perspectives of second-level teachers in Irish schools. This chapter continues to raise important questions regarding the level of knowledge and understanding which educators possess about ADHD, difficulties encountered in their relationships with diagnosed students, and the gendered assumptions that influence student-teacher interactions in the classroom. All of these areas, among others, will now be examined.

Chapter Eight: The Perspectives of Second-Level Teachers

8.1 Introduction

This chapter explores the perspectives of second-level teachers in Irish schools regarding their experiences of students diagnosed with ADHD.⁴⁴ This chapter begins with a review of the personal profiles of the eight teacher participants who completed semi-structured interviews, and then proceeds to an examination of the demographic information of the 239 anonymous online questionnaire respondents. This information is provided as a means of allowing readers to more fully understand participants' backgrounds and the contexts in which they work.

This chapter then proceeds to a discussion of the four central themes which emerged from analysis of these participants' views and experiences, as shared in both the online questionnaire data set and as deduced through thematic analysis of interview data. As such, these themes provide important insights into the influence of ADHD within the second-level context, and the feelings, thoughts, and challenges that teachers sometimes experience in their work with students who are diagnosed with the condition.

8.2 Interview Participant Profiles

Brianna: Nine years of teaching experience, predominantly as a maths teacher, working with all levels of students, including honours and ordinary. Showed particular concern over recent reductions in resources, combined with increasing numbers of students with SEN. Expressed feelings that teachers have been largely left to "cope" in the current educational climate.

Elaine: Eight years of teaching experience, mainly in the areas of Irish and English. At the time of the interview, Elaine was teaching in a mixed-gender school, situated in a disadvantaged area. Expressed the need for increased flexibility within the Irish education system, especially in relation to teaching and testing. Believed that such changes would benefit all students, not just those with SEN.

Kevin: Eight years of teaching experience, and briefly worked in a resource role for students with special needs. Currently a subject coordinator for music in a large urban school. Strongly supports the use of interactive and stimulating teaching techniques, believing that music class "should never be quiet." Raised concerns regarding the over-medication of students with ADHD, which he feels some teachers may not question because of the resulting decrease in disruptive behaviours.

⁴⁴ As a reminder to the reader, teachers were allowed to speak about and reference experiences of both male and female students with ADHD alike.

Maeve: Presently working as an educator in a special school, teaching a variety of subjects, including English and Maths. Expressed a very positive view of students with ADHD, seeing the condition as a "different way of learning." Two of her children are also diagnosed with ADHD, therefore, she offered insights as a teacher, and as a mother of children affected by the condition.

Saoirse: Three years of mainstream classroom teaching experience in subject areas such as English, History, and Geography. Trained internationally before returning to teach in Ireland. Emphasized the importance of getting to know students personally, and seeing the positive side of students with ADHD.

Mairéad: English teacher with five years of teaching experience. Raised numerous criticisms of the current exam system, calling for more flexibility to suit the needs of students. Additionally, believed that the curriculum should be more adaptable and practical, especially as a support to students with SEN.

Eileen: Six years of teaching experience in the areas of Science and Biology, with some experience in providing Learning Support. At the time of the interview she was teaching in a mixed-gender private school, where few students had special educational needs. Eileen also questioned the use of medication in the treatment of ADHD, and supported a child-centred approach to education.

Siobhan: Four years of teaching experience in the subject areas of Business and Spanish. The present academic year provided her first experience of a student with ADHD—a female who was particularly hyperactive. Raised numerous concerns related to the difficulties of inclusive practice, and increasing numbers of students with SEN in mainstream classrooms.

8.3 Demographic Information for Online Questionnaire Respondents

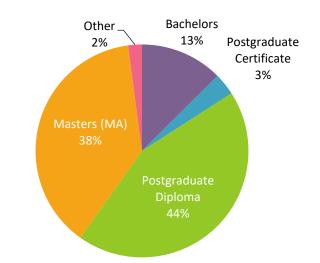
The following information summarises respondents' demographic information as collected in the anonymous self-completion online questionnaire.

Experience Teaching Students with ADHD

One-hundred percent (n=239) of online respondents had direct experience of working with or teaching a student with a *formal diagnosis* of ADHD, and 77% (n=184) stated they were *presently* doing so. Eighty-three percent (n=169) of participants believed they had taught more boys than girls with ADHD, 11% (n=23) reported teaching more girls with ADHD, than boys, and only 5% (n=11) reported having taught diagnosed girls and boys in equal numbers.

Gender and Educational Attainment

Seventy-one percent (n=168) of respondents were female and 29% (n=69) were male. Forty-four percent (n=105) of participants held a Postgraduate Diploma and 38% (n=91) held a Master's degree as their highest level of educational attainment.



VALUE	PERCENT	COUNT
BACHELORS (BA)	12.6%	30
POSTGRADUATE CERTIFICATE	3.3%	8
POSTGRADUATE DIPLOMA	43.9%	105
MASTERS (MA)	38.1%	91
OTHER	2.1%	5
	Total	239

Chart Eight: Respondents' Highest Level of Educational Attainment

Second-Level Teaching Experience

Overall, participants were highly experienced teachers with between 11 to 26+ years of experience working in secondary schools.

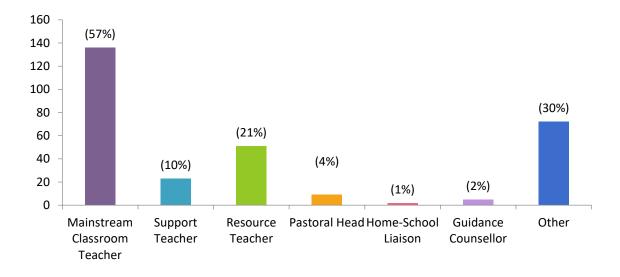


VALUE	PERCENT	COUNT
0-5 YEARS	11.5%	27
6-10 YEARS	20.0%	47
11-15 YEARS	21.7%	51
16-20 YEARS	13.6%	32
21-25 YEARS	11.9%	28
26 OR MORE YEARS	21.3%	50
	Total	235

Chart Nine: Respondents' Level of Teaching Experience

Present Educational Role

Fifty-seven percent (n=136) of participants designated their present role as a "mainstream classroom" teacher. However, 30% (n=72) of participants listed their present role as "other" which largely consisted of principals, a variety of programme coordinators (mostly in the area of SEN), special class teachers, and year heads. One person designated their present role as "librarian," and another as "chaplain."

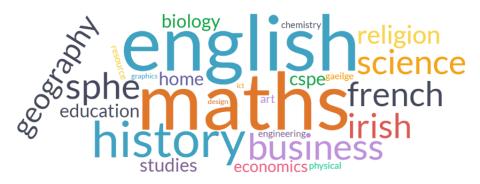


VALUE	PERCENT	COUNT
MAINSTREAM CLASSROOM	56.9%	136
TEACHER		
SUPPORT TEACHER	9.6%	23
RESOURCE TEACHER	21.3%	51
PASTORAL HEAD	3.8%	9
HOME-SCHOOL LIAISON	0.8%	2
GUIDANCE COUNSELLOR	2.1%	5
OTHER	30.1%	72

Chart Ten: Respondents' Present Educational Role

Subject Area of Expertise

Teachers from a wide variety of subject areas took part in this study. As the word cloud below indicates, the subjects of English, Maths, History, SPHE, and languages such as French and Irish, were some of the most highly represented:



Present Educational Setting

Sixty-nine percent (n=159) of participants taught in co-educational schools, 19% (n=45) taught in single-sex male schools, and 12% (n=28) taught in single-sex female schools.

8.4 Summary of Thematic Findings

THEME	Summary
Theme #1 Inadequate Teacher Education	Participants strongly felt they were unprepared to teach students with ADHD and other forms of SEN as a result of inadequacies in initial teacher education (ITE) programmes. Dissatisfaction was also expressed in relation to continuing professional development (CPD), which was often viewed as irrelevant to their work, or inaccessible. Participants had a strong desire to increase their knowledge of ADHD and other related SEN through additional training.
Theme #2 Trouble for Teachers	Although some participants were able to identify positives of teaching students with ADHD, the conversation generally focused on negative aspects. Teachers raised concerns about ADHD being used as an "excuse" for academic underachievement and behavioural difficulties. Additionally, many believed that students with ADHD can compromise the learning of other students in the classroom.
Theme #3 "Relationships" as Intervention	Participants discussed a wide variety of active learning and teaching strategies used to support students with ADHD. However, the most common approach was simply fostering personal relationships with these students, which served as both a behavioural and academic intervention.
Theme #4 Gendered Assumptions	The majority of teachers reported having substantially more experience teaching males with ADHD, than females. However, many "suspected" undiagnosed ADHD in their female students based on behavioural observations. Teachers also identified numerous gender differences in students with ADHD. Males were described as active, while females were viewed as more passive, less disruptive to the classroom, and more socially aware.

8.5 Theme One: Inadequate Teacher Education

Teachers strongly felt that they received inadequate teacher training, particularly in relation to the perceived expertise required to support students with ADHD in the classroom setting.

Thematic Key Points:

-Teachers expressed a high level of dissatisfaction in relation to deficits observed in their ITE training programmes. This included a sense that ITE was too theoretical in nature, and was subsequently lacking in the practical experience they required.

-Teachers were also somewhat dissatisfied with CPD training, feeling that present offerings were largely irrelevant to their work, and that they presently required additional training in the area of special needs education.

8.5.1 Deficits in ITE

Ninety percent (n=188) of online participants felt their initial teacher education (ITE) failed to prepare them fully for working with students with ADHD, and similar sentiments were also expressed by all eight of the interview participants.

Indeed, within the qualitative comments provided by online participants, 63 individuals remarked that education and training on ADHD and/or special educational needs was simply not provided in their ITE. One online participant noted, "30 years ago it just was not mentioned," while another stated that "Teacher training was generic: one size fits all, there was no mention of special needs." Similarly, another online participant explained, "Quite simply ADHD and other learning difficulties were never even mentioned during my teacher training." This same individual reported having between 11 to 15 years of teaching experience, thereby showing that even within the last decade, ITE programmes may have failed to provide sufficient training on ADHD and other related SEN topics.

Interestingly, Maeve was the only interview participant to state that her teacher training provided no preparation for working with students with ADHD. As she explained, there was:

No mention. One of my first experiences probably would have been going into a mainstream class and having a child in that class with ADHD that I'd never come across before and didn't know anything about it.

Regarding those participants whose ITE programmes *did include* discussion of special educational needs, thirty-eight online participants reported in qualitative comments that topics like ADHD were typically covered in an insufficient and superficial manner. Similar sentiments were expressed by seven

of the interview participants. For example, one online participant explained that ADHD, "was mentioned and covered but it could have been done in more detail," while another reported, "In college we were given a one hour lecture on ADHD, it explained what it was but didn't give any practical advice as to how to help or differentiate for the student." Similar sentiments were also expressed by Eileen who explained that her SEN module did not include any "in-depth analysis," while Saoirse recalled, "I think we had maybe two lectures by one man and that was just special needs in general, a whole overview." Connections can be made between these findings and research conducted by Shevlin et al. (2009, p. 6), who also found that both primary and second-level teachers in Ireland reported their ITE programmes provided insufficient SEN training. When considered in light of the present findings of this doctoral study, it suggests there may be an ongoing lack of SEN training among Irish ITE programmes, which further raises questions regarding teachers' preparedness to support students with SEN in the classroom.

It is also important to consider the possible implications of the above findings in relation to students with ADHD. For example, the lack of time generally devoted to SEN within ITE training may communicate the message to preservice teachers that special needs education is not a task which is central to their work. This may be especially true if they are training as mainstream educators. Additionally, the lack of time devoted to learning about ADHD may cause some teachers to assume that this condition is less serious, especially in comparison to others which they may have learned about during their training. In turn, such perceptions may cause teachers to underestimate the impact of ADHD on students, particularly in terms of academic outcomes, and consequently, teachers may feel less inclined to invest their time and energy in these students, to the same degree as those with conditions perceived as "more serious." Additionally, the reported lack of consideration given to ADHD within ITE programmes could potentially reinforce social stereotypes which question the legitimacy of ADHD—and this too could potentially affect the way in which students with this label are perceived, how teachers interact with them, and the level of personalised support they receive within the school context.

Interestingly, within their qualitative comments, five online participants specifically critiqued their ITE programmes as being too "theoretical" in nature, and subsequently lacking in "practical" content. Such sentiments were also raised by four of the interview participants. As an online participant recalled, "Information that was given to us was very much theoretical, they did not really give practical advice in how to enrich the educational experience of a student with ADHD or how to integrate the needs into your lesson." Similarly, interview participant Kevin report that within his ITE:

Obviously we would have talked about a little bit about students with special educational needs but within the context of those lectures and we learned various things of definitions

and those kinds of things, symptoms, but very little on strategies um, and very little on, on you know, the things that are important um with dealing with those issues.

Based upon the insights provided by participants, it appears that a more practical, hands-on educational experience during ITE may be what some teachers desire and need most from their training. Indeed, within their qualitative comments, five online participants expressed the belief that teachers best learn how to support students with SEN—not within the context of lectures—but rather, by working directly with them in the classroom. As one online participant explained, "more is learned by hands on practice than theory," and another noted, "It's only through complete immersion in the school environment as a full-time teacher that one gains an insight into the condition [ADHD]." Similar findings were also reported in a qualitative study conducted in Ireland which explored the perceptions of eight mainstream post-primary teachers in relation to the inclusive education of students with autism spectrum disorders (ASD) as, "Participants were unanimous in stating that experience, not training, equipped them to a satisfactory level to teach students with ASD" (McGillicuddy & O'Donnell, 2014, p. 336). Such findings may help to further illustrate the value that teachers place on direct experience of students with SEN, over theoretical knowledge.

However, according to Schmidt (2010, p. 131) perceptions such as those expressed above are quite common among teachers, as they "often claim that they learn more from teaching experience than from course work." Yet, a number of research studies appear to support the level of practical value that teachers place on direct classroom experience of students with SEN. For example, a study of 165 pre-service primary level educators found a significant positive correlation between participants' practical experience and their ability to effectively work with students with developmental delays or disabilities (Atiles, Jones & Kim, 2012). Another investigation suggested that *both* coursework and field experience produced significant gains in teacher self-efficacy as related to teaching in inclusive classrooms (Peebles & Mendaglio, 2014). While no studies could be identified which specifically addressed the role of direct experience of SEN in relation to the ITE of post-primary teachers, it seems reasonable to infer that these findings would similarly apply to teachers working beyond the primary level.

While it is clear that teachers in this present doctoral study, and the other studies cited, are largely unhappy with their ITE training and professional preparation for teaching students with special needs, it is important to extend the implications of this dissatisfaction, and to consider the impact that such unrest may have on teachers' perceived ability to teach students with SEN, as well as their attitudes towards inclusion. For example, research in Northern Ireland found that, because teachers believe their ITE failed to prepare them, a significant number may lack the self-confidence required to meet the educational needs of pupils with SEN (Winter, 2006, p. 89). It therefore seems reasonable to infer

that teachers in Irish schools, as a result of their educational dissatisfaction, may similarly lack the confidence required to appropriately support these students.

In addition, deficits in self-confidence may impact teachers' perceived levels of self-efficacy. As defined by Skaalvik and Skaalvik (2010, p. 1059) "teacher self-efficacy may be conceptualized as individual teachers' beliefs in their own ability to plan, organize, and carry out activities that are required to attain given educational goals." Teachers' self-efficacy beliefs are important as they can positively impact student achievement and outcomes in numerous ways (Holzberger, Philipp & Kunter, 2013). For example:

Teachers with high self-efficacy beliefs are more likely than teachers with a low sense of self-efficacy to implement didactic innovations in the classroom, to use classroom management approaches and adequate teaching methods, and encourage students' autonomy (Mojavezi & Poodineh Tamiz, 2012, p. 484).

Furthermore, self-efficacy beliefs may be directly connected to attitudes towards special educational provision, as research has found that "the more teachers believed they are able to implement inclusive practices on a concrete and pragmatic level, the more positive their attitudes towards inclusion are" (Savolainen et al., 2011, p. 65). In turn, it is likely that positive attitudes towards inclusionary classroom practices foster the creation of increasingly welcoming and supportive educational atmospheres for students with SEN. Such an atmosphere may be particularly important for students with ADHD and other behavioural conditions, who as a result of their diagnostic label, risk being perceived by teachers as "threatening and disruptive" (Evans & Lester, 2012, p. 108) to the classroom, and who may be less welcomed within this context as a result.

It also seems reasonable to infer that when teachers feel prepared and knowledgeable about teaching students with ADHD, this may lead to a higher sense of personal-self efficacy, and a greater willingness to include students with ADHD in mainstream classrooms by creating supportive educational environments which consider and respond to their needs. By the same token, if teachers feel unconfident and wholly unprepared to cater to the needs of students with ADHD, such negative self-perceptions may create a barrier which decreases the teacher's motivation and effectiveness, and which may directly impinge on the learning provision and outcomes of students diagnosed with the condition.

Based upon the evidence above, the natural conclusion would appear to be that ITE programmes should provide pre-service teachers with increased practical experience of working directly with students with SEN. However, the provision of practical SEN experience within ITE programmes is an extremely complex issue, and given the number of demands placed on ITE providers, it may be

virtually impossible to ensure that pre-service teachers receive direct experience of every SEN, prior to entering their own classrooms. Alternatively, a more practical approach may be to increase preservice teachers' knowledge of inclusionary practices and diversification strategies which are not necessarily condition specific, but rather, are more broadly reflective of good practice for all students. Indeed, Santangelo and Tomlinson (2012, p. 310) maintain that the purpose of differentiated instruction "is for teachers to maximize the potential of all learners by proactively designing learning experiences in response to individual needs," not just in response to the *medically diagnosed needs of a few.* Therefore, it could be argued that this view of differentiated teaching necessitates the importance of looking beyond students' diagnostic labels, and towards the individual needs of each student, thereby providing a more just and equitable education for all.

8.5.2 Dissatisfaction with CPD

While it could be argued that CPD courses could address some of the deficiencies identified in ITE, the findings of this study revealed somewhat mixed perceptions regarding the effectiveness of CPD.

Sixty percent (n=124) of online participants reported that CPD offerings were helpful in promoting their teaching of students with ADHD. When asked to define "how" such courses enhanced their teaching, responses typically noted that CPD provided strategies for identifying and assisting students with ADHD in the classroom, as the following anonymous online responses illustrate:

- "An insight into how they learn, how to best meet their needs, giving them coping skills within the mainstream setting"
- "Differential learning. Understanding how to manage students with the condition"
- "How to recognise ADHD. How to support learners with ADHD. How to meet the learning needs of students with ADHD."

However, it is important to recognise that 40% (n=84) of online participants did not view CPD as helpful in their teaching of students with ADHD. For example, participant Eileen felt that CPD was irrelevant to their work, and more applicable to the primary level. Similarly, an online participant working in the area of SEN observed that CPD offerings were, in their opinion, more tailored to mainstream classrooms:

As a special class teacher, I feel we are overlooked a lot, e.g.: CPD courses constantly focus on mainstream classrooms. Each year all teachers in our school and I'm sure many throughout the country, ask for a course that may be useful to our teaching and the challenges we meet, still there are none.

Ware et al. (2011, p. 127) also found similar views expressed among Irish primary school teachers who also desired CPD that was directly applicable to the students they were currently teaching, or would be in the future. These views may indicate that CPD course offerings are being developed in a general manner, and are failing to meet the specific and contextual needs of teachers, be they working in the second-level, or in specialized areas of education.

When querying teachers regarding their needs in supporting students with ADHD, it was clear they desired more training. Within her interview, Saoirse explained, "I would like teachers to get more training, and not just specifically ADHD, but special needs in general," while an online participant commented that teachers need more training to meet the demands of differentiation:

I strongly feel that all teachers should receive training in special needs education and strategies to assist them in differentiating their lesson plans to meets the needs of all students in their classrooms.

When asked in the online questionnaire, "Are there any resources, training or supports (that you do not currently have access to) that you feel would enable you to better support students with ADHD," 35 of the 119 participants who opted to respond, consistently mentioned the need for additional training. Examples of typical comments include the following:

- "CPD onsite training"
- "Informed CPD for teachers"
- "Any inservices dealing with classroom management strategies"
- "Appropriate teacher training"
- "ADHD training for all teachers as well as other SEN should be part of CPD for all teachers not only the elected ones!"

In this area, similar connections can again be made to McGilicuddy and O'Donnell's (2014) study, as Irish post-primary teachers also reported a perceived need for additional teacher education in relation to teaching students with ASD. Additionally, research by Rose et al. (2015, p. 5) found that many Irish teachers "believed...that they lacked the skills, knowledge and understanding required to provide effective curricular access for their pupils with special educational needs." These findings, combined with those in this present doctoral study, may partially stem from teachers' dissatisfaction with deficient ITE training, as noted in the section above. Additionally, however, such findings may also indicate that post-primary teachers in Irish schools:

 Experience an ongoing and pervasive sense that they lack of knowledge and awareness of particular SEN conditions, such as ADHD and ASD, which may lessen their perceived levels of self-efficacy in supporting students with these conditions

- 2. Fail to give due credit to the value of their personal experience and professional judgement as educators, especially in supporting students with SEN
- 3. Lack the required self-confidence to rely on their own expertise in making judgements regarding how to best support their students with SEN.

All of these factors may be resulting in teachers' perception that they require more information and training in order to fully support students with SEN in the classroom.

Additionally, it is also important to consider that the attitudes expressed in this theme may indicate the possibility that teachers perceive an ongoing lack of support within the present Irish education system, which begins during ITE, and persists throughout CPD. Furthermore, CPD training may be viewed as inadequate, and as failing to fully attend to areas that were insufficiently addressed and developed during ITE. While it could be argued that SEN is often one of the most highly discussed of all topics in CPD, and within Ireland for example, there are multiple organisations like the Special Education Support Service (SESS) and the National Behaviour Support Service (NBSS) who specifically attend to this area, it is important to note that teachers were not questioning the *quantity* of CPD offerings on SEN, rather, they were largely challenging the *quality* of offerings, particularly in relation to the perceived relevance of the topics in relation to their working within mainstream second-level classrooms. This perceived deficit could be especially detrimental to teacher attitudes towards inclusion and students with SEN, along with teachers' sense of morale, especially if the system is perceived as pushing them towards inclusion, and yet, is also viewed as *continuing to fail* in equipping them with the required skills for success.

As McGettrick (2009, p. 253) observes, internationally, there is growing awareness that teacher education is not limited to ITE, but rather, should be "a continuous and ongoing process." Citing the Commission of the European Communities (2007, p. 12), McGettrick argues that teachers must take responsibility for their own learning, and for acquiring new knowledge which informs their practice. It could be argued that relevant and accessible CPD can help to facilitate teachers in this process. However, the findings of this study raise questions regarding the extent to which second-level teachers are engaging in "continuous and ongoing" professional development, being that 40% (n=84) of participants in this present doctoral study felt that CPD was not helpful in aiding their teaching of students with ADHD. Therefore, if CPD is viewed by teachers as largely irrelevant to their work, as illustrated above, it may be the case that the learning and professional development of teachers may stall, and this fact may impinge on the quality of support and teaching that students receive.

In conclusion, although the National Council for Special Education (NCSE) asserts that students with special needs must have access to teachers who are qualified and experienced in the area of SEN

(National Council for Special Education, 2013; National Council for Special Education, 2011), many participants, particularly those working within mainstream classrooms, would argue that the system has not properly supported them in attaining these skills, despite the government's push towards the creation of inclusive mainstream classrooms as the "norm." Indeed, many teachers in this study would likely argue that inadequate teacher education is pervasive throughout the system, as evidenced in their ongoing dissatisfaction from ITE through to CPD. Additionally, teacher dissatisfaction with ITE and CPD as related to preparedness for teaching in inclusive classrooms, highlights a serious gap between inclusive policy and practice, particularly in relation to the education and formation of preservice teachers—but also in the training and continuing development of in-service teachers—all of whom appear to feel ill-prepared for the realities of inclusive classrooms.

8.6 Theme Two: Trouble for Teachers

While all eight interview participants were able to identify positive aspects of teaching students with ADHD, such as their caring and "fun" nature, and ability for creative thinking, online responses conveyed more negative perceptions of these students, especially in relation to their presence within the classroom.

Thematic Key Points:

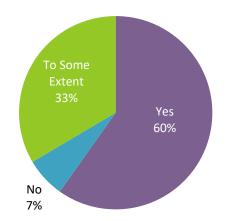
-Teachers focused mainly on the behavioural challenges they encountered in teaching students with ADHD.

-Participants were extremely concerned that the presence of a student with ADHD in the classroom could negatively impact the learning of other students.

-Some teachers expressed resistance to accepting the diagnostic legitimacy of the ADHD label, and instead, defined the condition simply as "BOLD" behaviour.

8.6.1 Preventing Others from Learning

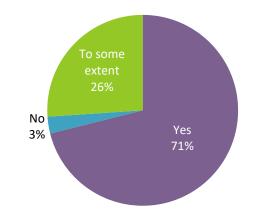
As the following graphic illustrates, an overwhelming 93% (n=195) of teachers reported experiencing challenges in their work with students with ADHD, which may indicate that teachers perceive this condition as one of the more difficult special education needs they encounter within the school.



VALUE	PERCENT	COUNT
YES	59.8%	125
NO	6.7%	14
TO SOME EXTENT	33.5%	70
	Total	209

Chart Eleven: Responses to the question: "Have you encountered any particular challenges in working with students with ADHD?"

Naturally, the classroom appears as the main setting where teachers encounter the vast majority of difficulties related to students with ADHD. As the following graphic illustrates, 97% (n=205) of participants expressed the belief that students with ADHD do impact the classroom climate, while only a mere 3% (n=6) felt they do not.



VALUE	PERCENT	COUNT
YES	71.1%	150
NO	2.8%	6
TO SOME EXTENT	26.1%	55
	Total	211

Chart Twelve: Respondents' views regarding whether ADHD impacts the classroom climate

More specifically, teachers expressed the belief that students with ADHD *negatively* impact the classroom. As Eileen noted, within this context ADHD is "not always welcome." Similarly, an online participant explained that students with ADHD, "can have a very negative effect on teaching and learning in the classroom. They make classroom management very difficult in all sorts of ways from dealing with indiscipline to the class's work ethic." However, one of the most serious concerns related by teachers was the belief that students with ADHD can negatively impact *other students*. This was a concept expressed by five of the seven interview participants, and it was also raised in the qualitative comments of fifteen online participants. For example, teachers particularly expressed concern that students with ADHD can prevent other pupils from learning, as one online participant declared:

They, like every other student, have an impact on the atmosphere in the classroom. This impact can be detrimental to the learning experience of other students and can be challenging in terms of classroom management. In particular, teachers felt that students with ADHD could be particularly "distracting" to other pupils, and this was one particular way in which they prevented others from learning. As another online participant explained:

Disruptive—speaking out of turn, getting out of seat and walking around, lacking concentration and motivation. This all wastes valuable class time and interrupts other students' concentration some of whom wish to engage in the lesson.

Similar perceptions were also reported in previous research among Irish primary school teachers, who also believed that "the acting-out behaviours [of students with ADHD] tended to be more problematic in relation to the other children in the class" (McIntyre, 2012, p. 202). This may indicate that teachers are less concerned about the effect that externalised behaviours have on them personally, and more concerned about the impact of such behaviours on the other pupils -in the classroom, particularly in relation to their learning and academic outcomes.

According to teachers in this present doctoral study, students with ADHD can also prevent others from learning by lowering academic standards and slowing the progression of the class. As an online participant explained, "Getting through material can be difficult with a serious case of ADHD in the room if they are having a bad day." Similarly, Siobhan observed, "There is a huge difference if the child with ADHD is not in the classroom, the whole dynamics of the classroom change. It's *amazing* the difference, like the work that I can cover in a class when she's not there." As illustrated by these quotes, it is clear that teachers perceive the impact of ADHD in the classroom as one which impedes teaching and learning outcome goals.

Teachers commonly perceived spending much of their time and energy on the student with ADHD, and forty-five participants in the online questionnaire specifically provided qualitative comments on this issue. In addition, they commonly believed that the student with ADHD can deplete from the resources available for other students and thereby negatively impact their learning. Saoirse explained, "I think that whether you mean to or not, you focus more of your attention on them, so maybe all students don't get as much time one-to-one as they should." Online participants also commented similarly:

- "They cause all the attention to be focused on them to the detriment of the other students"
- "Generally, students with ADHD need more attention from the teacher to keep them on task. This takes away from other students' one-on-one teacher-students time in the class."

Very few studies were identified which specially examined post-primary teachers' classroom experiences of students with ADHD, however, Canadian elementary school teachers have expressed similar perceptions, as they also believed that students with ADHD could disrupt teaching and reduce

time available for other students (Blotnicky-Gallant et al., 2014). The same concerns were also expressed by teachers in relation to the inclusion of students with other special educational needs, such as Autism (Sansosti & Sansosti, 2012). However, a number of studies assert that teachers may be mistaken in holding such perceptions. For example, Rouse and Florian (2006) found that the presence of students with SEN in mainstream classrooms *did not* lower the academic performance of other students, and research with elementary aged children concluded that the presence of students with severe disabilities in inclusive classrooms *did not* significantly impact the amount time available to other students (Salisbury et al., 1995). Therefore, it appears that teachers' perceptions of inclusion often challenge the reality of its actual impact on students, and this is an issue which may need to be addressed in teacher training, especially if teachers' perceptions negatively impact their willingness to promote inclusion, as well as their attitudes towards students with SEN in their classrooms.

