

Chapter 1 : Review of Literature

Prior (2022) states that one in every ten children will struggle with learning at some point during education. Prior (2022) argues that not all individuals who have difficulty during their academic years, will receive a formal diagnosis. Leaving a wide number of children and adults having a difficult academic experience and impacting their later life. Historically, the study of learning difficulties developed further in the period of the Second World War, systematically studying damage to certain areas of the brain of soldiers (Prior, 2022). However, earlier Hinshelwood (1895) and Orton (1825) developed theories regarding issues with reading and suggested the link with the brain (Guardiola, 2001). Furthermore, learning difficulties has also been associated with early brain damage in children (Gaddes, 2013). Consequences included loss or deterioration within certain cognitive functions such as memory and learning, this created a new path of research into the different factors of the brain associated with learning difficulties (Prior, 2022). A definition for 'learning difficulties' is explained differently in various cultures, considering those who have not received formal schooling (Leon & Campbell, 2020). Prominently referring to someone's reduced ability to learn certain skills or retain information sufficiently (Slowling et al, 2020). Some of the most known are Attention Deficit (Hyperactivity) Disorder (ADHD) and Dyslexia (Cruz et al, 2023).

ADHD is a neurodevelopmental condition which can make learning harder to navigate (Hudson, 2024). Presenting a pattern of inattention and/or hyperactivity-impulsivity behaviour, that can impact the functioning or development of an individual (American Psychiatric Association, 2022). ADHD is classified into different presentations, involving the inattentive presentation. Predominantly affecting social and academic activities, involving having a lack of attention to details and making careless mistakes. Secondly, the hyperactive/ impulsive presentation, presented as someone who often fidgets, often leaves their seat in a classroom, has difficulty waiting and is often hyperactive. Thirdly, the combined presentation, which can be a combination of the two (American Psychiatric Association, 2022). The prevalence of ADHD is dependent upon age, country and gender group, with males gaining a diagnosis easier, compared to females (Young et al, 2020). This is thought to be due to the presentations appearing differently for males and females being referred for suspected emotional issues (Klefsjö et al, 2021). The National Institute of Health states that in the UK, 3% - 4% of adults, and 5% of children have ADHD (NHS, 2024). Many children with ADHD experience social and academic impairments, experiencing peer victimization and negative self-esteem, as well as struggling to concentrate during class (Boguslavsky, 2021, Binti Marsus et al, 2022 & Zendarski et al, 2021).

Dyslexia on the other hand, is neurobiological (Munzer et al, 2020) characterised by having struggles with accurate word recognition, difficulties with written expression, poor decoding and spelling issues. It can also be combined with other learning difficulties associated with reading and mathematical reasoning (American Psychiatric Association, 2022). As stated by The British Dyslexia Association (BDA) Dyslexia is one of the most common specific learning difficulties, meaning it impacts certain abilities used for learning but does not impact overall intelligence of an individual (BDA, 2010). Affecting approximately 10% of the UK with 4% severely affected (Ross, 2023). However, although the prevalence of people diagnosed with these two difficulties, there are issues when it comes to diagnosis (Astle et al, 2022). This is thought to be due to the lack of training for teachers to support those with a learning difficulty (Rahul & Ponniah, 2021 & Bolinger et al, 2020) lack of academic funding (Fletcher et al, 2018) and extensive cost for private diagnosis (Pumfrey et al, 2013) meaning children and adults are left to wait longer periods to gain a diagnosis, sometimes persisting well into adulthood (reference). ADHD and Dyslexia can also fall together, this is referred to as 'comorbidity' describing the simultaneous occurrence of two or more difficulties in a single diagnosis (Pavlidis & Giannouli, 2014).

