

AUTHOR:

Maximus Monaheng Sefotho¹ Charity N. Onyishi^{1,2} 

AFFILIATION:

¹University of Johannesburg,
South Africa²University of Nigeria, Nsukka,
NigeriaDOI: <http://dx.doi.org/10.18820/2519593X/pie.v39.i2.20>

e-ISSN 2519-593X

Perspectives in Education

2021 39(2): 283-302

PUBLISHED:

11 June 2021

RECEIVED:

25 June 2020

ACCEPTED:

17 September 2020



Published by the UFS

<http://journals.ufs.ac.za/index.php/pie>

© Creative Commons

With Attribution (CC-BY)



IN-SCHOOL TRANSITION CHALLENGES AMONG PRIMARY SCHOOL LEARNERS WITH AUTISM SPECTRUM DISORDERS IN SOUTH AFRICA: PARENTS AND TEACHERS' PERSPECTIVES

ABSTRACT

Successful school transition is a basis for career development and eventual overall adult educational and socio-economic outcomes. Transitioning through primary school grades is a combination of relative academic and social skills acquired in each grade and forms the basis for subsequent academic and social success at ensuing educational pursuit and adult independent life. Evidence indicates that learners with autism spectrum disorder (ASD) and their families experience limiting challenges in their school transition at different levels. There is a gap in the literature as to the specific factors that constitute school transition difficulties in primary school learners with ASD in the area of study. The purpose of this study was to investigate challenges that learners with ASD face as they transition through school grades. The study adopted a phenomenological design with 12 participants (6 parents and 6 teachers). Two focus group discussions were held to collect data analysed using inductive thematic analysis. The results revealed three main themes, which included poor academic achievement and skills development, social and economic challenges as well as behavioural problems. The findings of the study suggest an increased need for home-school collaboration during the early stages and throughout the school years for the effective transition of learners with ASD. Thus, providing learners with ASD and their families with academic, emotional and behavioural intervention and support can help learners with autism to develop personal resources that will encourage their educational success.

Keywords: *Autism spectrum disorders; school transition; academic success, primary school, teachers, parents*

1. INTRODUCTION

Transition is any event or non-event that is consequential to change in relationships, routines, assumptions and roles

(Bailey-Taylor, 2009; Schlossberg, 1984; 2011). Learners who demonstrate success in school transition have an increased likelihood of engaging well and experiencing adaptive academic economic and social outcomes (Denkyirah & Magbeke, 2010). School transition is an ongoing, process involving beginning early childhood education, starting school, changing year grade levels within a school, transferring from one school to another, shifting from primary school to secondary school and moving from secondary school to further education, training and employment (Evans, Borriello & Field, 2018). For instance, as learners change class within or between schools, they must adjust to new surroundings, become familiar with new teachers and peers, learn new ways of working and make sense of the rules and routines that operate in their classes (Strand, 2019). While students are navigating the formal school environment, they are also adjusting to the continuous social changes that happen when changing schools and classes. Hence, while transition from one school to another has been widely researched (Evans, Borriello & Field, 2018; Marsh *et al.*, 2017; Nuske *et al.*, 2019; Strand, 2019; West, Sweeting & Young, 2010), there seems to be little or no research considering challenges associated with changing classes or within-school transition (that is transition between grade levels).

Increasing evidence-based studies have continually shown that subsequent primary to secondary school transition is a function of the success in transition within school, such as transitioning from class to class (Howard, 2004; Petriwskyj, 2010; Rice *et al.*, 2015). Progressing through graded social, academic and organisational experiences in the school is a cumulative function of class-specific transition success and could be challenging for every individual learner (Lei *et al.*, 2018). This is most daunting for learners with ASD (Coffey, 2013; Connolly & Gersch, 2016; Lei *et al.*, 2018), yet it is unclear what specific challenges account for poor transition in learners with ASD. ASD encompasses a range of neurodevelopmental conditions primarily typified by difficulties in social communication and interaction as well as the restricted, repetitive or stereotyped pattern of behaviours, interests and activities (American Psychiatric Association 2013; Centers for Disease Control and Prevention [CDC], 2012).

Apart from the primary characteristics of ASD highlighted above, the majority of persons in the spectrum also experience comorbid psychological conditions such as anxiety (Steenael *et al.*, 2011), depression (Wigham *et al.*, 2017), hypersensitivity to sound and light (Longtin, 2014; Sarrett, 2018) and poor executive functioning (APS, 2013; Demetriou *et al.*, 2018). Owing to these defining features of ASD, learners within the spectrum may have significantly poorer skills to face, accommodate and adjust to overarching changes during school transition. In spite of the facts that approximately half (46%) of the learners with ASD demonstrate normal intelligence quotient (IQ) to attain optimum academic height and the majority have areas of significant cognitive strengths (CDC, 2012), lower percentages of such learners are retained across post-secondary school graduation and subsequent employment (Shattuck *et al.*, 2012). These are indications of poor transition outcomes, explicating the underpinning school transition challenges.

Transition challenges in the ASD population limit their academic progress, functional participation and independent functioning (Anderson *et al.*, 2018; Markin, Hill & Pellicano, 2017; Marsh *et al.*, 2017). Thus, Markin and colleagues identified transition as challenging for learners with ASD. Though sources of concerns in the transition from primary to secondary school in autistic and typically developing children overlap considerably (Dann, 2011; Dillon & Underwood, 2012), increased challenges of learners with ASD account for their leaving colleges unprepared for adult life in college, in community living and at work (Wehman *et al.*,

2014). Additionally, learners with ASD may show more symptoms associated with transition compared to those with other disabilities (Lequia *et al.*, 2015; Ismaila *et al.*, 2016) and the typically developing learners (Marsh *et al.*, 2017). Hence, the trajectories of the localised transition problems of learners with ASD may be a function of deficiencies imposed on them by the disorders (CDC, 2012). Studies tend to suggest that deficits in social communication and how to put others in perspective limit their school transitions in a socially acceptable and adaptive manner (Gobbo & Shmulsky, 2014; Longtin, 2014).

Furthermore, the characteristic repetitive behaviours associated with ASD make it almost impossible for persons with ASD to adjust to the changes in daily routines as required (Barnhill 2016; Kapp, Gantman & Laugeson, 2011) for social and academic outcomes. As such, changing from one school activity to another (such as from assembly to classroom; from one subject period to another and from playground back to the classroom) may constitute stress for learners with ASD and may limit academic outcomes. Additionally, impairment in executive function limits their ability to make flexible academic planning, manage their time or demonstrate organisational skills necessary for effective learning (Barnhill 2016; Dipeolu *et al.*, 2014). Thus, it is always difficult for teachers and parents to make decisions regarding the academic progress of learners with ASD in the form of meeting requirements for changing school grade levels.

