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CHALLENGES EXPERIENCED BY STUDENTS WITH HIGH-FUNCTIONING AUTISM: A NARRATIVE INQUIRY

SHARON BALZAN & BRIAN VASSALLO |

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Corresponding author:
Sharon Balzan
Department of Inclusion
Mariam Albatool School, Malta
E-mail:
sharon_balzan@hotmail.com

Additional information is available
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PROFESSIONAL DEVELOPMENT | RESEARCH ARTICLE

Challenges experienced by students with high-functioning autism: A narrative inquiry

Sharon Balzan & Brian Vassallo

Abstract: The purpose of the study is to identify the specific needs of students with high-functioning autism spectrum disorder (HFASD) as they journey from post-secondary education to the workplace. The narrative inquiry proposed for the study involved the systematic collection and analysis of people's accounts to describe and share different experiences of the phenomenon being investigated. The six accounts provided insights into the support offered to individuals with HFASD that channeled their understanding of the social context and the acquisition of new social skills. Participants voiced out the challenges they faced while supporting students with HFASD and identified the necessary skills that need to be addressed within post-secondary colleges and work-based placements. Results show a series of patterns in the support offered to these students highlighting the importance of social and communication skills. To successfully transition from post-secondary education to work placement a strong and unified commitment is needed from all stakeholders involved. The study has identified areas that need to be addressed to support educators and students in developing effective strategies to achieve success for students with HFASD. Managers, learning support educators, and parents firmly believe that the same effective strategy can enhance the educators' practices and decrease their stress both within the college and during their work placement.

Keywords: High Functioning Autism, Work Based Learning.

The concept of transitioning from post-secondary education to the workforce is a major dispute among researchers. Robinson et al. (2012) believe that transition is measured through outcomes in education, employment, living arrangements, and relationships. Work-based learning (WBL) is one of the tools that help students link lessons taught in a classroom to the world of work thereby enabling them to transit effectively the workforce (Cedefop, 2022). In post-secondary educational colleges, WBL is a form of apprenticeship that involves communicating with different stakeholders thus strengthening the link between the college and the industry.

An apprenticeship permits students to journey through a real work experience while developing academic competences. Furthermore, it allows the students to engage with employers, tapping on opportunities that arise in the labour market while developing further competences. This is where the role of mentoring comes in. Mentoring provides students with vital information that supports them whilst gaining in-depth experiences beyond their own education. By being aware of the student's needs, the mentor would be able to further support inclusive work practices (Cronin, 2019).

2. Literature review

The Equal Opportunities Act (2000), states that no employer should discriminate on the grounds of disability against a qualified person with a disability. The act aims to foster social inclusion within an inclusive training environment. Trainees who have a disability imitate the behaviour of other employees thereby encouraging individuals to be productive during workshops. Moreover, employers are in a better position to promote inclusion by providing work experience to all trainees, with and without disabilities, which includes the opportunity of training together.

2.1 Individuals with HFASD

Lively social situations provide additional challenges for young adults with HFASD (Colle et al., 2008). Such difficulties in social communication channel individuals with HFASD to focus on restrictive, repetitive interests that limit consideration of other points of view (Bennett et al., 2008; Colle et al., 2008; Seltzer et al., 2003). These difficulties often translate themselves into their inability to respond to the dynamic nature and the social cues of a conversation with another person. Post-secondary education is a time when students forge new friendships and supporting structures (Glennon, 2001). Students with HFASD struggle to interpret facial expressions and emotional cues and often have difficulties engaging in common interests with other peers (Laugeson et al., 2012). They find it hard to socialise in unstructured environments and hence experience a higher risk of isolation.

2.2 Students with HFASD and employment

Work placement is an alternative method of supporting students with HFASD during their journey towards finding employment and settling in their workplace. For many youths with HFASD, early educational and vocational aspirations often go unfulfilled. Findings from many studies show that post-secondary career pathways can be difficult to navigate, and work prospects remain uncertain (Holwerda et al., 2012; Shattuck et al., 2012).

There are several factors limiting the employment outcomes of young adults with HFASD. When examining eligibility criteria for employment, one finds out that some youths with HFASD may not be deemed ineligible to receive formal transition or employment-related services. Moreover, educational programmes with students with HFASD often focus on academic achievement rather than the monitoring of transition phases and early work experiences that the youth has undergone. Additionally, social challenges associated with HFASD may impact negatively on the employment prospects of affected youths. Work placement is an opportunity for supervised work practise where youths with autism can gain experience by performing a specific role within a company. It is an opportunity for all students to learn from experiences experienced staff and apply what they have studied into practice.

2.3 Making workplace disability quotas work in Malta

According to a report by the International Labour Organisation (2018), 103 countries worldwide have a quota favouring the employment of people with disabilities, whereby fines could be administered if quotas are not reached. Following this report, the Maltese Employment and Training agency (Jobsplus) reached an agreement with the vocational industry, providing incentives for employers to employ people with disabilities. Rather, “persons with a disability continue to be denied the opportunity and right to work and engage in quality employment” (Pace Gasan, 2021, p.18).

