



Research Article

An Exploration of Adolescents' Perceptions of Their Attention-Deficit/Hyperactivity Disorder: A Qualitative Pilot Study

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Citation: Bowen G & Greenway CW (2022) An Exploration of Adolescents' Perceptions of Their Attention-Deficit/Hyperactivity Disorder: A Qualitative Pilot Study. Int J Autism & Relat Disabil 5: 153. DOI: 10.29011/2642-3227.000053

Received Date: 19 May, 2022; **Accepted Date:** 29 May, 2022; **Published Date:** 03 June, 2022

Abstract

In both diagnostic and research dimensions, Attention Deficit Hyperactivity Disorder (ADHD) symptoms are compartmentalized into specific behaviours rated for their severity and pervasiveness. To date, much of the research has examined the negative aspects and consequences of ADHD. However, emerging research in adult populations has begun to examine the possibility that ADHD is not universally negative [1]. The present pilot study sought to gain a better insight into the perceptions of adolescents with ADHD and answer questions concerning their problematic behavior or symptoms and whether they hold positive perceptions of their ADHD. Three adolescent boys diagnosed with ADHD were interviewed and using thematic analysis, the researchers identified seven themes: Broad Symptoms, Feelings about the symptoms, Setting, Task-specific, Negative outcomes, Recognizing the positives, and Lack of awareness of positive attributes. This study illustrates that, overall, negative perceptions of ADHD were more prevalent than positive perceptions, though the few positive perceptions identified were congruent with the adult-based literature. Implications of the study and recommendations for the future are discussed.

Keywords: Attention deficit hyperactivity disorder; Adolescence behaviour; Positive perception; psychoeducational programs

Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that affects 3% to 9% of children attending UK schools [1]. Despite its status as a neurodevelopmental disorder, historically, ADHD is often considered in terms of its associated negative behaviours that have a detrimental impact on the educational and social development of the individual [2,3]. In addition, the disorder has substantial negative attitudes and stigma attached to both the diagnosis and the associated behaviours [4,5]. Thus, research has approached ADHD to define and reduce its negative attributes to develop and provide effective treatments to

aid educational achievement and acceptable societal standards [6-8].

Problematic Behaviour

The three most frequently encountered problem behaviours to receive attention and intervention tend to be talking with other students, inability to follow directions and interrupting the teacher [3,9]. However, these behaviours are relatively generalisable to all students, as evidenced by the findings in a previous study by Kaidar et al. [10], who found that there is no difference between the frequency or type of behaviour perceived as problematic between students with or without ADHD. For Daley and Birchwood [11], behaviours exhibited by individuals with ADHD appear to attract more negative attention than the same presentation of behaviours in those without ADHD. It is worth noting that such behaviours are usually minor (fidgeting, talking, getting out of their seat) and

forms part of the child's coping mechanism for expelling excess energy or remaining 'grounded'. Du Paul and colleagues [12] stress that targeting externalised behaviours, enforcing conformity, and highlighting a failure to meet the classroom's multiple demands will lead to avoidance goals rather than approach or mastery goals [13]. Consequently, such strategies will do little to increase motivation to sustain attention or subsequent achievement [7]. Yet, despite such strategies failing to improve experiences for those with ADHD, schools continue to use them.

To-date, quantitative research highlights that most of the behaviour adolescents with ADHD consider problematic is directly related to their ADHD symptoms [3,5,14,]. For example, fidgeting, losing items, talking too much or being easily distracted are among the top reported problematic behaviours in adolescents [10]. These findings are consistent with observation-based studies of ADHD-related behaviour within the classroom [9]. However, such studies use quantitative measures, such as the Dominic-R [15], which require individuals to indicate their most problematic behaviour and its frequency from a preselected set. Although these measures allow data to be compared among groups and individuals, they appear to discount individual perceptions and assume generalisability across the ADHD population. Some may consider none of the behaviours the most problematic, whereas others may consider two problematic behaviours, but at different times. More importantly, these measures do not consider why the behaviours are problematic or within which context, leaving this very much open to interpretation.

