

## “Leaps of faith”: parents’ and professionals’ viewpoints on preparing adolescents on the autism spectrum for leaving school

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**Adolescents on the autism spectrum experience difficulty transitioning from secondary school to post-school activities, often due to transition planning processes that do not meet their unique needs. This study identified parents’ and professionals’ viewpoints on transition planning for adolescents on the autism spectrum. Interviews were completed with nine parents of adolescents on the autism spectrum and four professionals who worked with adolescents on the autism spectrum. A constant comparison approach was used to analyse the transcripts. Four themes were identified, reflecting parents’ and professionals’ viewpoints on how to meet the transition planning needs of adolescents on the autism spectrum. Supporting adolescents to grasp the big picture can enhance motivation to participate in transition planning. Autism can be an invisible disability; therefore, encouraging adolescents to be active participants and to be seen in transition planning ensures their individual needs are met. Encouraging adolescents to have high aspirations in transition planning develops their self-determination. Finally, to be prepared for the transition from school may reduce the adolescents’ anxiety. Adolescents on the autism spectrum face unique challenges in transition planning. The themes identified in this study provide insight into how parents and professionals might support adolescents with these challenges.**

### Introduction

Transition planning in secondary school involves preparing adolescents for leaving school and moving into activities such as vocational training, tertiary education, and employment (Cobb and Alwell, 2009). It involves setting goals and engaging the adolescent in activities that will teach them skills so that they feel confident about leaving school. When transition planning is undertaken in

secondary school, it can assist adolescents to successfully negotiate the move from school into adult life (Hagner, Kurtz, Cloutier, et al., 2012). Transition planning can lead to improved self-determination, increased rates of employment, enhanced success in post-secondary settings, greater happiness, and improved participation in the community (King, Baldwin, Currie, et al., 2005; Wei, Wagner, Hudson, et al., 2016).

A lack of transition planning is a common barrier to successful employment for adolescents on the autism spectrum (Morningstar and Clark, 2003). Autism is characterised by difficulties in socialisation and communication, as well as restricted interests and repetitive behaviours (American Psychiatric Association, 2013). People with autism have difficulties coping with change due to a preference for routines; even minor changes in the environment and daily activities can cause anxiety (Test, Smith and Carter, 2014). Therefore, periods of transition can be difficult, and during these times there is a need for strong preparation and communication to ensure anxiety is reduced (Dann, 2011). Transition can be even more difficult for adolescents on the autism spectrum who do not have an intellectual disability (ID), as schools tend to focus on academic performance rather than on engaging in transition planning (Lee and Carter, 2012). As a result, these adolescents often do not successfully transition to employment; only 16% of adolescents on the autism spectrum without an ID in Australia are employed full-time after leaving school, with 33% being employed part-time (Neary, Gilmore and Ashburner, 2015). Those who do have a job are often under-employed and in roles that do not reflect their level of education (Cederlund, Hagberg, Billstedt, et al., 2008; Howlin, Goode, Hutton, et al., 2004). In addition, young adults on the autism spectrum without ID are three times less likely to have post-school vocational activities when compared to their peers on the autism spectrum who have an ID (Taylor and Seltzer, 2011). This contradicts the common assumption that adolescents on the autism spectrum without ID

have better outcomes because of their intellectual abilities. Parents of adolescents on the autism spectrum have reported that the most serious problems arose when their adolescents were transitioning from secondary school, and that they felt unsupported in transition planning (Browning, Osborne and Reed, 2009). People with autism often do not qualify for adult services, and few adult services have the specialised knowledge to meet the needs of people on the autism spectrum (Chen, Leader, Sung, et al., 2015; Rydzewska, 2012). In addition, little is known about the effectiveness of adult employment support programmes, with current evidence limited by small sample sizes, lack of randomisation and control groups, and poor conceptualisation of outcomes (Hedley et al., 2016). Overall, transition is a difficult period for adolescents on the autism spectrum (Benitez, Morningstar and Frey, 2009).