Students With HFASD face several challenges as they enter the world of work, including negative prejudices about their work capacities and lower educational achievements due to exclusionary training practices (Madaus et al., 2022). Workplace apprenticeships provide answers to various questions posed by prospective employers about the professional ability of persons with HFASD. Moreover, apprenticeships that provide inclusive environments for students with disabilities enable employers to tap into new talent and develop a group of qualified job applicants with disabilities (ILO, 2018).



2.4 Simulated work-based learning

Simulated Work-Based Learning (SWBL) is a system whereby students can experience the traditional WBL while staying at college (Stauffer & Stauffer, 2022). For SWBL to be effective it must be governed by a framework that allows the input of employers together with a strong emphasis on practical tasks and opportunities for professional development for teachers and others involved in the program.

Simulated workplace environments are intended to make students feel as if they are truly “on the job”. Simulated workplaces vary in their setup, depending on the resources the college can deploy. Some colleges opt for hybrid programs that involve simulated tasks. Such simulated workplaces effectively bridge the gap between the classroom and the workplace without students being transposed to a facility (Applied Educational System, 2021).

At the Malta College for Arts Science and Technology (MCAST), WBL is given a lot of emphases since it recognises the need to provide universally accessible education and training that is responsive to the needs of the individual (MCAST, 2021). Following an in-depth analysis performed by the European Centre for the Development of Vocational Training (Cedefop, 2014), MCAST launched an ongoing reform that showcased the rise in vocational apprenticeships in Malta. Throughout the reform period, providers were asked to develop better opportunities to sustain quality learning at the workplace. MCAST liaises with various entities, including industry partners and students, promoting apprenticeship schemes, this strengthening MCAST’s links with the industry in question.

2.5 Building a bridge between learners with disabilities and employers for a more inclusive environment

To bridge the gap between learners with HFASD and prospective employers, the post-secondary education college and the company managers need to co-construct programs that help address the students’ strengths and needs. This is because student assessment and job requirements might need to be adjusted to respect the apprentice’s abilities and learning targets. Moreover, the employees need to be aware of the main difficulties that a student with HFASD faces and skilled as to how to adjust accordingly (Grandin & Panek, 2014).

Employers should demonstrate commitment to inclusive practices and provide any necessary information to all other employees, who also need to be aware of such individuals’ needs and abilities. Any changes to the physical workplace environment should be done in consultation with the student concerned, addressing his/her individual needs.

2.6 Effective approaches to support students with HFASD during their work placement

Studies indicate that youths with HFASD are finding it difficult to find and maintain employment (Friedman et al., 2013; Testa et al., 2012). A strong multidisciplinary collaboration is therefore crucial to boost the chances of successful employment.

Supportive employment is an essential precept for adults with HFASD since they show great resilience towards competitive employment (Lau et al., 2013; Wehman et al., 2014). In fact, individuals with HFASD who had experienced career success credited their achievements to supported employment.

According to the Mindspace Institute (2019), mentoring is most effective towards supporting employment since it provides a) a strong information base that provides useful guidance to the apprentice, b) access to planned resources that target the students’ vocation, c) improved career forecasts and progress, and d) the honing of leadership skills. MCAST offers the service of student mentors. Mentors serve as collaborators for students during their academic journey. The main role of mentors is to empower students to become autonomous learners while gaining independence skills. Mentors can also support the same students throughout their academic and workplace journeys, providing them



with the support they need irrespective of their current abilities. Mentors support students with their socialising skills facilitating their success both at MCAST and beyond the college walls.

While working as a service provider, the mentor should show respect, keep boundaries, and assure the students that s/he will be honest with them. Roberts (2015) believes that mentoring can help students with HFASD acquire self-advocacy, which is the ability to speak on their own behalf and voice their personal needs and benefits. Self-advocacy is vital for individuals with HFASD because it helps them attain a higher level of independence, self-assurance, and a sense of identity. (Zuber & Webber, 2019).

The transition to life after school can be challenging and fraught with uncertainties and indecisions. Shattuck et al. (2012) showed that for many youths with HFASD, post-secondary career, and college life can be difficult to navigate, and work opportunities remain unclear. In their research on transitional experiences, Robinson, Curwen, and Ryan (2012) note that individuals with HFASD, are more likely to experience an unsuccessful transition than other kinds of disability.

2.7 The importance of the support shown by service providers towards students with HFASD

The importance of support towards achieving a positive transition into school life cannot be emphasised enough. According to a research report by the Department for Children, Schools, and Families, a transition to the workforce is deemed successful if the young individual with HFASD adjusts to the new routines. This study further suggests that although pre-transitional visits are a positive initiative, support needs to be an ongoing process to enhance the quality of the students' experience (Dixon & Tanner, 2013).

2.8 Parental collaboration in the transition from secondary to post-secondary/work placement

Planning for effective transitions is important for increasing the possibility of a successful post-secondary experience for students with HFASD. Parents and caregivers of students with HFASD play a vital role in supporting their children during their transition from secondary to post-secondary education. Numerous studies suggest that parents have many experiences with transitions and can consequently determine their effectiveness (Defur et al., 2001).

Josilowski (2019) stressed the importance of understanding the parents and school's collaboration during the transition period. It emerged that when parents are involved in the process, educators are empowered to implement transitions more effectively, while students adjust better to the workplace environment, are more motivated to complete their tasks, and show better academic performance. At the same time, parents also strengthened their children's academic and social skills at home. Consequently, the transition process develops more efficiently. Therefore, whenever parents are involved, students experience academic improvements and adjust better during the transition phase.