These could account for the challenging nature of transition in learners with ASD, which only a few of them tend to overcome (Anderson *et al.*, 2018; Forest *et al.*, 2004; Mandy *et al.*, 2016a; b). Studies have shown that individuals with ASD experience significant transition challenges across their lifespan (Bolourian, Stavropoulos & Blacher, 2019; Mandy *et al.*, 2016; Friedman, Warfield & Parish, 2013). The transition of learners with ASD can also pose challenges for primary caregivers including parents and teachers (Ooi *et al.*, 2016). Challenges sprout up as the child interacts with the family system, with a little change in the home routines, such as having a visitor or cooking unfamiliar food (Ooi *et al.*, 2016). Moving from home to school (Marsh *et al.*, 2017); from primary to secondary school (Makin, Hill & Pellicano, 2017); specialised to mainstream schools (Martins *et al.*, 2019); secondary school to post-secondary (Gelbart *et al.*, 2014) and to adulthood and the world of work (Anderson *et al.*, 2018; Friedman, Warfield & Parish, 2013; Schall, Wehman & McDonough, 2012) also constitutes unequal stress and challenges.

These transition failures cause the learners with ASD to feel lonely, isolated dejected and pathologically defensive (Jackson *et al.*, 2018), thereby increasing internalising and externalising behaviour problems and undermining academic success. Thus, studies have found positive links between transition failure and negative behavioural, mental and economic outcomes in the children with ASD and their families (Marsh *et al.*, 2017; Schall *et al.*, 2012; Lequia *et al.*, 2015). For instance, Jackson *et al.* (2018) found mental health symptoms including reported feelings of isolation, high levels of stress, anxiety, depression and suicidal ideation in a sample of 56 post-secondary school students following the transition to university. There is also a strong correlation between the extent to which students experienced difficulty following transition and their likelihood of dropping out from school (West, Sweeting & Young, 2010). Other research indicates that poor transitions impact on students' wellbeing and on their achievement in the future (Evans, Borriello & Field, 2018).

On the other hand, success in transition may lead to positive outcomes, such as vocational competence employment perspectives, increased independence and increased social

competences (Schall *et al.*, 2012), which are expected educational outcomes. Thus Rice *et al.*, (2015) found that success in transition is a measure of being academically and behaviourally involved in school and feeling a sense of belonging to school. The long term outcomes include self-determination and self-advocacy, parental involvement in school and community inclusion as well as completion of postsecondary education (Anderson *et al.*, 2018; Schall *et al.*, 2012). Consequently, Transition through early age to adulthood in learners with ASD has been widely researched in high-income countries (Kapp, Gantman & Laugeson, 2011). Kapp and colleagues observe one of the major problems in ASD research and practice as paediatric-to-adulthood transition. Mandy *et al.* (2016) found that psychopathology, adaptive functioning and peer victimisation were measured by parent, self and teacher report were major challenges of transition from primary to secondary school.

Additionally, in a systematic review, Marsh *et al.* (2017) found that children with ASD demonstrated poorer emotional readiness to school and higher externalising behaviours as well as self-regulation difficulties compared to their peers. Marsh and colleagues suggested that such attributes affect school engagement and teachers' relationships with children with ASD as well as the ultimate school outcomes. Anderson *et al.* (2018) found that factors such as poor person-environment fit, ambiguity in parents' roles and the lack of comprehensive or integrated services influence poor transition outcomes. Cheak-Zamora, Teti and First (2015) indicated that fear and anxiety regarding transitioning and unmet needs were high, leaving caregivers struggling to fill gaps and the lack of individualised services were the major challenges. Caregivers faced additional difficulty in motivating youth and creating opportunities for education and employment.

However, no study was found investigating within-school transition in primary school children with ASD. The current study sought to investigate the challenges associated with transition of learners with ASD from within autism special schools. A study in this area is timely and especially critical, given that research has focused considerably on developing interventions in different areas of emotional, behavioural, social and academic dimensions, without considering what constitutes the challenges that undermine intervention outcomes. The aim of the present study is to investigate the parents and teachers' perceptions about transition difficulties experienced by learners with ASD within the school. To guide this study, we formulated the following research question: What are the challenges to transitioning learners with ASD across grades within the same primary school?

2. THEORY

In carrying out the present study, we followed the framework of Schlossberg's transition theory. Schlossberg's work provided understanding into the impending elements of transition, looking at the individual, the environment and the support systems in place during a transition period. Schlossberg's transition theory scrutinised the elements of transition, including different forms of transition as well as the process and factors that contribute to a transition. According to this theory, the four Ss guide the transition process (situation, self, support, and strategies) (Evans *et al.*, 2010; Schlossberg, 1984). In the four Ss, deficits can turn into resources and resources can turn into deficits during a transition. Thus, in this process, the situation aspect evaluates activator (the cause of transition); timing of the transition; control of the individual undergoing the transition; role change (gain or loss) and duration, (permanent, temporary or uncertain); previous experience with a similar transition, concurrent stress and an assessment of who or what is accountable for the transition (Evans *et al.*, 2010; Schlossberg, 1984).

The second S in Schlossberg's four Ss (self) highlights the importance of personal characteristics and how they influence a person's view of life. Personal characteristics may include personal demographics and psychological resources. The third S (support) in the model includes intimate relationships such as family, friends and institutions. Finally, the fourth S (strategies) depicts the coping responses one uses during a transition. Schlossberg divided the strategies into three categories: those who modify a situation, those who control the problem, and those who aid in managing the stress in the aftermath. Making successful transitions, therefore, encompass broader educational and personal purpose, considering the different participant groups (parents, teachers, assistants and the community) and learner diversity (Petriwskyj, 2010). Following Schlossberg's work, we sought information about the learners' challenges, emanating from self, situation, support and strategies. Data collected for the study were analysed giving rise to themes that reflect Schlossberg's 4S model of transition.

3. METHOD

3.1 Study paradigm

The study followed a phenomenological qualitative research design (Neubauer, Witkop & Varpio, 2019), which suits the present study given that the study aimed at describing the phenomenon (transition challenges) without any pre-given framework but based on the perspectives of those involved (Groenewald, 2004). Qualitative methods are recommended for their ability to explore the depth and complexity of phenomena (Guest, Namey & McKenna, 2017). A phenomenological method is a valuable approach to systematic reflection on the learning experiences of children and deeper understanding of students' meaningful learning transition and learners' experiences in the school (Maxwell, 2013; Shi, 2011). Figure 1 below represents the methods used in the study. Phenomenology is different from other qualitative research in that it lays more emphasis on the subjective point of view (in terms of consciousness and lived experiences), rather than theoretical, prejudicial and suppositional interference (Janesick, 2011; Shi, 2011). With all these strengths, phenomenological research is criticised for presenting the researchers with some dilemmas of being descriptive or interpretive; objective or subjective and participant voice or researcher voice (Janesick, 2011; Shi, 2011) and being time consuming (Creswell, 2014).