Research regarding ADHD and Dyslexia has identified several strengths associated with gaining an early diagnosis (Zahmacioglu et al, 2017). Promoting self-belief and self-acceptance (Gani, 2024) and allowing a better understanding of own behaviour (Battistutta et al, 2018). Individuals with ADHD are known to be good problem-solvers and can gain a unique perspective on situations and individuals with Dyslexia are seen to be highly creative (Ampe & Rammant, 2023). Furthermore, this does place great importance of having a diagnosis, with a late diagnosis leading to lower self-esteem (Glazzard, 2010, Zuppardo et al, 2023 & Watters et al, 2018) lack of close friendships (Shehu et al, 2015 & Miller, 2022) and lack of motivation (Battistutta et al, 2018). There is also a varse need for the correct support measures to be in place for a secure future progression (Rahul & Ponniah, 2021 & Graf, 2022). Glazzard (2010) investigated the impact Dyslexia has on self-esteem levels of nine 14 and 15 year old students, through conducting interviews of asking seventeen questions regarding their subjective perception towards their Dyslexia. Results indicated that students compared themselves to others often, which led to feelings of disappointment and feelings of stupidity, as well as feeling isolated from other students due to being 'different'. Teacher humiliation was also apparent, with students experiencing judgement and verbal abuse from their teachers. Students also reported feeling lower self-esteem prior to receiving a diagnosis, however after receiving that diagnosis, their confidence increased by being able to differentiate their difficulties to their intelligence.

In a more up to date study, Zuppardo et al (2023) stated that of the 47 children and adolescents from primary and secondary schools, (13 with Dyslexia and 15 without) in secondary and (9 with and 10 without) in primary, those with Dyslexia stated lower self-esteem, even after being diagnosed. However, heightened that not all with Dyslexia will have lower self-esteem and can be dependent upon individual differences. Furthermore, Glazzard (2010), further stated that students also reported if teachers knew better support mechanisms in the classroom and understood dyslexics better, students would struggle less and have better self-esteem. This was supported by Rahul & Ponniah (2021), stating that educators need to understand how to properly teach dyslexic pupils, aswell as understand their processing. Highlighting that those with Dyslexia need a proper diagnosis as early as possible to facilitate their social and academic life, that they require appropriate instructions and the necessary social and emotional support also. Teachers tend to focus more on the students with better literacy skills in the classroom, which emphasised that teachers need better support strategies. Furthermore, the common classroom methods of learning does not work for those with Dyslexia, and even more so, Dyslexic pupils require individualised measures due to individual differences. Encouraging that teachers need to adopt flexible approaches to learning which can aid overcoming difficulties in the future.

Glazzard (2010) and Rahul & Ponniah (2021) both argue that more support is needed for those with Dyslexia, which showcases in the difference of 11 years, little development has been done in support strategies for those with Dyslexia. Zuppardo et al (2023) on the other hand, also explored anxiety, self-esteem and behavioural problems between control groups and those with Dyslexia. Students with Dyslexia showcased a higher level of social anxiety when having to do performance's and self-esteem was impacted upon social anxiety and fear of judgement. This showcases that although it is a very present study, the stereotypical attitude towards Dyslexia is still apparent and children are still seeing an effect on their self-esteem. Overall, Glazzard (2010) study signifies that an early diagnosis of Dyslexia has significant effects on self-esteem. Although, due to the small sample size it was hard to determine significance from this study, however they considered the influence of teachers and peers on self-esteem. Zuppardo et al (2023) also faced a small sample size with external influences on self-esteem not being considered eg bullying.

In contrast, Acheampong et al (2019) conducted a study to examine the knowledge of basic school teachers on the support measures and identification of Dyslexia, 62% had knowledge about Dyslexia, 60.5% on identification and 65% had knowledge on support services. However, the teachers which had obtained a degree were 1.75% more knowledgable then those with basic education training. Concluding that basic education is lacking training about learning difficulties, has inadequate resources for pupils and that teachers find classes of large numbers harder to support, aswell as not having enough time to properly apply that support to pupils on a one to one basis. This is

further supporting the statements by Rahul & Ponniah (2021) regarding the lack of training provided for teachers. Although, levels of academic support can be dependent upon level of education (Fong et al, 2023).