However, it is also possible that the structure of the Irish educational system and new teacher accountabilities may be precipitating the views of teachers as expressed above. For example, the emphasis and concern placed on the learning outcomes of other students may be related to the highpressured nature of the Irish educational system and the Junior and Senior Cycle terminal exams. Conway and Murphy (2013, p. 11) remark that during the past 15 years, "new accountabilities" have emerged for Irish teachers, among which include "compliance with regulations, adherence to professional norms and attainment of results/outcomes." These authors also reference the Leaving Certificate examination as one example of the "high-stakes results-driven accountability" that teachers in Irish schools are now pressured to achieve, evidenced by the "ongoing iconic status accorded to Leaving Certificate results for individual students and their schools year after year" (Conway and Murphy, 2013, p. 12). Indeed, the level of seriousness with which Leaving Certificate results are viewed is clear—both for the teacher as evidence of their professional capabilities and meeting accountability standards, and for the student in terms of determining their future career possibilities and outcomes. Accordingly, this high-stakes pressurised atmosphere may lead some teachers to assume negative perceptions of students with SEN, especially if they are seen as impacting upon the ability of other students to learn, and by extension, to do well on terminal exams.

Similar pressures may also be felt by teachers working within the Junior Cycle. While it is true that the Junior Cycle (see Department of Education & Skills, 2015) is presently under reform, we must remember that the values associated with terminal exams in the Irish educational system are not likely to quickly dissipate with proposed changes. As reported by the National Council for Curriculum and Assessment (1999, p. 22), "Ireland is the only developed country that uses wholly external terminal examination at this stage of schooling," and it seems likely that even educators working with younger children in second-level may experience similar pressures to see their students perform and achieve,

and therefore, any perceived threat to this objective, such as the disruptive behaviour of students with SEN, may be unwelcomed.

In conclusion, this section illustrates that while teachers appear clearly aware of how ADHD negatively impacts their classroom and their pupils, in light of Theme One in this Chapter which illustrated their dissatisfaction with training for special education, it may be the case that teachers feel they do not possess the knowledge or practical skills required to minimise or alter this impact, which could leave them feeling frustrated and demoralised.

8.6.2 Using ADHD as an Excuse

Ninety-eight percent (n=204) of participants believed that ADHD can also influence the academic achievement of students who are affected by the condition, and teachers commonly perceived these students as struggling with concentration/focus, attention, organisation, and motivation. Such difficulties are commonly experienced by students with ADHD as a result of associated symptoms, and are well-documented in the research literature (for example see: Daley & Birchwood, 2010; Biederman et al., 2004).

However, despite an awareness of the impact that ADHD can impose on students, as evidenced by the comments above, it was interesting to note that a minority of 13 online participants expressed concern that the ADHD label can be used as an "excuse" by students and parents alike. Such comments were found across the dataset, in response to a variety of qualitative questions.

More specifically, five online participants expressed concern in their qualitative comments that an ADHD diagnosis can be used as *an excuse* for academic underachievement by pupils, and in some cases, their parents too. For example, one online participant commented, "the student may use the diagnosis as an excuse not to work in class," while another explained, "Very often when a student knows he/she has been diagnosed with ADHD they are inclined to use the condition as an excuse for non-cooperation with the learning process and will exploit it in order to gain extra attention from their peers and the teacher." As such, these comments illustrate concerns among a minority of participants regarding the *legitimate* academic impact of the ADHD diagnosis on students.

Yet, other teachers were careful to distinguish between the legitimate impact of an SEN such as ADHD, versus using the label as a justification for poor performance. As one online participant noted:

There has to be an understanding that having an SEN is not an excuse for performing poorly - it certainly impacts on the student's ability to learn but it does not give them the excuse to not perform to the best of their abilities and to not aim always for achieving more.

However, more common among teachers was the belief that some students with ADHD use their diagnosis as an excuse for *bad behaviour*, and as a means of reducing their personal responsibility and culpability for such infractions—concepts that were specifically expressed in the qualitative comments of ten questionnaire participants, for example:

- "Some students use it as an excuse for poor behavior"
- "Students refusing to take any responsibility for their actions."

The findings presented above align with those discovered in earlier research by Rush and Harrison (2008, p. 218) who also reported that general-education high school teachers viewed the behaviour of students with ADHD as disruptive, and who also expressed concern that adolescents with ADHD use their diagnosis as an excuse. Similar perceptions have also been found in relation to other conditions, such as Dyslexia, among others. As defined by Shaywitz (1998, p. 307) "Developmental dyslexia is characterized by an unexpected difficulty in reading in children and adults who otherwise possess the intelligence, motivation, and schooling considered necessary for accurate and fluent reading." It is possible that this seeming disconnect between what individuals *can do*, and what they *should be able to do*, may lead some to see Dyslexia as an excuse for underachievement in reading (for example: Rafferty, 1968). Similarly, it may be the case that teachers in this present doctoral study perceive a disconnect within students with ADHD, in relation to how they *should learn and behave*, and how they *actually* conduct themselves within the classroom. As such, these differences may lead teachers to believe that some students are capable of more, and are simply using their condition as an escape from the effort required to meet expected standards.

It is also important to recognise that on some level, a medical diagnosis—be it of ADHD, Dyslexia, or any other condition—is a legitimate excuse, or more properly, an explanation for why a student may fail to meet educational standards which they appear to be capable of achieving. Yet, viewing ADHD as an excuse calls into question to the very legitimacy and level of acceptance that ADHD receives, particularly among Irish educators. If educators negate the ADHD label, it could have a significant and negative impact upon students—from the seriousness with which symptoms of ADHD are viewed in the classroom, to the referral of students for assessment, to the provisions and supports they receive, and finally, to the very relationships they have with those who are entrusted to care and support them in secondary school.

Such perceptions of ADHD as an "excuse" may be also be related to the fact that the condition is an "invisible" disability, which outsiders cannot readily perceive just by looking at the individual. As a result, teachers may be more likely to discredit such disabilities, and their effect on the person, because they cannot see the physical manifestation of difference between the self and the other,

especially in cases where the individual may display their symptoms in subtler and less obvious ways. However, as Davis (2005, p. 154) asserts, "There is no reason to believe that the invisibility of a disability itself necessarily lessen its impact or makes the disability less serious." This implies that it is important for teachers to consider the attitudes they hold and project towards students with invisible disabilities, such as ADHD, as these attitudes may act as a barrier to the student's educational attainment—a barrier that may be just as strong as the ADHD diagnosis itself.

8.6.3 ADHD is Spelled B-O-L-D

The association of ADHD with "BOLD" behaviour was a concept which arose in the qualitative comments of fifteen online questionnaire participants, and in three of the semi-structured interviews. Of the online participants, eight teachers expressed concerns that others, usually their fellow colleagues, conceptualise ADHD as equating to nothing more than "bold" behaviour. Typical comments included:

- "Some colleagues believe the ADHD is another way of writing BOLD"
- "Some view ADHD as "bold" behaviour"
- "Some teachers consider ADHD to equal BOLD"

However, it is important to note that these participants did not typically admit to holding such views personally. Indeed, one online participant explained that such views were held by a minority of their colleagues.

"Some teachers think students are just being bold or that it is the result of poor parenting, or that I am too soft on students and spend too much time taking things through, however this attitude is only held by one or two teachers most teachers want to help students and are understanding of their particular needs."

One online participant noted, "I often hear teachers saying; 'they're just bold.' This makes me feel really annoyed and frustrated," thus indicating that the equation of ADHD with BOLD was clearly a source of difficulty for her.

Eight online participants attempted to explain the reasons why some teachers may be inclined to see students with ADHD in this manner. The reasons offered included teachers feeling *frustrated*, overdiagnosis of the condition, and students with ADHD being challenging in the classroom. Indeed, as one participant explained, "ADHD can be seen as BOLD, as teachers can be very frustrated by these students in the mainstream classroom." Additionally, three of these online participants felt that the "bold" label is applied to students with ADHD due to a lack of understanding, as one explained, "Other non-learning support staff often brand students with ADHD as 'bold' and they are often punished (detention, suspensions etc.) due to poor understanding by management of the nature and effects of ADHD on the individual." Within the context of her interview, Mairéad commented similarly, "I think that's why you get this kind of Irish sort of ADHD is bold like kind of mentality cause people, people say things and they don't mean it. It's just that they can't explain [it]."

At the end of the online questionnaire, participants were provided with the opportunity to freely express any points they wished in relation to the topic of teaching students with ADHD. Only one of the sixty-six participants who opted to respond appeared to harbour outright negativity towards the ADHD label and students diagnosed with the condition. This particular individual wrote:

ADHD, OCD, EBD, GHD - these are all new phenomenons that allow students and children [to] have an excuse from taking away the education of others. *How was it that a child was bold 10 years ago, whereas they are acronymed these days?* It does nothing only [but] perpetuate the idea that it takes 10 people to support one. Ireland needs to walk away from this nanny state mentality and make students become responsible for their actions.

It seems that the teacher above may be questioning the attempts of the medical community in explaining why some children struggle with behavioural compliance and conformity, and as such, they may be wholly resistant to accepting conditions perceived as "new phenomenons." Instead of seeing such labels as a useful means of understanding human behaviour, the response was to dismiss the medical and SEN research in favour of applying a broad "bad/bold" label, which may have been easier for this individual to conceptualise and accept. Certainly, this raises questions about why it appears that some teachers reject medical explanations for the difficult behaviour they encounter in the classroom. However, it is worth remembering that part of a teacher's credibility is directly related to being seen as "fair" in equally applying classroom rules and sanctions. Therefore, it may be that some teachers struggle with the ADHD diagnosis because they feel *this particular medical diagnosis* undermines their credibility, especially in practice when they are forced to give allowances to the student with ADHD, while punishing others for the same infractions.

It may also be the case that teachers' dismissal of the ADHD diagnosis in favour of the "bold" label is related to issues of power and control in the classroom, which are well ingrained in our western educational systems. French philosopher Foucault (1977), described the process by which "docile bodies" are created through the use of institutionalised power in prisons, and this discourse provides a model for understanding the use of power and training in other modern institutions (Downing, 2008), such as schools. As outlined in Downing (2008, pp. 79-80), Foucault argues that bodies are physically controlled through the use of "enclosures" and "partitioning" (to prevent individuals from

uniting in ways that might threaten the established order), organisation by "rank" into classes and groups, and the "control of activity" through the use of regulating timetables.

These concepts aptly apply to the school setting, as students are typically enclosed within the physical school building, and spend most of their time in classrooms with bodies physically confined to chairs and desks. Students are segregated according to class year, with a clear hierarchy of power and rank between themselves, and the principal and teachers. Each minute of the school day is also regulated through daily timetables and schedules of classes which determine where students should be, and what they should be doing, in an attempt to create "docile" and passive bodies. As such, associated values of obedience, conformity, and control, have long been engrained in common discourse regarding the purpose of education and the optimal atmosphere of the classroom. These ideals are also well accepted by many teachers, who consequently may see their role, not only as instructional, but also as one of maintaining order within the school by virtue of their "rank" as an educator. Indeed, as previously mentioned in Chapter Seven, the behavioural control of students has long been seen as a central domain of teachers (Griffin & Shevlin, 2011). Therefore, when a student challenges the established order, particularly through behavioural non-compliance, teachers may be prone to view these students as a threat to their authority, and the established values and norms of the school system. This may also explain why some teachers in this study, and/or their colleagues, appeared to encounter difficulties in fully accepting the ADHD diagnostic label, as it appeared to relieve the student from assuming personal responsibility, and of suffering the repercussions for behavioural deviance. It may also be the case that some teachers see the ADHD label as diminishing their own personal authority, especially if it forces them to make allowances or exceptions for the behaviour of these students.

However, these strict behavioural expectations should also be considered in light of the inclusive educational philosophy envisioned by the Department of Education and Science (2007, p. 39), in which all individuals are to be "accommodated and celebrated." However, if educators staunchly adhere to limited notions regarding which behaviours are "acceptable" within the context of education, this may prevent some children, like those with ADHD and other behavioural conditions, from being fully included and supported. Such notions could result in students with behavioural special needs being punished, and even excluded, for behaviours which may be outside of their control. Therefore, it seems that the implementation of inclusionary practices for these students requires that commonly held beliefs and values related to behaviour and control in schools be reimagined and expanded, in an effort to more readily include and support these students in mainstream education.

Yet, because issues of "control" and "good behaviour" appear central to our accepted notions regarding what constitutes proper teaching and learning, some educators may find it quite difficult to

unlearn these notions. Still, one online participant commented on the power of personal experience in changing their mind-set about students with ADHD:

I have greatly changed my own view of ADHD in the last few years. I am certainly guilty of thinking that these kids were just "bold" and at one stage would have even questioned the existence of ADHD at all. I have taught a few kids in recent years however that have had great difficulty with it and I have totally changed my view.

This quote illustrates that it is possible for some teachers to change their conceptualisation of ADHD, and it also emphasises the power of personal experience in developing how teachers view and respond to these students.

8.7 Theme Three: "Relationships" as ADHD Intervention

Eighty percent (n=161) of online participants stated they were aware of effective strategies for supporting students with ADHD, and 132 respondents opted to provide qualitative comments in which they discussed the approaches they have found helpful in supporting students with ADHD. Sixty of these online participants emphasised the effectiveness of "active" learning methods, such as group work, tactile/kinaesthetic learning, differentiation, and variety in activities. Similar ideas were also expressed by six of the eight interview participants.⁴⁵

Additionally, 30 of the 132 qualitative respondents noted above also commented on the importance of fostering positive personal relationships with students who are affected by ADHD. Similarly, this theme was discussed by seven of the eight interview participants. The data illustrated that this approach was used by these teachers as both an "academic" and "behavioural" intervention.

Thematic Key Points:

-In an attempt to support academic gains, teachers often personalised the curriculum in order to more fully engage students with ADHD in classroom learning.

-As a behavioural intervention, personal relationships and open communication were used in both a reactive and proactive manner.

⁴⁵ Although Theme One illustrated that teachers felt they required more training related to educational provision for students with ADHD, in practice, they appear quite knowledgeable regarding the importance of active methodologies for these students. Such methods are also supported by several sources in the research literature (for example: DuPaul, Weyandt & Janusis, 2011; Reif, 2005).

8.7.1 Personalising the Curriculum

As previously noted in Theme Two, teachers commonly found it difficult to engage students with ADHD in the classroom environment. One solution presented in the qualitative comments of ten online participants, of the 132 who opted to comment on the strategies they use to support students with ADHD, was to personalise the curriculum. In the words of an online participant, this was achieved by, "Getting to know the student's interests" and "always refer[ing] to his/her interests if possible" while another observed: "In the practical subjects if the projects can link in with an interest of theirs I have found them to be able to maintain an interest for a longer period." Within the interviews, Siobhan admitted that her subject, Business, can be "boring," and yet, she found that class could be greatly enhanced simply by integrating "things that [students are] interested in" and using examples "they can relate to." Brianna also tried to similarly adapt her classes to suit students' interests and talents:

I'd just see maybe what is the child interested in and try at all, at all contexts to try and bring that in to [the class]. If they're good at soccer em, bring that in to whatever they're doing, be it geography, start talking about a soccer pitch or a stadium somewhere.

Similarly, within the interviews, two of the eight teachers discussed the importance of "subject choice," particularly in relation to engaging students with special education needs. When asked if there were any changes that could be made to the school system to make it more supportive for students with ADHD, Mairéad replied, "Subject choice...It's like a no-brainer," and in the words of an online participant, "Their curriculum and subject choice must be active, motivating and of interest to them." As one participant summarised:

Students with ADHD work best when the person that is teaching them gets to their level and brings them along in the lesson it doesn't matter how fancy your resources are if you don't personalise it then forget about it.

It is important to note that the approaches described above, while viewed by teachers as effective for students with ADHD, are more generally examples of good teaching practice which benefit all students, not only those with special educational needs. Personalising the curriculum is seen as an important part of SEN practice within Scotland, where there is a "new emphasis on every learner being an active participant and contributor to their own learning. Involving learners in planning, assessment and building on their interests and prior learning, all assume helping them to gain the skills to take a lead role in their own learning" (Curriculum for Excellence, 2012, n.p.). While this level of personalisation might seem onerous to some, it represents a strategy which is easy for educators to immediately implement within their own classrooms, and takes little prior knowledge or special skills.

As such, personalisation of the curriculum could be a particularly effective means of developing positive attitudes in teachers towards inclusive practices, while also increasing their levels of self-confidence in providing for students with SEN.

8.7.2 Providing One-to-One Support

Three of the eight interview participants conveyed the belief that one-to-one support and attention was important in the academic success of students with ADHD. For example, Mairéad invested a significant amount of time in one individual prior to his Junior Certificate, and she explained, "I suppose that's what really...helped him...get such a good grade. He was getting, he was getting that attention." Similarly, Kevin also agreed, "[W]hen you show interest in them...and you're giving them attention, and it's one-on-one...they actually respond quite well to it." In many ways, these approaches represent a particularly insightful way of attending to attention deficits in the classroom, for when students were unable to maintain attention in a whole-class situation, the teachers *supplemented the absent attention*, by providing the individual with increased one-to-one support. While this approach may seem "simple" in nature, it also appears to have been *effective*, based on the outcomes cited above, thereby suggesting that students with attention deficits may not need difficult or burdensome interventions, rather, they may only require additional time and close support.

Additionally, 11 online participants provided qualitative comments which noted the importance of one-to-one support for students with ADHD.⁴⁶ For example, one online participant described their approach of supporting students with ADHD through, "One to one, careful teaching, giving due attention to the student's difficulties, and gently refocusing them on their learning task." In many ways, this teacher showed a much more nuanced, careful, and patient consideration of how ADHD impacts their students. Such educational strategies are also supported by Rustin (2011, p. 18) who maintains that positive student-teacher relationships enable deeper learning, instil self-confidence in students and reduce anxieties associated with learning. These factors may have also contributed to the success experienced by students, as noted above.

Rose and Shevlin (2010, p. 17) assert, "Effective teaching is built around relationships that foster trust and confidence, build self-esteem and encourage curiosity and enthusiasm for learning." Yet, in citing multiple sources, these same authors also warn that teaching and learning can become a challenge when the quality of student-teacher relationships break down, and therefore conclude that "time devoted to considering the development of positive teacher and pupil relationships may be critical in

⁴⁶ Interestingly, when asked about supports which were lacking, or which they "wished" they had more of, eight online participants remarked that additional time for one-to-one support with students with ADHD was something they desired.

enabling all parties to gain maximum benefits from schooling" (Rose & Shevlin, 2010, p. 17). Therefore, the significance of such relationships for improving the academic outcomes of all students in the classroom is quite clear.

8.7.3 Positive Reinforcement & Praise

Participants also stressed the importance of positive reinforcement and praise in their relationships with students with ADHD. These points were raised in the qualitative comments of twenty-five online participants, and by two interview participants. As one online participant expressed, "In my experience the best help for students with ADHD is human support and encouragement." In fact, online participants consistently commented in their qualitative comments on the importance of praising students with ADHD and using positive methods of behavioural reinforcement. Typical responses included:

- "Praise praise praise"
- "Praising any positive effort and good behaviour"
- "Patience and understanding through listening. Rewards and positive reinforcement"
- "Try to catch them doing good and praise them."

An online participant shared the technique of writing personal notes of encouragement to students, "Praise also works well, when students are particularly focused in class, I will write a note in their journal to state that they had an excellent class etc." As the above quotes illustrate, these teachers adopted a change of focus away from the negatives associated with ADHD, and instead, invested time and effort in finding and acknowledging the positives of these students. This change of focus may be one of the reasons why students appeared to respond well to positive praise and encouragement.

8.7.4 Open Dialogue

A minority of participants discussed the practice of engaging in open dialogue with students with ADHD, and this concept was present in the qualitative responses of four online participants, and three of the interview participants. For example, in his experience Kevin found, "There is so much that you can get by just having an open dialogue and communication with the student with ADHD." Similarly, an online participant suggested, "Be honest with the students. Support them by listening to them and telling them that they are central to the plan." In particular, another teacher felt it was important for educators to speak directly with students with ADHD, especially about their condition impacts them:

[Have] an open dialogue with the student on a one-to-one about their ADHD, the effects it has on the student themselves, and on the teaching and learning of the class. It is just

as important to say "you had a good class" as it is to say "tomorrow we will start with fresh [sic]."

As the above comment illustrates, not only is it important to consider the student's perspective, but it is equally important to give students with behavioural conditions additional opportunities to succeed each day. In many ways, this type of open communication and dialogue was precisely what the young participants in this study desired to have with their own teachers, but often found lacking, as evidenced in Chapter Seven, Theme Four. This suggests that open communication may be a successful means of engaging students with ADHD more fully in their own learning, and in finding solutions to classroom difficulties as a team.

In particular, Siobhan used dialogue as a pro-active method of reducing unwanted behaviours in the classroom, as she would sometimes speak to her student with ADHD *before class* and explain her expectations for the day and what they needed to accomplish: "Sometimes if I talk to her before the class starts...just have a little word with her, just one-on-one with her and say, you know, 'Ok...we need to get this work done'." As this quote illustrates, simple approaches can prove effective in supporting students with ADHD. This implies there may not always be a need for lengthy CPD or technical and time-consuming interventions, especially with older students in second-level who may be capable of understanding the educational goals and objectives which need to be accomplished.

However, it also appears that dialogue with students could be used as a reactive method of behavioural management. For example, Kevin stated that, when, and if, behavioural issues surfaced in the classroom, "always my first port of call would be to deal with the student themselves," and similarly, Elaine found that "whole class" discipline was an ineffective means of helping students with ADHD understand and change unwanted behaviours. In her opinion, students with ADHD do not typically "pick up" on the issues which relate directly to them when whole-class discipline is enacted. Instead, she takes a "very specific" approach with these students:

[They] can get really caught up in the moment and mighn't really get what they're doing is wrong...So very specific and get down to their level and look at them and just say, "This isn't appropriate, if you continue doing 'this specific thing,' this is what will happen." And let them see the correlation between what they are doing and what will happen.

The quote above illustrates another example of a teacher with a nuanced understanding of their students' needs. While it could be argued that such one-to-one practices should be used with *any* child who misbehaves in class, in the case of those diagnosed with ADHD, it is important to recognise they might not be able connect their actions to consequences, as readily as other students. As such, this teacher is not responding to a "bad" student, rather, they are responding to the symptoms of ADHD,

and in doing so, providing the student with the personalised level of support they require in order to benefit from their classroom experience.

The generalised and relational approaches of supporting students with ADHD, as cited above, appear to be in line with Senior (2009, p. 103) who asserts, "While it is imperative that teachers are provided with training on how to recognize ADHD, as well as how to deal effectively with the associated educational, behavioural and emotional needs, it is also important to move away from the notion that there is a specific ADHD pedagogy." Indeed, if this is the case, it could be argued that all forms of teacher training should increase teacher's knowledge and awareness of the power of positive studentteacher relationships in supporting pupils with SEN, which may help to move teachers away from the notion that they lack required expertise and strategies which are SEN specific.

The findings of this theme are positive, in light of research which suggests ADHD symptoms may negatively impact the quality of student-teacher relationships (Rogers et al., 2015). Alternately, it seems that utilising a team approach and building personal relationships with students with ADHD may be one simple way in which to reduce the level of negativity that ADHD symptoms can exert within the school setting. Additionally, it is important to recognise that the power of positive student-teacher relationships appears to extend well beyond the academic and behavioural domains. For example, research by Crouch et al. (2014) found that such relationships were essential in fostering a sense of belonging and inclusion among students, especially those who were impacted by a disability. As these authors note:

Although it is important for teachers to focus on curricula and academic concerns, it is also valuable for teachers to recognize the vital social functions they play in the lives of their students, particularly for those students who may be vulnerable and marginalized (Crouch et al., 2014, p. 27).

Therefore, it may be the case that in developing their personal relationships with students with ADHD, teachers are not only addressing academic and behavioural deficits, but they are also helping to potentially increase the level of social inclusion and belonging experienced by these students.

8.8 Theme Four: Gendered Assumptions

Teachers appeared to be strongly influenced by gendered assumptions in relation to how they understand and interpret the behaviour of male and female students, as well as how they conceptualise the nature of ADHD. As such, these assumptions may prevent teachers from recognising the characteristic signs of this condition in girls.

Thematic Key Points:

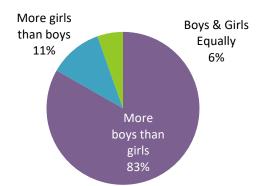
-Participants reporting teaching substantially more males with ADHD, than females. However, teachers often "suspected" cases of undiagnosed ADHD in girls.

-Some teachers reported observing clear gender differences in the behaviour of males and female students with ADHD, however many of these differences appear to reflect typical gender-role stereotypes.

-There may be a gendered cycle of ADHD recognition at work in Irish schools which directly contributes to the underrecognition and underdiagnosis of ADHD in young women.

8.8.1 Suspecting ADHD in Girls

As the following chart illustrates, participants overwhelmingly reported having significantly more experience of teaching boys with ADHD, than girls:



VALUE	PERCENT	COUNT
TAUGHT MORE BOYS THAN GIRLS WITH ADHD	83.3%	169
TAUGHT MORE GIRLS WITH ADHD THAN BOYS	11.3%	23
WITH ADHD		
TAUGHT GIRLS AND BOYS WITH ADHD EQUALLY	5.4%	11
	Total	203

Chart Thirteen: Respondents' Experience of Teaching Males & Females with ADHD

Based on this information, it seems reasonable to infer that teachers' experiences and perceptions of students with ADHD, as shared in this data set, are largely in reference to diagnosed males. When asked if she had ever taught a female diagnosed with ADHD, Eileen replied, "No," and she further observed, "I have never had an inkling or a kind of niggle about a female student that they might have ADHD, whereas I would have had a lot with the boys." Similarly, when asked the same question, Elaine stated, "I can't think of anybody off hand, which is mad. No, not that I can think of." These quotes illustrate that for some participants, the perception of teaching more males diagnosed with ADHD than females, was deeply ingrained. However, such findings do appear to support gender-based prevalence rates which suggest that ADHD is more frequently found in male children (American Psychiatric Association, 2013b, p. 63).

Although they struggled to recall teaching girls *formally diagnosed* with ADHD, teachers commonly *suspected* that they may have taught females with undiagnosed cases of the condition. In fact, this belief was raised by all eight of the interview participants. As Maeve explained, "I reckon I am teaching a female with ADHD who is not [diagnosed]," and an online participant similarly stated, "I believe that I have taught a small number of girls with ADHD who had not been diagnosed." When queried on *why* they suspected ADHD in these particular females, teachers commonly explained that these girls tended to display symptoms and behaviours which are more stereotypical for boys. As Kevin stated, "certainly the girls...who I would have suspected had it, would have had all the attributes that the boys would have. All of them." Similarly, 41% (n=80) of online participants reported observing *no behavioural differences* between boys and girls with ADHD. In other words, this likely means that they view affected boys and girls as acting in the same manner.

Given the information presented above, it seems likely teachers may use diagnosed males as their reference point for recognising ADHD in other students. As a result, when they "suspect" ADHD in a girl, it is likely because she demonstrates externalised and disruptive behaviours which are considered more typical for diagnosed boys (Newcorn et al., 2001), and which therefore, may make her standout, relative to other girls.⁴⁷ More will be discussed on this phenomenon in later sections of this theme.

8.8.2 Gender Differences in the Behaviour of Students with ADHD

While 41% (n=80) of participants saw no behavioural differences between males and females with ADHD, a majority of 59% (n=114) did report such observations. Although researchers debate whether gender differences exist among those diagnosed with the condition, teachers strongly felt they *had*

⁴⁷ For a review of gender issues and related stereotypes, see Chapter Three, Understanding ADHD.

encountered behavioural diversity among their students.⁴⁸ Yet, according to Campbell (2000, p. 385), "gender differences appear to be especially strong when teacher reports are used to define disorder." As a result, this finding may be somewhat unsurprising, however, it may also reflect the fact that gender stereotypes are deeply ingrained in our social experiences and expectations, and by extension, are a pervasive and influencing factor even within the field of education.

Boys with ADHD as Disruptive and Dominating

When it came to describing observed gender differences in the behaviour of males and females with ADHD, participants were largely united in their views regarding the behaviour of boys, who were generally associated with externalised difficulties. Boys were described as more disruptive, prone to "outbursts," aggressive, and confrontational, as compared to girls with ADHD. Typical online responses included the following:

- "Boys can have more outbursts in class, demand more attention"
- "Boys tent [sic] to push the boundaries a bit more. More rebellious and a greater propensity towards physical aggression and occasionally harder to reason with in regard to their outbursts"
- "Boys louder and more disruptive."

Although the above statements were specifically in reference to boys with ADHD, it is interesting to observe that all of them appear to reflect typical gender stereotypes about males, especially when considered within the school context. For example, based upon a review of related research, Howe (1997, p. 11) concluded that boys are stereotypically "more likely to be the focus of attention," to experience restlessness, and to misbehave within the classroom. Interestingly, these are the same characteristics that teachers used to describe their male students with ADHD.

Additionally, while the above generalisations may lead teachers to naturally expect and accept some level of disruption from male students, including those without special needs, it may be the case that ADHD causes affected males appear *significantly* louder, disruptive, and more rebellious than same-sex peers who are unaffected by the condition. Thus, males with ADHD may push the boundaries accepted by teachers to inappropriate and unwanted levels.

⁴⁸ Participants' qualitative responses which discussed observations in relation to the behavioural differences between boys and girls with ADHD were analysed in relation to the gender of the respondent, however, no differences were observed in relation to how male and female teachers perceived the behaviour of boys and girls diagnosed with the condition.

Girls with ADHD as Passive and Less Disruptive

Online participants in this present doctoral study were not as unanimous in their views regarding the impact of ADHD on the behaviour of affected girls. On average, girls with ADHD were viewed as more passive, quiet, and less prone to external displays of behaviour. Online responses commonly described female students with ADHD as:

- "Girls seem to be more placid or passive, forgetful, absent minded, tired, headaches"
- "Mostly behaviour amongst girls is quiet talking or not paying attention"
- "The girls present...as quieter and more withdrawn than the boys"
- "Girls are more able [sic] to control their behaviour."

