

TEACHERS' PERCEPTIONS OF HOW ATTENTION-DEFICIT/HYPERACTIVITY DISORDER MAY INFLUENCE LEARNERS' CAREER CHOICES

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ABSTRACT

This article reports on teachers' perceptions of how ADHD may influence learners' career choices. Purposive selection was used to identify six high school teachers who cater specifically for learners with Attention-Deficit/Hyperactivity Disorder (ADHD). An exploratory case study design and a qualitative approach were adopted. Data was gathered using an audio-recorded semi-structured focus group interview, and analysed and interpreted using inductive thematic analysis. Findings suggest teachers believe that ADHD affects parents, schooling, and the school environment from an early age, that taking medication for ADHD from an early age may positively and negatively influence affect learners' career choices, and that intervention to address the longer-term impact of ADHD on learners' career choices is essential. Moreover, teachers believe that parents play a powerful role in the career choice of learners with ADHD. Future research should include early childhood carers, teachers and other health professionals, and include larger and more diverse groups of participants.

Keywords: Attention-Deficit/Hyperactivity Disorder, career choices, longer-term impact of ADHD, early intervention

INTRODUCTION

The worldwide prevalence rate for school learners with Attention-Deficit/Hyperactivity Disorder (ADHD) ranges between 3 per cent and 5 per cent (American Psychiatric Association (APA) 2013). Although the prevalence rate has not been officially confirmed in South Africa (Perold, Louw, and Kleynhans 2010; Tomevi 2013), this statistic means that an average of one in every 25 learners suffers from ADHD (APA 2013; Özel-Kizil et al. 2016). Cross-cultural studies suggest that the number of people with ADHD is on the rise in developing countries

such as Africa – by as much as 10 per cent (Kashala et al. 2005; Topkin and Roman 2015).

ADHD often continues into adulthood, which could have negative impacts on a person throughout the different stages of their life (Barkly and Murphy 2010; Prevatt, Osborn, and Coffman 2015). One such stage of life is when a young adult is faced with the decision of what career journey they wish to pursue (Dipeolu 2010). Research suggests that ADHD symptoms might be associated with negative career thoughts, which may hamper and ultimately obstruct the process of making a career choice for individuals with ADHD (Bahny and Dipeolu 2012). Learners with ADHD may therefore require unique guidance in the area of making career choices. However, there is a paucity of research that supports informed career counselling within this specific group (Biederman and Faraone 2006; Dipeolu 2015). To the researchers' knowledge, the few studies that have been conducted on how ADHD may influence the future careers of these learners are limited to a handful of international studies (Amod, Vorster, and Lazarus 2013; Tomevi 2013; Weyandt and DuPaul 2006). Furthermore, little research has been conducted in South Africa regarding ADHD and most of it centres around schooling and more specifically teachers' knowledge and understanding of ADHD (Perold et al. 2010).

ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

For this study, attention-deficit/hyperactivity disorder (ADHD) will be referred to as a neurodevelopmental disorder that presents with behaviour patterns that include inattention and/or hyperactivity-impulsivity and restrict normal development or performance. ADHD can manifest as three different subtypes, namely predominantly inattentive, predominantly hyperactive/impulsive, and the combined type (APA 2013). In this study the term ADHD is used to refer to all three of these subtypes.

THE EFFECT OF ADHD ON LEARNERS' CAREER-CHOICE DECISIONS

Challenges with impulsivity and hyperactivity may manifest in learners who have ADHD and these impulsive decision-making habits may affect their career-choice decisions (Perold et al. 2010). Research on children having been diagnosed with ADHD shows that there is a substantial difference between their educational achievement and career choices and the achievement and choices of others without ADHD (Mannuzza et al. 1993). It is not uncommon that they struggle to make decisions about their career journey via higher and tertiary education (Weyandt and DuPaul 2006). As career requirements are often linked to academic achievement, such performance could influence how individuals with ADHD identify appropriate career goals (Prevatt et al. 2015).