Moreover, Kocur (2013) found that parents identified two major roles that need to be included during transition periods: guiding students to navigate college campuses effectively and encouraging students to participate more fully in college activities. Parents strongly believed that students should be guided continuously whilst striving for independence.

2.9 The importance of the students' involvement in transition planning

The transition planning process offers an important context and supports youths with HFASD, who need to be prepared for the world of work. Student involvement is an important precept for successful transitions, especially when planning for students with HFASD (Lee & Carter, 2012). Such students should form part of the preparatory meetings and take full opportunity to learn about themselves and plan for their future. Additionally, participation equips students with

HFASD with the ability to assess their own skills, become aware of the adaptations they need, and acquire the self-advocacy skills to express their needs in the workplace and within educational settings (Lee & Carter, 2012). Studies show, however, that students with HFASD often have limited opportunities for involvement in their own transition planning meetings (Shogren & Plotner, 2012).

2.10 Early Work Experience as a springboard for career development

Preparing youths for successful transitions to work placement experiences has always been a major challenge in vocational educational institutes. Vocational assessments and person-centred future. Planning needs to tailor for the needs of the individual and conducted by specialised teams assisting the students. Early work experiences provide students with HFASD genuine opportunities to obtain working skills that would help them form opinions about vocational decisions that would shape their career aspirations for the future (Lee & Carter, 2012). Students may be restricted in career options due to their lack of experience, target unrealistic vocational goals, and consequently make the wrong vocational decisions. Thus, it is imperative for these students to experience hands-on vocational experiences through traineeships.

When planning a transition, an Individualised Educational Plan (IEP) must be designed with the input and support of the parents, college mentors, and other service providers working within the college. This is a convoluted process that requires strategic planning by all stakeholders (Snell-Rood et al., 2020). The IEP is needed to effectively target a set of measurable skills that would benefit students with HFASD during their transition from college to their work placement. (Mogaji & Nguyen, 2022).

This study was guided by the following research question:

What role do post-secondary education stakeholders have in supporting students with HFASD during their apprenticeship scheme?

The objectives of our study are:

- 1) to evaluate the challenges that students with HFASD face while at their apprenticeships,
- 2) to identify the coping strategies and adaptations that employers need to execute when students with HFASD start attending their work apprenticeships.
- 3) to assess the effectiveness of educators and parents while mentoring students with HFASD both in classroom settings and throughout their work apprenticeship.

3. Methodology of research

The qualitative method of investigation was chosen to conduct research. The researchers were interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences (Daher et al., 2017). The qualitative methodology helped the researchers to adopt a true-to-life approach, which enabled them to pursue the phenomenon under investigation in a content-specific setting. They looked for insights into why students with HFASD face great challenges when trying to obtain a work placement. Furthermore, they wanted to learn about the experiences of educators, other service providers, and parents as they sought to offer support to these students. They also aimed to investigate the importance of total support throughout the transition from college to work placement. Through in-depth one-to-one interviews with parents, the researchers sought to gain a richer understanding of their experiences while trying to support their child in finding a proper work placement. In addition, they wanted the participants to identify any specific obstacles within the context of their work. Overall, the Narrative Approach was deemed ideal for obtaining these goals.

3.1 The narrative approach

The Narrative Inquiry (NI) process required us to listen to the participants' conversations as they release their past experiences, attributing meaning to their past before the inquiry was initiated and that their narrative continued even after the study ended. NI allows participants to share stories to clarify how they view their world (Clandinin & Connelly, 2000). By narrating their stories, the participants might find that specific incidents affect them personally and emotionally. NI moves beyond a person's story as an entity in and of itself, but also how this narrative develops out of their life's context, how it shaped their future decision-making processes, and how they reconstructed their life as a result of the experience. Clandinin and Connelly (2000) believe that researchers need to study their participants' stories carefully and in-depth.

3.2 The participants' recruitment

For this qualitative research, purposive sampling was chosen to select the participants. The researchers provided participants with a detailed description of the study in order to allow them to determine whether the study 'fits' their particular situation and needs (Merriam, 2009). Six participants were chosen because they were able to share their experiences with the researchers (Creswell, 2017). The aim of this technique was to purposefully select participants who were able to give detailed accounts of their experiences (Polit & Beck, 2012), thus fulfilling the aim of the study. Participants needed to be professionals (Learning Support Educators or managers) working with students with autism or parents who have children with HFASD and who experienced the challenges of supporting them. This ensured that participants share rich experiences, feelings and concerns while supporting their children throughout their transitions. In total 2 two Learning Support Educators, 2 two managers and 2 two parents were recruited. Notwithstanding the time and resources constraints, the small number of participants ensured quality, deep and insightful data suited for the purpose of the study.

3.3 Data collection

The main aim of this study was to construct the challenges confronted by MCAST students with HFASD when looking for apprenticeship. Semi-structured interviews were used as this yielded detailed knowledge about the phenomenon under investigation. We asked the participants to share their experiences while they were working with and giving support to students with HFASD, as well as the challenges and barriers that hindered the same students while transitioning from college to work placements. The information revealed helped the researchers to come closer to understanding the context of people's lives.

