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The needs of individuals with autism spectrum disorder when transitioning into the labour market

ABSTRACT

Introduction: South Africa, like other regions of the world, has an increasing prevalence of autism spectrum disorder (ASD). The transition of these individuals into the labour market is of concern. The aim of this study was to explore the perceptions of individuals with ASD and their parents in terms of their unmet needs in relation to transitioning into the labour market and the role an occupational therapist can play.

Methods: A qualitative explorative descriptive research method was used. Purposive sampling selected young adults with ASD currently or previously employed in the open labour market. Data were collected using email interviews with individuals with ASD and face to face interviews with their parents. Data were analysed using inductive thematic analysis.

Results: Two themes were identified: Transitioning was really hard, and Occupational therapists can do more. The results emphasised the lack of services in preparing adults with ASD for finding and maintaining employment, as well as suggestions for the role of occupational therapy in facilitating prevocational skills, job seeking skills and supported employment.

Conclusion: There is a lack of services for individuals with ASD transitioning into the labour market particularly in relation to vocational orientation and rehabilitation. Occupational therapists are ideally situated to provide services to meet needs of individuals with ASD transitioning into the world of work.

Implications for practice

- Occupational therapists need to play a role in developing vocational rehabilitation services in preparation of individuals with ASD into the labour market.
- There is a need to investigate what is currently offered and what can be added regarding occupational therapy programs supporting transition from school into employment for individuals with ASD in South Africa.
- Vocational rehabilitation services and transition programs should be developed in conjunction with individuals with ASD to ensure issues that are relevant to the population of individuals with ASD are addressed.

INTRODUCTION

The global prevalence of Autism Spectrum Disorder (ASD) is reported to be increasing and this complex disorder has considerable impact on the individual, their families, communities and societies¹. The same increase in prevalence is true in South Africa although this has not been well researched. It has been suggested the prevalence of ASD in South Africa may reflect the global prevalence of 1 to 2% of the population, with research indicating a prevalence of 0.08% in the Western Cape and an average increase of 15.18% per year².

Although more services have been provided over the last 20 years in South Africa for individuals with ASD, these services are mostly for children and not adolescents and adults^{2,3}. Longitudinal research in developed countries has found that only about 20% of adults are able to live independently. Only an average of 49% of adult ASD participants who were followed up in studies, were in paid, sheltered, or vol-

untary employment positions or educational programmes⁴. Research by Meiring et al.⁵ indicates that even a higher percentage of adults with ASD make up a proportion of the unemployed people with disabilities in South Africa. This indicates that the transition to the worker role is challenging for many of these individuals and their families and is impacted by reduced support from formal education structures and a lack of appropriate resources to assist with transition to work⁵. These individuals therefore have few resources to meet their transition to employment needs⁶.

Current research reports gaps in understanding the challenges associated with transitioning into employment for individuals with ASD. Thus, Renty and Roeyers⁷ suggest that professionals, such as occupational therapists, should consider the met and unmet needs related to transitioning into employment, from the viewpoint of individuals with ASD and their parents, since their services could play a role in employment outcomes for these individuals⁸. However, occupational therapists have limited information on which to base decisions regarding services for this population in the South African employment context. This has resulted in a lack of vocation specific services offered to adolescent and adult individuals with ASD.

Literature Review

Worldwide, employment of people with disabilities (PWDs) is a complex issue influenced by many factors and systemic issues that are interrelated⁹. While progress has been made in recent years with regards to the development of the legislative framework to support employment of PWDs in South Africa, the success of these policies is questionable as only 1.8% of the employees in the labour market are PWDs¹⁰. Even though the Equity Act and its Code of Good Practice¹¹ have been promulgated, these acts and codes appear to have made little difference to the percentage of PWDs who are employed. One group of PWD with difficulty in transitioning into and finding employment are those with ASD¹².

