

Gendered Expectations on the Recognition of ADHD in Young Women and Educational Implications

Although sometimes perceived as a well-known condition, there are numerous aspects of Attention Deficit Hyperactivity Disorder (ADHD) which we do not fully understand. Given the preponderance of previous ADHD research with males, the need for understanding females' experiences of living with the condition is pressing. This article presents research findings from a study conducted in Ireland which examined the social and academic experiences of 17 young women (ages 13 to 20 years) who were medically diagnosed with ADHD. Findings reveal the significant and impeding impact that gender stereotypes commonly had on participants' trajectory towards obtaining an ADHD diagnosis, as teachers and clinicians alike often struggled to recognise participants' behaviours as symptomatic indicators of the condition. It is posited that an inequitable gendered cycle may be at work in how we generally conceptualise, recognise, and understand the condition.

Keywords: ADHD, Females, Gender Stereotypes, Psychiatry, Diagnosis, Education

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental condition (Boon 2020; Young 2020; Millenet et al. 2018) characterised by patterns of inattention and/or hyperactivity-impulsivity, and is reported to occur more frequently in males than females (Arnett et al. 2015; American Psychiatric Association 2013; Carr 2006). The potential negative impact of ADHD on an individual's academic (Morsink et al. 2021; Keilow, Holm, and Fallesen 2018), psychological (Lee, Cheung, and Chen 2019) and social outcomes (Powell et al. 2020; Kok et al. 2016) are well documented within the literature. Although typically associated with childhood onset, ADHD can continue to affect the individual throughout their lifespan. For example, adolescents commonly experience persistent struggles with inattention, impulsiveness and inner-restlessness (Singh, Ojha, and Ansari 2016, 442) and symptoms of ADHD can last well into adulthood (see, e.g., Barkley, Murphy, and Fischer 2008).

Despite an abundance of previous research, there are numerous areas of ADHD which remain underexplored both internationally and within the Irish context (MacNeela 2016), and the literature on ADHD is dominated by medical and psychological studies which are clinically based and mainly utilise quantitative methods of enquiry (see, e.g., Emilsson et al. 2020; Sibley et al. 2020; Rubia et al. 2019). As a result, there is a deficit of qualitative research exploring the experiential aspects of ADHD through the voices and perspectives of people directly affected by the condition (Clancy, O'Connor, and Ni Mhaolain 2020). Additionally, most previous studies of ADHD have been conducted with male participants of child and adolescent ages (Guelzow, Loya, and Hinshaw 2017; Stenner, O'Dell, and Davies 2019) and studies including females with ADHD are significantly fewer in number. Such methodological choices and the underrepresentation of female participants has resulted in a clear gender bias in the existing literature, and it may be the case that our modern

conceptualisation of ADHD may not accurately, nor fully, reflect females' experience of the condition.

This article responds to these gaps and biases by examining data on the experiences and perspectives of young women (ages 13 to 20 years) living with an ADHD diagnosis in Ireland. Findings revealed that participants commonly experienced delayed ADHD diagnosis, despite their characteristic symptoms being visible/obvious from childhood. Such delays appear to be related to the inability of teachers and clinicians to recognise participants' behaviours as symptomatic expressions of the condition, which thus further impeded and delayed their diagnosis and the subsequent provision of medical and educational interventions. As such, this article examines the potential impact of inequitable gender stereotypes and expectations in educational and clinical settings, while positing that a gendered cycle of ADHD recognition is in action which may have directly compromised and reduced the ability of both teachers and clinicians alike to recognise ADHD in these female participants, resulting in their condition going unrecognised and undiagnosed for years, often until they reached secondary school or higher education. While populist critiques of ADHD and boys argue that the growth of ADHD diagnoses may be pathologizing boys' behaviour, we argue that symptoms of ADHD in girls and young women are overlooked because of gendered expectations, and this slippage has social and educational implications. In summary, this research offers readers the valuable chance to view ADHD through the voices and experiences of 17 young women and presents a rare qualitative and sociological glimpse into their worlds. The implications of this research holds value for a wide range of audiences, including educators, clinicians, parents, and those directly affected by ADHD.

Context

Medical & Clinical Perspectives on ADHD

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) (American Psychiatric Association 2013) associates ADHD with persistent symptoms of inattention and/or hyperactivity-impulsivity, which impact the individual's functioning and development (American Psychiatric Association 2013, 61). Three distinct subtypes of ADHD diagnosis are recognised: combined presentation of both inattention and hyperactivity-impulsivity; predominantly inattentive presentation; and predominantly hyperactive-impulsive presentation (American Psychiatric Association 2013, 60). ADHD affects approximately 5% of children and 2.5% of adults across nearly all cultures (American Psychiatric Association 2013, 61), however, a more recent meta-analysis of 175 studies using DSM-III, DSM-III-R and DSM-IV diagnostic criteria for ADHD estimated worldwide prevalence closer to 7.2% (Thomas et al. 2015). These researchers suggest that if population estimates exceed this figure, then overdiagnosis may be occurring, and similarly, if population estimates are lower than 7.2%, then underdiagnosis may explain such discrepancies (Thomas et al. 2015, e994).