The researchers adopted a friendly disposition and recorded all conversations using a voice recorder. The researchers were constantly aware of the need to be open and approachable in order to gain trust and confidence of the participants. Interviews were one-to-one and lasted around 60 minutes.

Following the data collection process, the narrative thematic analysis approach was used to gain insights into how and why certain ideas and topics were presented. All interviews were recorded and transcribed verbatim. We focused mainly on the experiences as narrated by the participants and on the meaning behind each narrative. Following the transcription process, the transcribed narratives were forwarded to the participants so that they could review the collected data and decide whether to allow their data to be used for the research study. The experience of participants in working with children with different abilities was considered of crucial importance since it allowed them to reflect better on the challenges and barriers they faced while supporting the students.

3.4 Composing field texts

Field texts (interviews and reflective journals) offer the intense data from which a participant story of experience is constructed. The stories of all the participants in our study are constructed from our evaluation of these field texts

from the perspective of personal, practical and social levels (Connelly & Clendenin, 2006). The researchers used temporality as a tool that looked into the past, present and future of things, places and people involved in the story being explored.

All stories will be told in a linear fashion reflecting our own personal experiences. We listened attentively to the participants while they recounted their personal experiences and memories. Moreover, we recorded all the conversations and organised field notes for every session. Therefore, the primary sources for the field notes included the recordings and interview notes, which were framed as conversations, thus allowing space for the complexity of the participants' lives to emerge. Overall, the field texts captured both our experiences as researchers as well as the participants' insights (Anderson & Bigby, 2015).

3.5 From field texts to research texts

After writing the narrative of each participant, we went back to the research participants for feedback, and any changes that they might want to make. Through NI, we saw that the participants' stories were indeed based on their actual experiences with students with HFASD. From the field texts, we created the final research texts, where we placed the individual narratives within the three-dimensional NI space, that is temporality, their experiences encountered, changed and lived and relived and recomposed, place that is all the events occurred in a place connected with their experience and sociality, i.e. attending to personal, cultural and social conditions.

3.6 Ethical considerations

The researchers felt obliged to fulfil several ethical obligations and procedures until they were approved to process the interviews. They also submitted a statement of intent which included a set of guidelines for ethical standards. Ethical approval was sought from the Research Ethics Committee at MCAST before proceeding with the research project. Permission was granted to conduct the study, guaranteeing the protection of confidential, personal data while avoiding any psychological, physical, or business harm.

Participants were aware that participation was voluntary, with no obligation and with the right to withdraw. As Narrative researchers, the priority is to respect the stories told and be loyal to the participants' voice. Some interpersonal responsibilities include maintaining and concluding the participants' relationship respectfully and ensuring a strong understanding of how each person's data are to be used (Clandinin & Connelly, 2000).

After identifying some potential participants, the researchers explained the nature of the study and requested their informed consent. Participants were provided with sufficient information to allow them to make an informed decision concerning their participation in the study. Moreover, we researchers did our best to prevent participants from experiencing any harm from the nature of the research methods, attitude, or material. In order to safeguard the participants' identity, we used pseudonyms instead of their real names and refrained from mentioning the name of the workplace. Participants were also assured that all recordings were protected and stored and that data shall be destroyed immediately after study was completed. Due to COVID-19 measures, all the interviews were held on an online platform. Participants were kindly asked to give as many details as possible about their experiences and share any emotions they felt at the that time. Throughout the study, we respected the participants' varying levels of comfort while sharing their narratives. All the participants appeared engaged, implying that they felt safe while sharing their stories.

3.7 Qualitative validity and reliability in research

Reliability and Validity are the concepts used to evaluate the quality of research. Reliability refers to how consistently a method measures something, while validity refers to how accurately a method measures what is intended to measure.



Creating trustworthiness in qualitative research is like developing credibility (Yin, 2016). Researchers undertaking qualitative studies build trustworthiness by explicitly including the research method, design, research site, participants, and data collection. The researchers established reliability through contemplation, consideration, interfacing with, examining the collected data and ensuring interpretation development (Steward et al., 2017).

According to Maxwell (1998), triangulation allows researchers to gain a broader and more secure understanding of the issues being investigated. Another strategy that was used to strengthen the study's credibility is reflexivity. As researchers, we recognised our potential influence on the participants during the data collection process, which is known as 'reactivity'. Reactivity refers to "the influence of the researcher on the setting or individuals studied" (Maxwell, 2013, p. 108). Maxwell (2013) also points out that the goal is not to eliminate the researcher's influence but to understand it and use it appropriately.

Our position as experienced practitioners working in these settings gave the researchers the required knowledge and know-how, which informed us throughout the data interpretation and analysis process. In other words, the researchers understood everything the participants were saying. One limitation of the study is that since the participants worked in the same setting, they could have been deterred from supplying specific information. In this study, sensitivity to context was achieved by utilising purposive sampling, i.e. choosing those participants who were living the experiences addressed by this study's research question and consequently the best candidates to offer raw data of their lived experiences. While interpreting the data, the researchers tried to make sense of the participants' experiences by ensuring that the meaning of the participants' words remained intact.