ADHD is at a different threat with educational support. Graf (2022) highlighted that symptoms of ADHD is directly at conflict with how current students are taught, with students being plagued by low performance and having a lack of attention (Rahul & Ponniah, 2021). Much research upon special education has been done by leading researchers DuPaul and Stoner, they developed multiple strategies to help those with ADHD and state that it is crucial to have the appropriate interventions in place to support these individuals for future success (Sol, 2020)

Bolinger et al (2020) conducted a study on the amount of knowledge teachers had regarding ADHD students and their classroom management systems. By surveying 17 teachers between the ages of 21-56, in which 4 had gained extra training for ADHD. Teachers did two surveys, one with 25 items regarding their knowledge and a 40 item regarding their management, analysis showcased that 35 – 85% had knowledge, however, 19.91% stated that they did not know. There was a significant relationship between knowledge and the correct management strategies that teachers provided. However, it was apparent that even if the teacher knew of the strategies, they did not always imply them. Supporting the issues faced against support for Dyslexia (Glazzard, 2010, Rahul & Ponniah, 2021, Zuppardo et al, 2023). The same issues are being opposed for ADHD, with teachers lacking knowledge of the support measures and not necessarily even implying the correct strategies. Limitations of this study involve having a small sample group which makes significance hard to determine, although a high percentage of teachers not being certain on what to do with an ADHD child, aswell as ethnicity and gender unable to be tested. There was also not enough teachers in the study to examine differences in knowledge for those that gain extra training and due to the teachers self-reporting their management strategies, these could possibly be modified or false which may be unreliable. Nevertheless, this study signifies that teachers lack knowledge on the correct support for ADHD students.

Comparably, Battistutta et al (2018) worked with adolescents who had been diagnosed with Dyslexia either in primary (mean age of diagnosis 8.1) or secondary school (mean age of diagnosis 13.5) through three scales based upon self-efficacy, self-concept and self-esteem, followed by two open-ended questions regarding the adolescents subjective perceptions towards their Dyslexia. The analysis detailed that those who gained an early diagnosis were more open towards others and accepted help in difficult tasks with better understanding of their diagnosis. Comparably those who were late, preferred their classmate's and teacher's to be unaware, in order to be treated as a normal student. Diagnostic timing was found to be an important factor in acceptance and understanding of having Dyslexia. Early diagnosis employed better self-perceptions, self-esteem and acceptance for support. Zahmacioglu et al (2017) who analysed self-esteem and loneliness through two scales, comparing adolescents who had received an early and late diagnosis of ADHD. Comprising of 62 adolescents with a late diagnosis (between the ages of 12-14) and 55 with an early diagnosis (between the ages of 6-8). Results from the loneliness scale indicated that those who were diagnosed late felt higher levels of loneliness. Self-esteem was also lower with those late diagnosed, aswell as displaying low self-confidence. Furthermore, this study employs that an early diagnosis can decrease the likelihood of psychosocial issues during adulthood. Similarly to Battistutta et al (2018), a late diagnosis of Dyslexia was associated with psychological consequences, such as lower academic competence and loss of motivation. However, this study did not account for comorbid difficulties and the varying degree of capabilities proposed by the age differences.

Moreover, Watters et al (2018) studied the impact having ADHD in adulthood through semi-structured interviews with 9 males and 2 females. Thematic analysis was used in order to determine themes, investigating the participants