There is a wide range of individuals on the ASD spectrum, with differing abilities which pose various challenges in transitioning into work. This study considered individuals with the diagnosis of ASD, who had completed their secondary education and had received further education or training. Research indicates disappointing employment outcomes for this group globally⁵ due to specific challenges individuals with ASD report in developing personal relationships and participating in social interactions. Increased levels of anxiety, stress, and depression in these individuals is exacerbated by fear of change and has been reported to result in social isolation and self-injurious behaviour¹³. While change can be daunting for anyone, individuals with ASD have a particular need for stable routine, predictability and sameness¹⁴. Thus, they sometimes present with recurring behavioural patterns resulting in inappropriate melt down behaviours when emotionally and sensorially overwhelmed.

These features of ASD contribute to the individual's ability to successfully or unsuccessfully transition between develop-

ment levels, particularly to adulthood where they are learning to take responsibility for themselves. Individuals with ASD experience complex challenges during the transition period which means they need specific supportive transition services to function within the same level as their counterparts. Therefore, extra support for this transition into adulthood is required in the light of significant developmental changes and challenges in acquiring and amalgamating essential life skills⁵. However, as Shattuck et al.¹⁵ indicated these individuals are faced with lack of support from particularly secondary and post-secondary formal education systems and lack of other resources important for a successful transition into adulthood.

Even though finishing secondary school symbolises a remarkable watershed for these individuals, many leave school, with no clear idea of how they will transition to the next phase of their life including how to find employment and how to start to fulfil their adult obligations¹⁶. Thus, literature suggests that decreased employment rates of individuals with ASD observed globally are possibly due to all these complex individual and environmental factors¹⁷. At the personal level, behavioural aspects, cognitive difficulties, poor social communication and interpersonal skills were usually reported as challenges to finding and maintaining employment^{18,19}. Decreased executive functioning skills which cause individuals with ASD to struggle with processing abstract information may also play a role. Misunderstandings and lack of problem solving skills, all needed for improved performance in the work environment have been reported as impacting employment²⁰.

At the environmental level, literature indicates that the social environment, mostly the system of empathetic and accepting individuals close to the individual with ASD, is a strong facilitator for successful employment¹⁷. This includes customised workplace accommodations¹⁷, support from co-workers, support staff²¹, family and others in their community²². It was postulated that the real obstacles to employment for individuals with ASD may lie in society's labelling of the peculiarities related to ASD as deficits rather than an appreciation that they have unique qualities to offer in many workplaces²³. Therefore, it is essential to appreciate the perspectives of the individuals with ASD within the situation and refrain from making assumptions on their behalf. In a study conducted by Magan²⁴, individuals with the diagnosis of ASD stated that they are the ones living with ASD therefore, their opinions must be appreciated and taken into consideration because a neurotypical society excludes and fails to understand ASD. Considering the concerns expressed by individuals with ASD might assist in accessing resources that will minimise some of the challenges they encounter post-school²⁵. Understanding the gap in transition into adulthood for adolescents with ASD from all perspectives will allow appropriate support from stakeholders including occupational therapists, in areas of education, social interaction, communication, interpersonal skills¹⁷, vocational possibilities and community integration to be provided⁵.

The American Occupational Therapy Association has

identified 'Transition Services' as one of the eight standards of practice for occupational therapy²⁶, emphasising the provision of support in the significant life area of work. Guidelines regarding how to prepare and support individuals attending learners with special needs (LSEN) schools for the worker role has also been published in South Africa²⁷ which supports the role of occupational therapists with respect to vocational rehabilitation services for youth with disabilities. However, occupational therapists are not always fully utilised as part of teams which support learners transitioning out of high school and no published research for the transition from high school or post-secondary education to the labour market for individuals with ASD in this country was found.

The intervention and employment model which has been presented by occupational therapists for the South Africa context²⁸ requires further development to be applied across an inter-sectoral domain of practice including individuals with ASD. Literature also suggests occupational therapy should play an advocacy role for the transition of individuals to employment, such as providing education to society and employers²⁹. Guidance to employers by the occupational therapist on how to optimally work with employees with the diagnosis of ASD was recommended^{30,31}.

Aim of study

The aim of this study was to explore the perceptions of individuals with ASD (who are or have been employed in the open labour market) and that of their parents, about their needs in terms of transitioning into the labour market and the perceived role that the occupational therapist can play in addressing their unmet needs.