Similar estimates are found within the Irish context, with research suggesting that ADHD affects between 1-5% of children in Ireland (Fitzpatrick, Halpin, and Doody 1999), and the condition is linked to approximately 31.6% of cases reported by the Child and Adolescent Mental Health Service (CAMHS)—making this condition the most common reason for presentation at clinics in Ireland (Health Service Executive 2013, 7).

Variability in prevalence estimates may be due to a multitude of factors such as the age, gender, and symptomatic presentation of research participants; the presence of diagnosed or undiagnosed comorbidities; population characteristics, methodological, environmental, and

cultural factors; and variability in the diagnostic criteria utilised in studies (Skounti, Philalithis, and Galanakis 2007).

Gender and ADHD Symptomatology & Diagnosis

Researchers have long questioned whether gender impacts the core symptomatic expression of ADHD in males and females, and some suggest there are few differences between the sexes (Owens, Cardoos, and Hinshaw 2015). However, other researchers maintain that males are more likely to display externalised and disruptive behaviours (Kok et al. 2020), while females are prone to internalised and inattentive symptoms (American Psychiatric Association 2013; Quinn 2008). Males and females may also express the same symptoms in different ways, for example, males may experience hyperactivity-impulsivity as excessive bodily/motor movement, and females may illustrate this symptom as heightened talkativeness (Grskovic and Zentall 2010).

ADHD appears to be diagnosed more frequently in males than females (Mowlem et al. 2019; Arnett et al. 2015; Skogli et al. 2013) and the DSM-5 reports a male to female gender ratio of 2:1 (American Psychiatric Association 2013, 63), while the Irish HSE suggests a rate of 4:1 (Health Service Executive 2013, 36). Additionally, females appear to be diagnosed later in life than males (Quinn and Madhoo 2014). Researchers suggest that these gender differences may be due partially to “lack of recognition and/or referral bias in females” (Young et al. 2020, 1), and call for greater recognition of the “the more subtle and/or internalised presentation that is common in females” (Young et al. 2020, 2). We would argue that this is partly due to the fact that gendered expectations and assumptions about the everyday behaviour of young women mask the recognition of ADHD symptoms. Additionally, the concept of ADHD as “occurring more frequently in males,” although perhaps statistically correct according to diagnostic practices, may be ultimately serving to

promote the under-recognition and under-diagnosis of ADHD in females by furthering the idea that females are less likely to be impacted by the condition.

Because there are no biological or physical tests which objectively detect the presence of ADHD, diagnosis is made subjectively by medical professionals using behavioural checklists and rating scales (Stead, Lloyd, and Cohen 2006) which are often completed by various informants such as the individual, parents, and teachers who may have particular gendered assumptions about the behaviour of young women. As Ward (2014) suggests, teachers' observations and knowledge of ADHD is crucial because of the central role they play in the diagnostic process. Yet, these processes have been heavily criticised in recent years. The symptomatic descriptions contained in the DSM-5 (and previous editions) are based on research conducted predominantly with samples of young males (Owens, Cardoos, and Hinshaw, 2015), and the gender-neutrality of the rating scales used in diagnosis has also been questioned. For example, the Conners 3TM Parent (Conners 2008a) and Teacher (Conners 2008b) scales ask informants to consider the child's behaviour in the past month against criteria such as the following: "Uses a weapon; physically hurts people; intentionally damages or destroys things that belong to others; is cruel to animals." Critics suggest these scales emphasise behaviours more representative of ADHD in males (Walters 2018, 8), and rather than using female-normative diagnostic criteria, the behaviour of girls is being compared "with that of disordered boys" (McGee and Feehan 1991, 188). Some critics have concluded that sex-biases are inherent within these instruments (Mowlem et al. 2019) and have called for the creation of gender-specific diagnostic criteria (see, e.g., Nadeau and Quinn 2002) for ADHD.

If sex-biases are present in the rating scales, diagnostic procedures, and in those who report symptoms, all of which are used to identify ADHD, this may explain why some researchers believe that ADHD is often overlooked (Nigg and Nikolas 2008, 320) and

“misdiagnosed [and] undertreated” in females (Sassi 2010, 29), particularly within clinical settings (Quinn and Madhoo 2014). This further implies that when hyperactivity is muted, inattentiveness is not always recognised as problematic for girls. It may also be that clinically diagnosed females with ADHD are illustrative of the most severe cases, and these individuals may not be representative of more typical ADHD presentations (Soffer, Mautone, and Power, 2008; Gershon 2002).