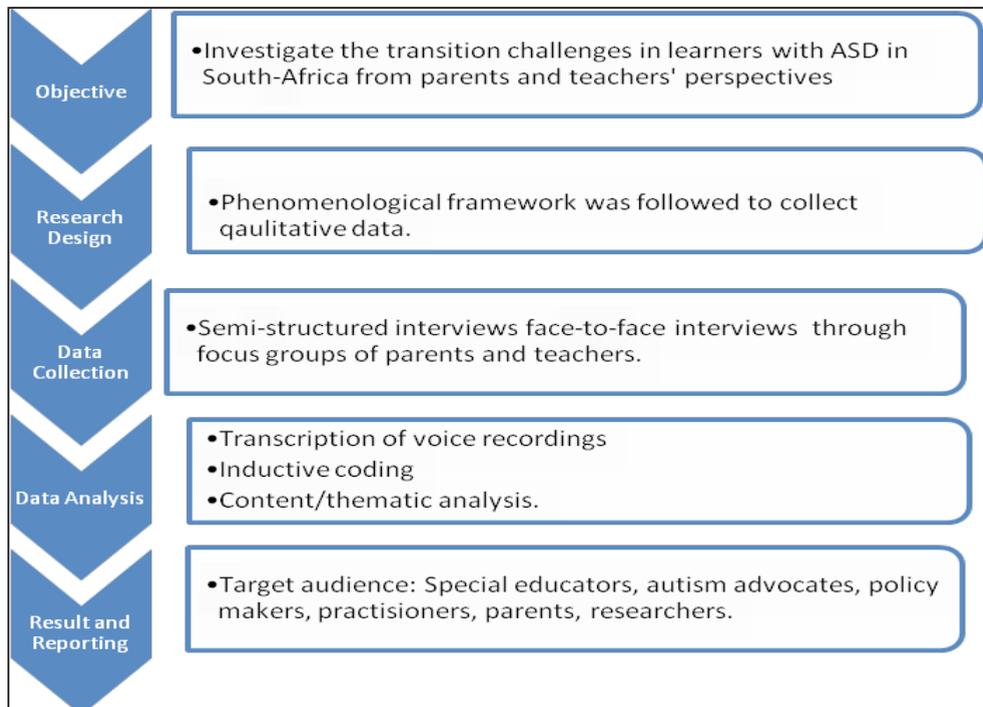


Figure 1: Research process flow-chart

3.2 Participants and sampling

Using purposive sampling we drew 12 participants comprising 6 parents and 6 teachers of children with ASD in Johannesburg, South Africa. Specifically, the purposive sampling techniques used was snowballing, which is a method of sampling where one participant recommends others for participating in the study (Groenewald, 2004). A parent of a learner with ASD, who is also undertaking her PhD at the University of Johannesburg and is a researcher in autism, recommended and assisted the second author in contacting other participants. Participants were recruited in the study based on the following inclusion criteria: 1) must be a parent or a teacher of learners with ASD; 2) must have taught or parented an autistic learner for at least 5 years after diagnosis; 3) perceived to be experienced, knowledgeable and informed about autism and finally, 4) must be willing to participate and sign an informed consent form. Each focus group was made up of 6 participants. This group size is common with a minimum of four and a maximum of 12 participants per group suggested in earlier studies (Guest *et al.*, 2017). The small sample is justified by the fact that focus group discussions do not depend on a large sample size but rely on the ability of participants to provide relevant information (Nyumba *et al.*, 2018).

3.3 Data generation methods

Focus group discussions (FGDs) were carried out with parents and teachers. FGDs are appropriate to investigate people’s subjective experiences, perspectives and attitudes, to elicit the views of key stakeholders or the views of marginalised groups (Guest *et al.*, 2017;

Stewart, Shamdasani & Rook, 2007). Five open-ended questions were generated for the study and were meant to guide the interviewers and researchers in probing questions and discussions with the participants. Focus group discussions allowed the researchers to elicit data through dialogue and participatory interactions.

FGDs were conducted in a quiet meeting room within an autism school in Johannesburg, South Africa. For consistency, the semi-structured interview schedule was the same for the parents and teachers. The foundational questions built on the perspectives of the participants and include: Describe your experience about transition challenges of your child with ASD in the following areas: Home and school? Comment on the challenges that may undermine successful transitioning across school activities, grade-levels or across schools (Pre-school-Primary-secondary-postsecondary). Explain how those challenges could limit their transition into the world of work? Some supporting questions which are “Think back” and “think ahead” questions that were meant to motivate participants to reflect on the past and predict future school experiences and obstacles were included in the question. Such phrases as “Think back to the beginning of the new school years, what took place then?”; “Can you infer the long-term outcome of...” With the consent of the participants, all FGDs were voice-recorded by one of the researchers and a facilitator who in each case was a research assistant trained for facilitation and note taking for the study. Each focus group discussion (parents and teachers) took approximately 90 minutes (one and a half hours).

3.4 Data analysis and trustworthiness

Data were coded inductively to find recurring categories that define perceived transition challenges to ensure trustworthiness. With the help of the research assistant, we identified patterns across the codes and reflected on the underlying meaning to cluster codes and form themes that were consistent across the focus group. This was meant bringing out the key issues as well as similarities and differences within and between groups of participants.

All qualitative data were analysed following Nowell, Norris, White and Moules' (2017) prescriptions for establishing trustworthiness in six phases of thematic data analysis. The phases include, Phase 1: Researchers familiarising selves with data; Phase 2: Generating initial codes; Phase 3: Searching for themes; Phase 4: Reviewing themes; Phase 5: Defining and naming themes and Phase 6: Producing the report. Observing these phases in the case of this research enabled the researchers to ensure trustworthiness with reference to credibility, transferability, dependability and conformability of the study outcome (Nowell *et al.*, 2017). The researchers familiarised themselves with the data set by line-by-line reviewing of data from each group, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report.

3.5 Ethical considerations

The researcher received ethical approval from the Faculty of Education, University of Johannesburg, South Africa to conduct this study. All participant signed consent documents before participating in the study. All participation in the study was on a voluntary basis. Participation in the study complied with the ethical rules of using human subjects in research. The research has no negative impact on the participants of the researchers. Data collected in the study were handled unanimously.

4. FINDINGS

Three main themes emerged from inductive coding process. These were labelled academic achievement and skill development, socio-economic challenges and behavioural problems. Each major theme is made up of sub-themes.