Learners with ADHD often display characteristics that complicate their career

development and career-choice making (Dipeolu 2010). For example, learners with ADHD have been known to change from one topic to another at a fast pace, without answering questions in an orderly manner (Brooks 2016). They often show thought patterns that seem unorganised and exhibit behaviours that range from uninterested to restless or irritated (Brooks 2016). Furthermore, some learners with ADHD have been known to show no interest in a career and even avoid recommendations of career fields (Dipeolu 2010). In contrast, learners with ADHD may have an array of career ideas and feel anxious due to indecision. Learners with ADHD is often misunderstood and their actions interpreted incorrectly (Gray 2009). This situation can become extremely challenging not only for the individual who has ADHD, but also for people who are providing them career assistance or guidance.

ADHD and its effect on career functioning

ADHD has been associated with various challenges in career functioning. Adults who presented with ADHD as children show significantly lower occupational status, receive poorer job ratings from employers, and have a higher chance of being fired more frequently than people who never had ADHD (Kuriyan et al. 2012). Additionally, adults who have been diagnosed with ADHD have a higher likelihood of having been dismissed from employment, having resigned impulsively from a job, having taken a higher number of leave days, and having had multiple jobs. They also seem to have prolonged employment issues in comparison to their non-ADHD colleagues and friends (Barkly and Murphy 2010).

THEORETICAL AND CONCEPTUAL FRAMEWORK

Krumboltz's social learning theory of career decision making

The research utilised a conceptual framework based on Krumboltz's social learning theory of career decision making (Krumboltz 1994; Krumboltz et al. 1976). This framework provides a structured, comprehensive approach to understanding the complex nature of how ADHD may influence career decision making and constitutes the conceptual framework of the study (based on the four factors discussed below). Each factor considered in the theory influences career decision making in a unique manner (Saint-Ulysse 2017) (see Figure 1). These factors are believed to be relevant and unique, especially with regard to learners with diagnosed ADHD.

Genetic endowment and special abilities

This factor (Stead and Watson 2017) refers to the qualities one is born with. Krumboltz (1994) believed that these qualities play an important part in role in the way career choices are made.

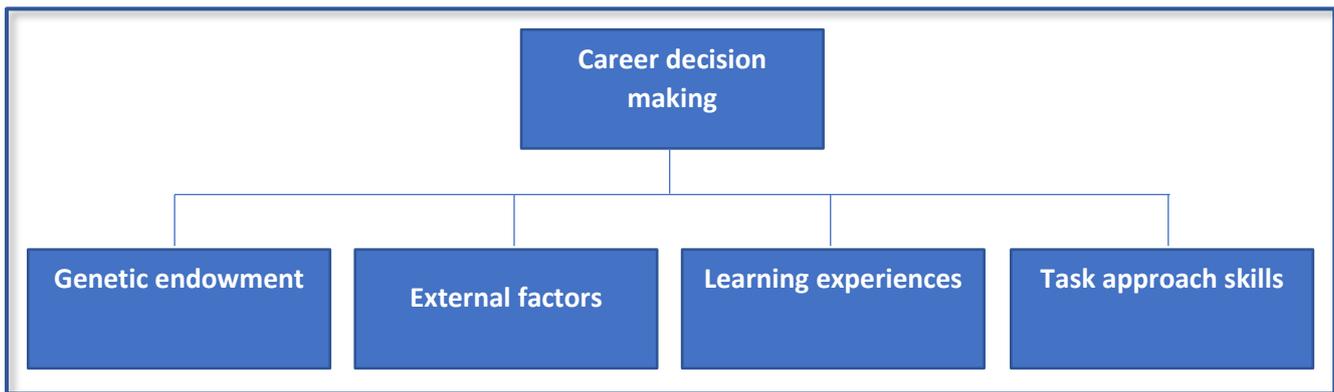


Figure 1: Krumboltz's social learning theory of career decision making (Krumboltz 1994; Krumboltz et al. 1976)

This factor recognises the traits that can influence career decision making in a way that is especially relevant to learners with ADHD, as the disorder has been known to have a genetic inheritability rate (Cortese 2012; Sprich et al. 2000).

External conditions

This factor involves the environmental conditions and events that may impact career decision making (Saint-Ulysse 2017; Stead and Watson 2017). ADHD is also linked to certain environmental conditions that can influence the way in which ADHD manifests (Cortese 2012).