In comparison to the boys, teachers generally felt that girls with ADHD presented them with fewer difficulties, and such sentiments were present in the qualitative comments of 28 online participants. As one noted, "Of the few girls I have experienced there has not been the same level of difficulty as that experienced with boys." Here too, it could certainly be argued that the above observations reflect gender role stereotypes of young women as more passive and compliant within the classroom setting. However, such views of females with ADHD are supported by Nigg and Nikolas (2008, p. 321) who maintain that "girls [with ADHD] are less active and disruptive than boys overall." Gaub and Carlson (1999) also suggest that, because girls may be more highly affected by inattentive type ADHD, they may experience less hyperactivity. As such, this may translate into girls with ADHD causing fewer disruptions within the classroom setting.

However, it should be noted that *not all participants* viewed girls with ADHD in a favourable way. For example, the qualitative comments of five online participants portrayed girls with ADHD as more emotional, reactive, and more difficult to teach than diagnosed boys. As one online participant reported, "Girls tend to be more easily frustrated and angered than boys in my experience...a girl would be more likely to become verbally abusive sooner than a boy would." Similarly, another online participant observed, "The boys will endeavour to work while girls with ADHD REALLY find it hard to settle into a classroom routine and take any correction in a negative way," thus illustrating that some teachers encountered definite challenges in their work with females with ADHD.

Similar observations were also reported in qualitative research by Krueger and Kendall (2001, p. 67), who found that "ADHD adolescent girls tended to be more sensitive to how their behavior affected others. Girls seemed more aware of the frustration, upset, disappointment, concern, and ridicule that others expressed in response to them about their behaviour." As such, it may be the case that ADHD serves to heighten the emotionality and awareness of young women affected by the condition,

especially in relation to the social implications of their symptoms and behaviours. Indeed, the DSM-5 confirms that individuals with ADHD may encounter difficulties in emotional regulation, citing associated features such as "low frustration tolerance, irritability, or mood liability" (American Psychiatric Association, 2013b, p.61). This fact may help to explain why some teachers in this present doctoral study felt the females were more difficult to teach, and it may be the case that boys with ADHD did not show the same heightened levels of emotional response to social difficulties. This is important to consider within the classroom context where emotional struggles with frustration, anger, and upset, may be perceived by teachers as interfering with learning and teaching.

Another reason why some teachers viewed girls with ADHD as more difficult than diagnosed boys, may relate to what Ohan et al. (2011, p. 84-84) propose in suggesting that, "the effect of the [ADHD] label may be more powerful for girls than for boys because girls diagnosed with ADHD may be perceived as significantly more impaired and in need of treatment than girls without a diagnosis." These authors make their conclusion based on a number of factors such as teachers' increased likelihood of encountering more boys with ADHD in the classroom, a point confirmed by this present doctoral study, as well as the fact that girls with ADHD in clinical settings were rated as more greatly impaired on numerous measures, than girls in community samples. This may also suggest that boys with ADHD, when compared to male peers, deviate less from gendered behavioural norms and teacher expectations, among other measures, which may make boys with ADHD appear "less impaired."

It is important to also consider that the gendered expectations cited above may actually serve to disadvantage young women in school, particularly those with undiagnosed and more inattentive and internalised forms of ADHD. For example, Kokkinos, Panayiotou and Davazoglou (2004, 114-115) suggest that pupil gender can significantly impact the level of seriousness with which student teachers view the behaviour of students. These authors found "internalising behaviours" were viewed as *more serious in boys*, while externalising behaviours were perceived as more serious in girls. This implies that teachers may view internalising behaviours, such as inattentiveness and daydreaming, as unproblematic when exhibited by a female, because such behaviours may be accepted as more appropriate for girls, and viewed as a natural characteristic of their gender. As such, these biases could further increase the likelihood that females with primarily inattentive ADHD features may go unrecognized because teachers would not see these symptoms as problematic for a girl. In comparison, when young women exhibit *externalised behaviours*, such as those associated with hyperactivity, this may be viewed as inappropriate for their gender, and considered worthy of assessment. If so, this would potentially explain why the all of the young participants in this present

doctoral study who were diagnosed early in childhood, both experienced and displayed hyperactivity as a main characteristic of their ADHD.

8.8.3 Gendered Cycle of ADHD Recognition

The findings of this present doctoral study certainly raise questions regarding the influence of gendered assumptions on the ability of teachers to recognise the symptoms of undiagnosed ADHD in young women. In summary, the discussion above suggests that teachers primarily view ADHD through a gendered male lens, that is, they associate ADHD most strongly with male students who exhibit hyperactivity and external displays of disruptive behaviour. According to Sassi (2010), this stereotypical view of ADHD is quite common. Yet, if the male-stereotype of ADHD is the primary view of teachers, in turn, it could be argued they are more likely to view and evaluate all students, especially those with suspected ADHD, through this biased "male" lens.

As such, there may be a gendered process of ADHD identification which is ongoing in Irish schools, and this may be further contributing to the underrecognition and underdiagnosis of young women with inattentive forms of the condition. This process is summarised in the following chart:

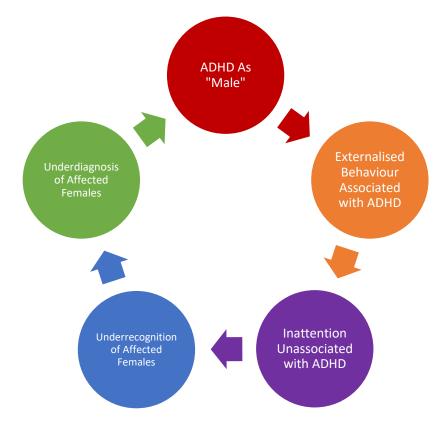


Chart Fourteen: The Gendered Cycle of ADHD Recognition

According to this chart, the gendered cycle of ADHD recognition starts with the social conceptualisation of ADHD as a condition which largely affects males. Because males are more prone

to externalised behaviours such as hyperactivity, this leads to the association of ADHD with such behaviours. As a result, internalised expressions, such as inattentiveness and daydreaming, are not considered as "evidence" of ADHD. Additionally, because such features are not bothersome within the classroom context, and because they may be viewed as gender-typical for females, this results in the underrecognition of females with primarily inattentive and internalised features. In turn, fewer young women are referred for clinical assessment specifically for ADHD, which leads to underdiagnosis. The reason for underdiagnosis of ADHD can be attributed back to the initial starting point—because ADHD is largely conceptualised as a male condition.

It is also important to recognise that this cycle may hold significant educational implications for girls with ADHD. For example, presently within the Irish context, additional SEN support and resource allocation is directly linked to medical diagnosis. However, if the above cycle leads to young women with ADHD to be unrecognized and undiagnosed, or to experiencing late diagnosis, as did the majority of young participants in this study (see Chapter Seven, Theme Two), that means they risk progressing through their educational career without receiving the necessary supports which they require, and are entitled to, as a result of their condition. Subsequently, this also means that they may be disadvantaged and unable to achieve to their full potential, which could have serious and negative future consequences, including whether they pursue higher education, and which career choices are open to them.

It is also important to realise that, if girls with ADHD are less likely to experience hyperactivity and less likely to exhibit externalised features of ADHD, it may also be the case that girls *who are recognised* by teachers as in need of assessment, and those who receive clinical treatment, *may represent the most extreme cases* of ADHD (Soffer, Mautone & Power, 2008), and therefore, may not represent *all girls with ADHD*. Furthermore, if teachers do indeed conceptualise ADHD through a gendered perspective, it would naturally seem that girls who are recognised as having ADHD are therefore more likely to manifest "male-typical" characteristics. Furthermore, it could be maintained that girls who are diagnosed with ADHD, may in some ways, continue to reinforce (particularly to teachers) the male stereotypical representation of ADHD, especially if they exhibit ADHD with hyperactivity and other forms of outward behaviour.

In conclusion, because teachers appear to focus so strongly on external behaviours as evidence of ADHD in students, and because it appears they view this condition through a male gendered lens, it seems very likely that Irish second-level teachers are failing to recognise young women with primarily inattentive ADHD in their classrooms and schools. These thematic findings and implications are concerning given that the Department of Education (Republic of Ireland, Department of Education &

Science, 2007, p. 71-72) maintains that teachers play a crucial role in the identification and referral of children with suspected ADHD and other special educational needs, as discussed in Chapter Five. Naturally, such conclusions also lead us to question just how seriously and actively second-level teachers are taking this responsibility? While this question was not directly explored within the parameters of this study, it does indicate possibilities for future research.

Additionally, the findings of this chapter call attention to the importance of challenging the view of ADHD as a "male" condition, and of educating teachers on the specific and unique implications this condition may impose on females, especially in terms of manifestation and expression within the classroom setting. However, this theme also highlights the significance of teachers developing an awareness of the educational and academic implications of gender stereotypes, especially when they result in conditions such as ADHD going unidentified and undiagnosed, and consequently, when students are denied the resources and supports they require in order to achieve to their fullest potential.

8.9 Conclusion

This chapter has advanced our understanding of teachers' subjective views of adolescent students with ADHD—and area which few other studies have considered (Rush & Harrison, 2008). As illustrated, teacher participants believed they did not possess the level of educational preparation that inclusive classrooms require of them, and some experienced students with ADHD as difficult to teach, and expressed concerns about the impact which their inclusion has on other students. While many participants strongly felt they required more knowledge in relation to effective supports and provisions for students with ADHD, others simply focused their efforts into building personal relationships with these students, which appeared to be a positive academic and behavioural support. Throughout all of these findings, the significant influencing role of gender in the classroom is clear, particularly as it contributes to the perpetuation of behaviour stereotypes and the potential underrecognition of ADHD in young women.

The following chapter now brings the reader to the conclusion of this research study, and explores the key findings, associated recommendations, and directions for future research which have emerged from this exploration of ADHD.

Chapter Nine: Conclusion

9.1 Introduction

This chapter brings the reader to the conclusion of this study, and begins with a summary of key findings, while also providing recommendations for change, particularly as related to educational policy and practice in Ireland. Next, this chapter outlines the unique contributions which this research has made to our knowledge, and it closes with a transparent assessment of associated limitations, and suggestions for future research.

9.2 Key Findings

The following section highlights the key findings which this research has illuminated. All of the following points are based on the perspectives and experiences of both participant groups.

9.2.1 Gender stereotypes compromise teachers' ability to recognise ADHD in females

The data suggest that gender-stereotypes compromise teachers' ability to recognise symptoms of ADHD in young women. Firstly, gendered behavioural stereotypes of females as "passive" and "daydreamy" (Lips, 1993) appear to contribute to the *underrecognition* of girls with inattentive and internalised ADHD, as these characteristics may have been viewed by teachers as "normal" and unproblematic for girls. By extension, these gendered stereotypes may have also contributed to young participants' common experience of late ADHD diagnosis. As such, this finding provides one explanation for why many of the young participants who experienced predominantly inattentive forms of ADHD were not recognised by teachers as requiring further assessment, or as having special learning needs.

In a reverse manner, these same gender role stereotypes appear to have assisted in the *earlier* recognition of young participants with increased levels of externalised ADHD symptoms. It seems likely that these girls *challenged* teachers' assumptions about appropriate female behaviours with their hyperactivity and impulsivity, and therefore, these young women did not "fit" the expectations regarding how females should act (i.e. as passive and obedient). Therefore, their symptoms were more easily recognised by parents and teachers, who may have also found their associated behaviours as disruptive, particularly within the classroom context.

This finding highlights the power of gender in the recognition of ADHD among females, and additionally raises questions regarding the extent to which teachers are aware of the gendered assumptions they may hold about students and their behaviour, and how these preconceptions may result in some special educational needs being unrecognised and unsupported in the classroom.

9.2.2. Young women's experience of hyperactivity-impulsivity challenges DSM-5 descriptions

The DSM-5 (American Psychiatric Association, 2013b) primarily describes symptoms associated with hyperactivity-impulsivity in externalised and bodily forms. However, young participants often challenged such descriptions based on their own personal experience of the symptom, which typically affected them in emotional and psychological forms. As such, these symptoms were largely unobservable to outsiders, but no less troublesome than the physical manifestation of bodily/motor activity.

This finding is an important reminder of the serious nature of both the outward and inward symptoms of ADHD. It is also a call for teachers to be increasingly attentive, not only to the externalised behaviours of students with ADHD, but to also consider the psychological and mental affect this condition may impose. Within this realm, teachers may be well served by entering into dialogue with students with ADHD about their condition, especially in relation to how students feel they are personal impacted by their diagnosis.

9.2.3 Some second-level teachers hold negative attitudes towards students with ADHD

It appears that some second-level teachers harbour negative attitudes towards students with ADHD. This conclusion is based on the fact that young participants commonly perceived a high level of negativity in their relationships with teachers, which they described as difficult and stressful. Similarly, a number of teachers perceived students with ADHD as disruptive in the classroom, challenging to teach, and as negatively impinging on the ability of other students to learn.

It is possible that negative attitudes towards students with ADHD may arise among second-level teachers for numerous reasons such as: the behaviours associated with ADHD may conflict with accepted notions of power and control in classrooms; teacher accountabilities and learning outcomes may create an atmosphere in which those with special needs are unwelcomed; teachers' perceived deficits in training and expertise for supporting students with ADHD may impact their level of self-efficacy, confidence, and morale for supporting these, and other students with SEN. Speaking of teachers in the United Kingdom, Rose (1998, p. 28) asserts, "In recent years staff in schools have been confronted with changes to most of the central tenets of traditional practice, and have been required to respond to a torrent of new initiatives." Given the development of educational practice in Ireland as outlined in Chapter Five, the same can likely be said of Irish teachers, and as such, it may be the case that the rapid pace of change and perceived deficits and challenges associated with the formation of an inclusive educational system may have caused some teachers to assume negative attitudes

towards students with ADHD, while also fostering resistance to the mainstream inclusion of students with SEN.

This finding calls to light the complex and multifaceted nature of student-teacher relationships in modern second-level schools, which appear to be influenced by a number of systemic factors, some of which are unique to the Irish school system. At times, it appears that certain values placed on learning and outcomes in practice, appear to conflict directly with the type of inclusive system which the DES appears to envision in policy (Republic of Ireland, Department of Education & Science, 2007). Indeed, Kinsella and Senior (2008, p. 654) acknowledge similar findings based on their previous research as they suggested that the development of inclusive systems "in Irish schools requires a review of structures, practices and policies and a change in the attitudes and cultures in mainstream schools." This finding also implies that teachers may need to increase personal awareness of the thoughts and feelings they hold about the students with ADHD, the reasons why they may harbour negativity towards these individuals, and how such feelings may be communicated to students, in realisation that negative attitudes towards the inclusion of those with SEN can also be detrimental to their academic achievement and progress.

9.2.4 "Relational" interventions benefit students with ADHD and teachers alike

Numerous teachers fostered positive relationships with their students with ADHD as a dual purpose intervention for academic and behavioural support. As an academic support, this intervention included straightforward measures such as getting to know the student personally, tailoring the curriculum to their interests, and investing personal time and attention in the individual. As a behavioural support, teachers would often directly engage in conversations with students with ADHD regarding the importance of their cooperation in the classroom, in an attempt to assume "team" approach with their students.

It is recognised that the support of students with ADHD in second-level can be particularly difficult given the organisation of the school environment (Abramowitz & O'Leary, 1991). However, the fostering of positive and supportive students-teacher relationships may be one manner of addressing such difficulties, as it contains numerous benefits for teachers and students alike. For example, this intervention is easy for teachers to implement, does not require lengthy training or special expertise, and forms the basis of good educational practice. Additionally, this intervention may represent a simple means of increasing teachers' self-confidence in providing for students with SEN, which may result in increased positive attitudes towards inclusion, and by extension, in the creation of a more supportive educational environment for students with special needs.

The implications of this finding suggest that a focus on "medical diagnosis" in the classroom may actually limit teachers' response to the needs of their students (Daniels, 2006), as viewing students through the lens of diagnostic labels often communicates the message that a particular expertise and specific intervention is required, when in fact, the student may benefit more so from simple relational supports. Additionally, this finding urges teachers to look beyond the "diagnosed needs" of their pupils, and to respond to the needs of the person behind the diagnosis. Indeed, this study concludes that the best interventions for second-level students with ADHD may simply be the fostering of supportive personal relationships and the investment of time.

9.2.5 ADHD lacks awareness, acceptance, and legitimacy in Irish second-level schools

Numerous young participants strongly felt that some of their teachers did not understand ADHD or the impact of this diagnosis on them as a student. Some also perceived that teachers dismissed their diagnosis and failed to take it seriously, which often resulted in them feeling unsupported in secondlevel. Additionally, some teacher participants appeared to struggle with accepting the legitimacy of the ADHD diagnosis, and instead, viewed it as an invalid "excuse" which absolves students from the repercussions of exhibiting disruptive behaviour in the classroom and underachieving academically. Other teachers also expressed concern that the labelling of students with ADHD as "bad" or "bold" was common among their colleagues.

The struggles described above may possibly rise from a number of factors including: cultural stigma against mental illness which is prevalent in the wider Irish society (Barry et al., 2009), the power of the media and subsequent misrepresentation of ADHD (Edwards, 2014), and the seeming "newness" of ADHD as a diagnostic category. All of these factors may raise suspicions, and encourage others to more easily dismiss and reduce the legitimacy of ADHD as a valid medical diagnosis. However, it is important to realise that this lack of ADHD awareness and acceptance may have particular consequences for those who bear this label, especially within the educational setting, where a lack of legitimacy may reduce the level of seriousness with which the diagnosed student is treated and supported, thereby potentially affecting their future outcomes. Therefore, this finding implies that it is necessary to increase understanding and awareness of ADHD especially among teachers, but also in the larger Irish society, as increased understanding may lead to further acceptance of ADHD and support for those who are diagnosed with the condition.

9.3 Recommendations

The following six recommendations result directly from the above findings. While these recommendations emerge specifically from the experiences of young women affected by ADHD, and second-level teachers, many of these points could potentially improve the educational and achievement outcomes of males who are diagnosed with ADHD as well.

9.3.1 ITE and CPD programmes should increase teacher education and awareness regarding gender and its potential influence on ADHD

In particular, training programmes should increase teachers' awareness of how gender may create subtle differences in the manifestation and expression of ADHD among males and females. However, not only should teachers be able to recognise potential gender-differences in the symptoms of ADHD, they must also be able to *apply their knowledge* in detecting students who may require additional support, and possibly further assessment. This is especially important given that the present system of educational resource allocation in Ireland requires medical and/or psychological assessment and diagnosis in order for students to receive additional supports.

Teachers should also be encouraged to develop a greater awareness of how gender-role stereotypes may influence the way in which they view and interpret the behaviours of male and female students in the classroom. This is particularly important as such stereotypes may determine whether or not a student's special educational needs are recognised, and in turn, whether they receive the appropriate required supports.

9.3.2 ITE and CPD training programmes should cooperate to ensure there are no gaps in teachers' initial training and ongoing professional development

Given that teachers perceived deficits within both ITE and CPD training, this study recommends that these programmes work together to ensure there are no gaps between teachers' initial training and their ongoing professional development, especially in relation to preparation for inclusive education. In doing so, this would maximise learning opportunities for teachers, especially in relation to recognising and understanding the special needs of students in their classrooms, which was a particular area of deficiency according to teacher participants. Additionally, teachers should be consulted directly about their learning requirements, and any perceived deficits in training or knowledge. Furthermore, input from practicing teachers should be used in the creation of ITE and CPD training as a means of developing courses which are timely, relevant, and responsive—both to the needs of teachers, as well as to the needs of their students.

9.3.3 Proposed changes to the support of students with SEN in Irish schools should be swiftly enacted

As outlined in Chapter Five, the National Council for Special Education has proposed numerous changes to the system of SEN provision in an effort to provide timelier support to students with special needs and potentially reduce reliance on medical diagnosis and the unnecessary labelling of students (National Council for Special Education, 2014). This study therefore recommends these changes be swiftly enacted, thereby allowing teachers to directly respond to their students, and to provide quick access to required supports based upon the *individual needs* which they display in the classroom context, rather than based solely on a *medical diagnosis*.

The proposed changes may be particularly useful to young women living with unrecognised and undiagnosed ADHD, who under the present system of allocation, are commonly denied crucial educational supports until the time when a diagnosis is obtained. This was certainly the case with many of the young participants in this research who unfortunately, only received additional supports towards the very end of their second-level schooling. However, it is important to clarify that this recommendation is not suggesting that medical diagnosis of SEN be ceased entirely, as it is recognised that in some cases identification of specific needs can be helpful in identifying real issues and the appropriate interventions. Rather, this recommendation is suggesting that students be granted access to the educational supports they require, as identified and deemed appropriate by their teachers *prior to* medical diagnosis, thereby potentially reducing the number of instances where students experience significant delays and obstacles in obtaining the resources to which they are entitled.

In addition, the proposed changes to support allocation may also assist teachers in building their selfconfidence for catering to the unique and individual needs of students, rather than relying on diagnosis and the "expert" opinion of outsiders, such as medical professionals. In theory, teachers would be provided with increased opportunities to rely on their own expertise in identifying students with SEN, and in responding to them with personalised interventions. In conclusion, this study emphasises the importance and necessity of enacting these changes as quickly as possible, given the multiple benefits they would bring to students and teachers alike.

9.3.4 Increase provision of educational and social support for young people diagnosed with ADHD

This recommendation is in response to young participants who often felt they lacked selfunderstanding of their ADHD diagnosis, and who identified a lack of relevant educational and related supports for females their age. It is therefore recommended that the HSE and ADHD Support Groups focus on creating educational resources designed specifically for adolescents that are both *age and gender* appropriate, including post-diagnosis materials to assist the young person in understanding their condition, and the support interventions available to them. Additionally, existing ADHD support groups in Ireland should increase their outreach to adolescent and young adults who are affected by ADHD as a means of providing additional social support.

9.3.5 Recognition of the limitations of the DSM-5 diagnostic criteria for ADHD

The findings of this research suggest that the DSM-5 (American Psychiatric Association, 2013b) diagnostic criteria for ADHD fail to adequately recognise and account for the gendered dimensions of the condition, especially in relation to how ADHD is diagnosed and uniquely experienced in females, but also in how it is generally conceptualised and understood. While it is recognised that researchers are divided on the issue of whether there are gender differences in ADHD, and correspondingly, whether gender specific diagnostic criteria should be developed and utilised, it is important to remember that the *direct and personal experiences* of the young participants in this study clearly suggest that gender differences *are present* within this condition.

Therefore, this recommendation highlights that it is important for Irish professionals such as teachers, psychologists, and doctors, as well as parents, to recognise that while the DSM-5 diagnostic criteria are clearly helpful in identifying and explaining ADHD, they are limited and fail to account for potential gender differences in the expression, experience, and conceptualisation of the condition. This failure is quite serious given that these shortcomings appear to commonly result in the underrecognition and underdiagnosis of ADHD in a staggering number of young women (Sassi, 2010), which in turn, may cause significant social, psychological, and educational disadvantage among these individuals. By recognising the present limitations of the DSM-5 in this way, the number of such instances may be reduced in the future, and it may promote increasingly accurate, equitable, and timely diagnosis of ADHD in both genders.

9.3.6 Increase public education and awareness of ADHD in Ireland

Due to the perceived lack of awareness and understanding surrounding ADHD in Irish society and schools, this study recommends that the HSE and ADHD support groups work towards the creation of a public education campaign to increase awareness and understanding of ADHD. In theory, such efforts could lead to greater acceptance of ADHD as a medically valid condition, which in turn, may reduce some of the perceived negativity towards the ADHD label, and those who bear this designation. By extension, such a campaign may also help to combat, and potentially lessen, some of the negativity and stigma that surround mental health issues in Ireland (Barry et al., 2009).

9.4 Contributions of this Study

This study has made a number of contributions to our present conceptualisation of ADHD. Although this study is situated and largely in reference to the Irish context, it is important to realise that these contributions extend far beyond the national level, and make important advancements which have value for an international audience as well.

9.4.1 Contributions to Knowledge

Above all, one of the most important contributions this study makes is in advancing our knowledge of ADHD in the lives of young women, and in the context of the second-level school, given that previous research has failed to fully engage females diagnosed with the condition, as well as second-level teachers in relation to their perspectives and experiences of students with ADHD.

Additionally, this study makes a unique advancement in relation to illustrating the consistent and pervasive influence of gender, and associated stereotypes, in the experiences of young women diagnosed with ADHD. It appears that gender commonly determines if, when, and how symptoms of ADHD are recognised in young women. Additionally, gender may influence the physical, emotional, psychological, and educational ways that ADHD affects females, which appears to differ from the male experience of the condition. In addition, this contribution helps to raise awareness of how our conceptualisation of ADHD is strongly influenced, and sometimes limited, by socially constructed factors and stigmas which extend well beyond the world of medicine. Therefore, it is necessary to be aware of, and even challenge these gender issues, especially as applied to the experience and lives of women, so that they and their struggles, are not overlooked, nor dismissed.

This study also contributes towards raising awareness of the attitudinal barriers that young people with ADHD face in Irish second-level schools, from perceived difficulties associated with their presence in the classroom (both for themselves, and for other students), to the unwillingness of some teachers to accept and support the ADHD diagnosis. As such, this finding shows that simply because the Department of Education and Science supports the creation of inclusive schools, this does not mean that all Irish schools have reached this goal. This finding also shows that much work remains to be done in addressing and removing the attitudinal barriers that may exist, both within society and within schools, which prevent students with ADHD from experiencing full inclusion in mainstream education in Ireland.

In a similar way, this study also calls awareness to the difficulties that teachers face in creating inclusive schools which are fully supportive and welcoming of students with ADHD. Here too, such difficulties often have very little to do with physical barriers and financial resources—instead, more often they are attitudinal in nature, and result in perceived divisions among faculty members—

between those who are accepting of students with ADHD, and those who are resistant to their inclusion. However, difficulties in the creation of inclusive schools can also arise when teachers feel they are professionally underdeveloped and are unsupported by the very system in which they work, and which is perceived as pushing them towards greater levels of inclusion. Additionally, teacher accountabilities, especially in terms of student performance and outcomes, may conflict with the needs and capabilities of students with SEN. As such, teachers may be put in a position of having to choose between doing what is dictated and expected by the system in order to meet established outcome goals, or doing what is in the best interest of the student with SEN. All of these issues can certainly contribute to negative attitudes among teachers towards inclusion in mainstream schools. In conclusion, this contribution illustrates that significant changes need to be implemented within the Irish educational system, particularly in terms of helping teachers to feel prepared for, and fully supported in the tasks and challenges associated with SEN provision. In turn, it is possible that such changes would foster increasingly positive attitudes in the active creation of an educational system that is truly inclusive of all students.

9.4.2 Methodological Contributions

This study has also made a methodological contribution by illustrating the value of mixed-methods in advancing knowledge in areas which are underexplored, with participants who are understudied. The use of mixed-methods represents a novel approach to researching ADHD, given that the vast majority of previous studies are situated within quantitative methods. Therefore, mixed-methods facilitated the collection of qualitative data which, in turn, allowed the "voices" of those directly affected by ADHD to be more clearly heard. These are the same voices which heretofore, have been largely silenced by other methods of inquiry in previous studies of ADHD.

The situation of this study in the Pragmatic and Interpretivist paradigms also represented an important break with tradition, as much of the existing body of research is situated in the Positivistic paradigm which embraces one objective definition of truth and reality. As previously noted in Chapter Six, the choice of Pragmatism was a freeing decision which allowed the research questions, participants, and their views, to be placed squarely at the centre of this research, and thereby fostered the development of a project that was firmly about examining the realities of life with ADHD as the first and foremost objective.

9.5 Study Limitations

It is important to recognise that this study is not without its limitations. One possible limitation relates to the small number of young participants (n=17) who took part in this research. Although this figure

may seem small, it should be interpreted in light of the total number of estimated females who are affected by ADHD in Ireland. Statistics obtained from the website of the Organisation for Economic Co-Operation and Development (n.d) state that for the year 2012, there were 29,540 females between the ages of 13 and 20 years living in Ireland. When this number is interpreted in light of DSM-5 figures which maintain that ADHD affects approximately 5% of children (American Psychiatric Association, 2013b, p. 61) and is found in males and females at a ratio of 2:1 (American Psychiatric Association, 2013b, p. 63), there were slightly under 500 females affected by ADHD in Ireland at the start of this study. Therefore, it can be said that the 17 participants in this study represents 3.4% of the total number of potential participants available. However, given difficulties associated with ADHD in females, such as the potential for the condition to be unrecognised and undiagnosed, the actual number of potential participants with a formal diagnosis of ADHD was likely significantly smaller.

However, in light of this fact, it is important to recognise the findings of this research are illustrative of the experiences of this specific group of participants—and cannot, and should not, be generalised to the entire population of young women with ADHD. However, it is reasonable to suspect that certain qualities of participants' experiences *may be* applicable to other young women who are diagnosed and living with the condition. As such, this study has been conducted and described with transparency in order to facilitate readers in determining the appropriateness of applying the findings of this study to other situations and contexts which they are familiar with. It is my hope that some of these findings will be helpful for young people and for teachers alike.

Other limitations are associated with the teacher participants in this study. There was a very small number of teachers (n=8) who engaged in the semi-structured interviews, although many of their perceptions were confirmed in data from the online questionnaire which contained a significantly greater number of participants (n=239). However, it is important to also highlight the potential for bias among these participants, given that teachers were self-selecting, and therefore, may have already possessed prior interest in ADHD, greater knowledge of the condition, and a greater willingness to engage in discussion on the topic, than other teachers may have. Therefore, it is important for the reader to consider that the findings represented in this study may not be representative of all second-level teachers of students with ADHD.