METHOD

This study used a qualitative explorative, descriptive design with phenomenological characteristics to explore the meaning people ascribe to their own experience³². In this case the perceptions of individuals with ASD and those of their parents on their unmet needs in relation to transitioning into the labour market as well as their views as to how occupational therapists could assist with this process, was explored. Cognisant of the social difficulties of individuals with ASD the data was collected in email interviews while the parents were interviewed face to face³³.

Research setting

The research population was individuals with ASD who were members of an Autism Support Group. The support group provides support for both individuals with ASD and their parents. The membership is diverse in terms of gender and age; including children who are as young as five years and adults as old as 75 years old. The purpose of the group was to discuss daily life challenges encountered by the families and individuals affected by ASD and provide peer support to members. The researcher, an occupational therapist, joined the group as a health care professional when treating clients who needed support. With the groups permission she attended the group meetings to experience the support offered and was later invited to remain in the group and was inducted as a member of the group.

Sampling

Purposive sampling was used to select participants with ASD who had completed their Grade 12 education and had received further training. The participants had been employed for at least three years, while two had been employed in multiple jobs. The sample therefore consisted of young adults with ASD who were currently employed in the open labour market or who had been previously employed and were looking for a job, so they could provide rich data by drawing on their own experience of transitioning into work. Eight individuals with ASD consented to be interviewed and this was done via email, which allowed the participants the opportunity to process information and to remove the experience of social anxiety or awkwardness. Ten parents of individuals with ASD were also purposively selected. Some were the parents of the individuals with ASD who were interviewed and others were parents of a young adult with ASD who was currently employed, had been employed or was still looking for a job³⁴. The final sample size of five individuals with ASD and eight parents was determined by data saturation.

Research procedure and ethics

Once ethical clearance from the Human Research Ethics Committee (M170928), at the University of the Witwatersrand and permission from the manager of the support group was obtained, recruitment of the participants for the study was initiated. The researcher presented the proposed study to the support group members at one of the meetings. An interview schedule for the email interview was developed and checked for content validity by a colleague and the study supervisor to ensure that the questions were representative of the objectives of the study. Interviews were practiced with them in separate instances, using the same interview questions that were to be used with the participants. The participants were interviewed over a three-month period using either email or face to face interviews. For participants with ASD, emails were sent back and forth (between three and five times with each participant) until there were no more probes from the researcher and the participant had no more information to add. Face to face interviews lasted approximately one hour and were recorded with permission of the participants. These interviews were transcribed word for word and the email interviews de-identified for data analysis.

Data analysis

Participants gave signed consent for demographic details used in this study to be presented. Six steps of data analysis recommended by Creswell³² regarding inductive thematic analysis (codes, categories and themes) were used in the study. This included organising and preparing the data by transcribing the interviews, reading the transcripts and emails to reflect on the overall meaning, coding the data, developing categories and themes for analysis, and interpreting of the findings.

Trustworthiness

Trustworthiness included member checking by sending through summary of themes after data analysis by email to the participants in order to ensure data analysis truly reflected

the opinions and perspectives of the participants³⁵. Thick description to convey the findings from individuals with ASD and their parents was ensured since the researcher was able to interpret the data within the particular context. Clarification of bias was addressed in frequent meetings between the researcher and the supervisor to achieve an objective view³² and allow the researcher to reflect on her own expectations and biases³⁶ so that she was aware of them before interviewing the participants so as not to influence the participants in any way. The researcher kept a reflective journal and created an audit trail. Negative or discrepant information that was contrary to the literature and expectations was included and supported by peer debriefing with a colleague and the supervisor³⁷.

RESULTS

Demographic data

The demographic data of the five individuals with ASD and the eight parents who participated in the study as well as their pseudonyms are represented in Table I (below). All the individu-

als with ASD had been employed for at least three years and two had been employed in multiple jobs. The parent participants, except one, were employed at the time of the study.