Learning experiences

Learning experiences influence the career decision-making process of an individual in an instrumental or associative manner (Saint-Ulysse 2017). The career decision-making process is influenced by how much these learning experiences have been strengthened, as well as the genetic abilities of the individual (factor one). Moreover, career decision making is influenced by individual learning experiences. Therefore, the learning experiences that a learner with ADHD has, may influence career decision making (Stead and Watson 2017).

Task approach skills

This factor involves so-called task approach skills, which involve the abilities that the individual has developed and can use to approach career decision making. The skills acquired play an important role in how the individual deals with developmental tasks and approaches and handles challenges (Stead and Watson 2017). Career decision making is influenced by the task approach skills that individuals have developed or acquired throughout their lives and that can be used when making career decisions).

Conceptual framework

The current study's conceptual framework (see Figure 2) of how learners with ADHD are influenced when making career choices is based predominantly on Krumboltz's Social Learning Theory of Career Decision Making.

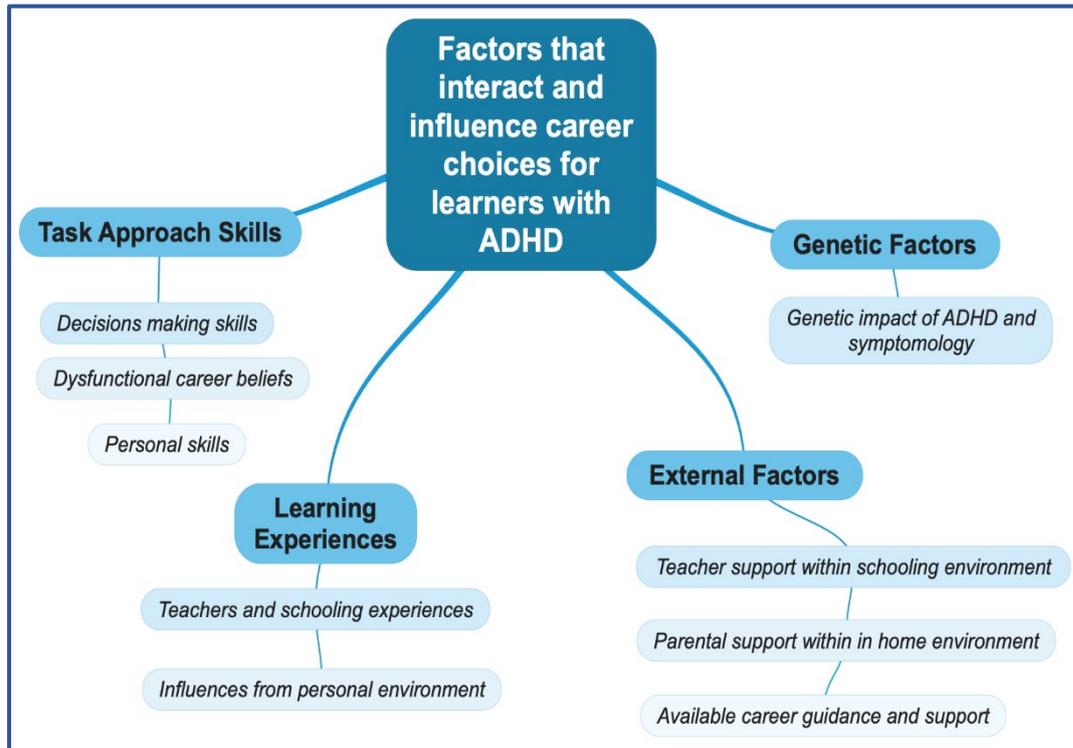


Figure 2: Conceptual framework of the current study based on the work of Krumboltz (1994) and Krumboltz et al. (1976)

The conceptual framework explains the problems that individuals with ADHD have with regard to making a career choice and recognises the genetic impact of having ADHD. It also shows the way in which external factors, learning experiences, and task approach skills can influence career choices (Krumboltz 1994).