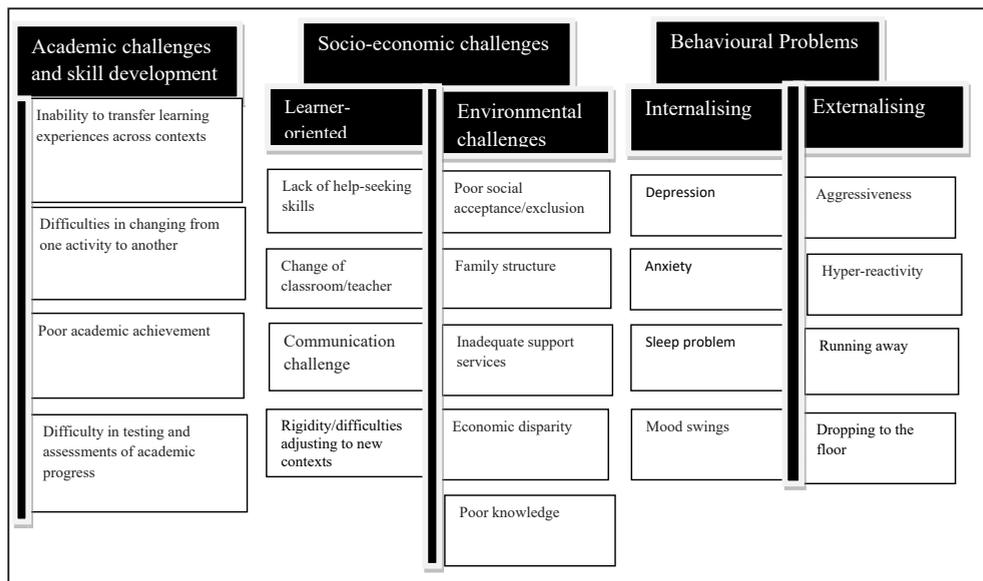


Figure 2: Themes and sub-themes on transition challenges

Theme 1: Academic achievement and skill development difficulties

The first and most conspicuous emerging theme from the data was *academic challenge and difficulty in developing life skills*. This theme points to learning difficulties observed among children with ASD. The parents and teachers attest to the fact that children with ASD experience a considerable challenge in learning new skills and demonstrating considerable success in academic success. Subthemes include: inability to transfer learning experiences across contexts; difficulties in changing from one activity to another; poor academic achievement even with the adapted curriculum and difficulty in testing and assessments of academic progress especially with those with high support needs. As expressed in the parents’ focus group discussion:

I thought it was only a school issue I tend to blame the teacher...But I noticed it’s pretty difficult to get him to learn one thing. Even what the teacher says he has learnt, I rarely see any evidence. Sometimes, he turns out to be worse...

A teacher submitted: teaching these children have always made me doubt my competence. I often think of doing one thing for ever... Sometime[s], I feel I am not getting it...

Both parents and teachers highlighted: It [is] difficult to evaluate academic progress in learners with ASD. It is difficult to justify the basis of promoting such learners to the next grade level and since we do not have any other framework for testing...

These constitute considerable challenges as teachers find it difficult to assess and promote the learners with ASD from one school grade to the other. Since these learners find it challenging to transfer learning experiences across contexts, success in tests and application of learning to life situations are hampered. Difficulties in changing from one activity to another may affect subject coverage and result in challenges managing class time. Poor academic achievement even with the adapted curriculum and difficulty in testing and assessments of academic progress in learners with ASD raise considerable challenges for teachers transitioning the learners to higher classes. It is clear and established that learning is cumulative and progresses from simple to complex. This implies that the difficulties experienced by learners with ASD at primary school level account for their high dropout rate at secondary school and their inability to cope at post-secondary school level.

Theme 2: Socio-economic challenges

There are many social limitations identified that could impact on transition across primary school classes/grades. Such challenges were highlighted under child-oriented challenges such as lack of help-seeking skills, difficulty during promotion/change of classroom/teacher, communication challenge, rigidity/difficulties adjusting to new contexts and environmental factors in the school, home or the community such as poor social acceptance/exclusion, family structure, inadequate support services, economic disparity/poverty and unemployment. Some exemplary comments of members of parents' group are as follows:

Resuming school each time constitutes stress for us. He would never admit to be in the school, shouting every morning. Sometimes I tend to consider if he should only be at home with his home-teacher

...going to the next class promotion is challenging. I did everything possible, only to notice that leaving the former teacher was the problem. I regretted not taking any action during the holiday.

He rarely likes to ask for help or anything from the siblings. Sometimes when they talk about his weakness thinking that maybe he doesn't understand, he will become very restless, yet would not express his grievances through words. We are no more comfortable accepting visitors, because my son will surely disgrace you. I wonder how he can get to a level he will be able to relate with people at [a] workplace or in the wider world

Teachers also noted that the aforementioned personal limitations in children with autism as challenges in their school transition from one activity to the other. For instance, as one of the teachers expressed:

To change lesson periods from reading to life skills for example, I have to prepare them before hand, otherwise that alone is enough to put the class in chaos. They are so rigid! I think that could impact on their successful transition because, the world is dynamic.

At early school years, navigating their challenging classroom behaviours to establish and sustain positive student-teacher relationships necessary for learning is another, challenge to their academic progress.

At late primary school grades and high school, the major challenge may be on helping them build social relationships and social networks to protect them from devastating mental health problems like depression or anxiety.

Environmental challenges discussed were poor social acceptance/exclusion, family structure, inadequate support services, economic disparity/poverty, unemployment and poor knowledge and attitude. According to the teachers' group, the socio-economic challenges are all critical for transition and form the basis upon which other challenges hide their roots. The parents and teachers stressed that critical learning skills are undermined by environmental factors such as poor social acceptance. A mother stated:

It is a world of you and your child with autism. Nobody is behind you! Not even your spouse, in fact I am divorced today because I have a child with autism. My husband never for one day accepted that this child is ours; it was always me and my daughter. Even the siblings were mostly unhappy. You go to [a] mall with her and all eyes are on you. My daughter is 26 now. Then, she was rejected in all the schools I took her to. I know if it is now she wouldn't have been as bad as she is.

So I think community attitude accounted for most challenges we encounter, my daughter and I always create a scene.

Another parent said that the most overwhelming challenge her family had was economic challenges.

Low income and poverty limits my investment on my child with autism. Autism condition is financially demanding. I pay approximately R2 100 monthly for school fees and transport of my son. You have to pay and pay and pay. Providing necessary interventions is of great cost, and their transition progress depends on integrated interventions, I cannot be [an] expert in all...

The environmental challenges highlighted also include social climate factors associated with home, school and the community. Children with ASD can sustain below normal social relationships with siblings, teachers, classmates, and friends. A challenge is meeting the requirements in organising the social frameworks of the home, school and the community to enhance positive transition in children with ASD.

During high school, young adults with ASD continue reduced transition outcomes, such as poor self-advocacy, loneliness, dependence and unemployment.

They also emphasised the challenge of un/under-employment, specific challenges such as limited employment options and limited vocational support were stressed. Successful transition to adulthood is especially challenged by having to secure a blue-collar job or becoming an entrepreneur. Some children have really acquired employability skills without being employed. Parents experience plenty of stress in getting learners with ASD to bear their personal responsibilities in terms of independent life skills and enhancing health and well-being depends on employment opportunities.

...limited employment opportunities for them after school could be discouraging. Some of them grow to be very good but unemployed. Like one that now helps us here has graduated since over three years.....and I know he can be good for appropriate employment.

Poor knowledge was also found to be a challenge for the parents and teachers. Participants expressed that poor knowledge of the parents and teachers about ASD, teachers' poor knowledge concerning the learning of children with ASD and poor community awareness hamper transition in learners with ASD.