3.8 Reflexivity

Research reflexivity is the process whereby the researcher recognizes, and self-discloses possibly could affect the study's outcome (Patnaik, 2013). It is a process whereby researchers' and participants' experiences are reflected in each other. Reflexivity helped the researchers to understand themselves better by identifying aspects of the decision-making process that could help their research. The researchers employed their knowledge as practitioners with students with HFASD to seek in-depth information. During the interviews, the researchers noticed some similarities in their thoughts and experiences. This enabled the researchers to probe our thinking at a deeper level viewing data as pieces of jigsaw that could generate different interpretations. The interviews themselves, as well as the field texts, were the source of our reflections, which were subsequently recorded in our journal.

The reflective journal also supported us in considering our own voice alongside those of the participants, allowing us to connect our own experiences as practitioners supporting students with HFASD and by participating in various activities involving parents with children with HFASD. Keeping a reflective journal from the beginning of the process of the study enabled us to provide a transparent approach to how this study is conducted. Engaging in reflexivity enabled the researchers to make changes and alterations to the questions they intended to ask and how they should ask them, allowing them to be more attentive to details that could have affected the research process.

4. Findings and discussion

The narratives speak primarily on the stress generated by difficulties that arise from a lack of awareness and understanding of HFASD and the ensuing effects on their family dynamics. All the participants expressed different emotions and feelings about their past experiences, their present goals, and their future expectations. According to Clandinin and Connelly (2000), the social components of narrations emphasise the contribution of new knowledge to research literature, practice, and policy. The analysis of a NI involves delving into the participants' stories in search of resonating patterns (Clandinin, 2013). The parents, service providers, and managers were interconnected. The results

are presented in this chapter by referring to the participants' in-depth experiences in their own words. Table 1 below shows eight main interlinking themes.

4.1 Thematic narrative analysis

Through Thematic Narrative Analysis, participants' in-depth experiences are shared through their narrative accounts, and analysed, with the researcher looking for deeper meanings (Clandinin, 2016). Thematic Narrative analysis enabled the researchers to better understand the phenomenon under study. In the case of this study, thematic narrative analysis proved to be an appropriate tool for this research as it enabled the researchers to keep each story 'intact' by working on the context rather than on different component themes across cases.

4.2 The analysis process

The participants' information sheet, researchers' notes and researchers' reflective journals were the sources from which analysis was initiated. Data was gathered and analysed from the various transcriptions. The analysis was a rigorous process involving the reading and rereading of the transcripts as well as listening and relistening to the audio recordings.

Participants were asked to confirm the content and to change the narratives as considered fit. The analysis process was a reflexive exercise where the researchers discovered emotions and feelings that could be mirrored in the three-dimensional spaces. In this study, both analysis of narrative and narrative of analysis were used (Delve & Limpaecher, 2020). The researchers read and re-read all transcripts and narratives were merged from which 8 themes were identified (Table 1).

Table 1. The eight common themes that emerged from the participants' narratives

Themes emerging from narratives	
Theme 1	Experiences when supporting students with HFASD both in class and in the workplace
Theme 2	Identifying the main difficulties of students with HFASD both in class and during their work placement
Theme 3	The essential tools that are used by LSEs to support students with HFASD to enhance their social communication skills
Theme 4	The support offered by institutes to students with HFASD throughout their academic journey and work placement
Theme 5	Challenges to family dynamics and work responsibilities
Theme 6	The parents as the voice of their child
Theme 7	Transitioning during academic years
Theme 8	The importance of continuous support by LSEs and mentors

4.3 Narratives: The life stories of individuals working directly with students with HFASD.

In the analysis, the researchers discussed and produced consistent arguments supported by literature and participants' experiences. The personal narratives reflected each participant's understanding of their life experiences, through which diverse narrative themes emerged. Indeed, all the participants had in-depth experiences in working with and supporting students with HFASD. Moreover, a narrative methodological outlook was chosen in order to attain an depth understanding regarding the challenges and barriers faced by the participants while working hands-on with these students.

May is a Learning Support Educator (LSE) who had has been working within the college for the past 7 years. She is a professional educator with vast experience in supporting students with HFASD. Her expertise included the effective



strategies and tools that need to be used when supporting students with diverse needs. Faith is also an LSE and has been working in this role for the past two years. She has attended numerous courses and seminars gaining deep insights into how to support students with autism. She states that being of the same age group prompts students to ask her advice when needed. Martina is a highly experienced coordinator (manager) focusing on the needs of students with HFASD. In her managerial role, she was involved in supporting both lecturers and students when they required assistance. Claire is the college coordinator (manager) who supported students with HFASD throughout their journey. Her academic background helped her understand the strengths and needs of these students.

Paul is a parent who has been employed in this field for the past 19 years. His 20-year-old son, who attended tertiary college, also had HFASD. He also supported a good number of parents by directing them with various strategies and ways to support and cope with the situation of having a child on the spectrum. Similarly, Paul stated that his son had started attending early intervention programmes, which helped his development as a child. Marie is a parent who reported grave concern over her son's (Jake) development. She observed that he was not responding when calling him. She further added that he used to spend whole nights researching to identify the difficulties that Jake was exhibiting.