9.6 Directions for Future Research

Based on the findings of this study, there are a number of possible directions that future research might take, which include the following:

- 1. Because this is one of a very few studies to examine the female experience of ADHD, it is important that future studies increasingly include young women diagnosed with ADHD, and if possible, conduct longitudinal research which specifically looks at their experiences and perceptions of living with the condition, across a range of ages, such as in children, adolescents, and adults. In doing so, this may help us to better understand what challenges are specific to living with ADHD as a female, particularly as one ages. For if these issues are better understood, then females with ADHD may be able to access more timely and appropriate supports, thereby decreasing the negative impact that ADHD can often impose over a lifetime. To my knowledge, there are very few, if any, studies which have comparatively examined ADHD in this way. Such studies would be particularly valuable if situated in Ireland, given how little we know about females living with ADHD in this context.
- 2. Given the considerations raised in this study in relation to the barriers some teachers faced in creating inclusive classrooms, this study indicates that future research may be needed to directly assess the present structure, values, and teaching and learning practices of the second-level context in relation to how these factors either support, or conversely, act as a barrier to the full inclusion of students with SEN in Irish schools. This would potentially assist in assessing the level of inclusion available to these students while also facilitating the possibility for school reform and increased inclusion.
- 3. In light of the fact that young participants rarely implicated their teachers as responsible for recognising their early struggles with ADHD prior to diagnosis, future research should assess and determine the level of seriousness with which primary and second-level mainstream teachers take their role in identifying students with SEN, as determined and outlined by the Department of Education and Science (Republic of Ireland, 2007). Such a study may also provide insightful information on mainstream teachers' perceptions and feelings towards special education, as well as their views regarding their role in the process of creating inclusive schools.

9.7 Conclusion

This final section brings the reader to the conclusion of this exploration into the educational and social experience of ADHD in the lives of adolescents, and the teachers who support them. As this study has shown, there are multiple issues associated with ADHD in Irish schools, such as gender, power, and

social stigma, which, in combination, can complicate the learning and academic outcomes of diagnosed students.

As the researcher, it is my hope that this study will be of use and benefit to multiple groups, such as teachers, parents, and clinicians. However, most especially, I hope that this research will be of some meaningful benefit in the lives of young women affected by ADHD, particularly by increasing social understanding and compassion for them. As such, this thesis formally closes with words of wisdom offered by Clodagh in the final moments of her interview, which were directed towards teachers and all those who support students with ADHD:

Take your time, don't rush things with someone with ADHD. I understand you have to get a class done, there are more students, but you have to keep in mind because of what this person with ADHD has, she will eventually fall down. She'll fall back, she won't be able to keep up. If she needs it, take your time with her personally and don't try to make her feel as if she can't do something just because she can't keep up with this one thing.

This reflection serves as an important reminder of the power of interpersonal relationships in the lives of those with special needs, especially when such relationships are based on patience, respect, and consideration. Particularly for educators, these values can go a long way in helping students with ADHD move one step closer towards achieving educational equity and social equality. As Clodagh asks, may we never forget to simply "take our time," especially with those who have special needs.

References

- Abikoff, H., Jensen, P., Arnold, L., Hoza, B., Hechtman, L., Pollack, S., Martin, D., Alvir, J., March, J.,
 Hinshaw, S., Vitiello, B., Newcorn, J., Greiner, A., Cantwell, D., Conners, C., Elliott, G., Greenhill,
 L., Kraemer, H., Pelham, W., Severe, J., Swanson, J., Wells, K. and Wigal, T. (2002) 'Observed
 classroom behaviour of children with ADHD: relationship to gender and comorbidity', *Journal*of Abnormal Child Psychology, 30(4), pp. 349-359.
- Abramowitz, A. and O'Leary, S. (1991) 'Behavioral interventions for the classroom: implications for students with ADHD', *School Psychology Review*, 20(2), pp. 220-234.
- Adeyemo, B., Biederman, J., Zafonte, R., Kagan, E., Spencer, T., Uchida, M., Kenworthy, T., Spencer,
 A. and Faranone, S. (2014) 'Mild traumatic brain injury and ADHD: a systematic review of the literature and meta-analysis', *Journal of Attention Disorders*, 18(7), pp. 576-584.
- Ainscow, M. (1999) Understanding the development of inclusive schools. London: Falmer.
- Alderson, P. and Morrow, V. (2011) *The ethics of research with children and young people: a practical handbook.* London: Sage Publications.
- Allen, G. (2005) 'Research ethics in a culture of risk', in Farrell, A. (ed.) *Ethical research with children.* Maidenhead: Open University Press, pp. 15-26.
- American Psychiatric Association. (1968) *Diagnostic and statistical manual of mental disorders.* 2nd edn. Arlington, VA: American Psychiatric Association.
- American Psychiatric Association. (1987) *Diagnostic and statistical manual of mental disorders*. 3rd edn revised. Arlington, VA: American Psychiatric Association.
- American Psychiatric Association. (2013a) Attention deficit/hyperactivity disorder fact sheet [Online]. Available at: http://www.dsm5.org/documents/adhd%20fact%20sheet.pdf (Accessed: 29 July 2016).
- American Psychiatric Association. (2013b) *Diagnostic and statistical manual of mental disorders*. 5th edn. Arlington, VA: American Psychiatric Association.
- American Psychiatric Association. (2013c) *Insurance implications of DSM-5* [Online]. Available at: https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM_Insurance-Implications-of-DSM-5.pdf (Accessed: 8 September 2016).
- Anastasiou, D. and Kauffman, J. (2011) 'A social constructionist approach to disability: implications for special education', *Council for Exceptional Children*, 77(3), pp. 367-384.

- Arcia, E. and Conners, C. (1998) 'Gender differences in ADHD?' *Journal of Developmental and Behavioral Pediatrics*, 19(2), pp. 77-83.
- Arcia, E., Frank, R., Sanchez-LaCay, A. and Fernandez, M. (2000) 'Teacher understanding of ADHD as reflected in attributions and classroom strategies', *Journal of Attention Disorders*, 4(2), pp. 91-101.
- Arnett, A., Pennington, B., Willicutt, E., DeFries, J. and Olson, R. (2015) 'Sex differences in ADHD symptom severity', *The Journal of Child Psychology and Psychiatry*, 56(6), pp. 632-639.
- Arnold, L. (1996) 'Sex differences in ADHD: conference summary', *Journal of Abnormal Child Psychology*, 24(5), pp. 555-569.
- Atiles, J., Jones, J. and Kim, H. (2012) 'Field experience + inclusive ECE classrooms = increased preservice teacher efficacy in working with students with developmental delays or disabilities', *Educational Research Quarterly*, 36(2), pp. 63-87.
- Ball, D. (2004) *Continuity between the primary school and the junior cycle of post-primary: a schoolbased study.* MEd Thesis. National University of Ireland Maynooth.
- Banks, J. and McCoy, S. (2011) A study on the prevalence of special educational needs. National Council for Special Education research report no. 9 [Online]. Available at: http://ncse.ie/wpcontent/uploads/2014/10/Prevalence_of_SEN_10_09_12.pdf (Accessed: 14 May 2015).
- Barbour, R. (2014) Introducing qualitative research—a student's guide. Los Angeles: Sage Publications.
- Barkley, R. (1997) *Defiant children: a clinician's manual for assessment and parent training*. New York: The Guilford Press.
- Barkley, R. (2015a) 'Etiologies of ADHD', in Barkley, R. (ed.) *Attention-deficit hyperactivity disorder: a handbook for diagnosis and treatment.* 4th edn. New York: The Guilford Press, pp. 356-390.
- Barkley, R. (2015b) 'History of ADHD', in Barkley, R. (ed.) *Attention-deficit hyperactivity disorder: a handbook for diagnosis and treatment.* 4th edn. New York: The Guilford Press, pp. 3-50.
- Barkley, R. and Peters, H. (2012) 'The earliest reference to ADHD in the medical literature? Melchior
 Adam Weikard's description in 1775 of "attention deficit" (Mangel der Aufmerksamkeit,
 Attentio Volubilis)', Journal of Attention Disorders, 16(8), pp. 623-630.
- Barnard-Brak, L., Sulak, T. and Fearon, D. (2011) 'Coexisting disorders and academic achievement among children with ADHD', *Journal of Attention Disorders*, 15(6), pp. 506-515.

- Barry, M., Van Lente, E., Molcho, M., Morgan, K., McGee, H., Conroy, R., Watson, D., Shelley, E. and Perry, I. (2009) 'SLÁN 2007: survey of lifestyle, attitudes and nutrition in Ireland: mental health and social well-being report', Department of Health and Children. Dublin: The Stationery Office [Online]. Available at: https://aran.library.nuigalway.ie/bitstream/handle/10379/ 4731/slan_wellbeing_report.pdf?sequence=1&isAllowed=y (Accessed: 29 July 2016).
- Batzle, C., Weyandt, L., Janusis, G. and DeVietti, T. (2010) 'Potential impact of ADHD with stimulant medication label on teacher expectations', *Journal of Attention Disorders*, 14(2), pp. 157-166.
- Baughman, F. (2006) *The ADHD fraud: how psychiatry makes 'patients' of normal children*. Victoria, British Columbia, Canada: Trafford Publishing.
- Baumgaertel, A. (1999) 'Alternative and controvertial treatments for attention-deficit/hyperactivity disorder', *Pediatric Clinics of North America*, 46(5), pp. 977-992.
- Bellanca, F. and Pote, H. (2012) 'Children's attitudes towards ADHD, depression and learning disabilities', *Journal of Research in Special Educational Needs*, 13(4), pp. 234-241.
- Benkert, D., Henning-Krause, K., Wasem, J. and Aidelsburger, P. (2010) 'Effectiveness of pharmaceutical therapy of ADHD (Attention-deficit/hyperactivity disorder) in adults—health technology assessment', GMS Health Technology Assessment, 6, Doc. 13, pp. 1–12.
- Berry, C., Shaywitz, S. and Shaywitz, B. (1985) 'Girls with attention deficit disorder: a silent minority? A report on behavioral and cognitive characteristics', *Pediatrics*, 76(5), pp. 801-809.
- Biederman, J. (2005) 'Attention-deficit/hyperactivity disorder: a selective overview', *Biological Psychiatry*, 57(11), pp. 1215-1220.
- Biederman J., Kwon A., Aleardi M., Chouinard, V., Marino, T., Cole, H., Mick, E. and Faraone, S. (2005)
 'Absence of gender effects on attention deficit hyperactivity disorder: findings in nonreferred subjects', *American Journal of Psychiatry*, 162(6), pp. 1083–1089.
- Biederman, J., Mick, E., Faraone, S., Braaten, E., Doyle, A., Spencer, T., Wilens, T., Frazier, E. and Johnson, M. (2002) 'Influence of gender on attention deficit hyperactivity disorder in children referred to a psychiatric clinic', *American Journal of Psychiatry*, 159(1), pp. 36-42.
- Biederman, J., Monteaux, M., Doyle, A., Seidman, L., Wilens, T., Ferrero, F., Morgan, C. and Faraone,
 S. (2004) 'Impact of executive function deficits and attention-deficit/hyperactivity disorder
 (ADHD) on academic outcomes in children', *Journal of Consulting and Clinical Psychology*,
 72(5), pp. 757-766.

- Biederman, J., Spencer, T., Lomedico, A., Day, H., Petty, C. and Faraone, S. (2012) 'Deficient emotional self-regulation and pediatric attention deficit hyperactivity disorder: a family risk analysis', *Psychological Medicine*, 42, pp. 639-646.
- Birchwood, J. and Daley, D. (2012) 'Brief report: the impact of attention deficit hyperactivity disorder
 (ADHD) symptoms on academic performance in an adolescent community sample', *Journal of Adolescence*, 35(1), pp. 225-231.
- Blotnicky-Gallant, P., Martin, C., McGonnell, M. and Corkum, P. (2014) 'Nova Scotia teachers' ADHD knowledge, beliefs, and classroom management practices', *Canadian Journal of School Psychology*, 30(1), pp. 3-21.
- Bolic Baric, V., Hellberg, K., Kjellberg, A. and Hemmingsson, H. (2016) 'Support for learning goes beyond academic support: voices of students with Asperger's disorder and attention deficit hyperactivity disorder', *Autism*, 20(2), pp. 183-195.
- Braet, W., Johnson, K., Tobin, C., Acheson, R., McDonnell, C., Hawi, Z., Barry, E., Mulligan, A., Gill, M., Bellgrove, M., Robertson, I. and Garavan, H. (2011) 'fMRI activation during response inhibition and error processing: the role of the DAT1 gene in typically developing adolescents and those diagnosed with ADHD', *Neuropsychologia*, 49(7), pp. 1641-1650.
- Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77-101.
- Breen, R. and Hannan, D. (1987) 'School and gender. The education of girls in Ireland', in Curtin, C.,
 Jackson, P. and O'Connor, B. (eds.) *Gender in Irish society*. Galway, Ireland: Galway University
 Press, pp. 37-53.
- Brinkmann, S. (2016) *Diagnostic cultures: a cultural approach to the pathologization of modern life.* New York: Routledge.
- British Sociological Association. (2002) *Statement of ethical practice for the British Sociological Association* [Online]. Available at: www.britsoc.co.uk/media/27104/StatementofEthical Practice.doc (Accessed: 13 December 2012).
- Brook, U., Watemberg, N. and Geva, D. (2000) 'Attitude and knowledge of attention deficit hyperactivity disorder and learning disability among high school teachers', *Patient Education and Counseling*, 40(3), pp. 247-252.

- Brophy, K., Hawi, Z., Kirley, A., Fitzgerald, M. and Gill, M. (2002) 'Synaptosomal-associated protein 25 (SNAP-25) and attention deficit hyperactivity disorder (ADHD): evidence of linkage and association in the Irish population', *Molecular Psychiatry*, 7(8), pp. 913-917.
- Bruchmuller, K., Margraf, J. and Schneider, S. (2012) 'Is ADHD diagnosed in accord with diagnostic criteria? Overdiagnosis and influence of client gender on diagnosis', *Journal of Consulting and Clinical Psychology*, 80 (1), 128–138.
- Bunford, N., Evans, S. and Wymbs, F. (2015) 'ADHD and emotion dysregulation among children and adolescents', *Clinical Child and Family Psychology Review*, 18(3), pp. 185-217.
- Bussing, R., Zima, B., Mason, D., Meyer, J., White, K. and Garvan, C. (2012) 'ADHD knowledge, perceptions, and information sources: perspectives from a community sample of adolescents and their parents', *The Journal of Adolescent Health*, 51(6), pp. 593-600.
- Butler, J. (1986) 'Sex and gender in Simone de Beauvoir's second sex', Yale French Studies, 72, pp. 35-49.
- Campbell, S. (2000) 'Attention-deficit/hyperactivity disorder', in Sameroff, A., Lewis, M. and Miller, S. (eds.) *Handbook of developmental psychopathology*. 2nd edn. New York: Plenum Press, pp. 383-401.
- Carr, A. (2006) *The handbook of child and adolescent clinical psychology—a contextual approach*. 2nd edn. London: Routledge.
- Castellanos, F., Lee, P., Sharp, W., Jeffries, N., Greenstein, D., Clasen, L., Blumental, J., James, R.,
 Ebens, C., Walter, J., Zijdenbos, A., Evans, A., Giedd, J. and Rapoport, J. (2002) 'Developmental
 trajectories of brain volume abnormalities in children and adolescents with attention deficit/hyperactivity disorder', *Journal of the American Medical Association*, 288(14), pp.
 1740-1748.
- Charmaz, K. (2014) Constructing grounded theory. 2nd edn. Los Angeles: Sage Publications.
- Cohen, D. (2006) 'Critiques of the ADHD enterprise', in Lloyd, G., Stead, J. and Cohen, D. (eds.) Critical new perspectives on ADHD. London: Routledge, pp. 12–44.
- Cohen, L., Manion, L. and Morrison, K. (2011) *Research methods in education.* 7th edn. London: Routledge.
- Conneely, C., Lawlor, J. and Tangney, B. (no date) 'Technology, teamwork and 21st century skills in the Irish classroom' [Online]. Available at: http://www.bridge21.ie/wp-content/uploads/

2011/04/Technology-Teamwork-and-21st-Century-Skills-in-the-Irish-Classroom.pdf (Accessed: 29 July 2016).

- Conners, K. (2008a) Conners 3TM parent. Tonawanda, NY: Multi-Health Systems, Inc.
- Conners, K. (2008b) Conners 3TM teacher. Tonawanda, NY: Multi-Health Systems, Inc.
- Conners, K. and Wells, K. (1997) *Conners-Wells' self-report scale*. Tonawanda, NY: Multi-Health Systems, Inc.
- Conrad, P. (2007) *The medicalization of society. On the transformation of human conditions into treatable disorders.* Baltimore: The Johns Hopkins University Press.
- Conrad, P. and Bergey, M. (2014) 'The impending globalization of ADHD: notes on the expansion and growth of a medicalized disorder', *Social Science & Medicine*, 122, pp. 31–43.
- Conway, P. and Murphy, R. (2013) 'A rising tide meets a perfect storm: new accountabilities in teaching and teacher education in Ireland', *Irish Educational Studies*, 32(1), pp. 11-36.
- Cormier, E. (2008) 'Attention deficit/hyperactivity disorder: a review and update', *Journal of Pediatric Nursing*, 23(5), pp. 345–357.
- Cortese, S. (2012) 'The neurobiology and genetics of attention-deficit/hyperactivity disorder (ADHD): what every clinician should know', *European Journal of Paediatric Neurology*, 16(5), pp. 422-433.
- Costello, M. (1999) 'A study of the provision of resource teachers in Irish primary schools', REACH Journal of Special Needs Education in Ireland, 12(2), pp. 66-74.
- Costelloe, M. (2002) *The ADHD pupil in post-primary schools—a whole school approach to learning support*. MEd Thesis. National University of Ireland Galway.
- Council for International Organizations of Medical Sciences. (2002) International ethical guidelines for biomedical research involving human subjects. World Health Organization: Geneva [Online]. Available at: http://www.cioms.ch/publications/guidelines/guidelines_nov_2002_ blurb.htm (Accessed: 29 July 2016).
- Creswell, J. (2013) *Qualitative inquiry & research design. Choosing among five approaches.* Los Angeles: Sage Publications.
- Creswell, J. (2014) *Research design: qualitative, quantitative, and mixed methods approaches. International student edition*. 4th edn. Los Angeles: Sage Publications.

- Creswell, J. and Plano Clark, V. (2007) *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications.
- Crouch, R., Keys, C. and McMahon, S. (2014) 'Student-teacher relationships matter for school inclusion: school belonging, disability, and school transitions', *Journal of Prevention & Intervention in the Community*, 42(1), pp. 20-30.
- Curatolo, P., D'Agati, E. and Moavero, R. (2010) 'The neurological basis of ADHD', *Italian Journal of Pediatrics*, 36(1), pp. 1-7.
- Curriculum for Excellence. (2012) *CfE briefing 5* [Online]. Available at: http://www.education scotland.gov.uk/Images/CfEBriefing5_tcm4-741643.pdf (Accessed: 30 July 2016).
- Daley, D. and Birchwood, J. (2010) 'ADHD and academic performance: why does ADHD impact on academic performance and what can be done to support ADHD children in the classroom?' *Child: Care, Health and Development,* 36(4), pp. 455-464.
- Daniels, H. (2006) 'The dangers of corruption in special needs education', *British Journal of Special Education*, 33(1), pp. 4-9.
- Davis, A. (2005) 'Invisible disability', *Ethics*, 116(1), pp. 153-213.
- Davison, K. and Frank, B. (2006) 'Masculinities and femininities and secondary schooling: the case for a gender analysis in the post-modern condition', in Skelton, C., Francis, B. and Smulyan, L. (eds.) *The Sage handbook of gender and education*. London: Sage Publications, pp. 152-165.
- Denscombe, M. (2008) 'Communities of practice', *Journal of Mixed Methods Research*, 2(3), pp. 270-283.
- Denzin, N. (1988) *The research act: a theoretical introduction to sociological methods.* 3rd edn. Englewood Cliffs, NJ: Prentice-Hall.
- Denzin, N. and Lincoln, Y. (1994) *Handbook of qualitative research.* Thousand Oaks, CA: Sage Publications.
- Desforges, M. and Lindsay, G. (2010) *Procedures used to diagnose a disability and to assess special educational needs: an international review. National Council for Special Education research reports no. 5* [Online]. Available at: http://ncse.ie/wp-content/uploads/2014/10/5_NCSE_ Diag_Ass.pdf (Accessed: 22 July 2016).

- DeShazo Barry, T., Lyman, R. and Klinger, L. (2002) 'Academic underachievement and attentiondeficit/hyperactivity disorder: the negative impact of symptom severity on school performance', *Journal of School Psychology*, 40(3), pp. 259-283.
- Detweiler, R., Hicks, A. and Hicks, M. (1999) 'A multi-modal approach to the assessment and management of ADHD', in Cooper, P. and Bilton, K. (eds.) *ADHD research, practice and opinion*. London: Whurr Publishers, pp. 43-59.
- Diller, L. (1998) Running on Ritalin: a physician reflects on children, society, and performance in a pill. New York: Bantam Books.
- Downing, L. (2008) *The Cambridge introduction to Michel Foucault.* Cambridge: Cambridge University Press.
- Drudy, S. and Kinsella, W. (2009) 'Developing an inclusive system in a rapidly changing European society', *International Journal of Inclusive Education*, 13(6), pp. 647–663.
- DuPaul, G., Eckert, T. and Vilardo, B. (2012) 'The effects of school-based interventions for attention deficit hyperactivity disorder: a meta-analysis 1996-2010', *School Psychology Review*, 41(4), pp. 387-412.
- DuPaul, G., Ervin, R., Hook, C. and McGoey, K. (1998) 'Peer tutoring for children with attention deficit hyperactivity disorder: effects on classroom behavior and academic performance', *Journal of Applied Behavior Analysis*, 31, pp. 579-592.
- DuPaul, G., Gormley, M. and Laracy, S. (2013) 'Comorbidity of LD and ADHD: implications of DSM-5 for assessment and treatment', *Journal of Learning Disabilities*, 46(1), pp. 43-51.
- DuPaul, G., Jitendra, A., Tresco, K., Vile Junod, R., Volpe, R. and Lutz, J. (2006) 'Children with attention deficit hyperactivity disorder: are there gender differences in school functioning?', *School Psychology Review*, 35(2), pp. 292-308.
- DuPaul, G. and Langberg, J. (2015) 'Educational impairments in children with ADHD', in Barkley, R.
 (ed.) Attention-deficit hyperactivity disorder: a handbook for diagnosis and treatment. 4th
 edn. New York: The Guilford Press, pp. 169-190.
- DuPaul, G. and Stoner, G. (2014) *ADHD in the schools: assessment and intervention strategies.* New York: The Guilford Press.
- DuPaul, G., Weyandt, L. and Janusis, G. (2011) 'ADHD in the classroom: effective intervention strategies', *Theory into Practice*, 50(1), pp. 35-42.

- Edwards, C. (2014) 'Spatialising the contentious politics of ADHD: networks and scalar strategies in health social movement activism', *Health Place*, 29, pp. 52-59.
- Elkins, I., Malone, S., Keyes, M., Iacono, W. and McGue, M. (2011) 'The impact of attentiondeficit/hyperactivity disorder on preadolescent adjustment may be greater for girls than for boys', *Journal of Clinical Child and Adolescent Psychology*, 40(4), pp. 532-545.
- Engle, G. (1977) 'The need for a new medical model: a challenge for biomedicine', *Science, New Series,* 196(4286), pp. 129-136.
- Evans, K. and Lester, J. (2012) 'Zero tolerance: moving the conversation forward', *Intervention in School and Clinic*, 48(2) pp. 108-114.
- Evans, S., Serpell, Z., Schultz, B. and Pastor, D. (2007) 'Cumulative benefits of secondary schoolbased treatment of students with attention deficit hyperactivity disorder', *School Psychology Review*, 36(2), pp. 256-273.
- Fabiano, G., Vujnovic, R., Pelham, W., Waschbusch, D., Massetti, G., Pariseau, M., Naylor, J., Jihnhee,
 Y., Yu, J., Robins, M., Carnefix, T., Greiner, A. and Volker, M. (2010) 'Enhancing the
 effectiveness of special education programming for children with attention deficit
 hyperactivity disorder using a daily report card', *School Psychology Review*, 39(2), pp. 219-239.
- Faraone, S. and Biederman, J. (1998) 'Neurobiology of attention-deficit hyperactivity disorder', Society of Biological Psychiatry, 44, pp. 951-958.
- Feilzer, M. (2010) 'Doing mixed methods research pragmatically: implications for the rediscovery of pragmatism as a research paradigm', *Journal of Mixed Methods Research*, 4(1), pp. 6-16.
- Feingold, B. (1976) 'Hyperkinesis and learning disabilities linked to the investigation of artificial food coloring and flavors', *Journal of Learning Disabilities*, 9(9), pp. 551-559.
- Felzmann, H., Sixsmith, J., O'Higgins, S., Chonnactaigh, S. and Nic Gabhainn, S. (2010) Children's research and ethical review: executive summary [Online]. Available at: http://www.nuigalway.ie/hbsc/documents/2010_rep__ethical_review_and_childrens_researc h.pdf (Accessed: 17 December 2012).
- Firestone, W. (1993) 'Arguments for generalizing from data as applied to qualitative research', *Educational Researcher*, 22(4), pp. 16-23.
- Fitzgerald, M. (2007) *Survey of ADHD in Irish Children* [Online]. Available at: http://positivecare.ie/ wp-content/uploads/2012/05/adhd-survey-ireland-parents.pdf (Accessed: 16 April 2015).

- Fitzpatrick, C., Halpin, C. and Doody, B. (2000) Response of the Royal College of Psychiatrists (Irish Division) child and adolescent section to 'Report on attention deficit disorder in Ireland'
 [Online]. Available at: http://www.irishpsychiatry.ie/Files/adhd%20response.pdf (Accessed: 31 March 2015).
- Fontana, J. (2004) 'A methodology for critical science in nursing', *Advances in Nursing Science*, 27(2), pp. 93-101.
- Forness, S., Kavale, K. and Crenshaw, T. (1999) 'Stimulant medication revisited: effective treatment of children with ADHD', *Reclaiming Children & Youth*, 7(4), pp. 230–233.
- Foucault, M. (1977) Discipline and punish: the birth of the prison. Translated from the French by Alan Sheridan. New York: Vintage Books [Online]. Available at: https://monoskop.org/images/ 4/43/Foucault_Michel_Discipline_and_Punish_The_Birth_of_the_Prison_1977_1995.pdf (Accessed: 30 July 2016).
- Francis, B. (2006) 'The Nature of Gender', in Skelton, C., Francis, B. and Smulyan, L. (eds.) *The Sage handbook of gender and education.* London: Sage Publications, pp. 7-17.
- French, S. (1994) 'Dimensions of disability and impairment', in French, S. (ed.) *On equal terms: working with disabled people.* Oxford: Butterworth-Heinemann Ltd., pp. 17-34.
- Gall, M., Gall, J. and Borg, W. (1996) *Educational research: an introduction*. 6th edn. White Plains, NY: Longman Publishers.
- Gallagher, D., Connor, D. and Ferri, B. (2014) 'Beyond the far too incessant schism: special education and the social model of disability', *International Journal of Inclusive Education*, 18(11), pp. 1120-1142.
- Gaub, M. and Carlson, C. (1997) 'Gender differences in ADHD: a meta-analysis and critical review', Journal of the American Academy of Adolescent Psychiatry, 36(8), pp. 1036-1045.
- Gershon, J. (2002) 'A meta-analytic review of gender differences in ADHD', *Journal of Attention Disorders*, 5(3), pp. 143-154.
- Ghanizadeh, A., Bahredar, M. and Moeini, S. (2006) 'Knowledge and attitudes towards attention deficit hyperactivity disorder among elementary school teachers', *Patient Education and Counseling*, 63(1-2), pp. 84-88.
- Giles, J. and Hill, E. (2015) 'Examining our hidden curricula: powerful, visible, gendered and discriminatory', *Medical Education*, 49(3), pp. 244-246.

Glaser, B. (1978) *Theoretical Sensitivity*. Mill Valley, CA: Sociology Press.

- Gough, B. (2017) 'Reflexivity in qualitative psychological research', *The Journal of Positive Psychology*, 12(3), pp. 311-312.
- Goulding, C. (2002) *Grounded theory: a practical guide for management, business and market researchers.* London: Sage Publications.
- Graetz, B., Sawyer, M. and Baghurst, P. (2005) 'Gender differences among children with DSM-IV ADHD in Australia', *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(2), pp. 159-168.
- Graf, W. and Singh, I. (2015) 'Can guidelines help reduce the medicalization of early childhood?', *The Journal of Pediatrics*, 166(6), pp. 1344-1346.
- Green, C., Duan, N., Gibbons, R., Hoagwood, K., Palinkas, L. and Wisdom, J. (2015) 'Approaches to mixed methods dissemination and implementation research: methods, strengths, caveats, and opportunities', *Administration and Policy in Mental Health*, 42(5), pp. 508-523.
- Griffin, S. and Shevlin, M. (2011) *Responding to special educational needs: an Irish perspective*. Dublin: Gill and MacMillan.
- Grskovic, J. and Zentall, S. (2010) 'Understanding ADHD in girls: identification and social characteristics', *International Journal of Special Education*, 25(1), pp. 171-184.
- Hallberg, U., Klingberg, G., Reichenberg, K. and Moller, A. (2008) 'Living at the edge of one's
 capability: experiences of parents of teenage daughters diagnosed with ADHD', International
 Journal of Qualitative Studies on Health and Well-Being, 3(1), pp. 52-58.
- Hansson Hallerod, S., Anckarsater, H., Rastam, M. and Hansson Scherman, M. (2015) 'Experienced consequences of being diagnosed with ADHD as an adult—a qualitative study', *BMC Psychiatry*, 15(31), pp. 1-13.
- Hardiman, A. (2015) *Multiple perspectives on girls with a diagnosis of attention-deficit/hyperactivity in Irish primary schools.* Unpublished MEd Thesis. National University of Ireland Galway.
- Harris, K., Friedlander, B., Saddler, B., Frizzelle, R. and Graham, S. (2005) 'Self-monitoring of attention versus self-monitoring of academic performance: effects among students with ADHD in the general education classroom', *The Journal of Special Education*, 39(3), pp. 145-156.