The Legitimacy & Usefulness of the ADHD Construct

Despite the vast (if limited in scope) amount of research previously conducted on ADHD, the condition remains a controversial and contentious topic (Smith 2012; Kendall et al. 2003), and serious questions have been raised regarding the legitimacy of the construct and the usefulness of this diagnostic label. Critics question ADHD’s very existence and cite issues such as the enduring inability of researchers to identify the specific aetiology of the condition, broad ranges in prevalence rates, the lack of physical/biological markers, and even disagreements regarding how to define the condition (Quinn and Lynch 2016). Popular discourse has witnessed a significant push back at the view that ADHD predominantly affects boys and the potential medicalisation of children’s difficult behaviour, wherein “nonmedical problems become defined and treated as medical problems” (Conrad 2007, 4). Some further argue the process of medicalisation has been largely aided by scientific inquiry and strengthened by the prestige of the medical model with views disability as a disorder within the individual requiring medicinal treatment (World Health Organization 2002, 8). Concerns have also been raised over the influence of global drug manufacturers who are profiting from the increasing levels of diagnosis year on year. These criticisms are important to recognise in any discussion of ADHD, and researchers must be attentive to the questions of outreach and effective public communication.

Educators and parents too, must be cognisant of the impact of labelling on the individual child. As Iudici et al. (2014) explain, an initial diagnosis of ADHD can give the impression to parents and teachers that they have found the “cause of a child’s problematic behaviour,” and a sense of relief may accompany diagnosis. Yet, this label alone, while perhaps providing clarity, does not remove the root cause of problems experienced by the individual, and parents and teachers are still faced with the challenge of managing the behaviour. Furthermore, these researchers maintain that the ADHD label can be a “stigma” for children which can last throughout their lifetime and affect college, work, and future relationships (Iudici, 2014, p. 508). Therefore, in any discussion of special and inclusive education, it is important to consider the implications of issues such as the medicalisation of behaviour and the labelling of students, to ensure that such actions promote positive outcomes for the individual, and that diagnosis of special needs are used for medical reasons, and not for the purpose of obtaining additional support in schools (NCSE, 2014, 3).

Methodology

The findings presented in this article emerge from a parallel mixed-methods study which aimed to explore the daily life and academic experiences of 17 adolescent young women (ages 13 to 20 years) living in Ireland with a medical diagnosis of ADHD. Secondary school teachers with experience of supporting students with ADHD were also included as participants in the larger study from which this paper emerges. However, discussion in this article focuses only on the data collected from the young women participants.

This study was situated within the pragmatic paradigm and the biopsychosocial model (Engle 1977) which conceptualises “illness” (including those of mental and behavioural natures) as complex phenomena best understood wholistically through multiple lenses of biology, psychology, and sociology. Informed by this perspective,

symptoms of ADHD and associated behaviours are conceptualised as resulting from the interplay of multiple factors and cannot be explained by any one simplistic cause.

Data was collected using a semi-structured interview schedule and an online questionnaire. Both measurements explored topics such as daily life with ADHD, receiving a diagnosis, school and social experiences, and future goals. Given that the existing body of ADHD research is heavily quantitative and clinically based, the use of qualitative semi-structured interviews provided a unique opportunity to gain in-depth insight into the complex realities of life with ADHD as a young woman. Because persons with ADHD may experience difficulties paying sustained attention, each participant was interviewed in-person, and then asked to independently complete the online questionnaire at home within 1 week. All 17 participants completed the semi-structured interview, and 14 participants completed the online questionnaire.

Calls for participants were published on social media and websites of national and regional ADHD support groups, in Irish newspapers, and through the disability services at further and higher education institutions throughout Ireland. Additionally, calls for participants were disseminated at a child and adolescent mental health provider in Dublin. Participants and/or their parents contacted the researcher directly to express interest in the study and were provided with information and consent sheets written in language accessible for young people. Parental permission was obtained for any participant under the age of 18, and this study received ethical approval from the National University of Ireland Galway, and a separate approval from the child and adolescent mental health clinic where some of the data was collected.

Although the researchers struggled to obtain a larger sample, the group of young participants was diverse and represented a wide range of socio-economic demographics from all four provinces in the Republic of Ireland. One participant was from Northern Ireland.

While at first the sample size may seem small and unrepresentative, it is not unusual for qualitative studies of ADHD (see, e.g., Aoki et al. 2020; Stenner, O'Dell, and Davies 2019; Hansson Halleröd et al. 2015). The sample size of 17 should also be interpreted relative to the total number of females who were estimated to be affected by ADHD in Ireland at the time this study was conducted. Statistics obtained from the *Organisation for Economic Co-Operation and Development* (no date) show there were 60,705 males & females between the ages of 13 and 20 years living in Ireland in 2012. If ADHD affects 5% of children (American Psychiatric Association 2013, 61) and is found in Ireland at a ratio of 4:1 (Health Service Executive 2013), it is estimated that at the time of this study, there were approximately 758 females potentially *affected* by ADHD in Ireland. However, we wished to obtain participants with a *formal diagnosis* of ADHD, and not simply those self-reporting the experience of similar symptoms. Nor did we wish to engage young women who self-diagnosed themselves with ADHD as the possibility for misdiagnosis in these cases may have been exceedingly high. Furthermore, given the potential for ADHD to be unrecognised and undiagnosed in females, the actual number of potential participants meeting the inclusion criteria for this study was likely significantly smaller than the raw estimate above may suggest. Thus, the sample size of 17 participants is quite strong, given these statistical and diagnostic challenges. Although the findings of this study are not meant for generalisation to the population, they may hold the potential for “case to case” transferability (Firestone 1993) to other contexts and settings. Such transferability was facilitated by rich description of the research methodology, findings and implications, so that readers may make their own conclusions regarding the potential applicability of this study to other contexts.