4.3.1 Theme 1: Experiences when supporting students with HFASD both in class and in the workplace

As a Learning Support Educator, Faith was very comfortable while sharing her experiences. She strongly felt the need to recollect her experiences chronologically to ensure that her story made sense. She said that throughout her 5-year experience, she became aware of how different her role is in post-secondary education than in primary or secondary schools. She used to be assigned one child to work with but now she has 8 to care and plan for. During the interview, she exhibited strong feelings when talking about supporting students with HFASD. She believed that her role was very rewarding, and working directly with students with HFASD was a real passion. May has worked as an LSE for the past six years. As an LSE, she had various opportunities to support students with HFASD. Meanwhile, Martina's opinions were contrary to what the others experienced.

She believed that all students are the same and that she feels that all students should be treated equally without the need for further or individualised support: "The institute always catered for all students with different disabilities, including students with low- and high-functioning autism". While listening to the participants and reflecting on their experiences the authors thought more about their own personal experiences. The researchers could relate more to their past and reflected on what could be done in the future.

4.3.2 Theme 2: Identifying the main difficulties of students with HFASD both in class and during work placement

One of the most frequently mentioned challenges is social communication. Adults with HFASD find it difficult to engage in conversation with their employers. They avoid looking directly into their eyes, keep a physical distance between them and the employer, and struggle to understand the difference between the employer and the employee. Consequently, fewer opportunities come along their way.

May, Faith, and Claire shared some common concerns involving the main barriers that students with HFASD face while going through their daily activities. Reflecting on our own personal experience with working directly with individuals with HFASD helped us to understand the participants' concerns. Martina, opined differently from the other participants. She believed that for these students to become more independent there is no need to be supported. May explained that all students with HFASD experienced difficulties in social communication that hindered them from reaching their main targets both academically and while in preparation for their work placements. She recalled that during an Erasmus program a, student refused to discuss and share opinions. The student only stayed for a short



period during the program as he could not cope with the environment.' May and Faith concurred that students with HFASD had major difficulties during changes in their environment.

Transition is not easy for these students. In fact, when Karl (the student) attended apprenticeship because it was part of his assignment, he was, once again overwhelmed by the challenges presented. Lack of communication skills is a life-long challenge for employment to individuals with HFASD (Walsh et al., 2014). Students with HFASD also struggle with sensory issues, with the most affected senses being the auditory, visual, and tactile senses and this makes it very difficult for them to navigate community resources (Sanz-Cervera P. et al., 2019). According to May, working environments can be particularly challenging if there is noise, lights, and overwhelming smells. Faith concurs that sensory issues hinder students with HFASD while attending their work placement. She also believes that employers are not well prepared for this. On the contrary, Martina stated that even other students might face communication difficulties, and therefore, such difficulties are not exclusive to students with HFASD.

Likewise, Claire (manager), identified the same difficulties with students with HFASD, adding however that all students have a unique set of skills, strengths, and needs. Identifying students' strengths would help "unlock their real potential to engage in learning and interact with others".

While Claire was narrating her experience, the researchers were impressed by the way she presented her concerns. She felt very worried when students had to go through their work placement journey and the great number of difficulties, they experienced throughout it all.

4.3.3 Theme 3: The essential tools that are used by LSEs to support students with HFASD to enhance their social communication skills

The participants also reflected on the tools they used to enhance the positive behaviours and attitudes of their students. The participants spoke in depth about the importance of having a detailed student profile. Therefore, professionals working with the students can assess the student and prepare effective individualised educational plans as needed. An updated student's profile is inclusive of student's strengths and weaknesses. It also increases trust and engagement among professionals, parents and students but also details differentiating instruction and personalizing learning goals.

Claire emphasised the importance of this document as a "unique portfolio of the student". Stressing that "everyone needs to be treated differently". Confidentiality is also an important issue and not all staff can have access to these documents.' May agreed fully with Claire's assertions and strongly believes that if the employer garners enough knowledge on how to support students with HFASD, s/he will set up an adaptive environment, and this will urge the students to show increased interest and minimize their difficulties. Martina had an entirely different opinion. She firmly stated that students with HFASD are not different from others and urged them to their difficulties. She considers Since she considers all students as equals and does not believe that student profiling is necessary.

Communication skills for students with HFASD whether it is written or oral, is a complex and challenging skill. Faith and May identified the communication book tool as an essential form of alternative communication. Faith remarked that the main challenges that students face while on campus are a) how to find the tuck shop, b) how to wait for one's turn, and c) how to manage the money. Using the communication book as a tool implies that the student being supported is nonverbal and consequently finds it difficult to express himself/ herself because she could "communicate with a particular student's parents, providing them with feedback and evaluation of their child's progress". Therefore, the communication book proved essential to keep ongoing contact with the students' parents or guardians.

Another tool that Faith employed was observations. Observation, as a systematic data collection approach provides an in-depth and rich understanding of a phenomenon, a particular situation, or the behaviour of the participants in a specific setting (Creswell, 2017). Faith believes that it is essential for LSEs to do some observations as autism falls under a large umbrella, and students have several difficulties which are hidden, and it is through observations that one can notice and analyse what is the appropriate approach to be used. Faith insisted that these two tools helped her identify the main difficulties that needed to be addressed while keeping in touch with the parents of the student she was assigned to.