Themes emerging

Two themes emerged from the interview data in relation to the objectives of the study, and are shown in Table II (below).

Theme 1: Transitioning was really hard.

The theme Transitioning was really hard describes the experiences of individuals with ASD in seeking and maintaining employment. This theme highlighted several unmet needs for individuals with ASD.

"Moving to the labour market is, from my perspective, is difficult for everybody. But I think for people with ASD it is even more difficult as they don't know what to expect." (IT Warwick)

Getting employment is difficult.

Difficulties mentioned by participants clustered around the issue of finding a job, being prepared for the job seek-

Table I: Demographics of individuals with ASD and parents

Pseudonyms		Gender	Age	Employed	Employment	HLOE
I1	Warwick	M	32	Yes	Environmental specialist for – 5 years	Doctorate
I2	Matthew	M	37	Yes	A support specialist - 4 years	Matric Certificate
I3	Marietta	F	34	Yes	Secretary – 3 years	Matric Certificate
I4	Hope	F	27	No	Nurse – 6 years, looking for a job	Certificate
I5	Carlo	M	25	Self-employed	Repair of musical instruments - 3 years	Technology certificate
Pseudonym and child's name		Gender	Age		Parental Employment	
P1	Nadia (Carlo)	F	45	Yes	Teacher	
P2	Anne	F	54	Yes	Secretary	
P3	Isabella	F	47	Yes	Accountant	
P4	William (Matthew)	M	56	Yes	IT support engineer	
P5	Annemarie (Hope)	F	54	Yes	Secretary	
P6	Thabiso	M	66	Yes	Doctor	
P7	Regina (Warwick)	F	71	No	Pensioner	
P8	Hattie	F	53	No	Unemployed	

Table II Themes, categories, and subcategories

Theme	Category	Subcategory
Transitioning was really hard	Getting employment is difficult	• did not understand the process and we lack job seeking skills
		• find life changes difficult and it is not easy finding the right fit
		• schools do not equip with transitioning skills
Occupational therapists can do more	Perceptions of and suggested role for occupational therapy	• just don't fit in and struggle with workplace attitudes
		• lack of reasonable accommodation
Occupational therapists can do more	Perceptions of and suggested role for occupational therapy	• perceptions were positive and negative
		• role such as case managers and in skills training, job hardening and adaptation to a workplace

ing process, and keeping a job. Participants elaborated on why individuals with ASD found it difficult to find a job thus contributing to difficulties in transitioning into the workplace after school. They **did not understand the process** and had unrealistic expectations, misunderstanding of how the job seeking process worked:

“Understanding how the job market works was a challenge. I expected jobs to ask me, not me having to look for a job. I misunderstood the job market.”
(I2 Matthew).

The **lack job seeking skills** meant that participants had relied on other people who they know to get jobs for them regardless of how skilled they were in certain jobs. They reported that they did not know how to apply for jobs.

“Autistics who do get jobs tend to be the ones that have a big support system, especially within their fields of interest, and ‘expedition assistants’ helping to get jobs through the back door. As a group and in general, Autistics tend to be round pegs and the typical job search application submission and especially the interview are square holes.” **(I5 Carlo)**

It was clear that finding gainful employment was hard for this group of individuals with ASD and many reported they felt side-lined when disclosing their diagnosis. However, the difficulty did not end with the successful job application. This was only the first hurdle in transitioning successfully into the workplace. Participants reported that they **found it difficult to adapt to change** and having to adapt to a new environment is a challenge. This makes it difficult to adjust to workplace demands, especially if there are changes in those demands.

“think if it’s a person that had already built a relationship with the individual with ASD, it will help them, as the transitioning into labour market is a big adjustment for the individual with ASD. Any change to them make them to be unsettled.....” **(P3 Isabella)**

Participants stated that it was a struggle for them to **find a right fit** in the job market and that individuals with ASD appeared socially awkward. As a result, they felt that they were left out of the job market. Participants admitted that there were certain skills they felt they need to learn to combat some of the challenges they are faced with, such as life skills.