From a qualitative perspective, when asked to explain their experiences of living with ADHD, adolescents will often describe feeling defined by their symptoms and not seen for who they are [16]. These feelings lead to expressing themselves in terms of their ADHD, which impact their sense of identity [17] and perceptions of how they fit into society [18]. Qualitative studies have also shown that adolescents can recognise the differences in their symptoms across contexts. In particular, they can express the relationship between the environment and the severity or presentation of their symptoms [18]. They can also recognise the need for specific support at home and in school, explaining that they look to teachers and parents to provide different kinds of support [19,20]. However, a common theme across much of the research seems to be that adolescents feel that they lack control and autonomy over their environment. In addition, they argue that achievement and behaviour definitions set by others place them at a distinct disadvantage. Consequently, little control over how they receive support contributes to an overall negative perception of their diagnosis and symptoms [21].

While quantitative measures can identify which general or specific behaviours present the biggest problem for adolescents with ADHD, qualitative research offers insight into why these

behaviours are problematic. Unfortunately, however, the contextual base for a significant portion of the literature remains focused on educational environments [5, 22] with few studies seeking to explicitly and exclusively examine the impact of ADHD in other areas of the adolescent's life [19].

Positive Behaviours

There is some evidence to suggest that ADHD should not be assumed to be inherently negative. For example, evolutionary psychologists posit that perceived inattention and hyperactivity-impulsivity could be considered residual characteristics of hyper-vigilance and high motor activity, both of which would have served their ancestors well in times of resource-depletion and conflict [23]. Such explanations have led to an interest in how these residual traits may benefit those with ADHD in more modern circumstances, with studies of adult populations yielding promising results [1, 24].

In the small body of research that examines the positive attributes of ADHD, traits such as hyperactivity, impulsivity, and risk-taking may afford opportunities psychologically inaccessible to neurotypical peers [25,26]. These traits, in childhood and adolescence, may present as problematic within the classroom but as adults, with the freedom to choose their environment, may manifest as behaviours and thought processes considered to be divergent thinking, adventurous, energetic and courageous [1].

In the adult literature, ADHD symptoms positively link to entrepreneurial intentions [24], with hyperactivity being seen as the driving force. The willingness to take risks and make impulsive decisions are beneficial attributes in a quick-paced entrepreneurial environment. In addition, self-employment and entrepreneurship may be appealing to individuals with ADHD as it removes conventionality. Individuals are not forced to conform to the demands of others as they would be as an employee or when at school [27]. Instead, they experience a level of autonomy and creativity, such as arranging their working hours, often late into the night, when they have the most energy and freedom to pursue new ideas and concepts [25].

However, these novel findings remain contested [27,28], with the presence of these beneficial attributes dependent on specific characteristics of the environment and task, such as autonomy of task selection and execution-style [1, 25]. Additionally, research has only examined adult ADHD populations to date, so how these findings are generalisable to the younger populations is yet to be seen.

Environmental Context

Recently, research has indicated that school appears to evoke a unique and environment-specific set of ADHD-related behaviours not reported within the home environment, suggesting

that ADHD may have a context-specific subtype [29]. Thus, indicating a difference in symptom severity and/or presentation across the two environments, which may account for the lack of significant correlation between parent-teacher ratings (as reported using Conner's Parent Rating Scale: CPRS, and would bring into question the efficacy of using school-derived interventions at home. Many educational and developmental studies have previously supported the importance of environment characteristics [11,30]. Given that neither parent nor teacher reports of ADHD symptoms are of superior validity [31], and the general lack of significant correlation between reports [32], it may be beneficial to consider the perceptions of those with ADHD. After all, they are present across both settings. This notion has previously been raised by Travell and Visser [33]. They believe that consideration of adolescent perceptions is vital to diagnosis and understanding the behaviour and manifestation of ADHD. The authors further argue that speaking directly to the source reduces misconceptions and negative attitudes towards the disorder.