One reason for the difficulty transitioning out of school could be that individuals on the autism spectrum without an ID have unique transition planning needs that are currently not being met. Although neurotypical adolescents reported feeling stressed about academic achievement, adolescents on the autism spectrum reported stress concerning getting a job, interpersonal relationships and transport, and also reported feeling that they were likely to fail in the future (Browning, Osborne, and Reed, 2009). This suggests that adolescents on the autism spectrum may have poor self-determination, a key predictor of successful transition into an independent adult life (Sands and Wehmeyer, 1996). In addition, one study in the United States of America (USA) found that even when general transition planning requirements were met, adolescents on the autism spectrum still experienced inferior outcomes in comparison to other disability groups (Cameto, Levine and Wagner, 2004; Newman, Wagner, Knokey, et al., 2011). Parents of adolescents on the autism spectrum have reported feeling more worried about the transition from school than parents of children with other disabilities (Blacher, Kraemer and Howell, 2010). They are less likely to perceive the transition planning process as being useful (Shogren and Plotner, 2012), and more likely to report that they would have liked to be more involved in the process (Blacher, Kraemer, and Howell, 2010; Cameto, Levine, and Wagner, 2004). These results indicate that adolescents on the autism spectrum have unique transition planning needs and further research needs to be conducted to determine what these unique needs are.

Two groups that often are involved in the transition planning process for adolescents on the autism spectrum are their parents and the professionals who work with them. However, there is very little research exploring their viewpoints on the transition planning process. One study examined barriers and facilitators of transition planning for adolescents on the autism spectrum

(Havlicek, Bilaver and Beldon, 2016) however, it focused specifically on youth in foster care. Further to this, most current research exploring the transition planning needs of adolescents on the autism spectrum is from the USA (Ankeny and Lehmann, 2010; Cameto, Levine, and Wagner, 2004; Cheak-Zamora, Teti and First, 2015; Nuehring and Sitlington, 2003; Weidenthal and Kochhar-Bryant, 2007). Given the legislative differences between countries, there is a need to explore this topic in an Australian context. Overall, there is a gap in the literature exploring parents' and professionals' viewpoints on preparing adolescents on the autism spectrum for leaving school.

#### *Aim*

To investigate views about the transition process for adolescents on the autism spectrum from the perspectives of their parents and the professional staff who assist in this process.

#### **Methods**

This study sought parents' views of transition planning for adolescents on the autism spectrum, and how they make sense of the transition planning process. Therefore, the literature was reviewed after data collection to minimise assumption or conjecture in interpreting results and to maintain an openness (Bailey, 1997).

This study included parents/carers of adolescents and young adults on the autism spectrum without a diagnosis of ID, and professional staff who were involved in the transition planning process for this group. Study participants were recruited from across Australia via dissemination of study information on the websites of autism service providers; local autism advocacy groups; at conferences and community events; and via government and non-government secondary schools in Western Australia.

Participants who consented to be interviewed were a subset of respondents to an online survey about transition planning for adolescents on the autism spectrum. At the end of the online survey, respondents had the opportunity to nominate their interest in participating in the interviews. Thirty parents indicated in the survey that they would like to participate in an interview. These parents were contacted in a random order generated in Microsoft Excel. Nine parents were interviewed before saturation was reached, or when the collection of additional data did not reveal any new issues (Liamputtong, 2013), so no further parents were interviewed. Six professionals who completed the survey indicated that they would like to participate in an interview. The first author contacted all six professionals; two declined and four agreed to be interviewed.

Adolescents and young adults on the autism spectrum were invited to complete the online survey to provide

their information about their experiences in transition planning, the results of which are reported elsewhere (Hatfield, Ciccarelli, Falkmer, et al., 2016).

Nine guiding questions were used in the semi-structured interviews (see Figure 1), along with interview techniques such as probing and cross-checks (Taylor and Bogdan, 1998). The interview guide was applied in a flexible way depending on the participants' role and experience in the transition planning process. Interviews were completed either by telephone or conducted in person. The duration of the interviews ranged between 30 and 60 minutes.

Interviews were audio-recorded, transcribed verbatim and analysed using NVivo 10 to identify key themes that emerged from the data. Transcripts were read several times by the first author and initial codes were developed and labelled by category; these were further condensed or sorted into sub-categories as needed (Liamputtong, 2013). The constant comparison approach was used to refine themes within and between the transcripts, and emergent themes were named and revised by the first author and peer-reviewed by the co-authors (Harding, 2013).