The conceptual framework in Figure 2 serves as a guide for the focus group interview questions that aimed to determine how the four factors influenced career decision making among individuals with ADHD. Moreover, Krumboltz's social learning theory of career decision making (1994) guided the primary researcher (the second author of this article) to identify and ask for clarification on certain responses during the focus group interview. Furthermore, the conceptual framework was used in the data analysis process to uncover suggested themes.

Goal of the study

The initial goal of the study was to uncover teachers' experiences of how ADHD may influence learners' career choices. However, it proved to be hard to differentiate between teachers' actual experiences and their perceptions. In the majority of instances, these teachers (none of whom were psychologists or registered counsellors) in reality shared their perceptions of how ADHD may influence learners' career choices rather than their "lived experiences" regarding how ADHD influence learners' career choices. Therefore, the emphasis shifted towards exploring and describing teachers' perceptions of how ADHD influences or may influence learners' career choices.

METHOD

Mode of inquiry

The researchers adopted a qualitative research methodology and made use of interpretivism as the meta-theory and research paradigm to guide the current study (Merriam 1998).

Research design

The research design employed in the current study was a single and exploratory instrumental case study (Universal Class 2022).

Participants and context

A high school in the Pretoria area was chosen purposively as the research site, due to the requirements of the research problem as well as the school's accessibility to the primary researcher. Purposive selection was also used to identify five participants – teachers who taught learners with ADHD. The particular high school was selected since it caters specifically for learners with different needs and (more especially for this study) for learners who have ADHD. It was assumed that teachers who teach at this school would have the required knowledge to give valid viewpoints on how ADHD may influence learners' career choices.

Data generation instrument

One focus group interview (in which all six participants participated) that lasted roughly 100 minutes was conducted. The researchers' decision to utilise a focus group interview instead of individual interviews (or interviews and a focus group interview) resulted mainly from the fact that the school where the research was conducted was reluctant to grant the primary researcher more than three hours to wrap up the research. In addition, we concurred with Biden (n.d.) and

Guest et al. (2017) that a focus group interview facilitates “open” discussions on topics and the examination of different and diverse perspectives, while it also promotes opportunities for building rapport and establishing sound relationships with research participants. Guest et al.’s (2017) extensive research also revealed that whereas using individual interviews promoted the generation of items during brainstorming exercises, focus groups interviews were more likely (than individual interviews) to enhance the disclosure of sensitive and personal information. The highly sensitive nature of discussions about facets of ADHD at various levels therefore suggested that focus groups might be the ideal methodology to be used in the current research. (Our assumption was borne out by what occurred during the actual focus group interview).

All the themes and subthemes discussed below were based on participants’ responses to questions posed during the focus group interview and subsequent discussions during the focus group interview. The six questions referred to are repeated below:

- i. Explain your role in general in providing career guidance, education, or counselling to your learners with ADHD?
- ii. What challenges do learners with ADHD face when making career choices?
- iii. How does ADHD influence learners’ career choices?
- iv. What factors play a role for learners with ADHD when making career choices?
- v. Which educational outcomes have an impact on career choices for learners who have ADHD?

Trustworthiness of the study

Confirmability

The primary researcher’s journal allowed for documented reflections on her personal preferences, preconceived notions, perceptions, and experiences throughout the research process (Thomas and Magilvy 2011).

Authenticity

The primary researcher’s use of an audio-recording device allowed for the documentation of the participants’ verbatim responses (Merriam 1998). Member checks served to validate that participants’ viewpoints had been correctly represented.

Credibility

The primary researcher engaged in rapport building with the participants and promoting

authentic responses during the focus group interviews. She held consultation sessions with the second author of the study to reduce the potential for bias in the findings.

Transferability

The primary researcher used her reflection journal to make the research process more transparent. She also presented comprehensive and in-depth descriptions of the research phenomenon.

Dependability

An audit trail was preserved in the form of a journal that documented the course of the research. The focus group interview was documented in a verbatim transcript record that provided the actual responses of the participants.

Data analysis and interpretation

The study made use of inductive (thematic data analysis) to interpret and analyse the gathered data (Braun and Clarke 2006). The researchers revisited themes and the data until an established comprehensive set of themes and subthemes was apparent. Braun and Clarke (2006) identified the following six phases of analysis that were used to perform an inductive thematic analysis for this study.