- Hawi, Z., Dring, M., Kirley, A., Foley, D., Kent, K., Asherson, P., Curran, C., Gould, A., Richards, S.,
 Thapar, A., Fitzgerald, M. and Gill, M. (2002) 'Serotonergic system and attention deficit
 hyperactivity disorder (ADHD): a potential susceptibility locus at the 5-HT1B receptor gene in
 trios from a multi-center sample', *Molecular Psychiatry*, 7(7), pp. 718 725.
- Hawi, Z., Matthews, N., Wagner, J., Wallace, R., Butler, T., Vance, A., Kent, L., Gill, M. and Bellgrove,
 M. (2013) 'DNA variation in the SNAP25 gene confers risk to ADHD and is associated with
 reduced expression in prefrontal cortex', *PloS ONE*, (8)4, p. e60274.
- Health Service Executive. (2013) The *fifth annual child and adolescent mental health service report* 2012-2013 [Online]. Available at: https://www.iasw.ie/attachments/6c0a78b4-25ea-44e3bb40-145e638543ca.PDF (Accessed: 22 July 2016).
- Hellblom-Thibblin, T., Klang, N. and Aman, K. (2012) 'Biopsychosocial model and the ICF-CY in in-service training: general educators' reflections', *International Journal of Developmental Disabilities*, 58(1), pp. 12-19.
- Hodgens, J., Cole, J. and Boldizar, J. (2000) 'Peer-based differences among boys with ADHD', *Journal of Clinical Child Psychology*, 29(3), pp. 443-452.
- Hodgson, K., Hutchinson, A. and Denson, L. (2014) 'Nonpharmacological treatments for ADHD: a meta-analytic review', *Journal of Attention Disorders*, 18(4), pp. 275-282.
- Holzberger, D., Philipp, A. and Kunter, M. (2013) 'How teachers' self-efficacy is related to instructional quality: a longitudinal analysis', *Journal of Educational Psychology*, 105(3), pp. 774-786.
- Howe, C. (1997) Gender and classroom interaction. A research review. The Scottish Council for Research in Education [Online]. Available at: http://tonycrowther.uk/wordpress/wpcontent/uploads/2011/10/gender-and-classroom-interaction.pdf (Accessed: 30 July 2016).
- Hoza, B. (2007) 'Peer functioning in children with ADHD', *Journal of Pediatric Psychology*, 32, pp. 655-663.
- Humphrey, C. (2013) 'A paradigmatic map of professional education research', *Social Work Education*, 32(1), pp. 3-16.
- Ilie, G., Vingilis, E., Mann, R., Hamilton, H., Toplak, M., Adlaf, E., Kolla, N., Ialomiteanu, A., van der Mass, M., Asbridge, M., Vingilis-Jaremko, L., Rehm, J. and Cusimano, M. (2015) 'The

association between traumatic brain injury and ADHD in a Canadian adult sample', *Journal of Psychiatric Research*, 69, pp. 174-179.

- James, W. (1981) Pragmatism. Indianapolis: Hackett Publishing Company.
- Jones, S. and Hesse, M. (2014) 'Adolescents with ADHD: experiences of having an ADHD diagnosis and negotiations of self-image and identity', *Journal of Attention Disorders*, pp. 1-11.
- Jootun, D., McGhee, G. and Marland, G. (2009) 'Reflexivity: promoting rigour in qualitative research', Nursing Standard, 23(23), pp. 42-46.
- Kadesjo, B. and Gillberg, C. (2001) 'The comorbidity of ADHD in the general population of Swedish school-age children', *Journal of Child Psychology and Psychiatry*, 42(4), pp. 487-492.
- Kamii, C. (1974). 'Pedagogical principles from Piaget's theory', in Schwebel, M. and Raph, J. (eds) *Piaget in the classroom*. London: Routledge & Kegan Paul, pp. 199-230.
- Kendall, J. (1999) 'Sibling accounts of attention deficit hyperactivity disorder (ADHD)', *Family Process*, 38(1), pp. 117-136.
- Kendall, J., Hatton, D., Beckett, A. and Leo, M. (2003) 'Children's accounts of Attentiondeficit/hyperactivity disorder', *Advances in Nursing Science*, 26(2), pp. 114-130.
- Kenny, M., McNeela, E., Shevlin, M. and Daly, T. (2000) *Hidden voices: young people with disabilities speak about their second level schooling. Commissioned by the South West Regional Authority.* Cork: Bradshaw Books.
- Kent, K., Pelham, W., Molina, B., Sibley, M., Waschbusch, D., Yu, J., Gnagy, E., Biswas, A., Babinski, D.
 and Karch, K. (2011) 'The academic experience of male high school students with ADHD',
 Journal of Abnormal Child Psychology, 39(3), pp. 451-462.
- Kinsella, W. (2009) 'Are inclusive schools possible? Students with disabilities and special educational needs in second-level schools', in Drudy, S. (ed.) *Education in Ireland: challenge & change*.
 Dublin: Gill & Macmillan, pp. 73-88.
- Kinsella, W. and Senior, J. (2008) 'Developing inclusive schools: a systemic approach', International Journal of Inclusive Education, 12(5-6), pp. 651-665.
- Kirby, P. (2003) Attention deficit hyperactivity disorder in the mainstream primary school: investigation of teachers' perceptions. MA Thesis. University College Dublin.
- Kirley, A. (2004) An investigation of clinical phenotype in relation to dopamine system genes in *ADHD*. MD Thesis. Trinity College Dublin.

- Kirley, A., Hawi, Z., Daly, G., McCarron, M., Mullins, C., Millar, N., Waldman, I., Fitzgerald, M. and Gill,
 M. (2002) 'Dopaminergic system genes in ADHD: toward a biological hypothesis',
 Neuropsychopharmacology, 27(4), pp. 607-619.
- Klykylo, K. and Klykylo, W. (2008) 'Managing attention deficit hyperactivity disorder in the emergency department', *Psychiatry* (Edgemont), 5(8), pp. 43-47.
- Knezevic-Floric, O., Znkovic, S. and Ninkovic, S. (2012) 'Case study: school experiences of children with attention deficit hyperactivity disorder', *HealthMed*, 6(10), pp. 3482-3487.
- Koch, T. (2006) 'Establishing rigour in qualitative research: the decision trail', *Journal of Advanced Nursing*, 53(1), pp. 91-103.
- Kokkinos, C., Panayiotou, G. and Davazoglou, A. (2004) 'Perceived seriousness of pupils' undesirable behaviours: the student teachers' perspective', *Educational Psychology: An International Journal of Experimental Educational Psychology*, 24(1), pp. 109-120.
- Kos, J. (2008) 'What do teachers know, think and intend to do about ADHD?' European Conference on Educational Research, 8-12 September [Online]. Available at: http://research. acer.edu.au/cgi/viewcontent.cgi?article=1008&context=tll_misc (Accessed: 24 July 2016).
- Kos, J., Richdale, A. and Jackson, M. (2004) 'Knowledge about attention-deficit/hyperactivity disorder: a comparison of in-service and preservice teachers', *Psychology in the Schools*, 41(5), pp. 517-526.
- Krueger, M. and Kendall, J. (2001) 'Descriptions of self: an exploratory study of adolescents with ADHD', *Journal of Child and Adolescent Psychiatric Nursing*, 14(2), pp. 61-72.
- Langberg, J., Epstein, J., Becker, S., Girio-Herrera, E. and Vaughn, A. (2012) 'Evaluation of the Homework, Organization, and Planning Skills (HOPS) intervention for middle school students with ADHD as implemented by school mental health providers', *School Psychology Review*, 41(3), pp. 342-364.
- Lange, G., Sherrin, D., Carr, A., Dooley, B., Belton, M., Doyle, M., Gaffney, P., Lawlor, M. and Mulligan, A. (2005) 'Family factors associated with attention deficit hyperactivity disorder and emotional disorders in children', *Journal of Family Therapy*, 27(1), pp. 76-96.
- Laver-Bradbury, C. (2012) 'Reducing the social and emotional impact of ADHD', *British Journal of School Nursing*, 7(5), pp. 222-226.
- Li, K. (2013) 'Religion and medicalization: the case of ADHD', *Journal for the Scientific Study of Religion*, 52(2), pp. 309-327.

- Lincoln, Y. and Guba, E. (1999) 'Establishing trustworthiness', in Bryman, A. and Burgess, R. (eds.) *Qualitative research.* Vol. 3. London: Sage Publications, pp. 397–444.
- Lincoln, Y. and Guba, E. (2000). 'Paradigmatic controversies, contradictions, and emerging confluences', in Denzin, N. and Lincoln, Y. (eds.) *The handbook of qualitative research.* 2nd edn. London: Sage Publications, pp.163-188.
- Lips, H. (1993) Sex & gender: an introduction. 2nd edn. London: Mayfield Publishing Company.
- Liu, F. (2006) 'School culture and gender', in Skelton, C., Francis, B. and Smulyan, L. (eds.) *The Sage handbook of gender and education.* London: Sage Publications, pp. 425-438.
- Loe, I. and Feldman, H. (2007) 'Academic and educational outcomes of children with ADHD', *Journal of Pediatric Psychology*, 32(6), pp. 643-654.
- Lowe, N. (2005) *Examination of DRD4, DRD5 and SNAP-25 as candidate genes in attention deficit hyperactivity disorder.* PhD Thesis. Trinity College Dublin.
- Luna, F. (2009) 'Elucidating the concept of vulnerability: layers not labels', *International Journal of Feminist Approaches to Bioethics*, 2(1), pp. 121-139.
- Lynch, F., Mills, C., Daly, I. and Fitzpatrick, C. (2006) 'Challenging times: prevalence of psychiatric disorders and suicidal behaviours in Irish adolescents', *Journal of Adolescence*, 29(4), pp. 555-573.
- Mabry, L. (2008) 'Case study in social science research', in Alasuutari, P., Bickman, L. and Brannen, J. (eds.) *The Sage handbook of social research methods.* Los Angeles: Sage Publications, pp. 214-227.
- MacNeela, P. (2016) *Finding your way with ADHD: struggles, supports, and solutions.* The better education, services, and treatments for people with attention deficit/hyperactivity disorder study (BEST-ADHD) [Online]. Available at: http://www.incadds.ie/documents/resources/ MacNeela_2016_BEST-ADHD_Report.pdf (Accessed 18 September 2016).
- Maedgen, J. and Carlson, C. (2000) 'Social functioning and emotional regulation in the attention deficit hyperactivity disorder subtypes', *Journal of Clinical Child Psychology*, 29(1), pp. 30-42.
- Mahone, E. (2010) 'Why fewer females than males are diagnosed with attention-deficit-hyperactivity disorder: it might not be hormones', *Developmental Medicine & Child Neurology*, 52(9), pp. 788-793.
- Marchbank, J. and Letherby, G. (2007) Introduction to gender. Social sciences perspectives. Harrow, England: Pearson Longman.

- Margolis, J. (2006) 'Introduction: pragmatism, retrospective, and prospective', in Shook, J. and Margolis, J. (eds.) *A companion to pragmatism.* West Sussex: Blackwell Publishing, pp. 1-10.
- Martin, A. (2012) 'The role of personal best (PB) goals in the achievement and behavioural engagement of students with ADHD and students without ADHD', *Contemporary Educational Psychology*, 37(2), pp. 91-105.
- Martin, M., Carr, A., Burke, L., Carroll, L. and Byrne, S. (2006) *The Clonmel project. Mental health service needs of children and adolescents in the south east of Ireland: final report.* Health Service Executive [Online]. Available at: http:// researchrepository. ucd.ie/bitstream/ handle/10197/6334/ClonmelProject.pdf?sequence=1 (Accessed: 22 July 2016).
- Massetti, G., Lahey, B., Pelham, W., Loney, J., Ehrhardt, A., Lee, S. and Kipp, H. (2008) 'Academic achievement over 8 years among children who met modified criteria for attentiondeficit/hyperactivity disorder at 4–6 years of age', *Journal of Abnormal Child Psychology*, 36(3), pp. 399–410.
- Massoumeh, Z. and Leila, J. (2012) 'An investigation of medical model and special education methods'. 4th World Conference on Educational Sciences, Barcelona, 2-5 February. *Procedia Social and Behavioural Sciences*, 46, pp. 5802-5804.
- Mather, B. (2012) 'The social construction and reframing of attention-deficit/hyperactivity disorder', Ethical Human Psychology & Psychiatry, 14(1), pp. 15–26.
- Maxwell, J. (2005) *Qualitative research design—an interactive approach*. 2nd edn. Thousand Oaks, CA: Sage Publications.
- Mays, N. and Pope, C. (1995) 'Rigour and qualitative research', *BMJ: British Medical Journal*, 311(6997), pp. 109-112.
- McGee, R. and Feehan, M. (1991) 'Are girls with problems of attention underrecognised?', *Journal of Psychopathology and Behavioral Assessment*, 13(3), pp. 187-198.
- McGettrick, B. (2009) 'A research-based profession: the importance of action research in teacher education', in Drudy, S. (ed.) *Education in Ireland: challenge & change*. Dublin: Gill & Macmillan, pp. 253-267.
- McGillicuddy, S. and O'Donnell, G. (2014) 'Teaching students with autism spectrum disorder in mainstream post-primary schools in the Republic of Ireland', *International Journal of Inclusive Education*, 18(4), pp. 323-344.

- McIntyre, R. (2012) *It's not something to be ashamed of. Multiple perspectives of childhood ADHD.* PhD Thesis. University College Dublin.
- Merrell, C. and Tymms, P. (2001) 'Inattention, hyperactivity and impulsiveness: their impact on academic achievement and progress', *British Journal of Educational Psychology*, 71, pp. 43-56.
- Meyrick, J. (2006) 'What is good qualitative research? A first step towards a comprehensive approach to judging rigour/quality', *Journal of Health Psychology*, 11(5), pp. 799-808.
- Mikami, A. and Pfiffner, L. (2008) 'Sibling relationships among children with ADHD', *Journal of Attention Disorders*, 11(4), pp. 482-492.
- Mojavezi, A. and Poodineh Tamiz, M. (2012) 'The impact of teacher self-efficacy on the students' motivation and achievement', *Theory in Practice in Language Studies*, 2(3), pp. 483-491.
- Morrow R., Garland, E., Wright, J., Maclure, M., Taylor, S. and Dormuth, C. (2012) 'Influence of relative age on diagnosis and treatment of attention-deficit/hyperactivity disorder in children', *Canadian Medical Association Journal*, 184(7), pp. 755-762.
- Morrow, V. and Richards, M. (1996) 'The ethics of social research with children: an overview', *Children & Society*, 10, pp. 90-105.
- Morse, J. (2007) 'Ethics in action: ethical principles for doing qualitative health research', *Qualitative Health Research*, 17(8), pp. 1003-1005.
- Mrug, S., Molina, B., Hoza, B., Gerdes, A., Hinshaw, S., Hechtman, L. and Arnold, E. (2012) 'Peer rejection and friendships in children with attention-deficit/hyperactivity disorder: contributions to long-term outcomes', *Journal of Abnormal Child Psychology*, 40(6), pp. 1013-1026.
- Mueller, K. and Tomblin, B. (2012) 'Diagnosis of attention-deficit hyperactivity disorder and behavioral, neurological, and genetic roots', *Topics in Language Disorders*, 32(3), pp. 207-227.
- Mulholland, S., Cumming, T. and Yup Jung, J. (2015) 'Teacher attitudes towards students who exhibit ADHD-type behaviours', *Australian Journal of Special Education*, 39(1), pp. 15-36.
- Nadeau, K., Littman, E. and Quinn, P. (1999) *Understanding girls with ADHD*. Silver Spring, MD: Advantage Books.
- Nadeau, K. and Quinn, P. (2002a) 'An overview of coexisting conditions for women with AD/HD', in Quinn, P. and Nadeau, K. (eds.) *Understanding women with ADHD*. Silver Spring: Advantage Books, pp. 152-176.

Nadeau, K. and Quinn, P. (2002b) 'Rethinking DSM-IV', in Quinn, P. and Nadeau, K. (eds.) Understanding women with ADHD. Silver Spring: Advantage Books, pp. 2-23.

- National Association for Special Educational Needs. (2016) *Girls and autism: flying under the radar. A quick guide to supporting girls with autism spectrum conditions.* Staffordshire: National Association for Special Educational Needs [Online]. Available at: file:///C:/Users/User/Downloads/girls_and_autism_-_flying_under_the_radar.pdf (Accessed: 2 August 2016).
- National Council for Curriculum and Assessment. (1999) *Special educational needs: curriculum issues discussion paper* [Online]. Available at: http://www.ncca.ie/uploadedfiles/nccaeng.pdf (Accessed: 24 May 2015).
- National Council for Special Education. (2011) The future role of special schools and classes in Ireland [Online]. Available at: http://ncse.ie/wpcontent/uploads/2014/09/The_Future_Role_of_ Special_Schools_and_Classes_in_Ireland_4.pdf (Accessed: 15 May 2015).
- National Council for Special Education. (2012) *The education of students with challenging behaviour arising from severe emotional disturbance/behavioural disorders. National Council for Special Education policy advice paper no. 3* [Online]. Available at: http://ncse.ie/wpcontent/uploads/ 2014/09/EBDPolicyReport_1.pdf (Accessed: 24 May 2015).
- National Council for Special Education. (2013) Supporting students with special educational needs in schools. National Council for Special Education policy advice paper no. 4 [Online]. Available at: http://ncse.ie/wp-content/uploads/2014/09/Supporting_14_05_13_web.pdf (Accessed: 28 May 2015).
- National Council for Special Education. (2014) *Delivery for students with special educational needs: a better and more equitable way* [Online]. Available at: http://ncse.ie/wpcontent/uploads/ 2014/09/Allocating_resources_1_5_14_Web_accessible_version_FINAL.pdf (Accessed: 29 May 2015).
- National Council for Special Education. (2015) Special needs assistant (SNA) scheme: information for parents/guardians of children and young people with special educational needs [Online].
 Available at: http://ncse.ie/wp-content/uploads/2015/01/NCSE-SNA-Scheme-Information-Pamphlet.FINALwebaccessibleversion.16.01.151.pdf (Accessed: 29 July 2016).
- National University of Ireland Galway. (2006) *Draft policy on data retention* [Online]. Available at: http://www.nuigalway.ie/research/vp_research/documents/ethics_committee_docs/datapoli cy.pdf (Accessed: 13 December 2012).

- National University of Ireland Galway. (2011) *Child protection policy* [Online]. Available at: www.nuigalway.ie/hr/documents/child_protection_policy.pdf (Accessed: 7 May 2013).
- National University of Ireland Galway. Child and Family Research Centre. (2010) *Child protection and welfare policy*.
- Newcorn, J., Halperin, J., Jensen, P., Abikoff, H., Arnold, L., Cantwell, D., Conners, C., Elliott, G.,
 Epstein, J., Greenhill, L., Hechtman, L., Hinshaw, S., Hoza, B., Kraemer, H., Pelham, W., Severe,
 J., Swanson, J., Wells, K., Wigal, T. and Vitiello, B. (2001) 'Symptom profiles in children with
 ADHD: effects of comorbidity and gender', *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(2), pp. 137-146.
- Newmark, S. (2009) 'Nutritional intervention in ADHD', *Explore: The Journal of Science and Healing*, 5(3), pp. 171-174.
- Niederhofer, H. (2013) 'Stabilization of circadian rhythm: its augmentation by bright light treatment and its importance for ADHD and depression of adolescents', *Neuroscience & Medicine*, 4(3) pp. 150-154.
- Nigg, J. (2006) What causes ADHD? Understanding what goes wrong and why. New York: The Guilford Press.
- Nigg J. and Nikolas, M. (2008) 'Attention-Deficit/Hyperactivity disorder', in Beauchaine, T. and Hinshaw, S. (eds.) *Child and adolescent psychopathology*. Hoboken, NJ: John Wiley & Sons, pp. 301-334.
- Nussbaum, N. (2012) 'ADHD and female specific concerns: a review of the literature and clinical implications', *Journal of Attention Disorders*, 16(2), pp. 87-100.
- O'Dwyer, L. and Bernauer, J. (2014) *Quantitative research for the qualitative researcher*. Los Angeles: Sage Publications.
- Ohan, J., Visser, T., Strain, M. and Allen, L. (2011) 'Teachers' and education students' perceptions of and reactions to children with and without the diagnostic label "ADHD"', *Journal of School Psychology*, 49(1), pp. 81–105.
- O'Kane, C. (2008) 'The development of participatory techniques: facilitating children's views about decisions which affect them', in Christensen, P. and James, A. (eds.) *Research with children: perspectives and practices.* New York: Routledge, pp. 125-155.
- Ongel, U. (2006) 'ADHD and parenting styles', in Lloyd, G., Stead, J. and Cohen, D. (eds) *Critical new perspectives on ADHD*. London: Routledge, pp. 115-127.

- Onwuegbuzie, A. and Combs, J. (2010) 'Emergent data analysis techniques in mixed methods research', in Tashakkori, A. and Teddlie, C. (eds.) *Sage handbook of mixed methods in social & behavioral research*. 2nd edn. Los Angeles: Sage Publications, pp. 397-430.
- Oppenheim, A. (2001) *Questionnaire design, interviewing and attitude measurement.* New edition. London: Continuum.
- Organisation for Economic Co-Operation and Development. (no date) 'Total population by sex and age' [Online]. Available at: http://stats.oecd.org/index.aspx?DataSetCode=RPOP# (Accessed: 5 August 2016).
- Oronoz, H. (2011) *Teacher's perspectives: an understanding of ADHD in a predominantly Hispanic school district.* MA Thesis. University of Texas at El Paso.
- Owens, E., Cardoos, S. and Hinshaw, S. (2015) 'Developmental progression and gender differences', in Barkley, R. (ed.) *Attention-deficit hyperactivity disorder: a handbook for diagnosis and treatment.* 4th edn. New York: The Guilford Press, pp.223-255.
- Owens, J., Holdaway, A., Zoromski, A., Evans, S., Himawan, L., Girio-Herrera, E. and Murphy, C. (2012) 'Incremental benefits of a daily report card intervention over time for youth with disruptive behavior', *Behavior Therapy*, 43(4), pp. 848-861.
- Paechter, C. (2006) 'Reconceptualising the gendered body: learning and constructing masculinities and femininities in schools', *Gender and Education*, 18(2), pp. 121-135.
- Park, J., Willmott, M., Vetuz, G., Toye, C., Kirley, A., Hawi, Z., Brookes, K., Gill, M. and Kent, L. (2010)
 'Evidence that genetic variation in the oxytocin receptor (OXTR1) gene influences social cognition in ADHD', *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 34(4), pp. 697-702.
- Patterson, M. and Pahlke, E. (2011) 'Student characteristics associated with girls' success in a singlesex school', *Sex Roles*, 65, pp. 737-750.
- Patton, M. (2002) *Qualitative research & evaluation methods.* 3rd edn. Thousand Oaks, CA: Sage Publications.
- Peebles, J. and Mendaglio, S. (2014) 'The impact of direct experience on preservice teachers' selfefficacy for teaching in inclusive classrooms', *International Journal of Inclusive Education*, 18(12), pp. 1321-1336.

- Perold, M., Louw, C. and Kleynhans, S. (2010) 'Primary school teachers' knowledge and misperceptions of attention deficit hyperactivity disorder (ADHD)', South African Journal of Education, 30(3), pp. 457-473.
- Pham, A. (2015) 'Understanding ADHD from a biopsychosocial-cultural framework: a case study', *Contemporary School Psychology*, 19(1), pp. 54-62.
- Pliszka, S., Bernet, W., Bukstein, O., Walter, H., Arnold, V., Beitchman, J., Benson, R., Chrisman, A.,
 Farchione, T., Hamilton, J., Keable, H., Kinlan, J., McClellan, J., Rue, D., Schoettle, U., Shaw, J.,
 Stock, S., Ptakowski, K. and Medicus, J. (2007) 'Practice parameter for the assessment and
 treatment of children and adolescents with attention-deficit/hyperactivity disorder', *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(7), pp. 894-921.
- Plumer, P. and Stoner, G. (2005) 'The relative effects of classwide peer tutoring and peer coaching on the positive social behaviors of children with ADHD', *Journal of Attention Disorders*, 9(1), pp. 290-300.
- Polanczyk, G., de Lima, M., Horta, B., Biederman, J. and Rohde, L. (2007) 'The worldwide prevalence of ADHD: a systematic review and metaregression analysis', *American Journal of Psychiatry*, 164(6), pp. 942-948.
- Polit, D. and Tatano Beck, C. (2010) 'Generalization in quantitative and qualitative research: myths and strategies', *International Journal of Nursing Studies*, 47(11), pp. 1451-1458.
- Purdie, N., Hattie, J. and Carroll, A. (2002) 'A review of the research on interventions for attention deficit hyperactivity disorder: what works best?', *Review of Educational Research*, 72(1), pp. 61-99.
- Purper-Ouakil, D., Ramoz, N., Lepagnol-Bestel, A., Gorwood, P. and Simonneau, M. (2011) 'Neurobiology of attention deficit/hyperactivity disorder', *Pediatric Research*, 69, pp. 69R-76R.
- Qiu, M., Ye, Z., Li, Q., Liu, G., Xie, B. and Wang, J. (2011) 'Changes of brain structure and function in ADHD children', *Brain Topography*, 24(3-4), pp. 243-252.
- Quinn, P. (2005) 'Treating adolescent girls and women with ADHD: gender specific issues', *Journal of Clinical Psychology/In Session*, 61(5), pp. 579-587.
- Quinn, P. (2008) 'Attention-deficit/hyperactivity disorder and its comorbidities in women and girls: an evolving picture', *Current Psychiatry Reports*, 10(5), pp. 419-423.
- Quinn, P. and Wigal, S. (2004) 'Perceptions of girls and ADHD: results from a national survey', Medscape General Medicine, 6(2), p. 2.

Quinn, S. (1998) Understanding disability. A lifespan approach. Thousand Oaks, CA: Sage Sourcebooks for the Human Services.

Rafferty, M. (1968) 'Dyslexia: real problem or convenient excuse?', Human Events, 28(45), p. 12.

- Randall, D. (2012) 'Revisiting Mandell's "least adult" role and engaging with children's voices in research', *Nurse Researcher*, 19(3), pp. 39-43.
- Reif, S. (2005) *How to reach and teach children with ADD/ADHD: practice techniques, strategies, and interventions.* 2nd edn. San Francisco: Jossey-Bass.
- Reilly, D. (2009) 'HADD family support group 3rd level guide for students with ADHD' [Online].
 Available at: http://www.hadd.ie/sites/default/files/publications/HADD%203rd%20Level%
 20Guide%20for%20Students%20with%20ADHD.pdf (Accessed: 22 July 2016).
- Reindal, S. (2008) 'A social relational model of disability: a theoretical framework for special needs education?', *European Journal of Special Needs Education*, 23(2), pp. 135-146.
- Renold, E. (2006) 'Gendered classroom experiences', in Skelton, C., Francis, B. and Smulyan, L. (eds.) *The Sage handbook of gender & education.* London: Sage Publications, pp. 439-452.
- Republic of Ireland. (1998) *Education Act 1998* [Online]. Available at: http://www.irishstatutebook.ie/pdf/1998/en.act.1998.0051.pdf (Accessed: 24 May 2015).

Republic of Ireland. (2001) Children Act 2001 [Online]. Available at:

http://www.irishstatutebook.ie/eli/2001/act/24/enacted/en/print (Accessed: 1 March 2016).

- Republic of Ireland. (2004) *Education for Persons with Special Educational Needs Act 2004* (EPSEN Act) [Online]. Available at: http://www.oireachtas.ie/documents/bills28/acts/2004/A3004.pdf (Accessed: 24 May 2015).
- Republic of Ireland. Department of Children and Youth Affairs. (2011) *Children first: national guidance for the protection and welfare of children* [Online]. Available at: http://www.dcya.gov.ie /documents/child_welfare_protection/ChildrenFirst.pdf (Accessed: 13 March 2013).
- Republic of Ireland. Department of Children and Youth Affairs. (2012) *Guidance for developing ethical research projects involving children* [Online]. Available at: http://www.dcya.gov.ie/ documents/Publications/Ethics_Guidance.pdf (Accessed: 15 December 2012).
- Republic of Ireland. Department of Education and Science. (1993) *Report of the special education review committee.* Dublin: Stationery Office [Online]. Available at: https://www.education.ie/

en/Publications/Education-Reports/Report-of-the-Special-Education-Review-Committee-1993.pdf (Accessed: 15 May 2015).