The Present Study

With the limited number of qualitative studies in this area, how adolescents perceive their ADHD symptoms and behaviours is unclear. Therefore, it seems pertinent to fill this gap in the literature. Additionally, the lack of literature surrounding adolescents' perceptions of positive behaviours and whether symptoms and behaviours differ across environments require careful preparation and interpretation. Therefore, it appeared relevant to carry out a pilot study. It is hoped that the pilot study will provide some preliminary insight into how adolescents perceive their ADHD symptoms and behaviours. Identifying behaviours that can be harnessed to produce beneficial outcomes presents an opportunity to change the current narrative and research focus from a deficit-based approach to a strength-based approach. Such change may improve educational outcomes, facilitate attitude change and reduce the stigma surrounding ADHD. Piloting the study will help the methodology's quality, appropriateness of the interview schedule, and interview skills in preparation for the authors' planned future study. Alongside these preparations, the study aimed to examine the following research questions:

1. What behaviour or symptom do adolescents with ADHD find most problematic?
2. In which environment are these behaviours or symptoms most problematic, and why?
3. Do adolescents hold any positive perceptions of their ADHD?

Method

Participants and procedure

Participant recruitment was supported by the ADHD Foundation, which distributed an e-flyer on their social media and

webpage, inviting interested parents to contact the researcher for further information. After initial screening for the exclusion criteria of age (<13/ >16), ADHD diagnosis (non-diagnosed excluded) and co-morbid autism and/or Tourette's syndrome [2] the sample remained at n=3. All three participants were boys, early to mid-adolescents, aged 13-15 (m= 14.3). All had a current diagnosis of ADHD (2, combination subtype, 1, Hyperkinetic Disorder). No data were collected regarding the status of medication use.

Information sheets were emailed to interested participants and their parents/guardians before collecting written informed consent. Two, separate information sheets were provided to respect the individual autonomy of the parent and the participant and provide the information in an appropriately written fashion. Consent and assent were also collected separately. Interviews were conducted by the first author via video-conferencing (Microsoft Teams & Zoom). The interviews were recorded and lasted between 20 and 30 minutes. Permission for recording was gained, and participants were reassured that their responses were anonymous, and each was assigned a pseudonym to protect their identity.

Materials

The interviews were semi-structured and consisted of thirteen questions that followed the three-phase model [34,35]. Phase one (three questions) was designed to build rapport between the interviewer and respondent and give the interviewer participant-salient information that can be used to provide examples or elaborate on a question during the data collection phase of the interview. Responses from phase one were not used in data analysis. Phase two contained seven questions adapted from qualitative and quantitative studies of ADHD behaviour and perceptions [3, 15, 25, 34]. The seven questions were designed to examine (1) the individual's most problematic ADHD behaviour or symptom, (2) when this behaviour or symptom was most likely to occur, and (3) if the ADHD symptom or behaviour contributed towards the success of the individual. Phase three (3 questions) allowed the interview to come to a natural, respectful close and encouraged the participant to reflect on their responses. Recordings were transcribed verbatim in preparation for data analysis.

The University ethics panel granted ethics approval. Participants were informed on the information sheet that participation in the study was voluntary and that they could withdraw at any time. At the beginning of the interview, the information required only the necessary demographic information to ensure anonymity and confidentiality.

Data Analysis

Data Analysis was performed using Thematic Analysis (TA) in line with the recommendations of Braun and Clarke [36]. Thematic analysis is an inductive approach to pattern recognition and theme identification that provides a rich and detailed account

of data [37]. Following transcription, both authors read and re-read the transcripts for accuracy and to familiarise themselves with the data. The next step involved producing codes, which included re-reading each interview and placing codes on the transcripts using highlighting pens and writing labels in the left margin of each interview transcript. Coding was carried out independently using Creswell’s [38] idea of analysing and categorising specific statements that signify the area of interest. The authors then met to compare the codes and discuss how they were generated. Rigour and credibility were ensured by checking codes against the initial descriptions developed [39], and a final total of thirty-nine codes were agreed upon to represent an agreement of almost 96%. Step four involved grouping codes and creating a preliminary table of sixteen sub-themes with supporting descriptions. The final step involved the clustering of subthemes into seven main themes across the three research questions. Trustworthiness and authenticity were determined by multivocality [39]. Multivocality encourages researchers to provide space for multiple, varied voices and opinions of those interviewed. Such opinions are presented through thick descriptions and direct quotations presented in the next section.