“People with ASD will have to get training on People skills, conflict resolution and office etiquette.” **(I1 Warwick)**

Schools that they had attended, did not **equip the children with any transitioning skills** or the necessary skills to function in the labour market.

“.....And the schools do not train them for any opportunity to go and work. They train them mostly to be able to be functional and to be self-sufficient so that they can almost

become adult like. But there isn’t anything of specific, of [work] type of training for any type of situation.”
(P6 Thabiso)

Their perception was that at LSEN schools, the child’s individual needs and interests were never supported. They reported the Programme-to-Work Linkage suggested by the Department of Basic Education, for LSEN schools, in which learners master the required skills at school level to enter adulthood with sufficient education, to obtain and maintain successful employment^{38:33} was not being implemented.

Challenges in the workplace

From the interviews it was clear that getting a job was only the first step in transitioning successfully into the working environment and that keeping a job was in some cases even more difficult than finding one. Fitting in, workplace attitudes and stigma contributed to the failure of individuals with ASD to navigate this transition successfully. Issues around fitting in also seriously affected individuals with ASD’s ability to keep a job. Issues identified by the participants were a struggle to read verbal cues, and a lack of social and communication skills.

“It was difficult for me to find a job; I was emotionally very young and struggled to fit in with my peer group.”
(I4 Hope)

“.... It makes it difficult because they can’t fit in. They just don’t fit in and my son doesn’t fit in, and that’s it. He does not have friends and does not mingle with others.”
(P8 Hattie)

Participants perceived workplace attitudes as both positive or negative since not everyone in the workplace treated them unfairly. However, even though some participants described a supportive work environment,

“.... They are very objective at first because they are unaware of his disability. They haven’t been exposed to this disability. But the minute they are exposed, they accept them.” **(P1 Nadia)**

most felt they were not being treated fairly by their co-workers.

“At my workplace, I principally work individually on “my” projects but with help and input with other colleagues who go on to be listed as co-authors. I would call this environment “quasi-collaborative”. Office environment/ colleagues are very supportive/friendly and understanding.” **(I5 Carlo)**

As a result of negative treatment, some participants reported they **struggled with workplace attitudes** and were not comfortable disclosing their diagnosis. They reported discrimination when others knew about their ASD and they found themselves settling for menial jobs and they over-worked themselves just so that they could be accepted.

"Autistic people have to be double as good in what they do to prove themselves.... Or that they do lowly work."
(I3 Marietta)

Sometimes when they disclosed their ASD at their workplaces, rather than being well accommodated they were ill-treated, got demoted or certain responsibilities were removed. Participants were also concerned about the **lack of reasonable accommodation** within the workplace and felt that this seriously impeded their ability to keep their jobs and thus make a success of the transition into the job market.

"And then also the work environment accommodation such as light, sound and so on. That is also an educational part to the employers to keep the environment conducive."
(T1 Warwick)

In some cases, parents still supported their children in managing their work environment to ensure they maintained employment. They have to attend their children's work functions with them, arrange for their work trips and follow-up with their children's employers on how these individuals are managing at work.

Theme 2: Occupational therapists can do more

Participants indicated they perceived that occupational therapists have the potential to provide more services than those they are offering at the moment. They stated that with the skills the occupational therapists' have, individuals with ASD could be better assisted through their transition into the labour market. They felt that currently the focus of occupational therapy intervention is more on children than adults.

"I think the research that you are doing is really needed because there is almost a perception out there that autism is a childhood condition, and it will be outgrown at some stage. The reality is, it's not and I think people tend to forget about the ASD children when they leave school, and they are left to try and figure out the way to survive in the adulthood world. And I think it is very important to try to get a support system in place."
(P7 Regina)

Participants **positive perceptions** of occupational therapy included improved functionality and assistance for individuals with ASD in understanding their diagnosis. Therapists were seen as having taught them life skills that are beneficial during their transition into the labour market.