Parents: I can say that poor knowledge is the summary of all the challenges...I regret my poor knowledge, especially at the early stage of my child's development. I didn't really

understand what was wrong with him, little did I take necessary actions at that early stage when intervention is most effective. Lack of knowledge is enough to keep a child with good potentials at home in complications”.

Teachers: ...but the problem we teachers are almost novice on the prognosis of these disorders. The learners in this spectrum are so heterogeneous that in a class of 9 learners, who are at the same support need, the variation in the pattern of behaviour and learning can be so versed and daunting.

Teachers: in fact, all of us teaching them at different levels are poorly knowledgeable in how best we can teach and assess progress of these learners.

Theme 3: Behaviour problems

The participants showed concern about behaviour problems in learners with ASD, pointing out that many learners exhibit a range of internalising and externalising behaviour problems. The teachers and parents submitted that internalising and externalising problems such as mood swings, anxiety and restlessness, aggressiveness as well as hyper-reactivity constitute great challenges to transitioning across primary school grades. As opined by the teachers' group:

Managing mental health and behavioural issues in learners with ASD is very challenging and could limit functionality among them. Sometimes, they fail to express learnt skills due to emotional problem.

...chronic depressive mood limit[s] learning and interferes with all life activities. Sometimes, I get exhausted trying to understand what distresses them...you take all the time to get him back, but no way.

One distress as little as a sight of a new face in the class or at home can get a child with ASD shouting till infinity this could be a very big challenge, especially as the child continue to have need for independent living.

I tend to nurse some concerns on what on earth can make them function well with that kind of negative emotions. It can hamper their active participation in home routine and self-care, so increases the stress if caring for them, even at adulthood.

...their aggressiveness hinders peer collaboration and limits their learning. They find it difficult working with others, prefer to work alone.

5. DISCUSSION

Learners with ASD are among the most vulnerable to transition problems, experiencing significant limitation in successful transition across life and developmental stages. This study sought to identify the overarching challenges of primary school learners with ASD in transitioning from one school grade to another. The results highlighted major academic difficulties, socio-economic challenges and behavioural problems as challenges leading to poor transition outcomes in learners with ASD.

5.1 Academic challenges

Academic achievement and skill development difficulties include inability to transfer learning experiences across contexts; difficulties in changing from one subject to another or from one grade level to another; poor academic achievement even with the adapted curriculum and difficulty in testing and assessments of academic progress especially with those with high

support needs. Inability of learners with autism to transfer what they have learnt to different contexts found in this study is in agreement with earlier studies in that area (Barnhill 2016; Kapp, Gantman & Laugeson, 2011).

Difficulties in changing from one subject to another or from one grade level to another found in the present study concur with the existing literature. For instance, evidence has proven that due to the need for routine, persons with ASD find it difficult to change activities (Gurbuz, Hanley & Riby, 2019; Hume, 2008; Kapp, Gantman & Laugeson, 2011). This is a major transition issue that affects children with autism in the classroom. For parents and teachers to help the learners navigate the problem of changing activities, everything has to be prepared (Kapp, Gantman & Laugeson, 2011; Zager & Shamow, 2005). The children need to be supported to get emotionally ready to change activities from in the school no matter how small the change may be. Some authors have suggested the use of prompting and reinforcements through activities planning in helping such children (Zager & Shamow, 2005). Further, the interest of the learners with ASD has to be sought for any activity including what to do next, what to learn next and the associated outcomes.

Another conspicuous academic challenge found in this study is poor academic achievement even with the adapted curriculum. Poor academic achievement undermines transition success in learners with ASD. This result confirms what is available in the literature, that even though more than 50% of learners with ASD have at least an average IQ, most of them achieve poorly academically (CDC, 2012; Estes *et al.*, 2011). The academic difficulties in learners with ASD could be due to their disorder in complex information processing characterised by irregular, idiosyncratic profiles of intelligence that show deficits in social contexts. As the learners proceed from grades to another, they are required to show considerable progress in the present grade before they are promoted to another grade. Further, higher order thinking that may demand adapted cognitive styles may be required from learners with ASD who struggle with organisational skills, switching attention, problem-solving and comprehension of complex operations. Due to deficits in judging the passage of time (Martin *et al.*, 2010) and in cognitive flexibility learners with ASD may not achieve spontaneous academic success, but may need specialised interventions to learn the required academic skills needed for transitioning from one school grade to another.

Learners with ASD can be helped to overcome academic challenges by designing/adapting curriculum that attend to their systemising personality characteristic (high inclination towards understanding of rules, the inner workings of objects and the organisation of systems). Systemising personality places preference to predictable, rule-based and lawful systems as well as inclination to the truth (Baron-Cohen, 2008). Furthermore, difficulty in testing and assessments of academic progress in formal and informal contexts was identified as a challenge to transition. Earlier studies have also recorded teachers' difficulties in assessing and evaluating academic progress in children with ASD (Tay, Kee & Hui, 2019). Learners with ASD normally present the problem of a scattered profile of results on formal testing measures, as well as inconsistent performance (Durocher, 2011) making it difficult to take decisions and planning concerning their transition.

5.2 Socio-economic challenges

Child-oriented social challenges include difficulty during promotion/change of classroom/teacher, communication challenges, rigidity/difficulties adjusting to new contexts and non-cooperation. These findings are consistent with earlier studies that show that autistic

children experience challenges blending with and coping in new school placements (Dillon & Underwood, 2012; Tobin *et al.*, 2012). These challenges are perhaps associated with deficits in social and communication skills, poor executive functions and cognitive inflexibility, which characterise ASDs (Dijkhuis *et al.*, 2020). Researchers observed that improved social skills are related to academic achievement in learners with autism (Estes *et al.*, 2011). Poor social communication may also limit the learners' help-seeking skills making it almost impossible for them to make personal adjustments (Dijkhuis *et al.*, 2020). Social situations keep getting more complex as learners progress through school and exacerbate their academic and social difficulties.

On the other hand, poor executive function limits higher order cognitive functioning embedded in abstract reasoning, decision making and social regulation, which controls cognitive flexibility, working memory and planning/organising, necessary for self-regulation (Hofmann, Schmeichel & Baddeley, 2012). These challenges may present difficulties in transition areas such as tracking deadlines, time management, keeping class notes and organising materials, coping with daily schedules and long-term assignments (Dijkhuis *et al.*, 2020). Furthermore, cognitive inflexibility has been identified as a predictor of achievement. For instance, St. John *et al.* (2018) found that the cognitive flexibility of children with ASD at the age of 6 years predicted their math achievement at age 9. A non-cooperation identified in this study could be explained by the attention problem in children with ASD. Attention issues have been found to be significantly associated with academic performance in children with ASD (Spaniol *et al.*, 2017).