A number of steps were taken to improve the trustworthiness of the data. An in-depth description of the study

**Figure 1: Guiding questions for semi-structured interviews**

1. Please describe your experience with transition planning to date.
2. Please describe your perception of the ideal transition planning process for adolescents on the autism spectrum.
3. How do you support the adolescent on the autism spectrum to be involved in the planning process?
4. What information is helpful in transition planning?
5. Can you describe how you determine progress in the transition plan?
6. Please describe any activities you have supported the adolescent on the autism spectrum to participate in during transition planning.
7. Can you describe how transition planning with adolescents on the autism spectrum may be different to planning for other groups?
8. (For professionals only) Please describe the most successful transition planning process for an adolescent on the autism spectrum that you have been involved in.

**Table 1: Participant information (Parents n = 9, Professionals n = 4)**

Parent participant ID	State or Territory	Relationship to adolescent	Adolescent's gender, age (years) and grade at school
1	Western Australia (WA)	Mother	Male, age 15, Year 9
2	WA	Mother	Male, age 14, Year 9
3	Queensland (QLD)	Mother	Male, age 17, First year university
4	WA	Mother	Male, age 14, Year 9
5	WA	Mother	Male, age 19, Left school Female, age 21, Left school
6	WA	Mother	Male, age 17, Year 12
7	WA	Mother	Male, age 15, Year 9
8	WA	Father	Female, age 15, Year 10
9	QLD	Mother	Female, age 15, Year 11
Professional participant ID	State or Territory	Job title	Years working with people with autism
1	WA	Job support co-ordinator	3
2	WA	Teacher at an education support school	13
3	WA	Occupational therapist	5
4	WA	Speech pathologist	4

participants is provided in Table 1 and data collection methods are described in detail above, to provide sufficient detail to allow readers to determine the extent to which the current research is applicable to other settings (Lincoln and Guba, 1985; Shenton, 2004). Use of a purposive sample (i.e., parents and professionals with first-hand experience in the transition planning process) further improved the transferability of the study findings. Dependability and credibility of the findings were improved through peer examination of the data to ensure ‘fresh perspectives’ on emergent themes, and through the use of an audit trail during data coding (Shenton, 2004). In addition, a journal was kept by the primary researcher to practise reflexivity and to improve confirmability of the findings.

Ethics approval was obtained from Curtin University Human Research Ethics Committee in Western Australia (approval number HR110/2014), the Catholic Education Office of Western Australia, and the Western Australian Department of Education. Informed written consent was provided by all participants. This consent procedure was approved by all aforementioned ethics committees. An Adverse Events Management Plan was utilised, which included steps to follow if a participant became distressed during interviews and general information about how interviewees could seek support following the interview, if required.

## Results

### *Participants*

Thirteen participants were interviewed for this study. A detailed description of the nine parents (mothers = 8; fathers = 1) and four professionals is provided in Table 1. Parents were mainly from Western Australia (WA), with two from Queensland (QLD). Their adolescent children were majority male and still in secondary school, two parents had adolescents who had recently left school. Professionals were all from WA, and had a range of job titles and experience working with adolescents on the autism spectrum, ranging from 3 to 13 years.

### *Themes*

Four core themes were derived from the interviews; *to grasp the big picture; to be seen; to have high aspirations; and to be prepared*. Each represents the participants’ experiences and viewpoints on transition planning with adolescents on the autism spectrum. Data analyses revealed considerable agreement between parents and professionals, and therefore the data were considered together and the themes are representative of both groups.

*To grasp the big picture. Grasping the big picture* was described by parents and professionals as the ability to anticipate how current actions may influence future prospects, and hypothesising what life might be like after

school. For example, understanding what might be involved in a job or what skills might be needed to live out of home: ‘He needs to understand what’s going to happen after school and what will be expected of him as an adult’ (Parent 7). Participants described how their experience was that adolescents on the autism spectrum may not understand these concepts intuitively, and that this may impact on their motivation to engage in the process of planning for their future. One parent described how her son appeared content to imagine a future where he continued living at home and did not have a job, because this was the current situation; ‘He’s not very receptive to the idea of one day having to provide for himself ‘cause he’s quite comfortable where he is; he doesn’t have the big picture’ (Parent 2). This parent described how part-time work provided her son with the motivation to engage in transition planning. Part-time work helped her son to understand the intrinsic reward related to being productive in the workplace and earning one’s own money. Participants described how supporting adolescents to understand the big picture motivated the exploration of new opportunities in the community and active involvement in transition planning.