4.3.4 Theme 4: The support offered by institutes to students with HFASD throughout their academic journey and work placement

The participants described in detail the different types of support offered both at the post-secondary education college and in the workplace. All participants concurred on the need to promote inclusion, focusing mostly on its social side. Claire believed that the buddy support system helps students with disabilities to feel part of the community. "Peer buddy support is very effective, and all students enjoy being supported by someone of his own age".

Moreover, trainees with disability imitate the behaviour of other that serve as role models towards positive socialisation. The support offered by the post-secondary educational institutions to students with HFASD during their academic journey and work placement such as mentoring is essential because they will be given well-structured activities. To support this, employers should also create social events where individuals with HFASD can be involved because structured activities can encourage them to be productive during workshops (ILO, 2013).

All the participants viewed the work placement as a relevant opportunity for these students. Claire, in fact, highlighted that employment is fundamental to all individuals, including those with HFASD, and believes that those who support these students lack essential knowledge of what autism is, but still show great interest in the students and enquire about autism and how they can support the students.

Also, students get used to the system. When they need academic support, they turn to the LSEs, and when they need social support, they ask a mentor.' Claire also discussed that if educators, mentors, and LSEs focus on the individual with HFASD as the recipient of all services, the student can be more successful. In her own words, "if the mentor and LSE were given the opportunity of supporting the student with HFASD continuously during their work placement, the students would be more successful. Faith and May concurred about the fact that students with HFASD require more visits from their mentors while undergoing their work apprenticeship. Besides, LSEs need more time with their students "so that they feel more comfortable and confident with [them]".

The importance of WBL cannot be stressed enough. Interview participants agreed that WBL is essential since it gives the opportunity to students to practice what they have learnt in class at the workforce environment, according to the chosen course.

4.3.5 Theme 5: Challenges to family dynamics and work responsibilities

Both participating parents admitted a change in family dynamics arising due to parenting a child with HFASD. Paul explained how from a serene marriage life, everything turned "topsy-turvy" when his wife noticed that certain behaviours were not normal. Maire described the stress the whole family had to endure and insisted on the need for family adaptation and collaboration. Parents' ways of coping with the stress and strain of bringing up a child with ASD, as well as having other children, can vary. Paul stated that during the first few months after his son was diagnosed with ASD, he was "in total denial because I [he] never believed that this could happen to my family". Marie too,

admitted that her family faced a period of denial as “this could not happen to us [them] and we [they] did not have any members in the family with the same condition.”

4.3.6 Theme 6: The parents as the voice of their child

The parents' narratives revolved around educators and professionals lacking knowledge about what approaches better suited their children's needs and which strategies they could try out. Marie described her communication with the schools' educators as "feeling disregarded [and]. . . lacking effective communication" [and] . . . “not involved in certain decisions”. Paul spoke about schools “focus(ing) more on his [son's] disabilities rather than his strengths [thereby] “facing dissatisfaction”. He stated that the LSE had great knowledge of what were the strengths and needs of John , but the school's managerial team never collaborated with what the LSE suggested.

Parents expressed their longing for a more meaningful relationship between professionals, educators, and parents when planning their children's future. These findings are supported by research conducted by Morris et al. (2009) who found that parents were frustrated by their lack of participation during their children's transition from post-secondary education to the workforce. Paul, however, failed to receive the required support.

4.3.7 Theme 7: Transitioning During Academic Years

During interviews, parents insisted that transition programmes must be individualised and based on the students' unique needs and strengths. Marie stressed that “Educators must not focus on ‘one size fits all programmes’ because this can lead to a lack of opportunities for our [their] children”.

When students with HFASD exhibit a participatory attitude during transition meetings, they will be more aware of what are the necessary skills that they need to have in order to succeed during their work-placement, and furthermore, they will be introduced to the changes that need to be implemented throughout their shift from the post-secondary education college to the work placement. This is precisely what Marie argued during her interview. Marie was concerned that her son might not have fully understood the methods of transitioning used in colleges. The shift from colleges to work placement education leads to great changes, and for a person with HFASD, such changes can hinder them from following their dreams.

4.3.8 Theme 8: The importance of continuous support by LSEs and mentors

This issue appeared continuously during the interviews. As a parent, Marie was convinced that if their children had been "continuously assisted throughout their college days", they would have been more engaged both academically and during their work placement. Paul argued that for his son to form part of an inclusive setting, he needed to keep receiving support even in a college setting to ease the transitioning period from secondary to tertiary and throughout the work placement as "our children still have the right to opportunity beyond schooling".

5. Conclusion

The study explored the narratives of individuals who directly supported students with HFASD. While the results are limited, they suggest a series of patterns in the support offered to these students while highlighting the importance of social communication skills and explaining how to have a successful transition from post-secondary education to work placement. Most of the participants, in fact, spoke about the challenges they face while supporting students with HFASD and identified the necessary skills that need to be addressed within the institutes. This supports previous research conducted by Seltzer et al., (2003).