- Phase 1. Becoming familiar with the data.
- Phase 2. Generating initial codes.
- Phase 3. Searching for themes.
- Phase 4. Reviewing themes to make coherent patterns.
- Phase 5. Defining and naming themes and subthemes.
- Phase 6. Producing the report.

An external coder (an experienced learning support specialist) was invited to enhance the interrater validity by perusing the data and validated the thematic data analysis findings. A final analysis of the themes was conducted by the two researchers.

Identifying the source of a quote

Nine initial data codes that belong to five categories were identified. Table 1 explains the initial codes.

Table 1: Coding and description of quotes

Initial codes	Description
CO 1.1.1	Fear of academic careers of tertiary education
CO 1.1.2	Aversion to making a career choice due to beliefs of incompetency and lack of self-efficacy
CO 1.1.3	Financial constraints due to the high cost of academic study after school
CO 2.1.1	Medication for ADHD having a positive influence on career choices
CO 2.1.2	Medication for ADHD having a negative influence on career choices
CO 3.1.1	ADHD learners following similar careers to their parents
CO 4.1.1	Symptoms of inattentive ADHD influencing career choices
CO 4.1.2	ADHD learners making career choices that are entrepreneurial or practically orientated
CO 5.1.1	The influence of accommodations provided by the employee on career choices

Once the initial codes and descriptions had been identified, the primary researcher used the focus group interview transcriptions to identify the different quotes and excerpts based on the identified themes and sub-themes. Corresponding colours, participant numbers, and line numbers were indicated on the focus group interview transcripts. At the end of each excerpt, the letter P (in brackets) indicates which participant made the specific remark. The letter L indicates the line reference range, which is also presented in the transcripts. For example, the exact quote from the interview transcription is as follows:

“They hide from studies they don’t want to, because obviously, it’s an issue and so their academics, they start slipping, that obviously, and it affects their self-confidence and I think ADHD itself is just a stigma with kids” (P1, L10–13).

Ethical considerations

The researchers abided by the ethical guidelines prescribed by the relevant University as well as by the Health Professions Council of South Africa (HPCSA). The university’s institutional review board approved the research.

OUTCOMES/ FINDINGS

Four main themes and a number of subthemes emerged from the data analysis (see Table 2).

Table 2: Summary of themes and sub-themes

Main themes	Sub-themes
Theme 1: Aversion to or fear of specific career choices	Sub-theme 1.1: Fear of academic careers or tertiary education Sub-theme 1.2: Aversion to making a career choice due to beliefs of incompetency and lack of self-efficacy Sub-theme 1.3: Financial constraints of tertiary education
Theme 2: The influence of medication on career choices for learners with ADHD	Sub-theme 2.1: ADHD medication having a positive influence on career choices Sub-theme 2.2: ADHD medication having a negative influence on career choices

Main themes	Sub-themes
Theme 3: The influence of external factors (parents and employers) on career choices for learners with ADHD	Sub-theme 3.1: The influence of parents Sub-theme 3.2: The influence of prospective employers
Theme 4: The effect that having ADHD has on career choices	Sub-theme 4.1: Symptoms of inattentive ADHD influencing career choices Sub-theme 4.2: Learners with ADHD making career choices of an entrepreneurial nature

Below, we provide responses to substantiate identified themes and subthemes.

Theme 1: Aversion to or fear of specific career choice: Brief description

The fear of or aversion to the pursuit of an academic career that requires tertiary education is defined as learners with ADHD fearing failure in an academic career or in tertiary studies (Bandura 2006).

Sub-theme 1.1: Fear of academic careers or tertiary education

“Learners with ADHD do have a tendency to shy away from any sort of academic career, careers that requires a bit more cerebral attention. They would rather than to do something with their hands or start a business, which is good if they can do it. But the fear of academia is far stronger.” (P2, L22–26).

Sub-theme 1.2: Aversion to making a career choice due to beliefs of incompetency and lack of self-efficacy

“I find with that they are scared to make career choices. They say they are scared, they are kind of like you know, can I just leave school and get away here.” (P5, L199-201).