Real-life experiences emerged as the best way of assisting adolescents to see the big picture. Volunteering, work experience, part-time work and after-school community activities were all powerful tools for providing adolescents with insight into life after school. These activities also assisted adolescents to develop life and employability skills, and promoted autonomy, self-esteem and resilience. Volunteer work and community activities provide an opportunity to learn skills without too much pressure and were perceived as a stepping stone into paid employment. Part-time work after school or on weekends was sometimes seen as ‘unrealistic’ for adolescents on the autism spectrum, but was described as an important part of teenage development:

*Neurotypical teenagers are expected to get a job of some form around fourteen or fifteen, you know they’re working for two or three years of their high [secondary] school life, and they’re much better set up when they leave school. (Professional 4)*

Overall, the importance of real-life experiences in transition planning could not be overstated, ‘It’s more difficult to have less experience no matter if you have a diagnosis or not’. (Professional 3)

Career exploration was also described as helpful to assist adolescents to see the big picture, including activities such as exploring higher education options, meeting people working in the area of interest and having a mentor. Life and employability skills training in areas such as personal care, social skills and organisational skills was also reported to assist the adolescents’ understanding of what life would be like after school.

*To be seen.* An important theme that emerged from the study was *to be seen*, as autism was described as an invisible disability by both parents and professionals, that is not immediately apparent to an everyday observer: ‘The biggest thing is they look so normal and they can sound for the most part very normal, until you know them well enough ... it’s the invisible disability’ (Parent 4). Therefore, adolescents on the autism spectrum without an ID often ‘fly under the radar’ because they appear to be coping well and do not receive support to prepare for leaving school. This leads to a feeling of helplessness and abandonment: ‘It’s a black hole. The Abyss... And that’s the time the parents are least equipped for’ (Parent 3). Participants described how each adolescent on the autism spectrum is unique and multi-faceted, emphasising the importance of individualising the transition planning process to the person, rather than using a generic approach: ‘He doesn’t fit a box’ (Parent 3).

To ensure the adolescent is seen and supported as the unique individual they are, it is important to include the adolescent on the autism spectrum in the transition process. Involving the adolescent gave them a sense of control and therefore increased their motivation to participate: ‘The more input that he has, the more likely he is to want to do it ... he needs to feel that he has control’ (Parent 7). Participants suggested strategies to assist the adolescent to successfully participate in transition planning, which included discussing the agenda with the adolescent prior to the meeting, and providing the adolescent with choices about where meetings are held, who attends, and how they want to communicate in the meeting. In addition, the team should also alter their communication style to meet the adolescent’s needs, taking into account learning styles, ensuring questions are concrete and providing choices in discussions.

*To have high aspirations.* Participants described the value of encouraging the adolescent *to have high aspirations* and supporting them to aim high: ‘We look at whatever the student’s dream is and help them so that they can achieve that ... we never say anything’s impossible’ (Professional 2). Adolescents were more engaged and motivated when the focus was on their aspirations, and this increased the chance of success post-school. An optimistic approach was helpful, in which ‘failures’ were viewed as learning experiences:

*That their mindset is in a positive mode, where rather than looking at it as ‘Oh, God, this is just another thing that I’ve got to, that I can’t do’; looking at it as ‘This is something that I haven’t learnt how to do yet’ (Parent 5)*

Having high expectations was important for developing the adolescent’s self-determination and resilience: ‘We always encouraged him to take those leaps of faith and we’re always there to help him if he fails, but never took the experience of failing away from him ... High

expectations but flexible’ (Parent 3). Another important part of having high aspirations was supporting the adolescent to feel they could change their mind, and that there was more than one way to achieve their aspirations:

*We’ve talked about the different pathways to get to one point, but we said all of those pathways can give you lots of different options, so it’s not an issue if you change your mind about what you want to be part way through. Yeah, he’s feeling like ‘oh you know it’s only gonna be good’.* (Parent 7)

*To be prepared.* Participants reflected on the importance of *being prepared* for leaving school. This included starting transition planning early, because adolescents on the autism spectrum: ‘Suffer from much higher anxiety than the average child, so to be forewarned is to be prepared, so that would help lower their anxiety’ (Parent 1). Parents and professionals felt that formal transition planning should start in Years 9 or 10 and should involve planning the pathway for the last few years of secondary school; choosing subjects, planning further study and developing a career plan. Informal transition planning should start in primary school; working on life skills, resilience and self-advocacy.