Findings

The information reported in this section presents representative quotes from the seven main themes. In addition, table 1 outlines the themes for each of the three research questions.

Research question	Main theme	Sub-theme
What behaviour or symptom do adolescents with ADHD find most problematic?	Broad Symptoms	Inattention Hyperactivity
In which environment are these behaviours or symptoms most problematic, and why?	Feelings about the symptoms	Annoyed Frustrated
	Setting	School Home
	Task-specific	Task length Autonomous environment Autonomous activity
Do adolescents hold any positive perceptions of their ADHD?	Negative outcomes	Verbal reprimands Ineffective strategies
	Recognising the positives	Stamina Bravery Open to experience
	Lack of awareness of positive attributes	Focussed on the negatives Problematic symptom differences

Table 1: Thematic analysis of the interviewees’ comments for each research question.

Research Question 1: Which Behaviour or Symptom do Adolescents Perceive as Most Problematic?

Broad symptoms

Interviewees identified two core ADHD symptoms, as opposed to individual ADHD-associated behaviours. These were inattention and hyperactivity. Interviewees felt that becoming distracted and lacking the motivation to sustain attention were their most problematic symptoms, “...unless I can see I am actively getting there...I find it quite hard to continue” (Ben), and “...not focusing and getting distracted” (Sam). Although those interviewed acknowledged that inattentiveness impacts their daily life, they also identified that

hyperactivity was the more prevalent symptom that caused them the most difficulty, "...and I do get kind of hyper, hyperactive, quite a lot" (Jack), and "it's hyperactivity, the more bad one" (Ben).

Feelings about the symptoms

The interviewees went on to explain how these symptoms made them feel. They spoke of feeling annoyed when they get in trouble for being hyperactive, "I guess [I feel] kind of annoyed" (Jack). They also cited frustration for themselves and others, "it's frustrating for me and the people around me. I just go off-topic because I'm not concentrating" (Ben).

Research question 2: In which environment are these behaviours or symptoms most problematic, and why?

Setting

From their perspective, school and home represent two settings in which they feel their most problematic behaviour occurs, "...well at school, I get into trouble quite a bit, for things like not focusing" (Jack). Each of the interviewees referenced home as an environment in which they perceived ADHD as having a negative impact, "Like when I'm at home...I'll get distracted and forget what I'm supposed to be doing" (Sam). For one of those interviewed, home represented "a low-pressure environment, where I don't have anyone constantly reminding me" (Ben). For this individual, the home affected his attention and ability to focus on tasks more than at school because he lacked the self-motivation to see the task through to the end. The interviewees also saw their ADHD affecting both home and school life. In particular, they state that their hyperactivity and inattention leads to "getting told off [at school], but that's at home as well" (Jack).

Task-specific

It appears that those interviewed believed that the problematic symptoms and behaviours were determined and often exacerbated by the type of task they were doing. For example, the task's length and the autonomous nature (autonomous environment and autonomous activity) of the task contributed to the problematic behaviours cited by those interviewed. For those who mentioned the length of task, "if it's a long piece of work, I'll just put that to the back of my mind" (Ben), their inability to sustain attention was exacerbated by activities that require protracted attentional expenditure to complete, "unless I can see I am actively getting there and I'm getting closer to the end goal...I find it hard to continue" (Ben).