- Republic of Ireland. Department of Education and Science. (1995) Charting our education future.
 White paper on education [Online]. Available at: https://www.education.ie/en/Publications/
 Policy-Reports/Charting-Our-Education-Future-White-Paper-On-Education-Launch-Copy-1995 .pdf (Accessed: 15 May 2015).
- Republic of Ireland. Department of Education and Science. (2005) *Circular SP ED 02/05: organisation* of teaching resources for students who need additional support in mainstream primary schools [Online]. Available at: http://www.education.ie/en/Circulars-and-Forms/Active-Circulars/ sp02_05.doc (Accessed: 24 May 2015).
- Republic of Ireland. Department of Education and Science. (2007) *Inclusion of students with special educational needs post-primary guidelines* [Online]. Available at: https://www.education.ie/ en/Publications/Inspection-Reports-Publications/Evaluation-Reports-Guidelines/insp_ inclusion_students_sp_ed_needs_pp_guidelines_pdf.pdf (Accessed: 24 May 2015).
- Republic of Ireland. Department of Education and Skills. (2010a) *A continuum of support for postprimary schools. Guidelines for teachers* [Online]. Available at: http://www.sess.ie/sites/all/ modules/wysiwyg/tinymce/jscripts/tiny_mce/plugins/filemanager/files/Documents_Publicati ons/neps_post_primary_continuum_teacher_guide.pdf (Accessed: 24 May 2015).
- Republic of Ireland. Department of Education and Skills. (2010b) *A continuum of support for postprimary schools. Resource pack for teachers* [Online]. Available at: http://www.education.ie/ en/Schools-Colleges/Services/National-Educational-Psychological-Service-NEPS-/neps_post_primary_continuum_resource_pack.pdf (Accessed: 24 May 2015).
- Republic of Ireland. Department of Education and Skills. (2014a) *Key statistics 2013/2014* [Online]. Available at: https://www.education.ie/en/Publications/Statistics/Key-Statistics/Key-Statistics-2013-2014.pdf (Accessed: 13 May 2016).
- Republic of Ireland. Department of Education and Skills. (2014b) Student support teams in postprimary schools. A guide to establishing a team or reviewing an existing team [Online].
 Available at: https://www.education.ie/en/Schools-Colleges/Services/National-Educational-Psychological-Service-NEPS-/Student-Support-Teams-in-Post-Primary-Schools.pdf (Accessed: 26 May 2015).

- Republic of Ireland. Department of Education and Skills. (2015) *Framework for Junior Cycle 2015* [Online]. Available at: https://www.education.ie/en/Publications/Policy-Reports/Frameworkfor-Junior-Cycle-2015.pdf (Accessed: 29 July 2016).
- Republic of Ireland. Department of Education and Skills, Health Service Executive and Department of Health. (2013) *Well-being in post-primary schools. Guidelines for mental health promotion and suicide prevention* [Online]. Available at: http://www.nosp.ie/Well_Being_PP_Schools_ Guidelines.pdf (Accessed: 24 May 2015).
- Republic of Ireland. Department of Health and Children. (2002) *Our duty to care: the principles of good practice for the protection of children and young people* [Online]. Available at: http://www.dohc.ie/publications/our_duty_to_care.html (Accessed: 7 May 2013).
- Republic of Ireland. House of the Oireachtas. (1998) *ADHD survey* [Online]. Available at: http://oireachtasdebates.oireachtas.ie/debates%20authoring/debateswebpack.nsf/takes/sea nad1998101400010?opendocument (Accessed: 29 July 2016).
- Republic of Ireland. Office of the Data Protection Commissioner. (2003) *Data protection acts 1988 and 2003: a guide for data controllers* [Online]. Available at: http://www.dataprotection.ie/ documents/forms/NewAGuideForDataControllers.pdf (Accessed: 13 December 2012).
- Republic of Ireland. Office of the Minister for Children and Youth Affairs. (2010) *Ethical review and children's research in Ireland* [Online]. Available at: http://www.nuigalway.ie/hbsc/ documents/2010_rep__ethical_review_and_childrens_research.pdf (Accessed: 13 March 2013).
- Robson, C. (2002) Real world research. 2nd ed. Malden, MA: Blackwell Publishing.
- Rogers, M., Belanger-Lejars, V., Toste, J. and Heath, N. (2015) 'Mismatched: ADHD symptomatology and the teacher-student relationship', *Emotional and Behavioural Difficulties*, 20(4), pp. 333-348.
- Roman, M. (2010) 'Treatments for childhood ADHD part II: non-pharmacological and novel treatments', *Issues in Mental Health Nursing*, 31(9), pp. 616-618.
- Rose, R. (1998) 'The curriculum: a vehicle for inclusion or a lever for exclusion?', in Tilestone, C., Florian, L. and Rose, R. (eds.) *Promoting inclusive practice.* London: Routledge, pp. 27-38.
- Rose, R. (2002) 'Including pupils with special educational needs: beyond rhetoric and towards an understanding of effective classroom practice', *Westminster Studies in Education*, 25(1), pp. 67-76.

- Rose, R. (2003) 'Ideology, reality and pragmatics: towards an informed policy for inclusion', in Tilestone, C. and Rose, R. (eds.) *Strategies to promote inclusive practice.* London: RoutledgeFalmer, pp. 7-17.
- Rose, R. (2007) 'Curriculum considerations in meeting special education needs', in Florian, L. (ed.) The Sage handbook of special education. London: Sage Publications, pp. 295-306.
- Rose, R. and Shevlin, M. (2010) *Count me in! Ideas for actively engaging students in inclusive classrooms.* London: Jessica Kingsley Publishers.
- Rose, R., Shevlin, M., Winter, E. and O'Raw, P. (2015) Project IRIS—Inclusive research in Irish schools. A longitudinal study of the experience of and outcomes for pupils with special educational needs (SEN) in Irish schools. National Council for Special Education research reports no. 20
 [Online]. Available at: http://ncse.ie/wp-content/uploads/2014/10/NCSE-IRIS-Report-No20.pdf (Accessed 24 September 2016).
- Rouse, M. and Florian, L. (2006) 'Inclusion and achievement: student achievement in secondary schools with higher and lower proportions of pupils designated as having special educational needs', *International Journal of Inclusive Education*, 10(6), pp. 481-493.
- Rucklidge, J. and Tannock, R. (2011) 'Psychiatric, psychosocial, and cognitive functioning of female adolescents with ADHD', *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(5), pp. 530-540.
- Rush, C. and Harrison, P. (2008) 'Ascertaining teachers' perceptions of working with adolescents diagnosed with attention-deficit/hyperactivity disorder', *Educational Psychology in Practice*, 24(3), pp. 207-223.
- Rustin, M. (2011) 'Passion in the classroom: understanding some vicissitudes in teacher-pupil relationships and the unavoidable anxieties of learning', in Harries, R., Rendall, S. and Nashat, S. (eds.) *Engaging with complexity: child & adolescent mental health and education*. London: Karnac Books, pp. 1-20.
- Salamanca, L. (2014) 'Biopsychosocial perspective of ADHD', *Open Journal of Epidemiology*, 4, pp. 1-6.
- Salisbury, C., Gallucci, C., Palombaro, M. and Peck, C. (1995) 'Strategies that promote social relations among elementary students with and without severe disabilities in inclusive schools', *Exceptional Children*, 62(2), pp. 125-137.

- Sansosti, J. and Sansosti, F. (2012) 'Inclusion for students with high-functioning autism spectrum disorders: definitions and decision making', *Psychology in the Schools*, 49(10), pp. 917-931.
- Santangelo, T. and Tomlinson, C. (2012) 'Teacher educators' perceptions and use of differentiated instruction practices: an exploratory investigation', *Action in Teacher Education*, 34(4), pp. 309-327.

Sarantakos, S. (2005). Social research. 3rd ed. New York: Palgrave MacMillan.

- Sarris, J., Kean, J., Schweitzer, I. and Lake, J. (2011) 'Complementary medicines (herbal and nutritional products) in the treatment of attention deficit hyperactivity disorder (ADHD): a systematic review of the evidence', *Complementary Therapies in Medicine*, 19(4), pp. 216-227.
- Sassi, R. (2010) 'Attention-deficit hyperactivity disorder and gender', *Archives of Women's Mental Health*, 13, pp. 29-31.
- Savin-Baden, M. and Howell Major, C. (2013) *Qualitative research: the essential guide to theory and practice.* New York: Routledge.
- Savolainen, H., Engelbrecht, P., Nel, M. and Olli-Pekka, M. (2012) 'Understanding teachers' attitudes and self-efficacy in inclusive education: implications for pre-service and in-service teacher education', *European Journal of Special Needs Education*, 27(1), pp. 51-68.
- Scanlon, G. (2011) 'Psychology of education', in Walsh, B. (ed.) *Education studies in Ireland: the key disciplines.* Dublin: Gill & Macmillan, pp. 132-170.
- Schmidt, M. (2010) 'Learning from teaching experience: Dewey's theory and preservice teachers' learning', *Journal of Research in Music Education*, 58(2), pp. 131-146.
- Scholtens, S., Rydell, A. and Yang-Wallentin, F. (2013) 'ADHD symptoms, academic achievement, selfperception of academic competence and future orientation: a longitudinal study', *Scandinavian Journal of Psychology*, 54(3), pp. 205-212.
- Schreiber, R. (2001) 'The "how to" of grounded theory: avoiding the pitfalls', in Schreiber, R. and
 Stern, P. (eds.) Using grounded theory in nursing. New York: Springer Publishing Company, pp. 55-83.
- Schultz, B., Steven, E. and Serpell, Z. (2009) 'Preventing failure among middle school students with attention deficit hyperactivity disorder', *School Psychology Review*, 38(1), pp. 14-27.
- Schwandt, T. (2000) 'Three epistemological stances for qualitative inquiry', in Denzin, N. and Lincoln,
 Y. (eds.) Handbook of qualitative research. 2nd edn. Thousand Oaks, CA: Sage Publications, pp. 189-213.

- Sciberras, E., Ohan, J. and Anderson, V. (2012) 'Bullying and peer victimisation in adolescent girls with attention-deficit/hyperactivity disorder', *Child Psychiatry and Human Development*, 43(2), pp. 254-270.
- Sciutto, M. and Eisenberg, M. (2007) 'Evaluating the evidence for and against the overdiagnosis of ADHD', *Journal of Attention Disorders*, 11(2), 106–113.
- Sciutto, M., Nolfi, C. and Bluhm, C. (2004) 'Effects of child gender and symptom type on referrals for ADHD by elementary school teachers', *Journal of Emotional and Behavioral Disorders*, 12(4), pp. 247-253.
- Sciutto, M., Terjesen, M. and Bender Frank, A. (2000) 'Teachers' knowledge and misperceptions of attention-deficit/hyperactivity disorder', *Psychology in the Schools*, 37(2), pp. 115-122.
- Scott, J. (2008) 'Children as respondents: the challenge for quantitative methods', in Christensen, P. and James, A. (eds) *Research with children: perspectives and practices.* 2nd edn. New York: Routledge, pp. 87-108.
- Selikowitz, M. (2009) ADHD. 2nd edn. Oxford: Oxford University Press.
- Semeijn, E., Comijs, H., Kooij, J., Michielsen, M., Beekman, A. and Deeg, D. (2015) 'The role of adverse life events on depression in older adults with ADHD', *Journal of Affective Disorders*, 174, pp. 574-579.
- Senior, J. (2004) Attention deficit hyperactivity disorder (AD/HD): developmental pathways in the aetiology, diagnosis, characteristics and school and family experiences of 10 male students attending upper primary and second level schools in the greater Dublin area. MEd Thesis.
 University College Dublin.
- Shattell, M., Bartlett, R. and Rowe, T. (2008) "I have always felt different": the experience of attention-deficit/hyperactivity disorder in childhood', *Journal of Pediatric Nursing*, 23(1), pp. 49-57.
- Shaywitz, S. (1998) 'Dyslexia', The New England Journal of Medicine, 338(5), pp. 307-312.
- Sheehan, K. (2008) An examination of serotonergic candidate genes in attention deficit hyperactivity disorder. PhD Thesis. Trinity College Dublin.
- Shevlin, M., Kearns, H., Ranaghan, M., Twomey, M., Smith, R. and Winter, E. (2009) Creating inclusive learning environments in Irish schools: teacher perspectives. Trim: National Council for Special Education [Online]. Available at: http://ncse.ie/wp-content/uploads/2014/10/ Creating_inclusive_learning_environments.pdf (Accessed: 30 July 2016).

- Shevlin, M., Kenny, M. and Loxley, A. (2008) 'A time of transition: exploring special educational provision in the Republic of Ireland', *Journal of Research in Special Educational Needs*, 8(3), pp. 141-152.
- Shevlin, M. and Rose, R. (2008) 'Pupils as partners in education decision-making: responding to the legislation in England and Ireland', *European Journal of Special Needs Education*, 23(4), pp. 423-430.
- Shorter, E. (2005) 'The history of the biopsychosocial approach in medicine: before and after Engel', in White, P. (ed.) *Biopsychosocial medicine: an integrated approach to understanding illness.* Oxford: Oxford University Press, pp. 1-20.
- Sibley, M., Pelham, W., Gnagy, E., Waschbusch, D., Kuriyan, A., Babinski, D., Molina, B., Garefino, A. and Karch, K. (2012) 'Diagnosing ADHD in adolescence', *Journal of Consulting and Clinical Psychology*, 80(1), pp. 139-150.
- Silverman, D. (2000) *Doing qualitative research: a practical handbook.* Thousand Oaks, CA: Sage, Publications.
- Skaalvik, E. and Skaalvik, S. (2010) 'Teacher self-efficacy and teacher burnout: a study of relations', *Teaching and Teacher Education: An International Journal of Research and Studies,* 26(4), pp. 1059-1069.
- Skelton, C., Francis, B. and Smulyan, L. (eds.) (2006) *The Sage handbook of gender and education*. London: Sage Publications.
- Skokauskas, N., McNicholas F., Masaud T. and Frodl T. (2011) 'Complementary medicine for children and young people who have attention deficit hyperactivity disorder', *Current Opinion in Psychiatry*, 24(4), pp. 291–300.
- Smart, J. and Smart, D. (2007) 'Models of disability: implications for the counseling profession', in Dell Orto, A. and Power, P. (eds) *The psychological & social impact of illness and disability*. 5th edn. New York: Springer Publishing, pp. 75-100.
- Smith, T. and Nicassio, P. (1995) 'Psychological practice: clinical application of the biopsychosocial model', in Smith, T. and Nicassio, P. (eds.) *Managing chronic illness: a biopsychosocial perspective.* Washington, DC: American Psychological Association, pp. 1-31.
- Smyth, E. (2010) 'Single-sex education: what does research tell us?' Revue Française de Pédagogie, 171, pp. 47-55 [Online]. Available at: http://www.ncgs.org/Pdfs/Resources/RF171-5.pdf (Accessed: 29 July 2016).

- Soffer, S., Mautone, J. and Power, T. (2008) 'Understanding girls with attention-deficit/hyperactivity disorder (ADHD): applying research to clinical practice', *International Journal of Behavioral Consultation and Therapy*, 4(1), pp. 14-29.
- Stead, J., Lloyd, G. and Cohen, D. (2006) 'Widening our view of ADHD', in G. Lloyd, J., Stead, J. and Cohen, D. (eds) *Critical new perspectives on ADHD*. Oxford: Routledge, pp. 1-11.
- Stein Safran, D. (2002) Art therapy and AD/HD: diagnosis and therapeutic approaches. London: Jessica Kingsley Publishers.
- Steneck, N. (2007) *ORI introduction to the responsible conduct of research* [Online]. Available at: http://ori.hhs.gov/documents/rcrintro.pdf (Accessed: 13 December 2012).
- Stewart, M. (1970) 'Hyperactive children', Scientific American, 222(April), pp. 94-98.
- Swanson, J., Flodman, P., Kennedy, J., Spence, M., Moyzis, R., Schuck, S., Murias, M., Moriarity, J.,
 Barr, C., Smith, M. and Posner, M. (2000) 'Dopamine genes and ADHD', *Neuroscience and Behavioural Reviews*, 24(1), pp. 21-25.
- Swords, L., Heary, C. and Hennessy, E. (2011) 'Factors associated with acceptance of peers with mental health problems in childhood and adolescence', *Journal of Child Psychology and Psychiatry*, 52(9), pp. 933-941.
- Taylor, E. (1999) 'Developmental neuropsychopathology of attention deficit and impulsiveness', Development and Psychopathology, 11(3), pp. 607-628.
- Taylor, E. and Keltner, N. (2002) 'Messy purse girls: adult females with ADHD', *Perspectives in Psychiatric Care*, 38(2), pp. 69-72.
- The Teaching Council. (2011) *Initial teacher education: criteria and guidelines for programme providers* [Online]. Available at: http://www.teachingcouncil.ie/en/Publications/Teacher-Education/Initial-Teacher-Education-Criteria-and-Guidelines-for-Programme-Providers.pdf (Accessed: 24 July 2016).
- Tekin, S. (2011) 'Self-concept through the diagnostic looking glass: narrative and mental disorder', *Philosophical Psychology*, 24(3), pp. 357-380.
- Thapar, A., Cooper, M., Eyre, O. and Langley, K. (2013) 'Practitioner review: what have we learnt about the causes of ADHD?', *Journal of Child and Adolescent Psychiatry*, 54(1), pp. 3-16.
- Thapar, A., Langley, K., Owen, M. and O'Donovan, M. (2007) 'Advances in genetic findings on attention deficit hyperactivity disorder', *Psychological Medicine*, 37(12), pp. 1681-1692.

- Thompson, R. and Miller, N. (eds.) (2012) *ADHD: cognitive symptoms, genetics and treatment outcomes.* New York: Nova Science Publishers, Inc.
- Tidefors, I. and Strand, J. (2012) 'Life history interviews with 11 boys diagnosed with attentiondeficit/hyperactivity disorder who had sexually offended: a sad storyline', *Journal of Trauma and Dissociation*, 13(4), pp. 421–434.
- Timimi, S. and Taylor, E. (2003) 'ADHD is best understood as a cultural construct', *The British Journal of Psychiatry*, 184(1), pp. 8-9.
- Topkin, B., Roman, N. and Mwaba, K. (2015) 'Attention deficit disorder (ADHD): primary school teachers' knowledge of symptoms, treatment and managing classroom behaviour', *South African Journal of Education*, 35(2), pp. 1-8.
- Travers, J. (2006) 'Perceptions of learning-support teachers and resource teachers of each other's role in Irish primary schools', *Irish Educational Studies*, 25(2), pp. 155-169.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (1994) *The Salamanca* statement and framework for action on special need education [Online]. Available at: http://www.unesco.org/education/pdf/SALAMA_E.PDF (Accessed: 24 May 2015).
- Van Cauwenberge, V., Sonuga-Barke, E., Hoppenbrouwers, K., Van Leeuwen, K. and Wiersema, J.
 (2015) "Turning down the heat": is poor performance of children with ADHD on tasks tapping
 "hot" emotional regulation caused by deficits in "cool" executive functions?", *Research in Developmental Disabilities*, 47, pp. 199-207.
- Vannest K., Davis J., Davis C., Mason B. and Burke M. (2010) 'Effective intervention for behavior with a daily behavior report card: a meta-analysis', *School Psychology Review*, 39(4), pp. 654–672.
- Vereb, R. and DiPerna, J. (2004) 'Teachers' knowledge of ADHD, treatments for ADHD, and treatment acceptability: an initial investigation', *School Psychology Review*, 33(3), pp. 421-428.
- Waite, R. (2007) 'Women and attention deficit disorders: a great burden overlooked', *Journal of the American Academy of Nurse Practitioners*, 19(3), pp. 116-125.
- Ward, V. (2014) 'What knowledge and conceptions do Irish primary schoolteachers hold on attention deficit hyperactivity disorder?', *Irish Educational Studies*, 33(4), pp. 489-512.
- Ware, J., Butler, C., Robertson, C., O'Donnell, M. and Gould, M. (2011) Access to the curriculum for pupils with a variety of special educational needs in mainstream classes: an exploration of the experiences of young pupils in primary school. National Council for Special Education research

report no. 8 [Online]. Available at: ncse.ie/wp-ontent/uploads/2014/10/Accesstothe Curriculum_1.pdf (Accessed: 24 May 2015).

- Wehmeyer, M. and Russo, H. (2006) 'Achieving equity: disability and gender', in Skelton, C., Francis,B. and Smulyan, L. (eds.) *The Sage handbook of gender and education*. London: SagePublications, pp. 392-406.
- Wellington, J. and Szcerbinski, M. (2007) *Research methods for the social sciences*. London: Continuum International Publishing Group.
- Weyandt, L., Iwaszuk. W., Fulton, K., Ollerton, M., Beatty, N., Pouts, M., Schepman, S. and Greenlaw.
 C. (2003) 'The internal restlessness scale: performance of college students with and without ADHD', *Journal of Learning Disabilities*, 36(4), pp. 382-389.
- Wigal, S., Chae, S., Patel, A. and Steinberg-Epstein, R. (2010) 'Advances in the treatment of attentiondeficit/hyperactivity disorder: a guide for pediatric neurologists', *Seminars in Pediatric Neurology*, 17(4), pp. 230-236.
- Wilkinson, S. (1988) 'The role of reflexivity in feminist psychology', *Women's Studies International Forum*, 11(5), pp. 493-502.
- Wills, H. and Mason, B. (2014) 'Implementation of a self-monitoring application to improve on-task behavior: a high school pilot study', *Journal of Behavioral Education*, 23(4), pp. 421-434.
- Winter, E. (2006) 'Preparing new teachers for inclusive schools and classrooms', *Support for Learning*, 21(2), pp. 85-91.
- World Health Organization. (1992) International statistical classification of diseases and related health problems. 10th Revision (ICD-10). Geneva: World Health Organization.
- World Health Organization. (2002) *Towards a common language for functioning, disability and health: the international classification of functioning, disability and health* [Online]. Available at: http://www.who.int/classifications/icf/icfbeginnersguide.pdf (Accessed: 21 July 2016).
- World Health Organization. (2007) *International classification of functioning, disability, and health: children & youth version* (ICF-CY). Switzerland: World Health Organization.
- World Health Organization. (2016) *International standard* [Online]. Available at: http://www.who. int/classifications/icd/en/ (Accessed: 22 July 2016).
- World Medical Association. (1964) Declaration of Helsinki: ethical principles for medical research involving human subjects [Online]. Available at: http://www.wma.net/en/30publications/ 10policies/b3/17c.pdf (Accessed: 17 December 2012).

- Wright, K. (2006) 'Researching internet-based populations: advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services', *Journal of Computer-Mediated Communication*, 10(3), pp. 00.
- Yanow, D. and Schwartz-Shea, P. (2006) *Interpretation and method: empirical research methods and the interpretive turn.* London: M.E. Sharpe.
- Yin, R. (2011) Qualitative research from start to finish. New York: The Guilford Press.
- Young, S. and Amarasinghe, J. (2010) 'Practitioner review: non-pharmacological treatments for ADHD: a lifespan approach', *Journal of Child Psychology and Psychiatry*, 51(2), pp. 116-133.
- Zalecki, C. and Hinshaw, S. (2004) 'Overt and relational aggression in girls with attention deficit hyperactivity disorder', *Journal of Clinical Child and Adolescent Psychology*, 33(1), pp. 125-137.
- Zambo, D. (2008) 'Looking at ADHD through multiple lenses: identifying girls with the inattentive type', *Intervention in School and Clinic*, 44(1), pp. 34-40.

Appendices

Appendix A: DSM-5 Diagnostic Criteria (American Psychiatric Association, 2013b, pp. 59-60)

- A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, as characterized by (1) and/or (2):
 - 1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older) at least five symptoms are required.

- a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
- b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- c. Often does not seem to listen when spoke to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficultly keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
- h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).
- Hyperactivity and impulsivity: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities: Note: The symptoms are not solely a manifestation of oppositional behaviour, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 or older), at least five symptoms are required.
 - a. Often fidgets with or taps hands or feet or squirms in seat.
 - b. Often leaves seat in situations when remaining seated is expected (e.g., leave his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
 - c. Often runs about or climbs in situations where it is inappropriate. (Note: In adolescents or adults, may be limited to feeling restless).
 - d. Often unable to play or engage in leisure activities quietly.

- e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- f. Often talks excessively.
- g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
- h. Often has difficulty waiting his or her turn (e.g., while waiting in line).
- i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).
- B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.
- C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).
- D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.
- E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).

Appendix B: Young Participant Information Sheet



Examining attention-deficit hyperactivity disorder in young women: manifestation, academic performance and social experience in Ireland

Participant Information Sheet

Please read over the following document in detail as it outlines all of the information you need to know about this study and what will be expected of you as a participant.

Aims and Purpose of this Research

This research project will explore the ways in which **ADHD affects the lives of adolescent females**, like you, who have a medical diagnosis of ADHD and are between the ages of 14-20 years. This study aims to examine and understand how ADHD impacts your experience in school and your relationships with important people such as teachers, family, and friends.

It is hoped that this research project will **increase our understanding** of the ways in which ADHD affects the lives of adolescent girls and will provide us with insights into how we can **improve their** educational and social experiences.

Why is this Research Important?

Your participation in this study is very important and crucially needed. Right now, **researchers have barely studied ADHD in adolescent females** and what we do know about ADHD mainly comes from studies of young boys! Also, **researchers have not spent much time speaking directly to young people living with ADHD** about their experiences and instead, have directed their conversations towards parents, teachers, and doctors.

Very few studies have examined ADHD specifically in Ireland, therefore, we know very little about what it is like to be a young Irish person living with this condition. These are just some of the reasons why this study has been focused on young women like you—and we want to know more about your thoughts, ideas, and opinions about life with ADHD!

What Will You Be Asked To Do?

Every adolescent participant in this study will be asked to **complete one electronic questionnaire and one individual interview.**

<u>The researcher would like to audio record the interview</u> so that she can better remember the information that you share. If you are uncomfortable with this, please let the researcher know.

After the interview, the researcher will type up a word-for-word transcript of the interview from the audio file. You and your parents will be provided with a copy of this document, and you will be allowed to review it and make any changes that you feel are necessary.

What Will You Be Asked About?

The questionnaire and interview that you will complete will ask you to answer questions about the following areas:

- Your experiences of life with ADHD.
- Your ideas about how ADHD influences or impacts your academic performance.
- Discussion on how ADHD influences your social experiences and relationships with important people in your life.
- Concerns about how ADHD will impact your future.

The questionnaire should take approximately 15-20 minutes to complete and will be administered electronically online, therefore it can be completed at a date and time that is best for you.

The interview will take approximately 45-60 minutes to complete and can be held at your home, on the campus of the National University of Ireland Galway, or at another place that you or your parent/guardian chooses. The researcher will make every effort to meet with you when your schedule allows.

Possible Benefits of Participating in this Study

By participating in this study, you will have the **opportunity to share your insights, reflect upon your experiences, and voice your opinions** regarding life with ADHD. You have information and insights that only you can provide, and that are unique to your life. This information is crucial to our understanding of ADHD and will potentially help to further our understanding of the realities, struggles and challenges of adolescent life with ADHD, and aid in developing our understanding of what "works" for young women in school and academics.

Foreseeable Risks of Participation

This study has been designed so **there are minimal risks to you**. However, you should be aware that because this study is exploring sensitive and personal topics regarding your life and experiences with ADHD, you might be surprised to have some emotional reactions to the topics discussed. Speaking about these experiences could be unsettling.

Additionally, you may have other worries or concerns that the researcher has not considered. Before participating in this study, you will be given a chance to speak with the researcher about any other concerns you have and how to address these.

If you find that you are having emotional problems related to anything discussed, please let the researcher know right away, and together we can try and find supports for you, such as counselling or ADHD support groups.

Your Rights in this Study

You have some very **important rights in this study**—please read closely over the following:

- 1. You have the right to freedom of participation—and you should be entering into this study because YOU want to—not because someone else is pressuring you to participate.
- 2. You also have the right to only answer those questions that you feel comfortable answering.
- 3. You have the right to stop participating in this study at any time.
- 4. Even if you do stop participating, you are free to rejoin the project at any time.

If you wish to leave the study at any time, I would ask that you (or your parent/guardian) send me an email at xxxxx@nuigalway.ie stating your desire to end participation. You may also speak to me directly by calling XXX-XXX-XXXX.

Confidentiality

You should know that **you can be assured of confidentiality and anonymity**. What this means is that the researcher will do everything she can to make sure that **no one can identify you from any of the information you provide** to this study, especially in the findings and final report that will be produced.

How will this happen? The researcher will use a pseudonym (a fake name) and/or may even omit the names of all persons, places, and any other information that could potentially be used to identify you. This will help to protect your privacy and that of your family.

You should also know that **the researcher will keep everything you tell her confidential**. However, there is one exception to this rule, and that would be in cases where an adolescent participant discusses or discloses something that makes the researcher seriously question her safety or welfare. Therefore, if you mention anything in the discussion with the researcher that makes her think you are seriously in danger, and/or are being abused, she will have to report those specific statements to a person of authority at the University. Please understand this is for your protection, health, and safety.

The researcher may also need to acquire the help of someone from outside of the University to help type-up the data collected in this study. Any person chosen for this purpose will understand that they must keep what they view completely confidential and not share this information with anyone else. These individuals, if they are consulted, will also be required to sign a document saying they will abide by these principles and keep the data safe and secure.

Protecting Your Data

All data and information collected from participants in this study will be kept in password protected files on the researcher's personal laptop. Five years after this study has been completed, all data will be completely destroyed.

What will Happen to the Results and Findings of this Study?

After the researcher has gathered data from participants, she will analyse it, and look for important insights and ideas. This information will then be complied into a written report (also known as a dissertation), that she will submit to the National University of Ireland Galway to complete her degree program. She may also share the findings of the written report in various types of publications, such as journals that would be read by other educators and other professionals who work to support persons with ADHD.

The sharing of this information is an important step, because the information contained in this study might be able to help young people and improve their lives. Remember though, **no matter how the information is shared or made available to the public, no one will be able to identify or associate you with this study.**

What Should You Do If You Have Any Questions?

If you have any questions or concerns at all about any aspect of this study or your participation in it, please feel free to contact the researcher, Andrea Lynch, at xxxxx@nuigalway.ie or at XXX-XXX-XXXX. Alternatively, you may contact my supervisor, Dr. Pat Eaton by email at xxxxxx@nuigalway.ie.

Thank you for taking the time to thoughtfully read this information sheet.