Having a clear process for the transition period was also important: ‘A flow chart of activities they go through, a suggested timeline of how long things take’ (Professional 3). According to participants, the transition planning process should include setting goals, which keeps everyone task-orientated and on track. Goals were perceived as particularly important for adolescents on the autism spectrum, as they assist them to understand the big picture. However, goals must be broken down, as participants reported that adolescents on the autism spectrum preferred this so that they could understand the smaller concrete steps required and see that they are making progress towards their goal.

Having a team of people around the adolescent was an integral part of preparing for leaving school. A strong transition team was described as cohesive and collaborative, with each team member providing a different, but equally useful, perspective. Parents were regarded as pivotal team members because in their view they need to drive the process and advocate for their child. The team should also include community members and other people in the adolescent’s natural networks: ‘They’ve got their networks and realising who’s in their community who can support them’ (Professional 2).

## Discussion

The findings of this study provide insight into the unique challenges that adolescents on the autism spectrum face in transition planning from the perspective of parents and professionals. These included difficulty seeing the big picture, the ‘invisibility’ of their diagnosis leading to a lack

of support, and anxiety which can be heightened by the prospect of leaving school. The four key viewpoints represent how parents and professionals felt they may be able to assist adolescents to overcome these difficulties, which include supporting adolescents *to grasp the big picture, be seen, have high aspirations and be prepared*. This is one of the first studies to identify the unique factors that assist transition planning for adolescents on the autism spectrum; previous studies have mostly explored transition planning experiences of adolescents with other disabilities, such as ID or developmental delay (Ankeny and Lehmann, 2010; Lindstrom, Paskey, Dickinson, et al., 2007; Weidenthal and Kochhar-Bryant, 2007). There are some commonalities between the findings in these studies and the current study, including the importance of setting goals, participating in community-based experiences and encouraging adolescent participation in transition planning. Some studies have explored transition planning for adolescents on the autism spectrum in the USA (Cheak-Zamora, Teti, and First, 2015; Giarelli and Fisher, 2013). These studies also describe how transition planning can increase anxiety for adolescents on the autism spectrum, and that motivation for this group can be challenging. However, the findings of the current study highlight some unique transition planning viewpoints that may be specific to parents of and professionals who work with adolescents on the autism spectrum in an Australian context.

*To grasp the big picture* was a new finding from this study, which has not previously been discussed in the literature. This might be because this is an issue that is specific to adolescents on the autism spectrum, who may not intuitively understand the big picture due to their difficulties with gestalt processing, or the tendency to focus on the details rather than the whole, meaning they can miss the overall meaning or significance in a task (Brosnan, Scott, Fox, et al., 2004). This may result in a difficulty understanding why an activity like part-time work may assist them with gaining a job after school, hence reducing motivation to participate in transition planning. In addition, adolescents on the autism spectrum struggle with abstract thinking (Fullerton, Stratton, Coyne, et al., 1996), and consequently may not be able to conceptualise what life may be like after school. Difficulties with abstract thinking and gestalt processing are distinct characteristics related to autism, and therefore a focus on the big picture could potentially be lacking in current transition planning processes, which are generic and not tailored specifically for adolescents on the autism spectrum. To develop understanding of life after school, participants recommended that adolescents should engage in real-life experiences, such as volunteering, work experience, part-time work, after-school community activities and having a mentor. Participants described how these real-life activities provided adolescents with concrete, hands-on experience of what life might be like after school, hence increasing their understanding of the need for transition

planning and developing their self-determination. This in turn enhanced adolescents' motivation to participate in transition planning.

Another key viewpoint for adolescents on the autism spectrum is *to be seen*, and to be actively involved in the transition planning process. Student involvement in transition planning is linked to greater success post-school (deFur, 2003), as well the development of self-determination (Test, Smith, and Carter, 2014). When adolescents are actively involved in transition planning, they are more likely to take ownership of their post-school plans, leading to increased autonomy, relatedness and competence, all of which promote intrinsic motivation (Ryan and Deci, 2000). Furthermore, goals that are determined by the adolescent themselves are linked to increased motivation and persistence in reaching that goal (Cuskelly and Poulsen, 2012). This is especially relevant to adolescents on the autism spectrum, as motivation to participate in transition planning has been identified as a significant barrier (Cheak-Zamora, Teti, and First, 2015). Autism is often an invisible disability, making it difficult for adolescents to get the support they need during the transition planning process. The concept of autism as an invisible disability has not been explored in-depth in the transition planning literature to date; however, it is acknowledged that adolescents on the autism spectrum without an ID frequently lack access to formal post-school services (Lee and Carter, 2012). Participants described strategies to support adolescents on the autism spectrum to be actively involved in transition planning. Strategies included preparing the adolescent for what to expect and providing choices in relation to meeting location, attendees and their communication method in the meeting. These strategies augment another recent study, which affirms the use of preparation, flexible meeting agendas and alternative means of communication as key to increase participation for adolescents on the autism spectrum (Hagner, Kurtz, May, et al., 2014). Further research on this topic should explore the perspective of adolescents on the spectrum in regards to active participation in transition planning meetings and further strategies that they feel would support in this process.