The interviewees also spoke of how the autonomous nature of the activity had affected their ability to work through a particular task in spite of their inattention or lack of focus, "it definitely does help [me to focus] when I'm doing something I like" (Jack). This suggests that when the environment is autonomously selected, such as the recreational setting cited by Jack, they have less of

a problem maintaining focus and attention, "if I'm out on my skateboard, I can go for longer..." (Jack). Interviewees also eluded to the potential benefit of being able to engage in a task with intense concentration when the activity was particularly salient and enjoyable, "[inattention is not a problem when it's something you enjoy] yeah, because..., well, my parents call it hyper focus". This suggests that ADHD behaviours and symptoms that are considered as problematic and disadvantageous in more controlled settings, may actually provide a means for advantage over non-ADHD individuals.

Negative outcomes

This theme explains why a certain symptom is perceived as more problematic because of the subsequent negative outcomes. In particular, the interviewees spoke of verbal reprimands following hyperactive behaviours "I usually get told off" (Jack) and "giving me a verbal warning" (Sam). The interviewees then go on to talk about the use of ineffective strategies by those handing out the reprimands. For example, "just telling me to stop doesn't really do anything. It's not like I choose not to listen" (Sam). It is clear that the use of such verbal reprimands has little influence in resolving problematic behaviour. Rather than addressing the behaviours, they "put that to the back of my mind... I don't really think about it" (Ben), or they feel "kind of annoyed" (Jack).

Research Question: Do Adolescents Hold Any Positive Perceptions of their ADHD?

Recognising the positives

For those interviewed, only Jack viewed their ADHD behaviour in a positive light. In particular, he spoke of his stamina, bravery and being open to experience. Jack expressed an enhanced ability to perform physical activities without experiencing exhaustion "I can go for longer..., I don't get tired as easy", and attributed this benefit to having [hyperactive] ADHD, "...probably not [the same outcome, if I did not have ADHD]" (Jack). When faced with situations that would typically evoke fear or uncertainty, Jack noted he did not experience these inhibitions, but acknowledged that others without ADHD might, "grown men... backing out [of a bungee jump]... saying they didn't want to do it... I like just jumped". Being willing to participate or engage in novel activities and environments was also considered to be a benefit of having ADHD, "Yeah I definitely [think a lack of fear helps me try new things]" (Jack).

Lack of awareness of positive attributes

Unlike Jack, the other two interviewees did not acknowledge any positive attributes associated with their diagnosis of ADHD "I can't really think of anything" (Ben). Instead, they focussed on the negatives which appear to be linked to problematic symptom differences.

Both interviewees could not recall any instances in which their ADHD had benefitted them, even when prompted to consider social and recreational environments, "I'm not sure to be honest, I haven't noticed anything" (Sam). It appears that their perceptions of ADHD were more strongly associated with its negative impact, "Yeah [I hold more negative perceptions of ADHD]" (Ben). Interestingly, for those not able to cite any positive perceptions of their ADHD both considered their most problematic symptom to be inattention. In contrast, Jack who could recall several positive attributes, considered hyperactivity to be their most problematic symptom.

Discussion

This pilot study aimed to explore adolescents' perceptions of their ADHD, specifically identifying positive perceptions they may hold. Research into positive attributes of ADHD is limited [1,25], and thus far, void of the perceptions of adolescent populations. It is essential to understand whether younger people are aware of the possible positive attributes associated with their ADHD so that early support strategies can be targeted toward enhancing these strengths instead of focusing on deficit-based intervention. This is particularly important as education moves toward a pupil-centred approach to learning.

As demonstrated by the identification of the theme Broad Symptoms, it was found that adolescents with ADHD tend to perceive their most problematic behaviour in terms of the overarching symptom of either inattention or hyperactivity instead of a specific behaviour. This is partially congruent with the literature that states that behaviour perceived as most problematic by adolescents with ADHD is directly associated with symptoms of the disorder [5]. Still, the finding that adolescents do not consider a specific behaviour, like fidgeting [10], to be more problematic than the symptom itself contradicts quantitative research [3]. This has implications for the utility of scales like the Dominic [15], which reduce symptoms down to specific behaviours. Further research is needed to examine why adolescents perceive the overarching symptom as more problematic than a specific behaviour, but it may be linked to the tendency to define themselves by their symptoms [17], something which they feel they have little control over [16]. However, it may be that they simply do not perceive specific behaviours, such as being out of their seat, fidgeting or interrupting as problematic [11].