Appendix C: Young Participant Consent Form



Title of Project: *Examining attention-deficit hyperactivity disorder in adolescent females: manifestation, academic performance and social experience in Ireland*

Name of Researcher: Andrea Lynch

Declaration:

I ______ (participant's name) agree that the following is true:

Please tick as appropriate:

- **1.** As a participant in this study, I confirm that I have read through the information sheet. [YES] [NO]
- 2. As a participant in this study, I do understand the information contained in the information sheet and I have had enough time to consider whether or not I want to participate in this study. [YES] [NO]
- **3.** I was provided with contact details for the researcher of this study and was encouraged to ask any questions I may have. [YES] [NO]
- 4. My participation in this study is completely voluntary. [YES] [NO]
- 5. I understand that I may stop participating in this study at any time, and if I wish, I may also rejoin the study at a later time. [YES] [NO]
- 6. I agree to take part in this study of ADHD through the completion of an electronic questionnaire. [YES] [NO]
- 7. I agree to take part in this study of ADHD through the completion of a personal interview. [YES] [NO]
- 8. I agree for the personal interview to be audio recorded. [YES] [NO]

Signature of Participant:	Date:
Signature of Parent: (Where participant is under 18 years of	age)
	Date:
Signature of Researcher:	Date:
Preferred Transcript Pseudonym:	
Preferred Email Contact:	

Appendix D: Semi-Structured Interview Schedule for Young Participants

Begin by giving participant a brief intro on the topics I will ask them about: daily experiences, receiving a diagnosis, school experiences, social experiences and plans for the future.

Remind the participant that they do not have to answer any questions they are uncomfortable with. Simply say something like, "pass" or "I don't wish to answer this question."

Daily experiences

1. Can you tell me a bit about what your daily life is like? What is a typical day like for you?

Potential follow-up questions

- 2. What hobbies do you have?
- 3. What are some of your interests?
- 4. Are you involved in any special organisations or groups?
- 5. Do you participate in sports?
- 6. Did ADHD have an influence on your choice of activities to be involved in?
- 7. Did ADHD have an influence on your ability to participate in these types of activities?

Questions on receiving a diagnosis

8. I'm really curious as to how it came about that you received your diagnosis. What do you remember most about the process or steps leading up to diagnosis?

Potential follow-up questions

- 9. Who first realized that ADHD might be present in your life? Was it you, a parent, teacher, or someone else?
- 10. What were the first signs of ADHD that you saw in your life?
- 11. What were the next steps after this?
- 12. Did you have to see lots of different doctors? Did you understand why this was happening?
- 13. How did you feel initially about receiving a diagnosis?
- 14. Now that you've had the diagnosis for [state time period], how do you feel now about having this diagnosis?

Questions on school experience

15. Let's being the next part of our interview by having you describe your school to me. What is a typical school day like?

Potential follow-up questions

- 16. Is it co-educational or single-sex?
- 17. Approximately how many students go to your school?
- 18. How many different teachers do you have in total? How many teachers would you see in a day? Are your teachers mostly male or female?
- 19. When do your classes begin each day? What time do your classes end?
- 20. How many different lessons or classes do you have each day?
- 21. Is there anything you especially like or enjoy about your school day?
- 22. Is there anything you dislike about your school day?
- 23. When you think about your experience in secondary school overall, what feelings or thoughts immediately come to mind?

- 24. Are there any particular teaching strategies that your teachers used which made it easier for students to learn?
- 25. Has ADHD influenced or impacted your relationships with teachers? If so, how?
- 26. Do you feel that teachers have a good understanding of what ADHD is?
- 27. Do you think that teachers really understand how ADHD affects females in particular?
- 28. Do you think that most classroom teachers know how to help support students with ADHD if they need it?
- 29. Do you feel that teachers really try to help students with ADHD if they need it?
- 30. Do you feel that ADHD has affected your learning or academic achievement? If so, how?
- 31. At any point, did you ever develop any concerns about your learning and/or academic achievement?
- 32. Were there any aspects of teaching and learning in your school that you feel could have been changed for the better, especially for students with ADHD?
- 33. In Ireland, the school system can be very focused on exams & testing. Do you think this may have an impact on people with ADHD? If so, how?
- 34. When thinking about your experience in the Irish school system, are there any changes or suggestions that you'd like to make, based upon your experience?

Impact of ADHD on social experience

35. Did ADHD affect your experiences growing up, outside of school?

Potential follow-up questions

- 36. What memories stand out for you from your younger years?
- 37. Does ADHD influence your life now?
- 38. Has ADHD's influence in your life changed from when you were younger, as compared to now?
- 39. In your opinion, has ADHD affected your relationships with your friends and peers? (Especially those who don't have the condition). Do you think they see you differently/see you as being different?
- 40. Do you have any other friends with ADHD? If so, do you think this affects the quality of your relationship with them?
- 41. Do you think that ADHD has affected your relationship with any of your family members? [Parents, siblings, extended family].
- 42. Have any of your family members been diagnosed with ADHD?
- 43. Do you feel that this affects the quality of your relationship and/or interactions with them in any way?

Thinking about the Future

- 44. Do you have any plans for your life after secondary school? Would you mind sharing these with me?
 - a. [If the respondent answers "college"] What do you plan on studying? What drew you to this particular subject area? What career path would you like to take after college?
 - b. [If the respondent answers "work"] What drew/attracted/influenced you to enter this line of work or trade?

Potential follow-up questions

45. Did your diagnosis of ADHD influence any of your decisions or the direction in which you wanted to go?

46. Is there anything that particularly excites you the most about growing up and what the future may hold? Do you have any worries or concerns?

Closing Questions

- 47. Is there anything else you would like to talk about today or share with me?
- 48. Do you have any questions for me?
- 49. Do you have one last parting message or insight that you would like to share with others who might read this study about ADHD? If so, what it is?
 - a. Messages for teachers?
 - b. Messages for others, especially females, living with ADHD?

Appendix E: Online Questionnaire Schedule for Young Participants

For each question, please tick the response that most closely matches your feelings and opinions. In some cases, you will be asked to provide further explanation, if you wish. Your insights are greatly appreciated. Also, remember that the results of this survey are anonymous, and the researcher will not be able to directly identify or link you to your responses.

1) What is your age?

- () 13 () 14 () 15 () 16 () 17 () 18 () 19 () 20 2) What level are you in school? () First Year () Second Year () Third Year () Transition Year () Fifth Year () Sixth Year () I am in college () Other: _____ 3) Is your secondary school: () Co-educational () Single-sex 4) Please indicate the type of secondary school you attend (tick all that apply): [] Private [] Gaelcholáiste [] Secondary School [] Comprehensive School [] Community School [] Community College [] Vocational School
- [] Intensive Tuitioning (Grinds School)
- [] Home School

[] If not listed above, please specify the type of school you attend here: *

5) What strategies or interventions have you used as a result of your ADHD? Please tick all that apply including those you are currently on, as well as those you've used or tried in the past, even if you are no longer using them.

[] Medication

[] Individual Therapy/Counseling

[] Group Therapy/Counseling

[] Family Counseling

[] ADHD Support Group

[] Behavioural Training

[] Dietary Modifications

[] Social Skills Training

[] I have not used any strategies or interventions as a result of my ADHD

[] If not listed above, please note other strategies or interventions you have

used:_____

6) After you received the formal diagnosis, have you consulted further with any professionals to help in the management of your ADHD? Please tick all that apply:

[] General Practitioner (GP)/Family Doctor

[] Psychologist

[] Psychiatrist

[] Counsellor

[] ADHD Coach

[] I have not consulted further with any professionals.

[] If not listed above, please note the types of professionals you have consulted:

7) Have you met/do you know anyone else with a diagnosis of ADHD? Please tick all that apply:

[] Peers

[] Adults

[] Sister(s)/Step-sister(s)

[] Brother(s)/Step-brothers(s)

[] Mother

[] Father

[] Extended family members (such as aunts, uncles, cousins)

[] Younger children with ADHD

[] I've never met anyone else with ADHD

[] If not listed above, please note the other types of people with ADHD you have met:

8) How old were you when you received your formal diagnosis of ADHD (in years)? If you are unsure of the answer to this question, please state so.

*

9) From the time when professionals were first contacted about your experiences of ADHD symptoms, how many months or years did it take for you to receive a formal diagnosis? If you are unsure of the answer to this question, please state so.

10) What type of ADHD were you diagnosed with?

() Combined Type

() Hyperactive Type

() Inattentive Type

() I am unsure of the type of ADHD I was diagnosed with

11) In addition to ADHD, have you been diagnosed with any other behavioural conditions?

() Yes

() No

() I am unsure

A) Triggered by "yes" answer: If you wish, please briefly list the other behavioural conditions which you have been diagnosed with.

12) Do you feel that ADHD impacts your functioning in daily life?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Please explain how you feel ADHD impacts your daily life.

B) Triggered by "somewhat" answer: Please discuss how you feel ADHD somewhat impacts your functioning in daily life.

13) Are there any particular strategies, techniques, or devices that you use to help organize your day or week?

() Yes

() No

() I am unsure

A) Triggered by "yes" answer: Please briefly explain the particular strategies, techniques, or devices that you use to help organize your day or week.

14) In your opinion, do others without ADHD understand what life with the condition is like?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "no" answer: Please explain what you believe are the biggest misunderstandings that people have about life with ADHD.

B) Triggered by "somewhat" answer: Please explain why you believe people without ADHD "somewhat" understand what life with the condition is like.

15) Do you feel that ADHD is accepted in Ireland as a legitimate condition?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Speaking from your experience, what clues tell you that Irish society has accepted ADHD as a legitimate condition?

B) Triggered by "no" answer: Please briefly explain why you feel that Irish society does not accept ADHD as a legitimate condition.

C) Triggered by "somewhat" answer: Please briefly explain why you feel that ADHD is "somewhat" accepted as a legitimate condition in Ireland.

16) Have you ever felt rejected by others or discriminated against because of your ADHD?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Please describe the circumstances in which you've felt rejected or discriminated against because of your ADHD.

B) Triggered by "somewhat" answer: Please explain why you have felt somewhat rejected by others or discriminated against because of your ADHD.

17) Do you receive any support or services at school because of your ADHD diagnosis? Please tick all that apply:

[] Special Needs Assistant

[] Individualized Education Plan (IEP)

[] Resource Hours

[] Withdrawal Classes

[] School Counselling

[] I don't receive any support or special services at school

[] I am unaware of receiving any support or special services at school

[] If not listed above, please note here any of the supports or services you receive at school:

18) Do you use any particular strategies or techniques to help you study and learn?

() Yes

() No

() I am unsure

A) Triggered by "yes" answer: Please explain some of the strategies you personally use to help you study and learn.

19) Which of the following statements most accurately <u>describes your grades overall</u>, following your transition from primary to secondary school?

() My grades became better

() My grades remained about the same

() My grades became worse

20) As a student with ADHD, does your secondary school provide you with everything you need to succeed academically?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "no" answer: Please explain why you feel your school is not providing you with everything you need to succeed academically. What changes could be made to better support you?

B) Triggered by "somewhat" answer: Please explain why you feel your school is "somewhat" providing you with what you need to succeed academically. What changes could be made to better support you?

21) Outside of school, do you have a job? This can include either paid or volunteer work.

() Yes

() No

A) Triggered by "yes" answer: Do you feel that ADHD affects your work performance?

() Yes

() No

() Somewhat

() I am unsure

- A) Triggered by "yes" answer: Please briefly explain some of the ways in which you feel ADHD affects your work performance.
- B) Triggered by "somewhat" answer: Please briefly explain why you feel ADHD somewhat affects your work performance.

22) In your opinion, does being "female" affect the way that ADHD impacts you?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Please discuss some of the ways in which you feel being female affects the way that ADHD impacts you.

B) Triggered by "somewhat" answer: Please explain why you believe being female somewhat affects the way ADHD impacts you.

23) Are there any positive aspects of being a young woman diagnosed with ADHD?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Please explain the positive aspects of being a young woman with ADHD.

B) Triggered by "somewhat" answer: Please explain why you believe there are some positive aspects of being a young woman with ADHD.

24) Do you feel there are any challenges unique to being a young woman with ADHD?

() Yes

() No

() Somewhat

() I am unsure

A) Triggered by "yes" answer: Please discuss the challenges you feel are unique to being a young woman with ADHD.

B) Triggered by "somewhat": Please discuss some of the challenges you feel are unique to being a young woman with ADHD.

25) Have you ever met other women with ADHD?

() Yes

() No

() I am unsure

A) Triggered by "yes" answer: Can you think of any similarities between your experience of ADHD and that of other women? If no, please state so.

B) Triggered by "yes" answer: Can you think of any differences between your experience of ADHD and that of other women? If no, please state so.

26) Have you ever met other males with ADHD?

() Yes

() No

() I am unsure

A) Triggered by "yes" answer: Can you think of any similarities between your experience of ADHD and that of other males? If no, please state so.

B) Triggered by "yes" answer: Can you think of any differences between your experience of ADHD and that of other males? If no, please state so.

27) Is there anything else that you would like to share about life with ADHD? If so, please do so here. If not, please click on the "submit" button at the bottom of the screen.

Thank You!

Appendix F: Online Questionnaire Information Sheet for Teacher Participants⁴⁹



Thank you for your interest in completing this online questionnaire and assisting in developing our understanding of Attention Deficit Hyperactivity Disorder (ADHD) and secondary education in Ireland.

This research questionnaire is geared towards educators with knowledge of ADHD or experience teaching male and/or female students with ADHD, even if only minimal.

To access the questionnaire, you must complete the following steps:

- 1. Click on the "Next" button at the bottom of the screen. This will take you to the Study Information Sheet.
- 2. Once you have read this sheet, you will again click the "Next" button at the bottom of the screen and be taken to the Informed Consent Declaration.
- 3. Once the questions on the Informed Consent Declaration are ticked appropriately, please press the "Next" button at the bottom of the screen and the survey will begin.
- 4. You can take as much time as you need to complete the questionnaire.
- 5. <u>You can also save and continue this survey later by clicking on the "save and continue later"</u> banner at the top of the screen. You will be asked to supply your email to continue the survey at a later time. <u>Your email will not be forwarded</u> to the researcher and will be kept entirely confidential.

Study Information Sheet

Please read through the following information which outlines the aspects of this study that are important for you to understand. Once you have done so, if you still wish to participate, press the "Next" button at the bottom of your screen and you will be taken to the informed consent declaration.

Title of this Study

Examining attention deficit hyperactivity disorder: manifestation, academic performance and social experience in Ireland

Primary Researcher

Andrea Lynch PhD Student National University of Ireland Galway xxxxxx@nuigalway.ie XXX-XXX-XXXX

⁴⁹ Included at the start of the fully-electronic survey.

Aims of this Research Project

This research project will explore the ways in which ADHD impacts the academic and social experiences of adolescents through the use of interviews and electronic surveys. Additionally, this project will also closely examine the experiences, insights, and informed opinions of second-level educators who teach and support students with ADHD in their classrooms.

How Data will be Gathered

Research with teacher participants will take place via an electronic questionnaire that will take approximately 15 minutes of your time to complete.

The researcher of this project is also <u>inviting all participants to consider participating in a personal</u> <u>interview</u> that will expand upon the topics discussed in the electronic questionnaire. The interview should take approximately 45-60 minutes to complete, and can be held at a location, date, and time of your choosing. If you are interested in this opportunity, please directly contact the primary researcher, Andrea Lynch, at xxxxx@nuigalway.ie.

What the Survey Will Ask You About

This questionnaire will begin by collecting some basic demographic information related to you and the school in which you teach. Additionally, you will be asked about the following topics as they relate to ADHD: your teacher training, classroom strategies and interventions, communication in the school and with parents/guardians, and your opinions regarding ADHD and its influence on the classroom & the students diagnosed with this condition.

Foreseeable Risks and Consequences of Participation

The foreseeable negative risks associated with participation in this study are minimal. However, this questionnaire will ask you to reflect upon your own opinions and praxis as it relates to the teaching of students with ADHD. Should reflection and thought about these areas lead to personal discomfort or distress, please contact the researcher immediately and you will be provided with a list of counselling and ADHD support groups, who may be of further assistance to you.

Possible Benefits from this Research

There are a number of possible benefits that you and others affected by ADHD may derive from this research:

- 1. This is an opportunity for you to critically reflect upon your experience of working with students with ADHD and to have your valuable insights and opinions included in research that has the potential to positively help students and teachers here in Ireland.
- 2. By participating in this study, you will have made an important contribution to an area that lacks serious consideration in Ireland.
- 3. You have the assurance that you are helping to advance our understanding of educational provision for adolescents with ADHD in Ireland.
- 4. The insights derived from your participation could help lead to greater understanding and awareness of the particular needs and challenges faced by educators in supporting students with ADHD.

Your Rights Within this Study

Your participation in this study is completely voluntary and you have the right to refuse or cease participation at any time. You may also re-join at a later date if you so choose. While completing the questionnaire, you may skip any questions that you do not wish to answer.

Data Protection

Your participation is entirely confidential and anonymous. No individuals or educational institutions can be identified or traced as a result of completing this survey. All data from this study will be kept in password protected files on the researcher's personal laptop. Following a five-year period after the completion of this project, all data collected from these questionnaires will be destroyed.

How the Results of this Study Will be Communicated

The results of this study will be communicated in the researcher's PhD dissertation as a requirement of the doctoral program at NUI-Galway. Additionally, the results of this study may be disseminated in scholarly and professional journals, at educational conferences, and to organizations and other interested persons who support students with ADHD in Ireland and further afield.

Researcher Contact Details

Thank you for reading through this information. If you have any questions or concerns about any aspect of this study, or if you would like to participate in a personal interview, please feel free to contact the researcher, Andrea Lynch, by email at xxxxx@nuigalway.ie or at XXX-XXX-XXXX.

Appendix G: Online Questionnaire Informed Consent Sheet for Teachers⁵⁰



Please answer each of the following questions as appropriate.

By ticking "YES" to the following questions you are affirming your desire to participate in this study, as well as your understanding of all that is contained in the Study Information Sheet.

Once this is completed, the electronic questionnaire will automatically begin.

- **1.** I confirm that I understand the information contained in the study information sheet. [YES] [NO]
- 2. I certify that my participation in this study is completely voluntary. I understand that I can cease participation at any point, and I can re-join the study at a later date if I so choose. [YES] [NO]
- 3. I agree to take part in this study via completion of the electronic survey. [YES] [NO]

⁵⁰ Included at the start of the online questionnaire.

Appendix H: Online Questionnaire Schedule for Teacher Participants
1) What is your gender? () Male
() Female
2) What is the highest educational award you have received? () Bachelors (BA)
() Postgraduate Certificate
() Postgraduate Diploma
() Masters (MA)
() Doctorate (PhD)
() Other:*
3) How many years of work experience do you have in secondary schools?
() 0-5 years
() 6-10 years
() 11-15 years
() 16-20 years
() 21-25 years
() 26 or more years
4) Please tick the type of school you are presently employed in:
[] National School
[] Gaelcholáiste
[] Fee Paying
[] Comprehensive
[] Community School
[] Grind School
[] Community College
[] Vocational School
[] Secondary School
[] Other:*
5) Is the school that you are presently employed in:
[] Co-educational

[] Single-sex female

[] Single-sex male

6) What is your present role within your school?	
[] Mainstream Classroom Teacher	
[] Support Teacher	
[] Resource Teacher	
[] Pastoral Head	
[] Home-School Liaison	
[] Guidance Counsellor	
[] Other:	*
7) Which of the following best describes the setting in which you w	ork or teach?
[] Mainstream Classroom	
[] Withdrawal Groups	
[] Special Educational Needs Classroom	

[] Other. Please explain here: ______

8) If you are responsible for teaching a specific subject(s), please list them here. Otherwise, please proceed to the next question.

*

9) Have you ever worked with or taught a student with a formal diagnosis of ADHD?

- () Yes
- () No
- () I am unsure

10) Do you presently work with or teach any students with a formal diagnosis of ADHD?

- () Yes
- () No

() I am unsure

11) How many of your current students have a formal diagnosis of ADHD?

- () 1-3
- () 4-6
- () 7-9
- () 10 or more
- () To my knowledge, none of my current students have a formal diagnosis of ADHD
- () I am unsure

12) Do you feel that your initial teacher education prepared you for working with students with ADHD?

() Yes

() No

A) A "yes" response triggered: If you wish, please briefly explain how your initial teacher education prepared you for working with students with ADHD.

B) A "no" response triggered: If you wish, please briefly explain why you feel that your initial teacher education did not prepare you for working with students with ADHD.

13) Have you engaged in any Continuing Professional Development (CPD) that was helpful for working with students with ADHD?

() Yes

() No

A) A "yes" response triggered: If you wish, please briefly discuss which aspects of ADHD and/or teaching students with ADHD were covered in your CPD?

14) Do you feel that students with ADHD impact the climate of the classroom?

() Yes

() No

() To some extent

A) A "yes" response triggered: If you wish, please discuss the way(s) in which you feel students with ADHD impact the climate of the classroom.

B) A "to some extent" response triggered: If you wish, please briefly explain your above answer.

15) Have you encountered any particular challenges in working with students with ADHD?

() Yes

() No

() To Some Extent

A) A "yes" response triggered: If you wish, please briefly explain some of the particular challenges you've encountered in teaching or working with students with ADHD.

B) A "to some extent" answer triggered: If you wish, please briefly explain your above answer.

16) In your experience, have you:

() Taught more boys with ADHD than girls with the condition

() Taught more girls with ADHD than boys with the condition

() Taught girls and boys with ADHD in equal numbers

17) In your opinion, can ADHD influence the academic achievement of students affected by this condition?

() Yes

() No

() To Some Extent

A) A "yes" answer triggered: If you wish, please briefly explain the most significant ways in which you believe ADHD can affect the academic achievement of students.

B) A "to some extent" answer triggered: If you wish, please explain your above answer.

18) Which of the following statements most accurately describes your beliefs about the academic impact of ADHD on boys and girls:

() ADHD more greatly affects boys academically

() ADHD more greatly affects girls academically

() ADHD equally affects girls and boys academically

() ADHD does not affect boys and girls academically

19) Have you noticed any behavioural differences between boys and girls with ADHD?

() Yes

() No

() To Some Extent

A) A "yes" answer triggered: If you wish, please discuss the behavioural differences you've seen between boys and girls with ADHD.

B) A "to some extent" answer triggered: If you wish, please explain your above answer.

20) Have you found any teaching strategies to be particularly helpful or effective in supporting students with ADHD?

() Yes

() No

A) A "yes" answer triggered: If you wish, please briefly provide some examples of strategies that you have found to be effective or helpful in supporting students with ADHD.

21) As an educator, do you believe you have any particular responsibilities towards students with ADHD in your classroom or care?

() Yes

() No

() To Some Extent

A) A "yes" answer triggered: If you wish, please briefly explain the particular responsibilities you feel you have towards students with ADHD in your classroom or care.

B) A "to some extent" answer triggered: If you wish, please briefly explain your above answer.

22) As an educator, do you feel that your current school of employment provides you with the required supports to properly teach and assist students with ADHD?

() Yes

() No

() To Some Extent

A) A "yes" answer triggered: If you wish, please briefly discuss some of the supports your school provides that enable you to properly teach and assist students with ADHD.

B) A "no" answer triggered: If you wish, please explain why you feel your school <u>does not</u> <u>provide you</u> with the supports necessary to teach and assist students with ADHD.

C) A "to some extent" answer triggered: If you wish, please explain why you feel your school, <u>to some extent</u>, provides you with the required supports to properly teach and assist students with ADHD.

23) If finances were not an issue, are there any resources, training or supports (that you do not currently have access to) that you feel would enable you to better support students with ADHD?

() Yes

() No

A) A "yes" answer triggered: If you wish, please briefly provide some examples of the resources, training or supports that you feel would enable you to better support students with ADHD, if you had access to them.

B) A "no" answered triggered: Please briefly explain your above answer here.

24) Beyond the standard report card, is there a formal system in your school for monitoring the progress and growth of students with special needs?

() Yes

() No

() I don't know

A) A "yes" answer triggered: If you wish, please briefly explain how the system in your school operates for monitoring the progress and growth of students with special needs.

25) Is there a system in your school for providing you with information about the special needs of students in your classroom or direct care, for example, such as students with ADHD?

() Yes

() No

() I am unsure

A) A "yes" answer triggered: If you wish, please briefly explain how the communication system in your school functions in terms of relaying information about the special needs of students in your classroom or care.

26) Do you communicate with your colleagues in school regarding the needs and/or progress of students with ADHD?

() Yes

() No

() To Some Extent

27) Please rate the quality of communication that takes place between you and your colleagues regarding the needs of students with ADHD.

() Extremely Poor

() Below Average

() Average

() Above Average

() Excellent

() Other. Please briefly explain here:______

A) Any of the above answers triggered: If you wish, please briefly explain your above answer.

28) Have you encountered any challenges in communicating with others (including parents and colleagues) regarding the needs of students with ADHD?

() Yes

() No

() To Some Extent

A) A "yes" answer triggered: If you wish, please discuss the particular challenges you've encountered in trying to communicate with others regarding the needs of students with ADHD.

B) A "to some extent" answer triggered: If you wish, please briefly explain your above answer.

29) As the researcher of this project, I am very interested in the opinions and insights of teachers regarding the general topic of ADHD & teaching students with this condition. Is there anything else that you wish to express about these topics, or clarify about your answers that you feel would be helpful to this study? If so, please feel free to share your thoughts. Thank You!

Appendix I: "For Fun" Quiz on ADHD for Teacher Participants

This for fun quiz was voluntary in nature and was aimed at educating participants in relation to ADHD, while also combatting stereotypes and common misperceptions regarding the condition. The quiz consisted of 9 questions, each true or false, and access was granted to participants only after they had completed and submitted their answers to the online questionnaire.

1. Scientists do not know the exact causes of ADHD

- a. A "true" answer triggered: Correct! At the present time, scientists have not yet identified a single cause for ADHD, but many theories link causation back to genetics as well as brain structure and function.
- b. A "false" answer triggered: Actually, at the present time, scientists have not yet identified a single cause for ADHD, but many theories link causation back to genetics as well as brain structure and function.

2. Children in single-parent families are more likely to be diagnosed with ADHD than those in two-parent households.

- a. A "true" answer triggered: Actually, children from single-parent families are just as likely as those from two-parent households to be diagnosed with ADHD. However, studies do suggest that children with ADHD are more likely to come from families with lower socio-economic status, higher levels of marital discord, stressful living situations, and low levels of support. While it is unlikely that these factors cause ADHD, they may contribute to the course and maintenance of the condition.
- b. A "false" answer triggered: Correct! Children from single-parent families are just as likely as those from two-parent households to be diagnosed with ADHD. However, studies do suggest that children with ADHD are more likely to come from families with lower socio-economic status, higher levels of marital discord, stressful living situations, and low levels of support. While it is unlikely that these factors cause ADHD, they may contribute to the course and maintenance of the condition.

3. A child can have ADHD and not be hyperactive.

- a. A "true" answer triggered: Correct! There are 3 subtypes of ADHD, and of these three types, the Inattentive-Type shows minimal signs of hyperactivity. In comparison, the Combined-Type of ADHD includes characteristics of both inattention and hyperactivity-impulsivity, while the Hyperactive-Type of ADHD mainly shows characteristics of hyperactivity-impulsivity.
- **b.** A "false" answer triggered: Actually, there are 3 subtypes of ADHD, and of these three types, the Inattentive-Type shows minimal signs of hyperactivity. In comparison, the Combined-Type of ADHD includes characteristics of both inattention and hyperactivity-impulsivity, while the Hyperactive-Type of ADHD mainly shows characteristics of hyperactivity-impulsivity.

- 4. The majority of children diagnosed with ADHD will largely outgrow this condition by the time they enter second-level schooling.
 - a. A "true" answer triggered: Actually, research studies have shown that ADHD is a chronic condition that is often lifelong. Therefore, a large proportion of persons affected by childhood ADHD will experience continued symptoms and effects well into adulthood.
 - b. A "false" answer triggered: Correct! Research studies have shown that ADHD is a chronic condition that is often lifelong. Therefore, a large proportion of persons affected by childhood ADHD will experience continued symptoms and effects well into adulthood.

5. Stimulant medication is the type of medicine most commonly prescribed for persons with ADHD.

- a. A "true" answer triggered: Correct! Stimulant medications such as Ritalin and Adderall are commonly prescribed for ADHD. However, non-stimulants such as Strattera, have also been developed as an alternative. Additionally, Anti-Depressants and Anti-Hypertensives (typically prescribed for high blood pressure), have also been used to treat the symptoms of ADHD.
- b. A "false" answer triggered: Actually, stimulants such as Ritalin and Adderall are commonly prescribed for ADHD. However, non-stimulants such as Strattera have also been developed as an alternative. Additionally, Anti-Depressants and Anti-Hypertensives (typically prescribed for high blood pressure), have also been used to treat the symptoms of ADHD.

6. ADHD "looks" or displays the same in boys and girls.

- a. A "true" answer triggered: Actually, boys and girls may display their ADHD in very different ways. Typically, boys are more likely to display the Combined-Type of ADHD with symptoms of hyperactivity-impulsivity and inattention. Boys are also much more likely to externalize their behaviors. In comparison, girls are more likely to display the Inattentive-Type of ADHD, with symptoms of inattention and daydreaming. Too, girls are more likely to internalize their symptoms, and are less likely to be hyperactive. Therefore, identification of girls with ADHD can sometimes be difficult to spot.
- b. A "false" answer triggered: Correct! Boys and girls may display their ADHD in very different ways. Typically, boys are more likely to display the Combined-Type of ADHD with symptoms of hyperactivity-impulsivity and inattention. Boys are also much more likely to externalize their behaviors. In comparison, girls are more likely to display the Inattentive-Type of ADHD, with symptoms of inattention and daydreaming. Too, girls are more likely to internalize their symptoms, and are less likely to be hyperactive. Therefore, identification of girls with ADHD can sometimes be difficult to spot.

7. On average, students with ADHD have lower IQs than students who do not have ADHD.

a. A "true" answer triggered: Actually, boys and girls with ADHD are often just as bright and intelligent as their non-ADHD peers. However, it is not uncommon for students with ADHD to score much lower than IQ tests and other measures of intelligence would predict.