"The value of occupational therapy is finding something that works for them [people with ASD]. But I mean there is definitely value for occupational therapy intervention, but I think that, occupational therapist should go to the next level."
(P1 Nadia)

"OT brought about the truth and proof of my autistic behaviours. I think without OT I wouldn't be able to function or have my diagnosis."
(I5 Carlo)

Other participants had **negative perceptions** reported it was difficult to work with some occupational therapists who showed no interest in helping individuals with ASD. They were seen as impatient and as not respecting the individuality of the person but only effects of the diagnosis. The therapists focused more on what the individuals with ASD could not do rather than assisting them to improve their level of functionality

"Professionals that keep on hampering on normalcy – they try to get everybody as much to the same as possible, instead of developing the individual's personal experiences of their world into something workable."
(I3 Marietta)

There are a number of perceived roles that occupational therapists, perceived as the experts in the field of vocational rehabilitation by participants, can fulfil, including **case managing, skills training, job hardening and adaptation to the workplace**. This includes assessment of the client, identification and placement of a client in an identified suitable job aligned with the client's skills as well as raising awareness about mental health issues in the workplace:

"I mean advocacy for these individuals will be really great. Getting people more exposed to people with this disability as it still has more negative connotation that people with disability can't do anything. Advocacy that these people may have disabilities, but they do have abilities."
(P1 Nadia)

"It could help if employers could be better informed about what it [ASD] is and what the person with Asperger's is capable of doing. If this comes from professionals like you. It may carry more weight than the word of the person who has Asperger's or autism."
(I4 Hope)

Participants wanted occupational therapists to help ease the transition and help both individuals with ASD and the people who employ or work with them to understand what is needed during the transition into the labour market.

The participants also expressed a need for the individuals with ASD to be **trained in certain skills** that would assist during transition process.

"They need to be assisted in developing life skills e.g., developing friendships, participating in activities of everyday, engaging in productive conversations."
(P5 Annemarie)

"... Self-regulation (e.g. what to do if you get emotional, if you feel a meltdown coming, when you get angry, etc."
(I4 Hope)

"I think preparing them for what to expect in life after school in a sense and teach them skills on how to cope with difficult situations that they have not encountered as yet."
(P3 Isabella)

Apart from skills training, the participants felt **job hardening** during transition process into the labour market would be desirable. It was stipulated that, individuals with ASD get appointed into different jobs not knowing what is expected of them. The participants expressed the need to have an occupational therapist available to prepare individuals with ASD on how job markets operate and how they must carry themselves.

“Explain the reasons for having to actually look for a job. Coach us in confidence for interviews and what to expect.” (I1 Warwick)

“Yes, training in how to conduct yourself in an interview, how to sell yourself and social integration as well as sensory issues.” (I4 Hope)

The participants were also concerned that individuals with ASD struggled to adapt in a work environment. They therefore indicated a need for the individuals with ASD to be taught **adaptation to a workplace**.

“I also think that it would have been much easier for most people with autism if there were someone that could help them with the adaptation into a new work environment.” (I1 Warwick)

“They need skills to keep themselves calm and how to cope in a work environment. Teach them to be independent in a way.” (P3 Isabella)

DISCUSSION

Data from the participants in the study supported issues transitioning into work since they were purposely selected and represented high functioning individuals with ASD. These participants had an opportunity to complete school and post-secondary training and were able to find and maintain employment in the open labour market in South Africa. The sample is similar to that described by Soeker¹⁷ in his study on transition for this population into work in South Africa. Most of the parents, who were also included in the study were employed, many in professional positions, that suggested a socio-economic status which meant they had resources to assist their children. This supports research that reported that adults with ASD who were from higher-income households, had better conversational or functional skills, or attended postsecondary schools had more positive employment prospects³⁸.

Participants in this study (both those with ASD as well as parents) reported that the transition from school to the labour market was a difficult and stressful time – even more so than the usual stress of raising a child without a disability. They concurred that individuals with ASD lack of job seeking skills and prevocational skills necessary for labour market due to the non-availability of services for specific work transition including a lack of career preparation services and a poor knowledge about suitable careers, the work environment and employment activities^{15,40}. The parents reported a lack of public special schools which could accommodate their

children as it is only since 2016 that the Gauteng Department of Education has opened ASD units in LSEN schools⁴⁰ to reduce waiting lists. The parents in this study were unable to benefit from these recent changes that do provide more accessible and financially affordable public schools for individuals with ASD⁴¹, although problems with accommodating all children still exist.