The two key environments of school and home were identified as being likely to exacerbate the most problematic symptoms, which supports previous literature [7, 9, 11,29]. It has been well documented that school is difficult for those with ADHD if specific adaptations are not in place. However, the home environment's relationship with ADHD has received much less explicit attention [29], with the focus on parents' perceptions [32]

or the way parents can support the school [11]. These findings have implications for the future development of appropriate training programmes and interventions that consider how those with ADHD can be supported at home as well as at school.

This study also found that certain tasks and settings supported a relatively symptom-free scenario, seemingly supporting Wiklund et al. [25]. When the environment, task and task-engagement time were selected autonomously, ADHD symptoms were perceived as far less disruptive and problematic. Autonomous vs non-autonomous environments and activities provides answers as to where and when ADHD symptoms are most associated with a negative outcome, and the times when they are not. School and home appear to be two settings in which the respondents perceived their most problematic behaviour to lead to the most negative outcome and have the largest detrimental impact, particularly when the task required of them was perceived as protracted and uninteresting. Settings and activities autonomously selected by the individual appeared to have a reverse effect on the outcome, with ADHD-related behaviours leading to more positive results. Therefore, future researchers and clinicians may want to explore different tasks and settings when carrying out diagnostic assessments and the development of self-management interventions.

Only one interviewee held positive perceptions of their ADHD, citing stamina in physical activities, absence of fear and a willingness to engage with new experiences. These attributes have previously been identified in adult-sample studies as energy, courage and adventurous [1]. Physical stamina has not been explicitly examined for its differences between ADHD and non-ADHD controls, though physical activity as an intervention has a large presence within ADHD literature, with it posited to provide a structured outlet for hyperactive symptoms and have benefits to cognitive function, [40] and behavioural management [41]. Further exploration of the physical stamina levels in individuals with ADHD in comparison to controls may reveal new insights into the potential beneficial attributes of hyperactivity.

The positive perception of increased bravery has also been previously identified in adult-sample based literature [1]. Individuals with ADHD often possess a lack of normative fear response, associated with the behaviours of risk-taking, impulsivity and response-inhibition [42], which may support this perception under the right circumstances.

The perception of being open to new experiences provides further support for the bilateral manifestation of ADHD behaviour. Within environments that require conformity, novelty-seeking may be considered "challenging" by those who interact with the individual [21]. However, the finding that it may be perceived as a positive attribute of ADHD is also supported by the findings from adult sample studies [1], where it has also been seen to increase the

success rate of entrepreneurial endeavours [25].

These findings have implications for the future development of family, educator and individual psychoeducational programmes, where consideration of the positive attributes may increase attitudes towards ADHD and increase the self-esteem of those diagnosed with the disorder. For researchers, there is a need to place a larger emphasis on the potential benefits associated with ADHD and how these can be productively harnessed in children and adolescents [41].

Though not completely absent, there appeared to be a distinct deficit of positive perceptions held by those interviewed. This could be because adolescents with ADHD appear to hold significantly more negative perceptions of their ADHD [21], which result in very few and notable positive attributes or experiences. However, the sparsity of positive perceptions cited could be considered to support Wiklund et al. [16], who state that those with primarily inattentive symptoms were the less likely to identify positive attributes in their ADHD. This finding that some individuals can identify positive attributes, while others are not, has additional implications for the way in which ADHD is portrayed in the research, the measures, psychoeducation programmes and educator training. A shift in the research focus may yield important findings that could be implemented into current behaviour measurement scales, encouraging future generations of individuals diagnosed with ADHD, and those around them, to evaluate the disorder differently.