Findings and Analysis

Participant Demographics

The online questionnaire reported that 50% of respondents (n=7) were diagnosed with Combined Type ADHD; 28.6% (n=4) Inattentive Type; and 14.3% (n=2) Hyperactive Type. One participant (n=7.1%) was unsure of their diagnostic type. These findings somewhat challenge the DSM-5 which states that “females are more likely than males to present with primarily inattentive features” (American Psychiatric Association 2013, 63), as well as the beliefs that females are more commonly diagnosed with Inattentive ADHD than other subtypes (Quinn 2008) and that they are less affected by hyperactive-impulsive symptoms (Nussbaum 2012).

The manifestation and experience of hyperactive-impulsive features varied widely among participants. For those like Fiona, struggles with externalised/bodily hyperactivity (like what might be expected in young males) were “massive” and earned her the nickname ‘Duracell’. For others, symptoms of hyperactivity-impulsivity were less dramatic and more subtly described as ‘fidgetiness’. Such characteristics are clearly represented in the DSM-5 diagnostic criteria for hyperactivity-impulsivity (American Psychiatric Association 2013, 60).

Interestingly, hyperactivity-impulsivity appeared to also impact participants’ mental activities. Thirty-five percent (n=6) of participants described difficulties in controlling the speed and direction of their thoughts, along with an inability to settle their minds. Twenty-nine percent (n=5) reported that ADHD caused them to overthink and overanalyse, which they felt sometimes impacted their ability to learn in school. These descriptions highlight the pervasive impact of hyperactivity-impulsivity in the lives of these young women, and in doing so, lend credibility to previous research studies by Weyandt et al. (2003) who suggested that adults with ADHD commonly experience mental restlessness, and Sibley et al.

(2012) who found that adolescents can experience difficulties associated with ADHD more commonly found in adults. Such findings also highlight that symptoms of ADHD may be experienced internally by young women, in ways that are hidden and invisible to outsiders.

Misunderstood Symptoms & Delayed Diagnosis

Qualitative data revealed that gender stereotypes were highly influential in the experiences young participants shared about living with ADHD. This was particularly true in relation to the ways in which teachers and clinicians perceived the behaviour of the young women. Although they often displayed struggles with inattention and executive functioning from early ages, clinicians and teachers alike commonly failed to recognise these issues as being problematic for the young women, and they did not view inattention as a reason for further assessment. Ultimately, many clinicians and teachers failed to see these behaviours as potentially indicative of undiagnosed ADHD. What may be the assumptions at play when inattentiveness and lack of executive functioning is considered acceptable for young women?

Classroom Experiences

When queried about the ADHD symptoms they experienced most strongly, participants commonly reported being plagued by inattention, which often started in primary school. This is in alignment with the DSM-5 which maintains that “ADHD begins in childhood” (American Psychiatric Association 2013, 61). The following comments from the questionnaire data reveal the impact of inattention on participants: ‘[It is] hard to focus on what people are saying, as I get easily distracted’; ‘Find it difficult to focus, especially at school’; ‘[ADHD] stops me from concentrating, stops me from learning, stops me from listening, affects my memory’.

Like most participants in this study, Ashling maintained that her symptoms of inattention were clearly present from an early age, as evidenced by the comments that primary-school teachers often made on her report card, such as “needs to focus more...she’s drawing all over her copies...she’s staring out the window...she’s making up stories when she’s supposed to be doing something else.” In summary, Ashling explained, “I was great at the work, I just couldn’t focus.” In this case, the distractions are acknowledged and noted in her report as in need of self-correction, but recalled by Ashling as beyond her control. Thus, for some participants, symptoms of inattention and inability to focus were strongly prevalent in their experience of ADHD. However, although teachers often noticed and commented on the inattentive behaviours, they did not appear to consider that these struggles might be atypical for females, nor that the young women might benefit from further assessment. Ultimately, teachers failed to recognise the inattentive behaviours as potentially indicative of the presence of undiagnosed ADHD. This is not to put blame on teachers, but to recognise that such disabilities are likely due to the limited professional development available for educators on girls and ADHD.

