

Literature Review: Transition of Autism Spectrum Disorder (ASD) Students from Primary to Secondary School

Anthony Sandford: ID: 26534268

Introduction

This literature review focuses on between-school transition for: Autism Spectrum Disorder (ASD) diagnosed students. Student transition (in this review) refers to the formal move from primary school to secondary school, which occurs over a period of weeks.

It begins with a rationale for transition. From here, viewpoints of education stakeholders: ASD students, parents and teachers, are promoted. The review consists of twelve empirical studies, which collectively consider the viewpoint of these stakeholders. Each study, regardless of their stakeholder focus, contributes to the knowledge base within the primary to secondary ASD student transition field. Gaps in the research are also outlined for most of the reviewed empirical studies.

The view of the ASD student, which is mostly a male view, is considered first. This is because they are at the centre of the transition process. This is followed by the view of parents, which is predominantly a female (or “mother”)

view. This is subsequently followed by the views of teachers, which is predominantly a secondary teacher or teacher (with ASD expertise) view. By considering these views, this review attempts to address the following questions:

- Based on the viewpoints of ASD students, parents (of ASD students) and teachers (of ASD students), what transition strategies need to be considered within education settings?
- What is an effective interventionist-based transition strategy that considers the viewpoints of ASD students, parents and teachers?

Obtaining all of these views, are important because each stakeholder impacts and influences the other during the ‘transition period’*. When parents and teachers with ASD expertise, share their views, they often highlight school and classroom ASD strategies and ideas, which can benefit the ASD student. These ideas and strategies are subsequently outlined. A collaborative, interventionist approach is also highlighted that considers all three stakeholders within the transition process. This review culminates with a summary of findings and future considerations are emphasised.

* = ‘Transition period’ is the period within the research where stakeholder(s) are interviewed by researcher(s). It involves a ‘pre-transition’ time period- i.e. Researcher(s) first time-check, in the ASD student’s final term at primary school. The subsequent ‘post-transition’ period(s) are researcher(s) time-checks after this point, which according to most of the research is mainly at

the end of the ASD student's first term of secondary school. However, the transition period may extend beyond this timeframe.

Rationale for transition

There are two main reasons for focusing on between-school transition for ASD students. Firstly, based on the perusal of each research database (i.e. *Google Scholar*, *Eric*), a significant proportion of the ASD transition literature focuses predominantly on the ASD student and how they transition from secondary school to work. Secondly, the significance of the primary to secondary transition period, is only stated generally in the updated *New Zealand Autism Spectrum Disorder Guideline* (2016) and does not provide in-depth information about primary to secondary transition processes, systems and structures.

ASD student view of transitioning to secondary school

ASD students are generally anxious

Dann (2011) found that using qualitative measures (i.e. semi-structured interviews), all six ASD students (i.e. five male, one female) suffered some form of anxiety. Hannah and Topping (2012) confirmed the results of this earlier study by studying eight male ASD students, diagnosed with Asperger's syndrome (Hannah & Topping, 2012).

One of these students was diagnosed with Asperger's and Tourette syndrome (Hannah & Topping, 2012).

Hannah and Topping (2012) collected quantitative data by using an adapted version of: *Spence Children's Anxiety Scale (SCAS)*. This data was collated before the students entered secondary school (i.e. pre-transition time point) and six months after entry to secondary school (i.e. post-transition time point).

The results showed there was a reduction in anxiety in '*Panic Attack and Agoraphobia (PAA)*' and '*Separation Anxiety (SA)*' scores at the post-transition time point, but was mixed for '*Physical Injury Fears (PI)*' (Hannah & Topping, 2012, p.201). The study highlighted that all individuals suffered some form of anxiety, but a general pattern of anxiety was unable to be established for the cohort (Hannah & Topping, 2012). They concluded there was "variability" between ASD individuals who suffer anxiety (Hannah & Topping, 2012, p. 207). This finding, suggests that each ASD student is a unique individual, and that transitioning to secondary school, will result in some form of anxiety for them.

This finding has to be met with some caution given the small sample size. This means it is difficult for these results to be generalised to the ASD student population. Also, the findings focused on male students so the results cannot be generalised to the ASD female student population.

Hannah and Topping's (2012) study was non-randomised where the students were purposely selected for the study meaning selection-bias was likely a factor. In addition, Hannah and Topping (2012) only used one-data collection source (i.e. a modified version of SCAS). This meant data could not be compared.