*To have high aspirations* was another crucial theme that emerged from this study. There is a strong relationship between high expectations and improved employment outcomes among people on the autism spectrum, as well as in the general population (Grigal, Hart and Migliore, 2011; Hagner, Kurtz, Cloutier, et al., 2012; Lee and Carter, 2012). In addition, having a strengths-focus has been found to increase success in post-school avenues (Browning, Osborne, and Reed, 2009; Hagner, Kurtz, May, et al., 2014; King, Baldwin, Currie, et al., 2005). However, there is evidence that parents of adolescents on the autism spectrum have lower expectations for their children (Ivey, 2004), and interestingly participants in this study focused more on what issues arose related to autism

and transition planning, rather than the unique strengths of the adolescents. Parents who have low expectations may not provide their children with opportunities to develop life skills and the sense of self-determination required for successful transition (Hagner, Kurtz, Cloutier, et al., 2012). For example, some parents of children on the autism spectrum may remove their children from social, academic or employment situations because these may cause stress for their children; inadvertently reducing exposure to important social- and resilience-building opportunities (Marriage, Wolverson and Marriage, 2009). Therefore, it is particularly important to support adolescents on the autism spectrum *to have high aspirations* and have high expectations during transition planning.

*To be prepared* is particularly important for adolescents on the autism spectrum, as they frequently experience high levels of anxiety associated with transition, change and unpredictability (White, Oswald, Ollendick, et al., 2009). This anxiety is likely to be amplified by the uncertainty of not knowing what will happen after leaving school. Therefore, early preparation and having a plan is expected to assist in reducing uncertainty and anxiety. The important elements of being prepared were to have clear and concrete goals and a strong team, all of which have been linked to improved transition outcomes (Hagner, Kurtz, May, et al., 2014; Nuehring and Sitlington, 2003; Taylor-Ritzler, Balcazar, Keys, et al., 2001). Having a team is important for increasing feelings of relatedness, and achieving goals increases competence, all important elements for developing a strong sense of self-determination (Ryan and Deci, 2000).

Goals are also important, because the range of choices available after school may be overwhelming for people on the autism spectrum who have difficulty with uncertainty and prefer a pre-determined path. Setting goals is associated with increased odds of attending college after secondary school for adolescents on the autism spectrum (Wei, Wagner, Hudson, et al., 2016). Having a clear plan with defined goals breaks the task of transition planning into manageable portions, and provides the adolescent with a sense of progress, appealing to the adolescents' preference for concrete and tangible steps (Fullerton, Stratton, Coyne, et al., 1996). Goal setting may also lead to increased motivation to participate in transition planning due to greater ownership of the plan, and increased self-determination (Martin and Williams-Diehm, 2013).

The findings of this study reflect the viewpoints of parents and professionals, and therefore it is important to consider how their views may differ from those of adolescents on the autism spectrum. Waltz (2005) describes how professionals may describe experiences from a position of power, and parents may present their viewpoints in alignment with a deficit-based and normalcy paradigm, rather than one of acceptance. Parents and professionals may also have different views, with an example being

what term should be used to describe autism; although people with autism and parents preferred the term 'autistic', professionals endorsed the term 'people with autism' (Kenny, Hattersley, Molins, et al., 2015).