Sub-theme 1.3: Financial constraints of tertiary education

“Money, of course, pays for studies.” (P5, L438).

“Money pays for treatment of ADHD. If you don’t have the finances there is no treatment for you.” (P2, L439).

Theme 2: The influence of medication on career choices for learners with ADHD

Taking medication for ADHD may influence learners' career choices (positively and negatively).

Sub-theme 2.1: ADHD medication having a positive influence on career choices

“Obviously medication will not suit all of the kids but I have seen good results and those kids are then able to get over that fear, that barrier. I have had ADHD kids who’ve gone to university and

who have performed well.” (P3, L44–46).

Sub-theme 2.2: ADHD medication having a negative influence on career choice

“When it comes to ADHD especially, unfortunately, a lot of these kids do not have a choice whether you are taking the medication or not, for example. Throughout the whole process, you are given this burden, and you have no choice. All you’re hearing is if you don’t drink your pills teachers are on you. Even if you’re just a little bit disruptive today, you will hear the question, did you take your pills today.” (P2, L599–608).

Theme 3: The influence of external factors (parents and employers) on career choices for learners with ADHD

Factors that are external to the learner with ADHD (over which they have no control) may influence their career choices negatively or positively.

Sub-theme 3.1: The influence of parents

“Overall, how parents deal with their children’s ADHD from a young age, throughout school, while they are in school environment, is important. Some parents support the child and help them while other parents do not.” (P5, L373–376).

Sub-theme 3.2: The influence of prospective employers

“The way you interact with your boss obviously gets influenced by the ADHD. Such factors end up influencing the career choice you end up making.” (P2, L360–362).

Theme 4: The effect that having ADHD has on career choices

Symptoms of ADHD (such as inattentiveness) may influence learners’ career choices (adversely or positively).

Sub-theme 4.1: Symptoms of inattentive ADHD influencing career choices

“When I looked up ADHD and careers, they said the most interesting jobs are like policemen and firemen, ER paramedics, teachers. Those are the careers for people with ADHD because of the adrenaline that keeps your mind focused.” (P3, L147–150).

Sub-theme 4.2: Learners with ADHD making career choices of an entrepreneurial nature

“I think that is a big thing that ADHD kids can also go into is starting their own thing (referring to becoming an entrepreneur). I found that with the ones I had last year that finished matric. They want to do their own thing, they don’t want to study.” (P5, L257–261).

DISCUSSION

The goal of the study was to explore and describe teachers' perceptions of how ADHD influences or may influence learners' career choices. The first research question ("What factors do teachers believe (may) play a role in the career choices that learners with ADHD make?") is discussed below.

Theme 1: Aversion to or fear of specific career choices

The participants reported that they perceived a general trend among their learners with ADHD of having a fear of specific career choices.

The three sub-themes identified within Theme 1 are next discussed within the context of the literature.

Sub-theme 1.1: Fear of academic careers or tertiary education

This finding supports those of Barkley (2008) who found that individuals with ADHD are less likely to attend tertiary institutions. Individuals who have ADHD and yet enrol in tertiary institutions tend to obtain much lower academic results than those who do not have ADHD and are more likely to drop out or withdraw from their courses (DuPaul et al. 2018; Gormley et al. 2019).

Sub-theme 1.2: Aversion to career choice making due to beliefs of incompetency and lack of self-efficacy

The participants suggested that learners with ADHD may have an aversion to specific career types due to the belief that they cannot competently pursue a specific career trajectory. This belief was often noticed as part of a lack of self-efficacy. This finding supports the findings by Shaw-Zirt et al. (2005) who noticed that students who have ADHD often experience decreased confidence levels that can be linked to lower career decision and self-efficacy. According to Luzzo et al. (1999), decreased self-efficacy in career decision making is likely to correlate positively with indecisiveness in making career choices (Tomevi 2013). Deficits in self-esteem and self-efficacy, which often accompany ADHD, may have an impact on the individual's ability to adjust to academic. Our findings support the findings stated above, as the participants often spoke of learners with ADHD having a fear of following an academic career after high school.

Sub-theme 1.3: Financial constraints of tertiary education

No research could be found to support the finding that learners with ADHD specifically have an aversion to entering tertiary education institutions due to financial reasons.