ASD students feel anxious about the secondary school environment

Makin, Hill and Pellicano's (2017) study involved fifteen ASD-diagnosed students (i.e. thirteen male, two female), who were interviewed during the final term of primary school (i.e. pre-transition) and in the first term of secondary school (i.e. post-transition). The range of ASD-diagnosis, among the students was as follows: Autism (6), Asperger syndrome (4), Asperger Syndrome/ADHD (1), Autism/ADHD (4) (Makin et al., 2017). Only seven of these students were going to attend mainstream secondary schools and the other eight students were going to attend special schools (Makin et al., 2017). These students (as well as their parents) completed the post-transition questionnaire: *'Effective Preschool, Primary and Secondary Education'* under the five categories: 'developing friendships and confidence, settling in school life, showing a growing interest in school and work, getting used to new routines and experiencing curriculum continuity' (Makin et al., 2017, p.5).

From this survey, Makin et al., (2017) found that during the pre-transition period, primary school

for most students was a challenge, and because of this, secondary school would also be a difficult proposition. Most of the students also perceived the size and space of their new secondary school as particularly challenging, which made them feel anxious (Makin et al., 2017). Moreover, anxiety was also felt around the idea that secondary work would be difficult, compared with primary school work (Makin et al., 2017).

These findings have to be met with some caution, given the relatively small sample-size and not all students were transitioning to the mainstream school environment. Therefore, these results cannot be generalised to all ASD students, located in the secondary school mainstream environment. Also, the findings focused predominantly on male ASD students so the results cannot be generalised to the ASD female student population.

ASD students may have a co-existing mental health issue

Mandy et al., (2016a) used a greater range of reporting measures for twenty-eight ASD mainstreamed students (i.e. 25 male and 3 female), compared with the single-measure Hannah and Topping (2012) study. Mandy et al., (2016a) initially identified characteristics of the student (i.e. autistic symptoms) in the pre-transition-phase (i.e. final term of primary school) using an 'Autism Diagnostic Observation Schedule' (ADOS) assessment. Each student's level of intelligence was also measured at the pre-transition phase, via

‘Wechsler Intelligence Scale for Children’ (4th Ed)
(Mandy et al., 2016a, p.7).

Mandy et al., (2016a) analysed the results of student responses using the Beck Youth Inventory (BYI) and found that ASD students generally reported a lower level of psychopathology (compared with the ASD student rating supplied by parent(s) and teachers). Psychopathology refers to internalised behaviours, such as depression, anxiety and/or anger (Mandy et al., 2016a). Student level of psychopathology stayed relatively the same when comparing primary school (i.e. pre-transition) and secondary school (i.e. post-transition) data (Mandy et al., 2016a). It appears that, based on this finding, ASD students can also present with internalising behaviour(s) such as: depression, anxiety and/or anger, as they enter secondary school, but they seem to have a different perception of it, compared with their parents and teachers.

ASD students can be the victim-of bullying

Mandy et al., (2016a) also analysed ASD student results of *peer victimization*. Peer victimization refers to the ASD student being the victim or target of verbal and/or physical abuse, by other students (Mandy et al., 2016a). The twenty-eight ASD students who self-reported on the Schwartz Peer Victimization Scale (SPVS), reported a slight decrease in the frequency of bullying, between their primary (i.e. pre-transition period) and secondary school (i.e. post-transition period). Moreover, Mandy et al., (2016 a) could not

ascertain from their results that an ASD student bullied at primary school would subsequently be bullied at secondary school. It appears that, based on this finding, ASD students who are bullied (in primary school) may or may not be bullied in their secondary school environment. Mandy et al., (2016a) argue that bullying may be more a result of school surroundings, rather than individual characteristics of the ASD student.

The research of Mandy et al., (2016a) significantly adds to the research of Hannah and Topping (2012) because their study reported on the views of all transition stakeholders: teachers, parents and students. It also involved a larger cohort of students: twenty-eight mainstreamed ASD students in total, three of which were female. Compared with Hannah and Topping's (2012) smaller sample size, there was also a greater range of ASD-diagnosis among participants: autism (4), Asperger's (14) and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS): (6) (Mandy et al., 2016 a). Based on a large (male) student cohort, it would seem appropriate that these results could be generalised to the greater ASD male student population. However, due to the limited number of ASD female students within the study, the results obtained should not be generalised to the greater ASD female student population.