Ailish also experienced similar struggles with inattention in primary school, and rather than advocate on her behalf, she felt as though teachers remained silent. She explained, “They never really said, ‘We think your daughter has a problem,’” and in her opinion, teachers should have recognised her condition earlier and advocated for her needs. These findings suggest there may be a disconnect between clinical perspectives of ADHD and knowledge of girls and the condition in schools. Given the central role that teachers often play in the diagnosis of ADHD (Ward 2014), it may be the case that this lack of recognition and referral for assessment contributed to the delayed diagnosis experienced by a majority (n=10) of participants in this study, most of whom were not formally diagnosed with ADHD until they entered secondary school or higher education. This stands in stark contrast to males

who are typically diagnosed with ADHD during childhood (Mahone 2010, 790). Had teachers been able to recognise ADHD earlier, it may have substantially and positively improved participants educational experience and future outcomes, especially because at the time of this study, a medical diagnosis of special needs was required to obtain additional support in schools (Department of Education and Science, 2007).

Participants also commonly described struggles with executive functioning, such as disorganisation and forgetfulness. Combined with inattention, these symptoms were particularly troublesome for participants within the classroom setting. The link between ADHD, inattention, and executive functioning difficulties have been documented in the literature for many years (American Psychiatric Association 2013; Nigg and Nikolas 2008; Gaub and Carlson 1997). One possible reason for the lack of teacher action in recognising the early signs of ADHD may be because the inattentive and internalised behaviours were less disruptive in the classroom, as compared to externalised hyperactive features. According to Sciotto, Nolfi, and Bluhm (2004, 247) “This pattern of symptoms is less likely to disrupt the classroom and may be more readily overlooked.” If true, this may suggest the priority in many classrooms is the maintenance of order, with learning difficulties arising from inattention taking on lesser urgency due to their non-disruptive nature. Further, if the gendered expectation of young women in classrooms is non-disruptive behaviour, then inattention may not be viewed as problematic, but rather, as acceptable and ordinary.

Other participants (n=4) opined that teachers mistakenly believed they “didn’t care” about academic progress, despite the tremendous amount of effort they were investing into learning. Aoife explained, “[Teachers] thought I was kind of...a bad student. They thought I didn’t care but I actually tried my best.” Similarly, Amelia perceived that some teachers eventually “lost a wee bit of hope” in her, yet she also questioned how they could not have recognised her difficulties. She explained, “I don’t know how a teacher can’t tell when

there's someone who doesn't care and someone who has these constant problems?" One possible explanation for her query is likely because some teachers may indeed, lack the ability to make the distinction between ADHD symptoms and what they perceive as the ordinary gendered behaviour of young women, again, likely due to a lack of adequate professional training and preparation in the areas of special needs and gender in education.

Clearly, participants in this study commonly experienced strained relationships with their teachers, and often sensed teachers' frustration with their actions and ADHD related behaviours. For example, Róisín distinctly recalled being constantly reprimanded by a teacher who would slam her desk and shout, "Pay Attention! You have to pay attention to me!" There is a tension here between the teacher's belief that inattention is a form of defiance, and a student with ADHD who has limited ability to control their attention. Similar findings were also reported by Rodgers et al. (2015) who maintain that ADHD can negatively impact the quality of student-teacher relationships, thereby creating a barrier to academic achievement. Additionally, although the ADHD label can provide educators with clarity and insight into a student and their behaviour and needs, it can also cause teachers to view the individual more negatively, while simultaneously decreasing teachers' self-efficacy belief in their ability to cater for the student's needs (Lee, Cheung, and Chen 2019; Ohan et al. 2011). Such findings illustrate the serious and negative impact labelling can have on teachers' views of, and relationships with, students who bear the ADHD designation. Griffin and Shevlin (2011, 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." In the case of ADHD, if teachers lack understanding of the construct and how it affects the individual, they may be tempted to see the label being used as an "excuse" by students for behavioural and academic

deficiencies, rather than seeing ADHD as a valid diagnostic condition with real effects for students.

It is also significant to note that 70% (n=12) of participants reported their teachers lacked understanding and awareness of ADHD. Rose asserted, "Certain teachers may not understand ADHD," while Aoife estimated that only "Two, out of eight or nine, actually knew what it [ADHD] was." Similarly, Clodagh explained, "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." Three participants (17%) reported that some teachers directly admitted their lack of knowledge concerning ADHD. For example, after receiving her diagnosis in secondary school, Ailish approached her guidance counsellor, who admitted that she did not "know anything about ADHD." As a result of this knowledge deficit among teachers and counsellors, some participants were forced into self-disclosure about their ADHD diagnosis, while also assuming the role of "teaching the teacher" and educating them about ADHD and the personal implications of their diagnosis. Parallels can be drawn with previous research conducted by Senior (2004) who explored the school experiences of males diagnosed with ADHD in Ireland. This study similarly found that participants perceived their teachers "had no understanding of the difficulties associated with AD/HD" (Senior 2004, 227). These same sentiments were also expressed by the boys' parents, who felt that teachers did not know enough about the condition. Research conducted in the United States with gifted females diagnosed with ADHD (ages 12-13 years) also reported the girls commonly felt "alienated or misunderstood because teacher fail to fully realize the challenges that they face on a daily basis" (Fugate and Gentry 2016, 101). Similarly, mixed-methods research conducted in Hong Kong reported finding no difference between pre-service and in-service secondary school teachers' knowledge of ADHD, some of whom admitted to having a lack of knowledge about how to meet the needs of students with