The first step in navigating the transition to the labour market successfully is finding a job. Participants in this study found the job seeking process difficult. The literature confirmed that regardless of their education level, individuals with ASD struggle to get employed and spend a significantly longer time looking for a job^{39,42}. Participants with ASD had many misconceptions as to how one goes about finding a job. They believed that job opportunities should come knocking on their doors and were surprised by the need to actively look for a job. Participants with ASD, even those who were highly qualified, reported they therefore attained their jobs through the help of known others, relying on friends, family and on teachers⁴², due to the negative attitude they experienced from prospective employers. Baldwin et al.⁴³ report that 41% of the participants with ASD in their study were assisted by the people they know to obtain jobs and as reported in the current study disclosing a diagnosis of ASD cost them a number of job opportunities³¹. It seems when known others assist with finding a job, employers may have better knowledge about ASD and this confirms the need to inform employers about the ability of individuals with ASD, to overcome the negative connotation experienced by participants in this study.

If individuals with ASD did manage to get a job, higher expectations for communication skills, than those in the school situation meant participants with ASD felt unprepared⁴⁴. Briel and Getzel⁴⁴ indicate the importance of career guidance that will support an individual with ASD in choosing a career that does not rely on good interpersonal skills but accommodates their strengths. However the parents of individuals with ASD reported that their children were just not fitting in at work and that transition process needs to be done over a prolonged period³¹. Both personal and environmental factors contributed to the inability of the participants with ASD, to keep their jobs⁴⁵ and they agreed with their parents that they struggled to fit in with a peer groups, could not make friends and struggled in adapting to change. Added to the personal challenges were the environmental challenges including being stigmatised for having a diagnosis of ASD.

Disclosure was associated with limitations in terms of employment advancement and promotion which sometimes resulted in participants resigning from their jobs. There is controversy in the literature about disclosure by the individual about their diagnosis of ASD to their employer. The act of disclosing requires a level of emotional, and social conversation that may be difficult for an individual with ASD due to their communication deficits and social anxieties⁴⁶. Ohl et al.⁴⁷ however reported that disability disclosure actually contributed to successful employment retention in the United States since disclosure allowed for reasonable workplace accommodations. These findings were supported by some of the participants in this study because their immedi-

ate supervisors knew of their ASD diagnosis and therefore provided them with the support they needed. These findings confirm that a strengths-based approach which could be used to assist those in the workplace understand the positive aspects that an individual with ASD such as *punctuality, low absenteeism, high quality of work, prompt task commencement and strong work ethic*^{48;882}.

Some of the ASD participants indicated that they sometimes got frustrated as they struggled to cope with environmental characteristics such as light, noise and the office set-up that were *too much for them*. This occurred even if their colleagues and employees accommodate them and Baldwin et al.⁴³ indicate that workplaces are often unsuccessful in providing accommodations and adjustments and maximisation of the *person-environment fit* for the individuals with ASD. This is due to the characteristics of the workplace and their impact on a person with ASD being poorly understood. It has been suggested that people who supervise, interact, or collaborate with the individuals with the diagnosis of ASD need to be patient, flexible and tolerant in order for those individuals to maintain their employment²⁰ and employers and colleagues also need to be educated about the characteristics of people with the diagnosis of ASD. In this study some participants who were employed reported that they were fortunate enough to work in environments which did not negatively affect their work performance as they had been accommodated by changes to communication processes because of supportive employers or a mentor and the right fit in their job. Thus, keeping a job was depended not only on the work but more importantly on the people in the work environment and the implementation of specific accommodations²⁰. Parents reported that they were very involved in the support their children and one parent indicated that she had to travel with her son on his business trips. Other parents in this study also reported that they assisted their children through the transition process and had to continue to support their children for long periods. As indicated in literature parents often continue to be the primary caregiver until individuals with ASD reach well into their adulthood years⁴⁹.