experiences with accessing treatment and support during adulthood and positive/negative effects of ADHD. The study found that all participants had a co-morbidity which could have influenced overall findings. However, low self-confidence and low self-esteem was evident. Participants also stated having 'limited possibilities' when working and sticking to a job, there was high levels of frustration and feeling inadequate, due to concentration difficulties. Benefits of having ADHD were also mentioned, that working on impulse was a good thing and not thinking too much into things. However, participants highlighted that 'you just have to accept it' in adulthood and it was a challenge in accessing support, due to ADHD being considered a childhood 'thing' and that ADHD in adulthood is an 'excuse'. Watters et al (2018) further states that clinicians need to be more aware to give the correct support. Supporting studies by Glazzard (2010) and Rahul & Ponniah (2021) with the correct support needed. This magnified that support is lacking for ADHD and Dyslexia. Stigma was also emphasized in this study, that ADHD is evidently seen as bad behaviour, or is a label for a 'bad kid'. Although this study heightens the impact on adulthood, they were predominantly male of a small sample and there were also issues in determining ADHD and co-morbidities, encouraging more research to be done into perspectives of those diagnosed during adulthood.

Furthermore, Shehu et al (2015) investigated the impact the quality of social relationships has on self-esteem levels of children with Dyslexia through seven schools. Firstly diagnosing the children and then applying a questionnaire to measure their social relations. Similar demographic information was needed to the present study (age, gender, educational level) also questioning parental and peer relationship. Consisting of ten questions with seventeen participants, which gives a small sample size and only selecting participants of a particular age. 58.9% felt excluded from peers due to academic difficulties. This study identified that having a positive child-peer and child-teacher relationship facilitated self-esteem levels and that a poor child-peer relationship showcased lower self-esteem.

In contrast, Miller (2022) considered comorbid difficulties and social skills in ADHD, and stated that ADHD rarely occurs in isolation, with most children having at least one other condition also relating to anxiety or depressive disorders, although minority will just have ADHD. Comorbidities can alter the clinical presentation, symptom severity and functional outcomes of ADHD. Given the relevance of social difficulties associated with ADHD, the current study aimed to navigate these challenges. Social skills are defined as behaviours required to behave competently in social situations (Little et al, 2017). Moreover, comorbid difficulties leave a risk of further poor academic outcomes and social difficulties (Sahoo et al, 2015). Miller (2022) analysed 1400 children aged 7-12 with ADHD alone and comorbid difficulties, through a preliminary analysis through SPSS, which showcased that those with ADHD and comorbidities each had lower social skills. Further supporting Glazzard (2010) on the effects on self-esteem, although Miller is being associated from an ADHD point of view. Shehu et al (2015) and Miller (2022) both discuss the issues opposed on social relations and social life when having ADHD. Shehu et al (2015) heightens the affect of support, in order to facilitate social development between peers and teachers. It is evident from this literature that there is a lack of social support also for ADHD and Dyslexia (Bolinger et al, 2020 & Glazzard, 2010) and that the time of diagnosis has an impact on self-esteem and social relationships (Zahmacioglu et al, 2017 & Zuppardo et al, 2023).

This present study is investigating the impact ADHD and Dyslexia has on educational experiences, social relationships and self-esteem levels. After reviewing the relevant psychological literature surrounding these areas, it is prominent that a vast amount of research heightens the significance of diagnosis timing (Battistutta et al, 2018, Zahmacioglu et al, 2017, Watters et al, 2018 & Rahul & Ponniah, 2021) with little consideration of those receiving a diagnosis over the age of 18. As encouraged by Watters et al (2018) more research is needed to receive the perspectives of those receiving a diagnosis during adulthood. It has been identified the sheer importance of diagnostic timing among ADHD and Dyslexia, with early diagnosis securing social skills and improving self-acceptance (Glazzard, 2010). However, the literature has also suggested the impact a late diagnosis has on social difficulties (Shehu et al, 2015 & Miller, 2022) and low self-esteem (Battistutta et al, 2018 & Watters et al, 2018). Another key factor is the role of support (Acheampong et al, 2019) which the literature has significantly proven a lack of for students and adults (Bolinger et al, 2020 & Watters et al, 2018). This study will be investigating the

experiences of individuals with ADHD and Dyslexia. Particularly aiming to contribute to the gap in literature of perspectives of early and late diagnosis of those over the age of eighteen, and how these two difficulties impact social relationships, educational experiences and self-esteem.

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