ADHD in the classroom (Liang and Gao 2016, 377). Studies such as these suggest that, despite the wealth of previous research on ADHD and public awareness of the condition, teachers' knowledge of ADHD remains poor—a fact observed by affected students, teachers, and parents alike. Clearly, there is a “need for teachers to be better prepared to recognise and respond to AD/HD in the school system” (MacNeela 2016, iv). Such preparation could be facilitated within initial teacher education (ITE) and continuing professional development (CPD) courses to increase awareness and knowledge among educators regarding ADHD, the effects of gender on male and female symptomatic expression, and how to support positive academic outcomes for these students. Providing such insight and training may also help to reduce the perception that initial teacher education courses commonly fail to adequately prepare pre-service teachers for the realities of supporting students with special educational needs in inclusive classrooms (Shevlin et al. 2009).

Clinical Experiences

Interestingly, for most participants in this study, the lack of ADHD recognition experienced in the classroom continued into their clinical experiences, where physicians also struggled to recognise ADHD in the young females. Sixty-four percent (n=11) of participants who completed the online questionnaire reported being referred for clinical assessment following the experience of social-emotional difficulties such as bullying, depression, anxiety, and engaging in anti-social behaviour. In comparison, three (21%) participants reported to have “self-diagnosed” their ADHD after learning about the condition and seeing similar traits in themselves. Following this, they sought clinical assessment with help from their parents. Four distinct patterns were evident in the data which summarised their medical experiences:

1. Physicians often tested for a host of other conditions but did not evaluate for ADHD;

2. Participants were commonly diagnosed with a range of other conditions (often anxiety and depression), but were *not* initially diagnosed with ADHD;
3. In two cases, participants were tested for ADHD and given a negative result, only to have their diagnosis confirmed later. Such confirmation of ADHD often required a visit to a specialist physician;
4. ADHD could be ruled out without any formal testing or evaluation.

Perhaps the most shocking example of ruling out ADHD without any testing was related by Ashling who first self-identified her symptoms. Ashling and her mother presented at the office of their local General Practitioner (GP) for assessment, only to be bluntly told, “I’m sorry dear, but girls can’t have ADHD.” While this utterance might at first seem surprising, a systematic narrative review of the literature found that GPs, who often act as the first-call and gatekeeper to further assessment, commonly displayed “mixed and unhelpful” attitudes in relation to ADHD (Tatlow-Golden et al. 2016, 1). Ashling eventually obtained a diagnosis of ADHD only after attending a specialist psychiatrist. According to her testimony, the psychiatrist “was able to see it [ADHD] straight away.” Clearly, these findings raise important questions regarding whether gendered assumptions influence clinical practice, given the inability of clinicians to recognise ADHD accurately and quickly in these young women? These findings also call attention to the often prolonged and delayed path to diagnosis that many of these participants endured.

The Inequitable Gendered Cycle of ADHD Recognition and Diagnosis

In considering the data presented from this study, we must ask whether the inabilities of teachers and clinicians to recognise ADHD in females are simply due to a lack of knowledge, or something else? Given that ADHD is ranked “among the most common psychiatric disorders of childhood” (Kooij et al. 2019, 15) and is believed to exert upwards of

7.2% worldwide prevalence (Thomas et al. 2015), some level of familiarity on the part of teachers and clinicians seems reasonable to expect.

Therefore, could it be the case that other factors are preventing the early recognition of ADHD in females? This paper posits that gender stereotypes and assumptions about “typical” female behaviour may have contributed to the delayed recognition and diagnosis of the condition within both the classroom and clinical settings. For example, Lips (1993, 6) argues that ‘daydreaming’ is a characteristic typically associated with women. As such, young women who internalise their ADHD, and who exhibit more passive, inattentive, and less disruptive forms of the condition may actually reinforce existing gender stereotypes of teenage girls as carefree, daydreamy and ditzzy (Young 2005; Davies et al. 2001; Walkerdine 1998). Therefore, if teachers viewed the inattentive symptoms displayed by participants as being typical for teenage females, they naturally would not have believed these characteristics required further assessment. This would potentially explain why only two participants in this study said their teachers were responsible for first recognising their symptoms of ADHD. These same gender stereotypes and expectations may have also prevented clinicians from seeing the symptomatic presentations of the young women as indicative of ADHD. This could potentially explain why the first response of clinicians was often to test for a host of other conditions, and if they tested for ADHD at all, they often did so only as a last resort.

Conversely, it is also noteworthy to consider that gender assumptions about female behaviour may have played a part in the early diagnosis of a minority of participants (n=5, 29%) who were diagnosed in childhood/primary school. In all cases, these participants reported experiencing externalised hyperactivity-impulsivity. As such, they may have challenged teachers’ stereotypical notions of what young women ‘should’ act like (i.e. as quiet, compliant, and passive) (Davies et al. 2001). Thus, when compared to same age and

gender peers, their uncharacteristic levels of hyperactivity may have stood out more readily, making them increasingly likely to be recommended for further assessment, thus leading to a faster clinical diagnosis. Such assumptions are supported by Nadeau, Littman and Quinn (1999, 49) who maintain, "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."