Indeed, this study has targeted areas that need to be addressed (Sanz-Cervera P. et al., 2019). Besides supporting research conducted by the Mindspace Institute (2019) which focused on coaching and mentoring, the current

study stresses the importance of broadening the role of the Learning Support Educators and insists on their pivotal role in positive transitional experiences of HFASD students. The need to continue honing their existing repertoire of skills has emerged repeatedly in the study and is crucial towards fostering seamless transitions. The research evidenced statements issued by Commissioner for the Rights of Persons with Disability (Pace Gasan, 2021, p.18) namely that the "right to work ... is not so simple for persons with a disability". What came out from the research is an impending need to step up discussions on both a national and international level to enhance synergy between educators, employers, and parents and college staff in preparation for the transition from college to the work placement. Forming a stronger alliance with all stakeholders will transform existing mind sets into productive opportunities for people with HFASD.

The study supported both educators and students in developing effective strategies in order to achieve the student's targets as discussed and identified by students' mentors and parents themselves. The same strategies can be used to enhance the educators' practices and can decrease their stress both within the college and during their work placement. Given the growing number of students with HFASD in post-secondary educational college continues to increase, it is essential for these students and their families to have easier access to professionals with knowledgeable background of what is HFASD. Hence it is essential to understand how to support students with HFASD while navigating the challenging academic and social communication difficulties. As stated by Geller and Greenberg (2010), "going to college or other post-graduate training should always be a means to an end and not the sole end of transition planning" (p. 105).

5.1 The researchers' reflections

Throughout the study, the researchers wrote down their feelings and thoughts concerning our experiences. They register the emotions expressed by the participants through the different tonalities used when asked a variety of questions and when they discuss challenging topics. These encouraged us to rethink the understanding of the experiences narrated by the participants, which helped us make new sense of situations, which in turn allowed us to gain new experiences. However, reflexivity is the actual combination of the reflection and its outcome, that is the ongoing process of questioning, examining, accepting and assumptions. Our initial hypotheses were based on our experience in the field and the literature consulted.

Reflecting on our personal past and current experiences helped us offer relevant recommendations and discuss the study's limitations. The sole basis for this exercise was to immediately document our thoughts so that nothing was lost in the process. Meanwhile, by reviewing the audio recordings multiple times and rereading the interview transcripts, certain difficulties, challenges, resonances, and divergences were rendered even more visible.

5.2 Recommendations

The findings of this study suggest the need for further qualitative longitudinal studies on students with HFASD and the challenges they face when looking for apprenticeship opportunities. Each theme that was developed through this study can be individually researched to obtain a more focused and in-depth understanding of the different types of support and the various approaches mentioned by the participants. Further support is needed, both within the college and in the workplace. Visiting students two or three times during their apprenticeship experience is certainly not enough. LSEs and mentors need further engagement with students. Parents also expressed that showing continuous support can enhance the students' motivation and encourage them to be more engaged during their work placement.

Consequently, the researchers recommend that service providers offer students more frequent support throughout their work placement. The ensuing changes that come with transitioning from college to the workplace, require broader support. This can be achieved by having mentors and LSEs in the workplace on a daily basis until the students become

familiar with the environment and are able to work independently. It is recommended that more discussions take place between educators, management staff, and parents who must collaborate in preparation for the transition from college to work placement.

Moreover, students must be more involved in decision-making. Indeed, it is recommended that researchers investigate children's narratives and experiences, which are very valid in this area of study. Moreover, it is important to study their quality of life both on campus and during their work placement. Although mentors support academic processes, they need to be equipped with more knowledge and understanding of what each student's strengths and needs are. This can be achieved if they attend professional courses to enhance their knowledge of HFASD so that they can tap into the best practices in this regard.

5.3 Strengths and limitations

The findings of this current study contributed to the literature by expanding the understanding of the experiences faced by students with HFASD. The strength of the study is that the researchers achieved an appropriate level of variation among participants to the extent that the researchers included educators, service providers, and parents who represented varying genders, ages, titles, and length of service. The research indicates the need for additional support and effective approaches to support students with HFASD during the intensive period of transitioning from post-secondary to work placement. The importance of enhanced communication with parents and service providers would give the latter a deeper understanding of the parent's perceptions of the post-school and work placement transitions.

A limitation of the study is that the participating service providers were all female, so male service providers were not represented in this study. Another limitation is the number of participants interviewed. Although all the participants described their experiences in depth, the emergent themes may have been different if more participants were involved. For example, three participants were highly concerned about the issues related to social communication and support services, while another participant did not address these difficulties with the same mindset as the other participants. Another limitation is that children with HFASD did not have the opportunity to relate to the narratives and share their opinions. Due to the COVID-19 pandemic, the interviews were not done face to face but through the ZOOM platform. The thematic narrative analysis process requires researchers to observe and pinpoint each participants' feelings, facial expressions, and emotions; however, the virtual interviews prevented the researcher from fully observing the participants' feelings and emotions.

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7. Disclosure of Conflict

The authors declare that they have no conflicts of interest.

Author Details

Sharon Balzan

Department of Inclusion

Mariam Albatool School, Malta

E-mail: sharon_balzan@hotmail.com

ORCID: <https://orcid.org/0009-0001-7346-3634>

Brian Vassallo

Department of Inclusion

Mariam Albatool School, Malta

Email: brianvassallo7671@gmail.com

ORCID: <https://orcid.org/0000-0002-4513-7524>

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