Theme 2: The influence of medication on career choices for learners with ADHD

The attitudes of the teachers regarding learners taking medication for ADHD represented both a positive and a negative view. Some participants believed that medication had a positive impact on learners with ADHD, while others mentioned the possible negative effects of taking such medication.

Sub-theme 2.1: Potential positive influence of ADHD medication on career choices

Our findings support those of Bolanda et al. (2020), who found that taking medication for ADHD provided a protective effect against some psychiatric disorders such as mood disorders, depression, substance abuse disorders and that taking medication for ADHD protects against injury, poor educational outcomes (which negatively impact career choice making), and mood disorders. Meaux et al. (2006) and Prosser (2008) reported that adolescents reported the benefits of taking medication for ADHD and claimed that taking medication aided them to make decisions more easily and thus led to more productive academic and educational outcomes. Our findings regarding the positive influence of medication for learners with ADHD therefore support these findings to some extent.

Sub-theme 2.2: Potential negative influence of ADHD medication on career choices

The participants spoke about how their learners were not always given a choice as to whether or not they would like to take medication for ADHD. They felt that this probably had a negative effect on the learner's ability to make career and related choices later in life. However, the finding that being denied the choice to take (or refuse) medication for ADHD probably influencing a learner's ability to make career choices later in life, was not supported within the context of the available literature.

According to Meaux et al. (2006) and Prosser (2008), adolescents reported the benefits of taking medication for ADHD and claimed that taking medication not only aided them to make decisions in general more easily, but also led to more productive academic and educational outcomes. Meaux et al. (2006) and Avisar and Lavie-Ajayi (2014) found that even when side effects from taking medication for ADHD were reported, individuals preferred to continue to

take medication for ADHD, as it provided positive educational and academic outcomes.

Theme 3: The influence of external factors (parents and employers) on career choices for learners with ADHD

The participants repeatedly spoke of various external factors that could influence the career decision making of learners with ADHD. The influence of parents as well employers as representative of external influence often featured in the focus group interview.

Subtheme 3.1 – The influence of parents

The participants suggested that the parents of children with ADHD may have a significant influence on the career choices made by these learners. The fact that parents can influence the career journey of their children with ADHD – whether in a negative or positive manner – clearly emerged from the focus group interview. The conclusion that parents have an influence on the career choices of their children with ADHD supports the findings of Johnston and Chronis-Tuscano (2015). These authors suggest that numerous family factors interact with and influence children with ADHD.

Sub-theme 3.2 – The influence of prospective employers

The participants suggested that prospective employers may have an influence on the career choices that a learner with ADHD makes. This finding supports a consensus opinion reached by Adamou et al. (2013), who found that employers may not be properly informed about the potential benefits of employing an individual with ADHD. This may lead to negative viewpoints of employees with ADHD and influence prospective employers' willingness to employ an individual with ADHD. Fuermaier et al. (2021) found that individuals with ADHD have issues due to expectations articulated by their employers, which resulted in poor work performance, low job evaluations, and loss of employment.

The second research question (“How do educational outcomes influence learners with ADHD when making a career choice?”) is discussed next.

Theme 4: The effect that having ADHD has on career choices

The participants discussed how learners' symptoms of ADHD, such as being inattentive, may influence their career choices. The participants exchanged views about how learners with ADHD often make career choices that are of a more entrepreneurial nature, which allows the individual to create their own career journeys.

Sub-theme 4.1: Symptoms of inattentive ADHD may influence career choices

The findings suggested that learners with ADHD may not want to enter a career that requires them to concentrate for long periods of time due to their symptoms of inattentive ADHD. This finding is supported by Barkley and Murphy (2010), namely that those who have ADHD and who exhibit inattentiveness often find it challenging to fit into career trajectories that require sustained attention and collaboration with work colleagues. Thus, individuals with ADHD who exhibit inattentive behaviours may find it easier to work in an environment where they are able to work independently and rely on their own self-sufficiency (Mannuzza et al. 1993).