A recent shift in autism literature advocates movement away from deficit-based discourse to supporting people on the autism spectrum to embrace their unique culture and diversity (Jaarsma and Welin, 2012). While parents and professionals in this study advocated for the individualisation of transition planning and high expectations, they also placed importance on adolescents developing skills for life, employment and social situations. These are skills that are valued in Western society, and therefore the underlying presumption is that adolescents on the autism spectrum need to change their behaviours to better fit norms and social expectations. An alternate perspective is that the focus should shift from the individual to society, and how workplaces and post-secondary institutions can modify environments to be more 'autism-compatible' (Jaarsma and Welin, 2012). Prior studies support the view that the environment plays a significant factor in supporting people with autism to successfully transition from school (Ankeny and Lehmann, 2010; Giarelli, Ruttenberg and Segal, 2013). These studies also suggest that adolescents have some similar views to parents and professionals, such as the importance of being prepared, having a strong team, and being actively involved in the process (Ankeny and Lehmann, 2010; Giarelli and Fisher, 2013; Giarelli, Ruttenberg, and Segal, 2013). Adolescents in these studies had similar aspirations to those in the current study, including wanting to go to college and get a job, and they perceived their personal characteristics as presenting both barriers (social skills, sensory preferences) and facilitators (cognitive abilities, kindness) to achieving these goals. Therefore, there are likely to be similarities and differences between the views of parents and professionals, and adolescents, which require further exploration.

Most of the parents who participated in this study were mothers, who perceived that the responsibility for transition planning was often left to them. They felt it was their role to advocate for their child, to organise team meetings, and to follow-up on goals. The pressure felt by mothers is also apparent in how they often feel scrutinised by services to ensure they are meeting their child's 'needs' (Goodley and Runswick-Cole, 2011). Traditional gender roles are still apparent in the differences between how mothers and fathers respond to having a child with autism. Mothers take the role of the active carer in daily matters and this directly impacts on their emotional well-being (Gray, 2003). In contrast, fathers describe feeling concerned about their child's future, but that this has less of an impact on their emotional well-being. It appears that traditional gender roles may be present in transition planning, with the mother often taking the leadership role in supporting their adolescent on the autism spectrum to prepare for leaving school.

It is important to acknowledge the complexity of transition, and the many factors that contribute to the outcome of transition from secondary school to post-school activities. Contextual determinants of expectations for young people have evolved in the past few decades, including enhanced educational opportunities, shifting cultural norms for women, and increased inclusion and participation opportunities for people with disabilities (Asbjørnslett, Engelsrud & Helseth, 2015; Crider, Calder, Bunting & Forwell, 2015). This has led to life stages becoming increasingly blurred, with significant shifts in the times of expected milestones for young people that no longer follow cultural or social expectations (Rydzewska, 2012). The themes presented in this paper represent the participants' experience of transition planning related to leaving secondary school, and cannot represent the entirety of the influences that may impact on the outcomes in transition to adult life.

### Limitations

The study information was disseminated to potential participants across Australia; however, most interview participants came from one state, Western Australia. As education is managed at a state government level, there may be differences in school transition planning processes between states. This could limit the generalisability of our findings.

Only 6 of 53 professionals who participated in the survey indicated an interest in being interviewed, and only four actually participated in the interviews. Therefore, fewer professionals were interviewed than parents, when ideally it would have been preferable to have a more even range of participants.

### Conclusion

This study identified viewpoints related to the unique transition planning difficulties faced by adolescents on the autism spectrum from the perspective of parents and professionals. These include supporting adolescents to grasp the big picture; be seen; have high aspirations; and be prepared. It is suggested that future studies explore the viewpoints of adolescents on the autism spectrum in relation to transition planning, and how these compare to the views of parents and professionals.

### Recommendations for future research

Including young people on the autism spectrum in interview-based research is crucial to ensure their voice is heard (Harrington, Foster, Rodger, et al., 2014), and therefore it is recommended that future research related to transition planning focuses on using more in-depth methodologies to obtain insights from adolescents on the autism spectrum. Techniques to support this group to participate in interviews include preparation during pre-interview home visits; and questions that embed visual supports, provide concrete examples and allow for extra time to respond (Harrington, Foster, Rodger, et al., 2014). Other methods

that have been successfully utilised are 'walking interviews' that include walking around a location relevant to the topic while taking photographs of important landmarks; 'activity-based' interviews that involve discussions using activities such as drawing (Winstone, Huntington, Goldsack, et al., 2014); and card sorting activities (Shepherd, 2015) or Q-sorts (Cross, 2005).

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### Author contribution

MH, MC, TF, MF contributed to the design of the study. MH collected the data and drafted the manuscript. MH, MC, TF, MF reviewed the manuscript. The manuscript has been read and approved by all authors.

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