As well as providing preliminary findings on adolescent perceptions of their ADHD, the pilot study aimed to gauge the viability of the research, helping to identify areas for improvement for a larger scale project post-pandemic restrictions. As expected, this pilot demonstrated several areas of improvement required for the future larger study. One of the main issues with the study was the sample size. Unfortunately, the COVID-19 pandemic significantly reduced access to participants. Those who had indicated an interest to take part were reluctant to be interviewed remotely which led to them pulling out of the study. Furthermore, the use of video conferencing may have affected the quality of interviews. For example, while those interviewed may have felt safe and relaxed in their own space, the researcher has very little control over the external environment of those being interviewed. Distractions and disruptions that are heightened for those with ADHD may have shifted their focus from the interview [43]. The quality of the interviews may also have been affected a lack of privacy. All were interviewed from their parent's home which may have affected their willingness to speak openly. Fatigue may also have played a part in the quality and length of the interview. Although this might be an issue for face-to-face interviews, the increase in video-conferencing and technology for school-work during the pandemic has highlighted the tiring nature of online

communication [44]. Furthermore, the difficulties those with ADHD experience with regard to attention and concentration would have exacerbated this further. Additionally, good quality interviews require a strong researcher-participant connection, especially when discussing sensitive topics [45]. The use of video conferencing would have compromised this connection and may have resulted in missed opportunities for the researcher to observe the participant's physical space and respond to body language and emotional cues [46].

Further considerations relate to the interview structure and questions. The order of the questions may have affected the participants' ability to recall positive attributes of their ADHD. Interviewees were asked to consider the negative attributes of their ADHD first, before being asked to consider its positive attributes, which may have seen them 'stuck' in a negative train of thought [47]. This was probably exacerbated by the expectation to cognitively switch tasks considered more difficult for those with ADHD, [48]. Additionally, though the questions were worded in such a way as to avoid being leading, or distressing, such as refraining from using the term 'problematic' and avoiding reference to specific behaviour, this may have been to the detriment of the study. It would be beneficial to revise these questions, and the language used, to explore whether this would encourage more substantial responses from the interviewees.

Despite the issues and considerations above, there are several strengths notable in this pilot study. To our knowledge it is the first study to attempt exploration of the positive perceptions of ADHD symptoms and behaviours from an adolescent's perspective. The previous adolescent sample-based studies have held focus on problematic ADHD behaviour only [5] with the exploration of positive attributes favouring adult populations [1, 25]. Furthermore, with the majority of studies focussing on classroom behaviours [20] this study was successful in its attempt to expand the literature on the positive attributes of ADHD to include adolescent populations outside of the classroom.

This pilot study also identifies a need for research to focus on the impact of ADHD within the home environment, with the aim of developing home-specific interventions, particularly those aimed at maintaining focus on homework assignments. This is particularly relevant, given that the current Coronavirus Pandemic has forced students to learn from home, where students may have less structure and consistency. Research into the efficacy of a holistic approach that combines recommendations regarding task length with computerised interventions and student-focused coping programmes may be beneficial. Finally, given the current dearth in the literature, it would be beneficial to expand the research focus to include the exploration of positive attributes of ADHD, which would offer an opportunity to change the current narrative on ADHD and emphasise the positive qualities individuals may hold

which can improve self-perceptions and future outcomes for those with ADHD [49,50].

Conclusion

The current literature has placed a heavy focus on ADHD within the context of school [9, 11, 29] and as a result, there are numerous evidence-based interventions recommended in the literature [7, 11,9]. However, findings from this study suggest that problematic behaviour is most often met with ineffective strategies, indicating an increased need to address this in teacher training programmes and classrooms. Additionally, home environments that lack sufficient support for attentional deficits require effective home-based interventions that target inattention and focus.

The fact that adolescents' negative perceptions of their ADHD appear to be much stronger and more easily accessible than their positive perceptions, suggests that more work is needed on encouraging more positive experiences for those with ADHD. With this in mind, teacher training, psychoeducational programmes and diagnostic tools need to redress the balance of negativity to allow those with ADHD to acknowledge and celebrate the positives which may change the negativity and discrimination associated with the disorder.

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