In summary, we suggest that an *inequitable gendered cycle of ADHD* recognition and diagnosis is at work in these findings. Such a cycle perpetuates the stereotype of ADHD as a condition affecting mainly hyperactive-impulsive males (Sassi 2010) and in doing so, further contributes to the under-recognition and underdiagnosis of ADHD in females.

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The inequitable gendered cycle starts with the generally accepted conceptualisation of ADHD as a condition which largely (or only) affects males. Because males are more prone to exhibit externalised behaviours, this strengthens the association of ADHD with the hyperactive-impulsive behaviours commonly associated with younger boys. Correspondingly, internalised expression of ADHD, such as inattentiveness and daydreaming, are not considered to be symptomatic indicators of ADHD, and the association of these characteristics with the condition is weakened. Due to gendered assumptions, these internalised features may even be perceived as completely "normal" for young women. When situated within the classroom context, because internalised symptoms of ADHD are not disruptive, this may result in the under-recognition of females with primarily inattentive ADHD, because they do not display the condition as the hyperactive-impulsive/male presentation which teachers have come to

expect. In turn, fewer young women are referred for clinical assessment for ADHD—and when they are, clinicians will often utilise other diagnoses to explain their symptoms. This leads to the under-diagnosis of ADHD in females, which in turn, further reinforces the conceptualisation that ADHD is a “male” condition. And thus, the cycle continues.

In summary, this process may explain some of the findings in this present study, such as why participants with higher levels of inattention and lower levels of externalised hyperactivity-impulsivity experienced delayed diagnoses of ADHD until their teenage and young adult years and conversely, why participants with an ADHD presentation more similar to males (i.e. primarily externalised hyperactive-impulsive symptoms) were typically diagnosed during childhood. Additionally, this cycle may also explain why numerous clinicians failed to immediately test the young women for ADHD when they first presented in the clinic, and why Ashling’s doctor erroneously believed that “girls can’t have ADHD.” These conclusions appear to be supported by research investigating factors influencing girls’ and boys’ ability to meet the diagnostic criteria for ADHD (Mowlem et al. 2019). This study found gender biases in parental perceptions of ADHD symptoms in children and concluded that “sex-specific biases in perceptions of child behaviour may exist” (Mowlem et al. 2019, 765). Thus, it seems possible that gender biases may indeed, affect the ability of parents, and by extension, teachers and clinicians, to perceive ADHD related behaviours in females. This biased cycle may also help to explain why, despite high prevalence rates and an abundance of previous research, those like Kooij et al. (2019, 15) maintain that “ADHD is currently underdiagnosed and undertreated in many European countries.” Ultimately, this paper challenges the reader 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.

Implications for Inclusive Practice in Irish Schools

The adoption of a revised conceptualisation of ADHD is particularly important for Irish educators, if they are to fully enact the whole-school model of inclusion currently advocated by the Department of Education & Skills (2017) and more readily recognise and respond to student needs through the appropriate and timely provision of supports. Within the Irish context, mainstream inclusive education for persons with special educational needs has long been enshrined in legislation (Republic of Ireland 2004). The National Council for Special Education (NCSE) defines inclusion as “a process of addressing and responding to the diversity of needs of learners” while also calling for the removal of “barriers within and from education” (NCSE 2011, 13-14). Although earlier models of provision relied heavily on medical diagnosis a gateway to obtaining additional supports, within recent years, Irish schools have shifted to a new model of whole-school inclusive provision (Department of Education and Skills 2017). This new model no longer links medical diagnosis with educational support and instead, maintains the most effective provision takes place “within an inclusive whole-school framework” (Department of Education and Skills 2017, 3) with mainstream classroom teachers assuming “primary responsibility” for ensuring access to the curriculum for all students in their classrooms (NCSE 2014, 47). This mirrors earlier documents on inclusion and SEN provision which similarly emphasised the “whole school community” model (NCSE 2011, 17) and the “key role” mainstream teachers play in supporting the inclusion of students with special educational needs (Department of Education and Science 2007, 71).

The new model of inclusion in Irish schools is viewed as a more equitable method of providing timelier support by allowing teachers and schools to respond to student needs as they arise, without requiring medical diagnosis (Department of Education and Skills 2017, 4). This move away from situating special education within the medical model is a positive step

forward, as the model could make “teachers and other educational professionals feel inapt” (Te Meerman et al. 2017) in their classroom practice and ability to cater for students with special needs. However, the failure of mainstream classroom teachers to recognise early signs of ADHD raises serious questions about teachers’ ability to fulfil their role in promoting the whole-school inclusion of students affected by the condition. It can also be argued that an inability to recognise student needs associated with undiagnosed ADHD is an existing “barrier” to equity of learning that must be removed through teacher education and training. Because the new model has lessened reliance on medical diagnosis (an often time consuming and expensive process which reinforced social advantage and disadvantage) in favour of providing timelier in-school supports, it is now more important than ever that teachers are able to recognise undiagnosed ADHD in female students in order to respond with appropriate supports. Similar conclusions have been reached by Boon (2020, 534) who argues that how ADHD is understood and conceptualised by educators is crucial because this ultimately affects the level of support offered to students with ADHD. If this is true, then increased educator training on ADHD may lead to the timelier provision of appropriate supports in schools for students with ADHD. Such support is particularly important for adolescent students, as research confirms the teenage years are a “critical period” for those diagnosed with the condition (Sibley and Coxe 2020). Otherwise, if teachers fail to recognise that students are struggling in the first instance, their needs may remain unrecognised and unsupported in classrooms.