- b. A "false" answer triggered: Correct! Boys and girls with ADHD are often just as bright and intelligent as their non-ADHD peers. However, it is not uncommon for students with ADHD to score much lower than IQ tests and other measures of intelligence would predict.
- 8. Once the symptoms of ADHD have been treated and are under control, a student may still have trouble academically due to gaps in their previous learning.
 - a. A "true" answer triggered: Correct! While medications often have a direct impact on the symptoms of ADHD, students with the condition will still commonly require additional support to help address any existing academic skills deficits they may have.
 - b. A "false" answer triggered: While medications often have a direct impact on the symptoms of ADHD, students with the condition will still commonly require additional support to help address any existing academic skills deficits they may have.
- 9. Students with ADHD commonly need separate behavioural and social supports, accompanied with academic supports.
 - a. A "true" answer triggered: Correct! Students with ADHD often require separate interventions and supports that address issues they may be experiencing academically, socially, or even behaviourally. The challenge for educators is to figure out what works for each student on an individual basis.
 - b. A "false" answer triggered: Students with ADHD often require separate interventions and supports that address issues they may be experiencing academically, socially, or even behaviourally. The challenge for educators is to figure out what works for each student on an individual basis.

Pass Message: You passed! Your score was [numerical score] %, well done! Hopefully this quiz has spurred your interest in further learning about ADHD! If you would like to learn more about ADHD in the Irish context, please feel free to visit the website of HADD Ireland where you will find more information on diagnosis, treatment, teacher tips, and further resources. You can access their website at http://hadd.ie.

Fail Message: Sorry. You didn't pass the quiz. You got [number of] questions right out of 9 (score %). Thanks for trying! Hopefully this quiz has spurred your interest in further learning about ADHD! If you would like to learn more about ADHD in the Irish context, please feel free to visit the website of HADD Ireland where you will find more information on diagnosis, treatment, teacher tips, and further resources. You can access their website at http://hadd.ie.

Appendix J: Sample Email Correspondence to Schools

Dear Principal [Last Name of Principal] & Teaching Staff at [Name of School]:

Hello, my name is Andrea Lynch and I am a doctoral student in the School of Education at the National University of Ireland Galway.

I am presently conducting a study of ADHD in adolescents, and part of this study includes examination of the insights and opinions of secondary school teachers in relation to teaching students with this condition. This project also represents an opportunity for second-level teachers to make contributions to an area of research that has been sorely neglected in Ireland.

Below you will find a link to the online questionnaire I have created for secondary school teachers who wish to participate in this study. The online questionnaire is entirely confidential and anonymous and should take approximately 20 minutes to complete.

I am asking that you forward this email to your teaching staff so they may consider participating in this research project.

If you, or any members of your staff have questions or would like to speak to me directly about this research, please contact me at xxxxx@nuigalway.ie or you may reach me at XXX-XXX-XXXX.

I thank you in advance for your support of this educational research.

To access the online questionnaire, please click on the following link:

http://edu.surveygizmo.com/s3/1513512/Teacher-Online-Questionnaire

Sincerely,

Andrea Lynch Doctoral Student National University of Ireland Galway School of Education xxxxxx@nuigalway.ie XXX-XXX-XXXX

Appendix K: Semi-Structured Interview Information Sheet for Teacher Participants



Dear Research Participant:

I ask you to please read through the following document which outlines the various aspects of this study that are important for you to know and understand.

After reading through this information if you are still interested in participating via a personal interview, you will be asked to sign the consent form which you will find at the end of this document.

Title of This Study

Examining attention-deficit hyperactivity disorder in young women: manifestation, academic performance and social experience in Ireland

Primary Researcher

Andrea Lynch PhD Student School of Education National University of Ireland Galway xxxxx@nuigalway.ie XXX-XXX-XXXX

Aims of this Research Project

This research project will explore the ways in which ADHD affects the lives of young women by examining manifestation characteristics and the influence of this condition on their academic performance and social experiences. This project will work very closely with young women with a formal diagnosis of ADHD and will involve them in interviews and an online questionnaire to elicit their views and opinions.

This project also aims to look closely at the experiences and knowledge of second-level educators regarding the teaching and supporting of students with ADHD in their classrooms. You have been invited to participate in this study because you are a professional educator in an Irish secondary school.

How Data will be Gathered

As a teacher participant, your research data will be collected via a semi-structured personal interview. The personal interview will take approximately 45-60 minutes of your time to complete and consists of open-ended questions. The interview will take place at a location of your choosing, or on the campus of the National University of Ireland Galway, if you so wish.

The content of the questions asked in this interview will pertain to the following areas:

• Basic demographic information about yourself as a teacher & the school setting in which you teach.

- Discussion on your initial teacher education and preparation for working with students with ADHD.
- Your views, opinions, and experiences of teaching students with ADHD.
- Classroom strategies and educational supports for students with ADHD.
- Opinions regarding ADHD and its potential impact in the school setting.
- The support of second-level teachers in working with students with ADHD.
- Communication (at a school level and with parents) regarding the needs of students with ADHD.

The researcher may also use the interview as a chance to further explore and follow-up on any interesting trends or points that surface in the data collected from the electronic questionnaire which has been sent to all schools in Ireland.

Audio Recording of the Interview

It is the intent of the researcher to **audio record** the interview. The researcher wishes to audio record the interviews for the following reasons:

- 1. It provides the researcher freedom to focus on entering into active conversation with participants.
- 2. It allows the researcher to be sensitive to the particular needs and feelings that participants may be communicating.
- 3. Audio recording also allows for more accurate transcription of the discussion that took place, thus ensuring that your views are correctly represented in the data.

The above benefits of audio recording will ultimately allow for a more authentic, accurate, and valid record and analysis of the interview to take place, thus preserving the integrity of the views, feelings, opinions, and experiences of participants.

If you are uncomfortable with being audio recorded, please let the researcher know and written notes will be taken of the interview proceedings.

Foreseeable Risks and Consequences of Participation in this Study

The foreseeable negative risks associated with participation in this study are minimal. However, prior to participating you should consider that this interview will ask you to reflect upon your own opinions in relation to the teaching of students with ADHD, while also asking you to provide information regarding the provisions and supports that are offered in your school, and particularly in your classroom for students with this condition. Should reflection and thought about these areas lead to personal discomfort or distress please let the researcher know immediately and you will be provided with a list of counselling and ADHD support groups who may be of further assistance to you.

Possible Benefits from this Research

There are a number of possible benefits that you, along with persons affected by ADHD, may derive from this research project, such as the following:

1. By participating in this study, you will have the opportunity to critically reflect upon your teacher training, current practice, professional experience teaching students with ADHD, and the school where you work and the students you teach.

- 2. You have the assurance of knowing you have contributed to an area that lacks serious study in the Irish context and are helping to advance our understanding of educational provision for adolescents with ADHD in Ireland.
- 3. The insights derived from your participation could lead to greater understanding of the particular needs and challenges faced by educators in supporting students with ADHD. This study also represents an opportunity to have your opinions included in research that has the potential to benefit students and teachers here in Ireland.

Your Rights within this Study

As a participant in this study, your association is completely voluntary and you have **the right to refuse** participation **or to withdraw from this study at any time** with no penalty or prejudice. You may also **re-join at a later date** if you so choose.

During the interview, you may answer the questions asked as fully as you would like. You may also refuse to answer any questions that you do not wish to speak about. You may also ask the researcher any questions that you wish.

If at any time you wish to withdraw from this study, simply notify the researcher in written form.

Confidentiality

The researcher of this project believes that it is important at all times to ensure the confidentiality of participants' identities, as well as those of the educational institutions in which they work, and the students they teach. Additionally, any information you share in this interview will be kept strictly confidential. The researcher will also take the following steps to protect your privacy:

- 1. Within the interview transcripts, random pseudonyms will be used in place of real names to protect the identity of participants—this includes any names of persons or places that are disclosed.
- 2. When necessary, identifying and/or key characteristics of personal stories will be changed or omitted entirely to protect the identity of participants when it is possible to do so without altering the integrity of the data collected.
- 3. Participants will also have the opportunity to review and freely amend the transcript of their personal interview, which includes clarifying, adding to, or deleting portions of the transcript.

Data Protection

Data collected from this study will be kept in password protected files on the researcher's personal laptop. Following a five-year period after the completion of this project, all data collected from these questionnaires will be destroyed.

How the Results of this Study will be Communicated

The results of this study will be communicated in my dissertation as a requirement of the doctoral program at NUIG. Additionally, the results of this study may be disseminated in scholarly and professional journals, at educational conferences, and to organizations and other interested persons who support students with ADHD.

If You Have Any Questions

Thank you for reading through this information. If you have any questions or concerns about any aspect of this study, please feel free to contact the researcher, Andrea Lynch, by email at xxxxx@nuigalway.ie, or you may reach me personally at XXX-XXX-XXXX.

Appendix L: Semi-Structured Interview Informed Consent for Teacher Participants



Please tick as appropriate. By ticking "YES" to the following four questions, you are affirming your desire to participate in this study and your understanding of all that is contained in this information sheet.

- 1. I confirm that I understand the information contained in these documents and I have had enough time to consider my participation in this study. [YES] [NO]
- 2. I confirm that I was provided with contact details for the primary researcher of this study and was encouraged to ask any questions I may have. [YES] [NO]
- 3. I certify that my participation in this study is completely voluntary and I understand that I may withdraw from this study at any time without penalty or prejudice. I also understand that I may re-join the study at a later date, if I so choose. [YES] [NO]
- 4. I agree to take part in this study via completion of a personal interview. [YES] [NO]
- 5. I agree to allow the personal interview to be audio recorded. [YES] [NO]

Signature of Teacher Participant:	Date:
Signature of Researcher:	Date:
Preferred Pseudonym:	
Preferred Contact for Sending of Transcript:	

*Note: If participant does not contact the researcher within 1 month of receiving the interview transcript for review, the researcher will assume it is appropriate to use the transcript in its original form.

Appendix M: Semi-Structured Interview Schedule for Teacher Participants

Yourself as an Educator

- 1. How many years of teaching experience do you have?
- 2. What is your professional role in the school? (Example: Mainstream classroom teacher, special needs educator, resource teacher).
- 3. What grade levels do you work with?
- 4. If classroom teacher: what subjects do you teach?
- 5. If special needs or resource:
 - a. Can you tell me a little bit about the populations you work with? Age ranges, what types of conditions they might have?
 - b. How many of the students you work with would specifically be diagnosed with ADHD?
 - c. How many of the students in your school would have ADHD?

About the School Where You Work

- 6. What is the approximate size of the student population at your school?
- 7. How diverse is the student population of your school when it comes to special educational learning needs? What are some of the special needs challenges that affect students in your school/class?
- 8. Can you tell me a bit more about the demographics of your school staff?
- 9. Can you tell me a bit more about the demographics of the students at your school?
- 10. Are there any other characteristics you would you like to share about your school?

What is a Typical Teaching Day Like for You?

- 11. On average, how many students would you be responsible for teaching in one day?
- 12. What percentage of students in your classroom (students who receive direct instruction from you) would have diagnosed special educational needs?
- 13. Have you taught any students with ADHD in the past? Approximately how many students with ADHD have you taught in your experience?
- 14. Do you presently teach students with a formal diagnosis of ADHD? If so, how many?

Teacher Training

- 15. Do you feel that your initial teacher training prepared you for working with students with ADHD?
- 16. Do you remember learning anything specifically about ADHD from your initial classes? If so, what? Facts, statistics, etc.
- 17. Did your initial teacher training provide you with, or suggest the use of any particular teaching strategies or interventions for students with ADHD?
- 18. Did your initial training prepare you for working with other special needs? If so, which conditions were focused on in your training?
- 19. Have you undertaken further studies in the field of SEN since your B.A., H.Dip.? If so, which courses have you taken?
- 20. In your Continuing Professional Development, has the topic of ADHD ever been addressed? If so, what aspects of ADHD were discussed?
- 21. Have you ever seen any teacher training offerings that were specifically focused on ADHD?

Views and Experiences of Teaching Students with ADHD

- 22. When you hear the term "ADHD," what images or associations come to mind?
- 23. It has been said that many students with ADHD often encounter difficulties, especially when they transition from primary school to secondary school. Have you seen this to be true? If so, what particular difficulties have you seen students with ADHD encounter in secondary school?
- 24. In your opinion, do students with ADHD change or influence the overall climate of the classroom? If so, how?
- 25. Have you found students with ADHD to be challenging in the classroom? If so:
 - a. What are the biggest challenges of having a student with ADHD in the classroom for you as the teacher?
 - b. What are the biggest challenges that face the student with ADHD in the classroom?
 - c. What are the biggest challenges of having a student with ADHD in the classroom for the other students in the class?
 - d. Are there any positive aspects that students with ADHD can bring to the classroom?
- 26. Have you tried to use any specific strategies or interventions in working with and supporting students with ADHD in your classroom? If so, which ones have you used in the past?
- 27. In your opinion, what strategies have you found most helpful in supporting students with ADHD:
 - a. In terms of behaviour?
 - b. In terms of emotional support?
 - c. In terms of learning and academic performance?
 - d. In terms of their social relationships?
- 28. In Ireland, the school system can be highly focused on standardized testing. Do you feel this presents any particular challenges for students with ADHD?
- 29. Can you think of any changes you might suggest to the school system in Ireland that would make it more supportive of students with ADHD?

Gender Differences in Students with ADHD

- 30. Have you taught any males with ADHD?
- 31. Have you taught any females with ADHD?
- 32. Have you noticed any differences between girls with ADHD as compared to boys with ADHD? If so, what have you noticed?

Supports for Students with ADHD

- 33. From what you have seen in your experience, are there any educational supports or accommodations available for students with ADHD in your school? If so, please explain. (For example: resource hours, extended time on tests, withdraw for test taking, etc.)
- 34. To your knowledge, are there any behavioural supports offered/available in your school for students with ADHD? If so, please explain.
- 35. Have you ever witnessed students with diagnosed ADHD struggling to gain access to the supports they need? If so, what was the main issue that prevented them from getting the support they required or had rights to?

Supports for Teachers of Students with ADHD

36. Does your school offer any supports to help you in the teaching of students with ADHD or special needs? If so, what are they? If no, what do you feel you are missing? What more could your school provide?

- 37. In your opinion, does the Irish school system support second-level students with ADHD properly? If not, what more could be done? Or what changes could be made?
- 38. Is there anything you'd like to change in your school that would make it easier for you to teach students with ADHD?
- 39. If money wasn't an issue, or if you could wave a "magic wand," what resources or support would best help you as a teacher of students with ADHD? Why do you feel these resources would help you?

Communicating with Others

- 40. Is there a formalized system in your school for communicating to teachers the needs of the students in their classroom, especially if they have diagnosed conditions such as ADHD? If so how does this system operate?
- 41. Does the staff at your school ever come together to specifically discuss the progress of students with special needs, such as ADHD?
- 42. Can you think of any suggestions you could make to improve the quality of communication that takes place within your school regarding the needs of students with ADHD, and the needs of their teachers?
- 43. Do you communicate regularly with the parents of students with ADHD? Have you encountered any particular difficulties in trying to communicate with the parents of students with ADHD?
- 44. Can you think of any suggestions you could make to improve the quality of communication that takes place between teachers and parents of students with ADHD? If so, what would they be?

Parting Messages

- 45. If you could express a few last parting messages, what would you want others to know or understand about teaching students with ADHD?
- 46. Do you have any questions for me?

Appendix N: Press Release/Advertisement

Views and Opinions of Young Women Living with ADHD & Second-Level Teachers Are Required for Research Study

Thursday, 17 July 2014

The School of Education at NUI Galway is currently seeking young women ages 14-20 with a formal diagnosis of ADHD to participate in a study examining the impact of ADHD on their educational and social experiences. This study is open to participants living in any geographical region of the Republic of Ireland.

Participants will be asked to provide their opinions and insights regarding how ADHD affects their daily lives, academic performance and achievement, and their relationships with others. Participants are asked to complete 1 personal interview and 1 online questionnaire. Participants need not travel to NUI-Galway, as the researcher will travel to a location of their choosing.

This project represents an important advancement in ADHD research because very few studies of ADHD have taken place in Ireland, and fewer yet have considered the impact that ADHD has in the lives of young women. As the primary researcher of this project, Andrea Lynch remarks, "We do a lot of talking 'about' people with ADHD, and yet, very little communication takes place 'with people' affected by ADHD. This study represents an important chance for young women living with the condition to have their voices and opinions heard, and to help others understand what it is truly like to live as a young woman with ADHD in the Irish context."

Additionally, this study is seeking the insights of second-level teachers who have some experience supporting students with ADHD in the classroom. This study represents a chance for teachers to reflect critically on their own educational preparation for working with students with ADHD, as well as their own praxis, and ways in which classroom inclusion for second-level students with ADHD could be increased. Teachers are asked to complete 1 online questionnaire. Teachers are also asked to consider completing 1 personal interview that can be held at a time and location of their choosing.

"This study also represents a chance for teachers to reflect upon their experiences of teaching students with ADHD, and is an opportunity for them to express their opinions regarding the particular needs of second-level educators in supporting students with ADHD, and ways in which educational provision for students with this condition could be improved for this population," says researcher Andrea Lynch.

Those interested in participating in this study should contact researcher Andrea Lynch at xxxxx@nuigalway.ie or at XXX-XXXXXXXXX.

-ENDS-

Notes to editors:

Background

Attention-deficit hyperactivity disorder (ADHD) is a neurodevelopmental condition typically characterized by symptomatic expressions of hyperactivity, impulsivity, and inattention. While this disorder is controversial and often contested in the research literature, proponents argue that its impact can be chronic and lifelong, significantly influencing and even limiting the functioning of individuals across multiple domains including their mental and physical health, academic performance and achievement, career and professional progression, and their interpersonal relationships. Within Ireland, statistics estimate that approximately 6,000 to 31,000 people between 15 to 24 years of age

are affected by ADHD. Despite this level of statistical significance, ADHD has traditionally been studied in young males in the clinical setting. The resulting body of research knowledge therefore contains a strongly male bias and largely ignores the specific needs and challenges of young women. Especially within the Irish context, the voice and experiences of young women living with ADHD are nearly silent and unknown as research on this condition in Ireland has been sparse. Additionally, ADHD is rarely mention in the literature on Irish schooling and educational provision, despite the fact that the Department of Education and Skills clearly argues that the Irish educational system is dedicated to the inclusion of all students with special educational needs in mainstream classrooms, which includes students with ADHD. This research project therefore aims to address these weaknesses in the current body of literature, and expand our understanding of what life with ADHD is like for young women living in Ireland.

About NUI Galway

NUI Galway* is one of Ireland's foremost centres of academic excellence. Over 17,000 students undertake an extensive range of studies at the University, which is renowned for the quality of its graduates. NUI Galway is a research-led University with internationally recognised expertise in areas including Biomedical Science and Engineering, Web Science, Human Rights, Marine Science, Energy and Environmental Science, Applied Social Sciences and Public Policy, and Humanities, in particular literature, theatre and Irish Studies.

For more information, visit www.nuigalway.ie or view all NUI Galway news here.

*The University's official title is National University of Ireland Galway. Please note that the only official abbreviation is NUI Galway.

Appendix O: Child Protection/Welfare Policy & Protocol

This research project will be conducted in close conjunction with the cooperation of 20 adolescent females between the ages of 13 and 20 years. Young participants will be asked to complete one personal interview and one electronic survey.

Due to the young age of the research participants, special care and consideration has been taken within this project to ensure and protect their welfare and safety. This project will undergo and receive full ethical approval prior to the commencement of research and the researcher will obtain full Garda vetting.

Confidentiality and At-Risk Disclosures

Within this research project, the fullest of confidentiality will be given to research participants at all times—except for in cases where participants reveal information that puts them "at-risk" or where there is suspected or real abuse and/or neglect of any kind. Following the principles of good practice outlined in the document, *Our Duty to Care: The Principles of Good Practice for the Protection of Children and Young People,* this study "recognizes that the welfare of children must always come first, regardless of all other considerations," including the research aims and goals of this study (Republic of Ireland, Department of Health & Children, 2002, p. 4).

Such conduct is also supported in the British Sociological Association's (2002, p. 5) *Guidelines for Good Professional Conduct and Statement of Ethical Practice,* which declares that "Guarantees of confidentiality and anonymity given to research participants must be honoured, unless there are clear and overriding reasons to do otherwise, for example in relation to the abuse of children." In the case of this study, disclosures of abuse are seen as the only overriding reason to breech the confidentiality assured to participants.

Definition of "Abuse"

Understanding and awareness of what constitutes "abuse" is essential for the proper application of any child welfare policy. For the purposes of this study, the definition of abuse and the types of abuse that will be reported have been identified and drawn from the *Child Protection Policy* of the National University of Ireland Galway (2011). In line with this policy, and in the interest of the health and safety of participants, any significant levels of abuse or neglect of any kind will be reported—this includes neglect, emotional, physical and/or sexual abuse (National University of Ireland Galway, 2011, p. 6). Additionally, other forms of abusive behaviour which may be reported include: verbal abuse, bullying, and "unwelcome behaviour [which] can include favouritism, exclusion, sexual harassment and sexual innuendo, humiliating and embarrassing others, deprivation of basic rights and harsh punishments" (Republic of Ireland, Department of Health & Children, 2002, p. 15).

It should be noted that a list of child abuse indicators is contained in Appendix E of the NUI Galway *Child Protection Policy* (2011) and this document will be consulted and reviewed continually throughout the duration of this research project.

Development of Child Protection Protocol

According to the NUI Galway *Child Protection Policy* (2011, p. 4), "University members have a responsibility at all times to...report bullying of children, report disclosures of abuse or concerns that they may have that a child may have been subject to abuse, [and] maintain appropriate confidentiality." Furthermore, "The University must ensure allegations made or concerns reported by

children...to University Members are dealt with appropriately by the institution. Such allegations will be reported to the HSE and An Garda Siochana" (National University of Ireland Galway, 2011, p. 4).

Detailed Protocol for Use in Cases of Disclosed or Suspected Abuse

As a result of the aforementioned, the following step-by-step protocol has been developed specifically for use in this study and will be employed should an adolescent participant make any disclosure that puts them at-risk, or should concerns be raised about their safety and welfare—this includes instances of suspected abuse. These steps have been devised based on the guidelines established in the *Child Protection Policy* of the National University of Ireland Galway, and by considerations established in the *Child Protection and Welfare Policy* of the Child and Family Research Centre at the National University of Ireland Galway (2010). Additionally, advice for this protocol has been taken from the following documents: *Ethical Review and Children's Research* (Republic of Ireland, Office of the Minister for Children & Youth Affairs, 2010), *Children First: National Guidelines for Protection and Welfare of Children* (Republic of Ireland, Department of Children & Youth Affairs, 2011), and *Our Duty to Care: The Principles of Good Practice for the Protection of Children and Young People* (Republic of Ireland, Department of Health & Children, 2002).

It should be noted that during the informed consent process, the following procedure will be discussed with both the adolescent participants, as well as their parents/guardians/primary care givers. In addition, as advised in the document *Ethical Review and Children's Research* (Republic of Ireland, Office of the Minister for Children and Youth Affairs, 2010, pp. 69-70), both parties will be informed of the type of information that may need to be disclosed in questions of child welfare and protection, and what information will remain confidential.

If significant levels of real or suspected abuse are revealed by any participant during the course of this research project, the following steps will be enacted:

- 1. The person who has made the disclosure will be notified that the information cannot be kept completely confidential, and that it will be passed on to the appropriate authorities (National University of Ireland Galway, 2011, p. 8).
- I will "listen carefully to what is being said and record the details in writing as soon as possible ensuring that the record is kept safe and secure" (National University of Ireland Galway, 2011, p. 8).
- 3. Immediately notify the Designated Child Protection Officer.
- 4. My immediate supervisor, Dr. Patricia Eaton, will be notified within 24 hours, as will Dr. Mary Fleming, the head of the School of Education at NUI-Galway.
- 5. The most appropriate person should discuss the concern or consult with the primary carers. This person will be determined via conversation between the primary researcher of this project and the Child Protection Officer for NUI-Galway (National University of Ireland Galway, Child and Family Research Centre, 2010, p.11).
- 6. Pending these steps, as the researcher of this project I will take no father actions, nor will I discuss the matter further with anyone else unless advised otherwise (National University of Ireland Galway, 2011, 8).

The designated Child Protection Officer for the University is Ms. Carmel Browne, Ext 3649, email: carmel.browne@nuigalway.ie. According to University policy, it is the responsibility of the Designated

Child Protection Officer to immediately report the allegations to the HSE and to An Garda Síochána (National University of Ireland Galway, 2011, p. 7).

It is also important to note that per Child and Family Research Centre guidelines and established protocol, information will be forwarded and disclosed on a "need to know" basis for the purpose of protecting and safeguarding the adolescent (National University of Ireland Galway, Child and Family Research Centre, 2010, p. 6). Such disclosure on a need to know basis is also confirmed in section 5.15.1 of the document *Children First: National Guidance for the Protection and Welfare of Children* (Republic of Ireland, Department of Children & Youth Affairs, 2011, p. 38), which states that "All information regarding a concern or an assessment of child abuse should be shared on a 'need to know' basis in the interests of the child." Disclosure of information in this study will also be granted on a need to know basis as well. Any information that has been obtained from an adolescent participant that is not directly relevant to their protection and welfare will continue to be treated in a confidential and private matter and will not be disclosed to authorities (National University of Ireland Galway, Child and Family Research Centre, 2010, p. 6).

How the Researcher Will Respond

As the researcher, I will respond in the following manner:

- Stay calm and listen, giving the adolescent time to say what they want,
- Reassure the adolescent, but not promise to keep it a secret,
- Explain what needs to be done next,
- Record the discussion as carefully as possible (Republic of Ireland, Department of Health & Children, 2002, p. 17).

Protocol for Record Keeping

As a researcher, I will follow the suggested steps for record keeping as outlined in section 5.21.1 of the document *Children First: National Guidance for the Protection and Welfare of Children*, namely that I maintain "...contemporaneous records of all reported concerns in a safe place. These should include details of contacts, consultations and any actions taken" (Republic of Ireland, Department of Children & Youth Affairs, 2011, p. 41).

Action Flow Chart

Step 1	 Tell the person making the disclosure of the specific information that cannot be kept confidential. Notify the person making the disclosure of the following procedure. Listen carefully and take detailed notes of what is being said. Keep these notes in a safe location.
	 Immediately contact Child Protection Officer, Ms. Carmel Browne, Ext. 3649, email: carmel.browne@nuigalway.ie.
	 Notify Dr. Patricia Eaton & Dr. Mary Fleming of the School of Education at NUI-Galway.
Step 2	•The most appropriate person will then notify the adolescent's primary carer(s).
	•Following the above steps, as the researcher of this project, I will take no further actions in regards to the allegations or concerns.
Step 3	 I also will not discuss the matter with any other parties, unless advised otherwise.

Appendix P: ADHD Support Groups, Counselling Services, and Educational Supports



Examining attention-deficit hyperactivity disorder in adolescent females: manifestation, academic performance and social experience in Ireland

Dear Participant:

Thank you for the work and time that you have put into this research project. Your help and insights have been invaluable in giving clarity to our topic of study.

It is understandable that in the process of discussing and reflecting upon your experiences with ADHD, various emotions and questions may have been raised. The following is a guide of some available resources that might help you to deal with any issues experienced as a result of participating in this study.

After reviewing this document, if you need any further assistance, please do not hesitate to contact Andrea Lynch, the primary researcher for this project, at xxxxx@nuigalway.ie, or at XXX-XXX.

Thank you again for your participation in this project.

Andrea Lynch Primary Researcher School of Education National University of Ireland Galway

Websites with information on ADHD

http://www.addvance.com/help/teens/

This website is specifically geared towards the needs of teens and parents. This website contains information on successfully navigating the stressors of second-level education, transitioning to college, and understanding young women with ADHD.

www.add.org

This USA based website is geared towards adults with ADHD and contains information on awareness, advocacy, resources, and other support materials.

http://www.hadd.ie/resources/useful-websites

Additional websites can be found at the above link which contains a comprehensive list of websites that are helpful in learning more about ADHD.

National ADHD Support Groups	HADD Support Group
	Carmichael House
	North Brunswick Street
	Dublin 7
	(01) 8748349
	info@hadd.ie
	www.hadd.ie
	INCADDS: The Irish National Council of AD/HD
	Support Groups
	Unit 17a, Ballybane Enterprise Centre
	Galway
	(091) 755090
	info@incadds.ie
	www.incadds.ie
	The ADD Mid-West ADHD Support Group
	Office Unit 11
	Limerick Enterprise Development Park,
	Roxboro Road,
	Limerick
	(061) 312621
	addmidwest@eircom.ie
	24 Hour Emergency Helpline: (085) 2330513

Additional Resources

The following resources were taken from <u>http://www.incadds.ie/support-groups.php.</u> In addition to the selected resources listed below, there are other listings on the website which individuals may find helpful.

Health Service Executive	Special Education Needs Coordinator
Northern Area Head Office	National Council for Special Education
Swords Business Campus	c/o Pobalscoil Neasáin
Balheary Road	Baldoyle
Swords	Dublin 13
Co. Dublin	(01) 8167732
(01) 8131800	
email: nahbcommunications@erha.ie	
email: nahbcommunications@erha.ie	
	Youth Advocate Programme
Department of Education and Skills	Youth Advocate Programme Contact: Fiona Duignan
Department of Education and Skills Marlborough Street, Dublin 1	•
email: nahbcommunications@erha.ie Department of Education and Skills Marlborough Street, Dublin 1 (01) 889 6400 http://www.education.ie	Contact: Fiona Duignan
Department of Education and Skills Marlborough Street, Dublin 1 (01) 889 6400	Contact: Fiona Duignan Programme Director