Environmentally oriented challenges include poor social acceptance/exclusion, family structure, inadequate support services, economic disparity/poverty and poor/negative attitude. Exclusion has been a major challenge in socio-educational experience of learners with ASD and their families. Learners with ASD are more likely to be excluded from schools than any other group of disabilities. Exploring learners' perspectives, Brede *et al.* (2017) found that unmet needs and inappropriate approaches by previous school staff in attending to children's difficulties were the causes of decline in children's mental health and behaviour and, ultimately, led to subsequent school exclusion. Both formal and informal school exclusions have been recorded in children with ASD (Brede *et al.*, 2017), including fixed-term school exclusion, permanent exclusion (formal exclusion) and/or encouraging children to be home-schooled (informal exclusion) especially when a carer/teaching assistant is unavailable (Atkinson, 2013; Brede *et al.*, 2017; Sproston, Sedgewick & Crane, 2017).

Family structure was among the sub-themes in the transition challenges. While teachers outlined the place of family involvement in transition, teachers submitted that a disrupted family structure could have a negative effect on transition success. Research recognises the place of family in the successful transition of students with ASD across schools and employments (Hagner *et al.*, 2012). Sproston *et al.* (2017) found that disrupted spousal relationship is a factor in exclusion of children with ASD. In a relationship study, Rea-Amaya, Acle-Tomasini and Ordaz-Villegas (2017) found that parents who give meaning to their lives are more likely to seek help to maintain the family's emotional bond and to solve problems inherent to having a child with ASD, while those who exhibit distress, anguish, hyper-concern, little tolerance and rule inconsistency are associated with negative outcomes. This indicates family resilience in terms of acceptability of the child and being proactive in negating transition problems in ASD learners and parenting behaviours (Crowell, Keluskar & Gorecki, 2019).

Economic disparity/poverty relates to the disparity in access between white South Africans and those who are black or coloured. Given the financially intensiveness of caring, treating and educating learners with ASD (Mthombeni & Nwoye, 2018), it is not unexpected that economic disparity and poverty were identified as challenges to transition in learners with ASD. Parents and families living with ASD face a high financial burden. The cost of therapies, special education and treatments are high and are rarely covered by the Government of South Africa (Erasmus, 2019; Franz *et al.*, 2018). High levels of effort, both physically and financially, are required in order to ensure that placement for learners with ASD is duly encapsulate in the intervention services (Meiring *et al.*, 2016). After formal education, parents take the sole responsibility to organise ongoing learning and movement into independent living and working opportunities, and disparity in economic empowerment is always experienced by white and black South-African citizens with ASD learners. Though this theme was quite evident during the focus group discussion, the researchers could not find literature backing the argument. This calls for further investigation.

Poor/negative attitude of the parents, teachers and the community were also prominent in the study themes. This finding supports previous studies that found that parents' attitudes affect functional outcomes in learners with ASD (Meiring *et al.*, 2016). Attitudes of the parents determine the parental behaviours towards learners with ASD (Crowell, Keluskar & Gorecki, 2019) and affect the efforts made towards transition and development of the child. For instance, some parents see their children with ASD as ones that cannot improve. Such parents are not proactive towards what the learners can learn to improve their lives but see them as needing only physical care. Further, due to negative attitudes, many families having children with ASD have problems with spousal relationships and children are raised by single parents, most often the mother. On the other hand, teachers' professional attitude can undermine learning and transition in learners with ASD. The study findings show that some teachers believe that learners with ASD are unteachable and cannot be evaluated. However, the outcomes of the present study still suggest that if the critical challenges are well captured in transition planning, the learners can learn, be evaluated and make remarkable school progress.

5.3 Behaviour problems

Both internalising and externalising problems, such as mood swings, anxiety and restlessness, aggressiveness, self-injury, abnormal fear response, as well as hyper-reactivity, temper tantrum, running away and dropping on the floor were identified as challenging for the parents and teachers. These agree with the findings of Kurzius-Spencer *et al.* (2018), which showed that some of these behavioural problems are comorbid conditions associated with ASD. Evidence shows that the increased tendency of learners with ASD to engage in problem behaviour during transitions constitutes a considerable challenge for the learners with ASD and those in their immediate environment (Lequia *et al.*, 2015). Approximately 94% of the ASD population exhibits some challenging behaviours, out of which 63% exhibit externalising while 83% exhibit internalising behaviours (Jang *et al.*, 2011). Results of this study are also consistent with that of Lequia *et al.* (2015), which identified some common challenging behaviours exhibited by students with ASD during transition periods, including aggression, off-task behaviour and inappropriate vocalisations, dropping to the floor and running away.

Parents and teachers who participated in this study expressed their worry about the level of independence that the learners can attain and the possibility of their coping without care and assistance. Additionally, participants also worry about problem behaviours. This

finding is synonymous to that of Mandy *et al.* (2016) who found maladaptive behaviours are often exhibited by people with ASD and are the main cause of caregivers' stress. Maskey *et al.* (2013) found that sleep, bathroom and eating problems, hyperactivity, self-injury and sensory difficulties were greater in children with high support needs. Contrary to this, anxiety, tantrums and aggression towards others are common regardless of age, ability or schooling. Further studies found that anxiety, depression, withdrawal, somatic complaints, problems with socialisation, thought or attention, rule breaking and aggression tend to raise family concerns (Lindor *et al.*, 2019). Irrespective of learners' position in the spectrum of autism, problematic behaviours can limit transition success.

In view of the preceding discussion, it is advisable that teachers, parents and learners with ASD work together to overcome these indicated challenges for a smooth transition within and across school grades. Approximately 25% of a school day is engaged in transition activities, such as moving from classroom to classroom, coming in from the playground, going to the cafeteria, putting personal items in designated locations like lockers or cubbies and gathering needed materials to start working. Teachers and parents should make an effort to ensure functional transition in each instance for optimum outcome. Prepare for everything. Most transition research has focused on learners who are transitioning across education settings, such as from primary to secondary, secondary to university, etc.. However, the present study has expanded insight on the need to make plans to navigate each of the many daily school transition processes. Based on the present finding, it is clearly understandable that the transition difficulties encountered by learners with ASD at later school levels are a function of specific failures in daily transition in the classroom. It is also believable that long-term successful transition is dependent on the ability of caregivers to help the learners navigate the challenges in different areas such as academic achievements, behaviour problems and social and economic difficulties.

6. CONCLUSION

Based on the findings of the present study, we conclude that there are academic challenges such as the inability to transfer learning experiences across contexts, difficulties in changing from one activity to another, poor academic achievement, difficulty in testing and assessment of academic progress. Learner-oriented socio-economic difficulties also exist such as the lack of help-seeking skills, chance of class or teacher, communication challenges and rigidity limit transition success. Environmentally, poor social acceptance, family structure, inadequate support services, economic disparity and poor parents and teachers' knowledge are the major challenges. Furthermore, internalising problem behaviours such as depression, anxiety, sleep problems and mood swings, hamper transition success. Externalising problem behaviours such as aggressiveness, hyper-activity, running away and throwing tantrums/throwing themselves on the floor were major challenges identified as significant concerns.