Sub-theme 4.2: Learners with ADHD make career choices that are of an entrepreneurial nature

The participants repeatedly mentioned that learners with ADHD may be more inclined to choose careers that have an entrepreneurial foundation. They surmised that entrepreneurship would potentially be a good career choice for their learners with ADHD. Their perceptions corresponded with the findings of Wiklund et al. (2017), who found that ADHD symptoms of impulsivity are indeed positively linked to entrepreneurship. However, they also found that symptoms of inattentive ADHD (in other words, struggling to attend to details, getting distracted easily, struggling to complete (finish) or organise tasks and assignments, and/or failing to execute routine chores) are negatively associated with entrepreneurship. The current study also revealed a positive correlation between having ADHD with symptoms of impulsivity and entering an entrepreneurial career. Furthermore, Wiklund et al.'s (2017) research suggested that various symptoms of ADHD may be linked to individuals who are more inclined to start a business of their own or to embrace entrepreneurship.

Revisiting the theoretical and conceptual framework that supports this study

The theoretical and conceptual framework that guided the current study was Krumboltz's social learning theory of career decision making. This theory puts forth the idea that career decision making can be influenced by four factors that each has an impact on career decision making (Saint-Ulyse 2017).

The participants in the current study discussed the significance of genetic endowment and special abilities and indicated that their learners with ADHD are special and unique. They stated that these individuals may need a different type of career guidance. Furthermore, various external and environmental conditions identified by participants during the focus group interview could have a potential influence on their learners with ADHD when making career choices. These conditions included parental influences, as well as prospective employers'

influence on career choices. Learning experiences highlighted by the participants involved the impact of taking medication for ADHD, as well as participants' perception that learners with ADHD have an aversion to attending tertiary education institutions. The participants highlighted task approach skills during their discussions of how the symptoms of ADHD may influence learners' career choices. They mentioned symptoms of inattention and suggested that learners with ADHD may be more inclined to choose careers that are entrepreneurially focused.

Limitations of the study

First, since the current research comprised a single case study, its findings are subjective and cannot be generalised. Similarly, because the study was based on only one focus group interview, the validity of the subjective answers provided by the participants may be questioned. Second, the researcher's analysis of the data may have been biased to some extent. Another researcher could interpret the findings differently. Third, the participants were recommended by the principal of the school that served as the research site. This constitutes a form of purposive selection, which could be a concern for bias. Lastly: A contextual factor that could also be considered a limitation involves the COVID-19 restrictions that had to be adhered to during the focus group interview. The fact that social distancing and mask wearing were compulsory may have influenced the way that participants interacted in the interview.

Implications of the research for future research, policy, and practice

First, further research should be conducted to expand our understanding of teachers' perceptions of how ADHD influences learners' career choices. Such research could include larger and more diverse groups of participants. Second, a comparative study should be conducted so comparisons can be made between a broader range of participants. Third, a comprehensive national survey should be conducted to examine the views of teachers from various schools regarding how ADHD influences career choices. Fourth, a longitudinal study should be conducted to gain a long-term understanding of teachers' perceptions of how ADHD influences career choices. Lastly: Teachers should receive education and training to enhance their knowledge of the effects of ADHD so that they can advise their learners with ADHD when these individuals make career choices. This kind of training will also give them (teachers) a better understanding of how ADHD plays a role in the lives of their learners.

CONCLUSION

The perceptions of the teacher participants of how ADHD influences learners' career choices (as explored in the current study) revealed several meaningful trends. This includes the fact that

learners with ADHD have a fear of academic careers that require further study at tertiary institutions. These learners exhibit a lack of confidence in their intellectual abilities and lack of self-efficacy because of negative perceptions during their school years. These and other aspects negatively influence the type of career trajectories learners with ADHD would choose.

It is our sincere hope that the study will contribute to future research within the field of career-related interventions for learners with ADHD.

EPILOGUE

The primary researcher touched base with the participants again a couple of months after completion of the focus group interview and asked them to reflect on the focus group discussion. They generally thought that it was a valuable experience and that they were able to learn from one another as well as voice their own opinions. From a teacher's perspective, they felt that there was great value in research on ADHD, especially in (South) Africa.

NOTES

1. We thank the teachers for participating in this research.

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