The participants reported that they felt that there was no support at all for them and their children in terms of preparing them for employment and supporting them in employment. They voiced the need for vocational services so that their children could be trained and prepared for suitable future professions and work endeavours. The participants believed therefore that occupational therapists have a role in supporting the individuals with ASD to transition smoothly into the labour market. Participants reported however that some occupational therapists were not at all supportive and sympathetic to individuals with the diagnosis of ASD and that generally occupational therapists do not provide intervention for older individuals with ASD during transition period into work¹⁷. On the other hand, some participants reported that there was value to occupational therapy services and that occupational therapists could play a key and more effective role in enhancing the service delivery to improve employment outcomes for individuals with ASD⁸.

The strategies suggested in the study by Frank⁵⁰ and Hillier

et al.¹³ include life skills, employment skills and other skills that apply to adapting to either college life or adult life. Research indicates that individuals with ASD that receive these vocational rehabilitation services have more positive employment outcomes⁵¹. Occupational therapists are able to evaluate the individual's psychological, and cognitive functions then link the individual's functional abilities to those required by the job. Participants felt that if the occupational therapists exercised this role the individuals with ASD would not find themselves in the work environments where *they don't fit* and fail to keep their jobs. Therefore, this suggested that occupational therapists can indeed play a role in the life of the individual with ASD in transition into the workplace, since they are well equipped and trained to provide such services³⁰.

The participants reported that it was important that occupational therapists coached the individuals with ASD as a preparation to the labour market transition by providing work practice on different job types. This is a service which occupational therapists could provide meaningful opportunities to improve general employment skills and career readiness. Employment training could also include on-site experiences in a variety of work settings, both paid and non-paid^{27;52}. Scaffolding techniques and referral to job coaches or professional supports should also be utilised to ensure proper transition in the work place⁵³.

The participants emphasised that most of their colleagues and employers are not informed about ASD and that occupational therapists could work together with employees and supervisors to improve adaptation of individuals with ASD in different labour markets. The International Society for Research⁵⁴ added that instead of using *blanket training*, training the unique needs of each individual with ASD should be considered and how to support them. They believed that occupational therapists have skills for advocating for individuals in the workplace³¹.

Study Limitations

Participants were from a middle-class socioeconomic background and had access to significant financial resources to provide for training for their children with ASD. Most individuals with ASD had jobs and some form of income. Their experiences may not represent those with fewer economic resources, who are not financially stable and therefore could not access the same services as the participants of this study.

There was no diversity in cultures involved as Afrikaans speaking people predominated. People who failed with their employment transition and who have not got employment were not interviewed. Thus, the research findings are not transferable to many other individuals with ASD in South Africa.

CONCLUSION

Individuals with ASD and their parents voiced the opinion that it was a real struggle to navigate the transition from schooling into the labour market successfully in South Africa. Analysis of the data confirms that individuals with ASD require more support in both preparing for the transition as well as while navigating the transition itself. The unmet

needs in relation to employment support are increasing for the population of adults with ASD in South Africa. Vocational rehabilitation programmes to provide training and supported employment for individuals with ASD are needed.

The participants suggested that occupational therapist have a role during the transition of individuals with ASD into the labour market. They identified services which could be offered by occupational therapists and the areas where they can effectively assist to facilitate transitioning process such as case management, work hardening, skills training and advocacy. It is crucial that occupational therapists in South Africa consider what they could be doing to prepare individuals with ASD for transition into the workplace. Occupational therapy services to improve career choice, modification of occupations or the environment to support occupational engagement in work and the enhancement the ability of individuals with ASD to engage in the work occupations want to, need to, or are expected to do should be implemented and collaboratively researched with individuals with ASD and other stakeholders.

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Conflict of interest declaration

The authors have no conflicting interests to declare.

Author Contributions

Bonang Mhleka conceptualised the study and completed data collection and analysis and interpretation of data. Denise Franzsen and Lindsay Koch supervised the research study and provided guidance during research for analysis and interpretation of data. All authors contributed to the conceptualisation and writing of the article.

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