7. RECOMMENDATIONS

Families and schools of learners with ASD should make the home and school environments more accommodating and reduce the emphasis on their difficulties. Family and school collaboration are encouraged for follow-up and integrating what is learnt from school into home activities and vice versa. More intervention should be put in place to help learners with autism develop personal resources that will encourage their success in school and at home. Home-based interventions and community-based awareness are encouraged in South Africa

to overcome poor knowledge. Teachers need more training and professional development in order to understand and attend effectively to the transition needs of learners with ASD. Necessary therapies should be free for learners with ASD and their families in the form of support services.

8. LIMITATIONS OF THE STUDY

The present study capitalised on teachers and parents' perspectives without collecting data from the learners. Further studies can compare caregivers' perspectives with the learners' voice. This study found out the difficulties without considering the strategies to overcome each of the difficulties. It would be necessary to identify through research, those strategies that can work for transition success in the learners with ASD. A mixed method research would also be required to establish the best practices in overcoming transition challenges in learners with ASD.

REFERENCES

- Anderson, K.A., Sosnowy, C., Kuo, A.A. & Shattuck, P.T. 2018. Transition of individuals with autism to adulthood: A review of qualitative studies. *Pediatrics*, 141(Supplement 4): S318–S327. <https://doi.org/10.1542/peds.2016-43001>
- Audu, E.I.V. & Egbochuko, E.O. 2010. Autism among primary school pupils in Benin metropolis: Implications for counselling. *Edo Journal of Counselling*, 3(2): 261–272. <https://www.ajol.info/index.php/ejc/article/view/63612>. <https://doi.org/10.4314/ejc.v3i2.63612>
- Bailey-Taylor, A. 2009. Advising adult students: Connecting Schlossberg's transition theory to the appreciative advising model. *The Mentor: Innovative Scholarship on Academic Advising*, 11.
- Barnhill, G.P. 2016. Supporting students with Asperger syndrome on college campuses: Current practices. *Focus on Autism and Other Developmental Disabilities*, 31(1): 3–15. <https://doi.org/10.1177/1088357614523121>.
- Lewis, S. 2015. Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice*, 16(4): 473–475. <https://doi.org/10.1177/1524839915580941>
- Durocher, J.S. 2011. Assessment for the purpose of instructional planning for students with autism spectrum disorders. *Autism spectrum disorders: Foundations, characteristics, and effective strategies*, 34–67.
- Erasmus, S., Kritzinger, A. & Van Der Linde, J., 2019. Profiles of public and private autism-specific schools in Gauteng. *South African Journal of Childhood Education*, 9(1): 1–9. <https://doi.org/10.4102/sajce.v9i1.691>
- Estes, A., Rivera, V., Bryan, M., Cali, P. & Dawson, G., 2011. Discrepancies between academic achievement and intellectual ability in higher-functioning school-aged children with autism spectrum disorder. *Journal of autism and developmental disorders*, 41(8): 1044–1052. <https://doi.org/10.1007/s10803-010-1127-3>.
- Evans, D., Borriello, G.A. & Field, A.P. 2018. A review of the academic and psychological impact of the transition to secondary education. *Frontiers in Psychology*, 9: 1482. <https://doi.org/10.3389/fpsyg.2018.01482>

- Forest, E.J., Horner, R.H., Lewis-Palmer, T. & Todd, A.W. 2004. Transitions for young children with autism from preschool to kindergarten. *Journal of positive behavior interventions*, 6(2): 103–112. <https://doi.org/10.1177/10983007040060020501>
- Franz, L., Chambers, M., von Isenburg, N. & de Vries, P.J. 2017. Autism spectrum disorder in sub-Saharan Africa: A comprehensive scoping review. *Autism Research*, 10(5): 723–749. <https://doi.org/10.1002/aur.1766>
- Friedman, N.D., Warfield, M.E. & Parish, S.L. 2013. Transition to adulthood for individuals with autism spectrum disorder: Current issues and future perspectives. *Neuropsychiatry*, 3(2): 181. <https://doi.org/10.2217/npj.13.13>
- Gobbo, K. & Shmulsky, S. 2014. Faculty experience with college students with autism spectrum disorders: A qualitative study of challenges and solutions. *Focus on Autism and Other Developmental Disabilities*, 29(1): 13–22. <https://doi.org/10.1177/1088357613504989>.
- Guest, G., Namey, E. & McKenna, K. 2017. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field methods*, 29(1): 3–22. doi.org/10.1177/1525822X16639015
- Gurbuz, E., Hanley, M. & Riby, D.M. 2019. University students with autism: The social and academic experiences of university in the UK. *Journal of autism and developmental disorders*, 49(2): 617–631. <https://doi.org/10.1007/s10803-018-3741-4>
- Hagner, D., Kurtz, A., Cloutier, H., Arakelian, C., Brucker, D.L. & May, J. 2012. Outcomes of a family-centered transition process for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 27(1): 42–50. <https://doi.org/10.1177/1088357611430841>
- Hendricks, D.R. & Wehman, P. 2009. Transition from school to adulthood for youth with autism spectrum disorders: review and recommendations. *Focus Autism Other Dev Disable*, 24(2): 77–88. [doi:10.1177/1088357608329827](https://doi.org/10.1177/1088357608329827)
- Hofmann, W., Schmeichel, B.J. & Baddeley, A.D. 2012. Executive functions and self-regulation. *Trends in Cognitive Sciences*, 16(3): 174–180. <https://doi.org/10.1016/j.tics.2012.01.006>.
- Hoy, K., Parsons, S. & Kovshoff, H. 2018. Inclusive school practices supporting the primary to secondary transition for autistic children: pupil, teacher, and parental perspectives. *Advances in Autism*, 4(4): 184–196. <https://doi.org/10.1108/AIA-05-2018-0016>
- Hume, K. 2008. Transition time: Helping individuals on the autism spectrum move successfully from one activity to another. *The Reporter*, 13: 6–10. <http://www.iidc.indiana.edu/irca/education/TransitionTime.html>
- Imam H. 2012. Educational policy in Nigeria from the colonial era to the post-independence period. *Italian Journal of Sociology of Education*, 4(1): 181–204. <https://doi.org/10.14658/pupjise-2012-1-8>
- Ismaila, R., Baharib, F., Rahimc, N.F.A., Seokd, C.B., Abdullahe, S. & Mutangf, J.A. 2016. Challenges and problems of school transition to workplace for students with Autism Spectrum Disorder (ASD) in ethnically diverse families. *Asia Pacific Institute of Advanced Research*, 2(2): 771–799.
- Jackson, S.L.J., Hart, L., Brown, J.T. & Volkmar, F.R. 2018. Brief report: Self-reported academic, social and mental health experiences of post-secondary students with autism

spectrum disorder. *Journal of Autism and Developmental Disorders*, 48(3): 643–650. <https://doi.org/10.1007/s10803-017-3315-x>.

Janesick, V.J. 2011. *“Stretching” exercises for the qualitative researcher* (3rd ed.). Thousand Oaks, CA: Sage.