Conclusion

There are several limitations associated with this study which the reader should be aware of. Firstly, due to the small sample size (N=17), the findings of this study are not generalisable to the larger population. However, they may be transferable to other contexts and situations (Firestone 1993), and thus, provide insight and value for a wide audience of readers including

teachers, parents, clinicians, and even young women affected by ADHD. Secondly, given that females with ADHD are likely underdiagnosed, the set of participants in this study, who were all formally diagnosed with ADHD, may not be fully representative of girls and young women affected by the condition in the wider population, particularly if their condition remains unrecognised, or if their symptoms are less severe than those of the individuals who took part in this study.

Yet, despite these limitations, the experiences of the young women arising from this qualitative study are both rare in the literature and insightful, as they draw attention to the many ways that gendered assumptions have very real consequences in the lives of females living with similar symptoms and biopsychosocial struggles as boys, but who receive unequal diagnoses, and educational accommodations, due to gendered stereotypes and expectations. The social and educational implications of ADHD for young men are well documented (American Psychiatric Association 2013; Laver-Bradbury 2012; Pride, Payne, and North 2012; Frazier et al. 2007), but this present research study illustrates there are young women attempting to negotiate complex neurodevelopmental conditions, who are unable to obtain full support from the medical and educational communities. Such difficulties appear to arise from gender biases and stereotypes laden in the conceptualisation of ADHD, combined with a lack of information and understanding regarding how the condition uniquely affects young women. In the same way that we often dismiss boys' problematic behaviour with "boys will be boys," it may be that our everyday gendered assumptions about the behaviour of girls and young women prevent us from considering a possible diagnosis of ADHD. This has significant implications when the chronic distraction of young women is simply dismissed as a propensity for "daydreaming," and in turn, they are not given the opportunity of medical and educational interventions. Thus, we need to raise awareness and pay closer attention to how our gendered assumptions and expectations about young women may directly impact

their chances of ADHD recognition, diagnosis and treatment earlier in life, and enable them to receive the necessary medical and educational supports sooner, rather than later.

This research holds significant implications for teacher-educators in Higher Education, who should ensure that initial teacher education programmes provide adequate theoretical and practical training in special education, along with a sophisticated understanding of gender in education. Indeed, previous research confirms the positive impact that both coursework and field experience has on teachers' effectiveness, perceived levels of self-efficacy, and ability to support students with SEN in the classroom (Peebles and Mendaglio 2014; Atilas, Jones, and Kim 2012). It is also suggested that teacher development programmes support practical approaches for inclusion and catering for diversity based on the principle of differentiation which can "maximize the potential of all learners" (Santangelo and Tomlinson 2012, 310). Similarly, enabling teachers in the use of educational approaches such as *Universal Design for Learning* (also based on the principle of differentiation) may be an effective method for promoting more inclusive and flexible educational systems (Boon 2020; Dalton et al. 2019). Research also confirms the paramount importance of fostering positive teacher attitudes towards inclusion (Saloviita 2019; Sandhu 2017), as these attitudes can directly affect the successful implementation of inclusion in mainstream schools (Ewing, Monsen, and Kielblock 2018). Thus, more than ever, it is essential that teachers feel they are both prepared and competent to recognise and respond to the needs of the students in their classrooms, and more favourably dispositioned towards teaching in mainstream inclusive classrooms.

The findings of this study also highlight the need for clinicians to recognise that DSM-5 diagnostic criteria for ADHD may contain a gendered bias which does not adequately account for the nuanced ways in which young women experience the condition differently to young males, and that such biases may further impede the diagnosis of ADHD in young

women. Indeed, Young et al. (2020, 1) assert, “a better understanding of ADHD in girls and women is needed” and similarly Te Meerman et al. (2017) call for a “reinvigorated” understanding of ADHD. This present study supports these same conclusions—and calls for more research, awareness and understanding on ADHD and its impact on females, including in educational settings.

In closing, despite the various panics and very public debates about ADHD, the aim here is not to argue that we need to broaden the way we understand ADHD so that we might increase the number of people who have the diagnosis. Rather, this article suggests that when considering ADHD, educators and medical professionals would do well to recognise the vast research which confirms that unchecked gender expectations and biases often function to exclude women (Paechter 2006). The same appears to be true when considering the exclusionary confluence of gender and ADHD in the lives of young women.

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