Kapp, S.K., Gantman, A. & Laugeson, E.A. 2011. Transition to adulthood for high functioning individuals with autism spectrum disorders. *A Comprehensive Book on Autism Spectrum Disorders*, 451–478.

Kurzius-Spencer, M., Pettygrove, S., Christensen, D., Pedersen, A.L., Cunniff, C., Meaney, F.J. & Rice, S. 2018. Behavioral problems in children with autism spectrum disorder with and without co-occurring intellectual disability. *Research in Autism Spectrum Disorders*, 56: 61–71. <https://doi.org/10.1016/j.rasd.2018.09.002>

Lagunju A, Bella-Awusah T.T. & Omigbodun, O.O. 2014. Autistic disorder in Nigeria: Profile and challenges to management. *Epilepsy and Behaviour*, 39: 126–129. <https://doi.org/10.1016/j.yebeh.2014.08.020>

Lei, J., Calley, S., Brosnan, M., Ashwin, C. & Russell, A. 2018. Evaluation of a transition to university programme for students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 1–15. https://doi.org/10.1007/978-1-4614-6435-8_102485-1

Lequia, J., Wilkerson, K.L., Kim, S. & Lyons, G.L. 2015. Improving transition behaviors in students with autism spectrum disorders: A comprehensive evaluation of interventions in educational settings. *Journal of Positive Behavior Interventions*, 17(3): 146–158. <https://doi.org/10.1177/1098300714548799>

Lesi, F.E., Adeyemi, J.D., Aina, O.F., Oshodi, Y.O., Umeh, C.S., Olagunju, A.T. & Oyibo, W. 2014. Autism in Nigeria: A call for action. *Journal of Clinical Sciences*, 11(2): 33. <https://doi.org/10.4103/1595-9587.146494>

Marsh, A., Spagnol, V., Grove, R. & Eapen, V. 2017. Transition to school for children with autism spectrum disorder: A systematic review. *World Journal of Psychiatry*, 7(3): 184. <https://doi.org/10.5498/wjp.v7.i3.184>

Martin, T., Dixon, R., Verenikina, I. & Costley, D. 2019. Transitioning primary school students with Autism Spectrum Disorder from a special education setting to a mainstream classroom: successes and difficulties. *International Journal of Inclusive Education*, 1–16. DOI: 10.1080/13603116.2019.1568597

Martin, T., Dixon, R., Verenikina, I. & Costley, D. 2019. Transitioning primary school students with Autism Spectrum Disorder from a special education setting to a mainstream classroom: successes and difficulties. *International Journal of Inclusive Education*, 1–16. <https://doi.org/10.1080/13603116.2019.1568597>

Maskey, M., Warnell, F., Parr, J. R., Le Couteur, A. & McConachie, H. 2013. Emotional and behavioural problems in children with autism spectrum disorder. *Journal of autism and developmental disorders*, 43(4): 851–859. <https://doi.org/10.1007/s10803-012-1622-9>

Maxwell, J.A. 2013. *Qualitative research design: An interactive approach*, 3rd ed. Thousand Oaks, CA: Sage.

Meiring, M., Seabi, J., Amod, Z., Vorster, A. & Kern, A. 2016. Transition for adolescents with autism spectrum disorder: South African parent and professional perspectives. *Frontiers in Psychiatry*, 7: 93. <https://doi.org/10.3389/fpsy.2016.00093>

- Mthombeni, Z.C. & Nwoye, A. 2018. Black South African caregivers' understanding and responses to their children with autism spectrum disorder symptoms: a qualitative study. *South African Journal of Psychology*, 48(1): 99–111. <https://doi.org/10.1177/0081246317696453>
- Neubauer, B.E., Witkop, C.T. & Varpio, L. 2019. How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2): 90–97. <https://doi.org/10.1007/s40037-019-0509-2>
- Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16: 1–13. <https://doi.org/10.1177/1609406917733847>
- Nuske, H. J., McGhee Hassrick, E., Bronstein, B., Hauptman, L., Aponte, C., Levato, L. & Smith, T. 2019. Broken bridges – new school transitions for students with autism spectrum disorder: A systematic review on difficulties and strategies for success. *Autism*, 23(2): 306–325. <https://doi.org/10.1177/1362361318754529>
- Nyumba, T., Wilson, K., Derrick, C.J. & Mukherjee, N. 2018. The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1): 20–32. <https://doi.org/10.1111/2041-210X.12860>
- Petriwskyj, A. 2010. Kindergarten transitions and linkages to primary school-readiness reconceptualised. In P. Peterson, E. Baker & B. McGaw (Eds.). *International encyclopedia of education* (pp. 120–125). Oxford: Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.01180-5>
- Schlossberg, N.K. 2011. The challenge of change: The transition model and its applications. *Journal of Employment Counseling*, 48(4): 159. <https://doi.org/10.1002/j.2161-1920.2011.tb01102.x>
- Shattuck, P.T., Narendorf, S.C., Cooper, B., Sterzing, P.R., Wagner, M. & Taylor, J.L. 2012. Postsecondary education and employment among youth with an autism spectrum disorder. *Pediatrics*, 129(6): 1042–1049. <https://doi.org/10.1542/peds.2011-2864>
- Shi, Z. 2011. Dilemmas in using phenomenology to investigate elementary school children learning English as a second language. In *Education*, 17(1): 3–13. <https://doi.org/10.37119/ojs2011.v17i1.88>
- Strand, G.M. 2019. Experiencing the transition to lower secondary school: Students' voices. *International Journal of Educational Research*, 97: 13-21. <https://doi.org/10.1016/j.ijer.2019.06.009>
- Tay, H.Y., Kee, K.N.N. & Hui, S.K.F. 2019. Effective questioning and feedback for learners with autism in an inclusive classroom. *Cogent Education*, 6(1): 1–19. <https://doi.org/10.1080/2331186X.2019.1634920>
- Van Schalkwyk G.I., Beyer, C. & de Vries P.J. 2016. South Africa and autism. In F.R. Volkmar (Ed.). *Encyclopedia of autism spectrum disorders* (pp. 1–7). New York: Springer. https://doi.org/10.1007/978-1-4614-6435-8_102111-1
- Wehman, P., Schall, C., Carr, S., Targett, P., West, M. & Cifu, G., 2014. Transition from school to adulthood for youth with autism spectrum disorder: What we know and what we need to know. *Journal of Disability Policy Studies*, 25(1): 30–40. <https://doi.org/10.1177/1044207313518071>
- West, P., Sweeting, H. & Young, R. 2010. Transition matters: pupils' experiences of the primary–secondary school transition in the West of Scotland and consequences for

well-being and attainment. *Research Papers in Education*, 25(1): 21–50. <https://doi.org/10.1080/02671520802308677>

Zager, D. & Shamow, N. 2005. Teaching students with autism spectrum disorders. *Autism Spectrum Disorders: Identification, Education, and Treatment*, 3: 589. <https://doi.org/10.4324/9781410611260>