Parent view of their ASD child transitioning to secondary school

Parents are anxious for their ASD child and they have a strong sense of advocacy

Dann (2011) interviewed six parents using qualitative methods, who provided feedback on their ASD child transitioning to secondary school. (Parent gender-mix, was not outlined, by the researcher). Interviews took place at a pre-transition time point (i.e. Their ASD child was attending the last term of primary school) and post-transition time point (i.e. Their ASD child was attending secondary school in the first term). Dann (2011) found that parents generally had mixed feelings of the transition process, but generally they had a heightened sense of anxiety, that centred on their ASD child, which had accumulated over a long time. Some parents also described how their ASD child, could be emotionally draining (Dann, 2011).

These findings have to be met with some caution given the very small parent sample-size. This means it is difficult for these results to be generalised to all parents (i.e. mothers or fathers) who have an ASD child transitioning to secondary school.

Makin et al., (2017) expands on these findings by highlighting that even though parents had a good grasp of their child's educational

challenges and shortcomings, they also outlined their ongoing historical struggles and anxiety with the education system. Makin et al., (2017, p.12) also found there was a strong sense of advocacy among parents where they had to “fight to get their children’s needs met”. Hamilton and Wilkinson (2016) also found that parents like to be an advocate, but sharing this role with a key member of secondary staff, is a priority.

Parents recognise their ASD child’s difficulties

Mandy et al., (2016a) interviewed twenty-six parents. (However, the researchers did not explicitly outline the gender composition of this parent population).

Mandy et al., (2016a), found that parents articulated high levels of psychopathology, for their child. This finding suggests that parents of an ASD child understand the significant impact mental health difficulties have on their child.

In addition, parents “reported high rates of adaptive function difficulties for the children in this study.” (Mandy et al., 2016, p. 9). Adaptive functioning relates to the ability of students to meet the demands of Communication, Socialisation and Daily Living (Mandy et al., 2016, p.8). This level of adaptive function difficulty for parents stayed the same, when comparing pre and post-transition period data, on the ‘Vineland Adaptive Behavior Scales’, second edition (i.e. VABS-II) (Mandy et al., 2016).

It seems, based on this finding, that parents recognise the social and communicative difficulties that their ASD child faces, when they are part of a non-ASD world. Adapting to their environment is also challenging.

Parents' notice when their ASD child is a victim of bullying

Mandy et al., (2016a, p.9) noted, when comparing pre and post-transition data, there was an "... overall decrease in peer victimisation between primary and secondary school assessments..." Mandy et al., (2016a, p.9) examined this finding further and noted a lower level of bullying (i.e. 'name-calling' and 'exclusion') for ASD students although levels of 'sexual' and 'physical' bullying remained the same across the pre and post transition phases.

Initial socialisation and familiarisation to secondary school is more important for parents, than their child's academic achievement

Some studies at the pre-transition period (i.e. last term of primary) have noted the feedback from parents of ASD students: that academic achievement, was initially less of a priority than their child fitting in socially, establishing new relationships and adjusting to specific expectations and routines of secondary school (Tobin et al, 2012; Fortuna, 2014; Peters & Brooks, 2016; Hamilton & Wilkinson, 2016). This suggests, that once ASD

students are reaching some of these stated (parent) goals then the focus of educational support, based on parent feedback, could focus more on academic remediation.

Parents predict whether or not their ASD child will have a good or bad experience at secondary school, based on their child's experience at primary school

Dillon and Underwood (2012) obtained the perspectives of fifteen parents (i.e. one male, fourteen female) of ASD children transitioning to secondary school. Nine of the parents were interviewed at three different transition time intervals over a fifteen-month period: final term of primary school, eight weeks after their ASD child started secondary school and after one year attending secondary school (Dillon & Underwood, 2012).

Dillon and Underwood (2012) found during the pre-transition period that parents predicted that the transition to secondary school would be a negative, experience for their ASD child and their family, if the primary school experience, was generally negative as well. Conversely, Dillon and Underwood (2012) also noted that positive primary school experiences for their ASD child, would often give parents a sense of optimism about transition to secondary school.

These findings have to be met with some caution given the parent sample-size was small and

the views gathered were predominantly that of mothers. Therefore, the results cannot be generalised to the view of ‘both parents’, or ‘fathers’.

Ineffective secondary school communication can harm the parent relationship

Several studies have noted that a lack of proactive communication by the secondary school was generally seen as a barrier to the transition process (Dann, 2011; Dillon & Underwood, 2012; Deacy, Jennings & O’Halloran, 2015; Makin et al., 2017).

Tobin et al., (2012) obtained the perspective of seven parents (i.e. five mothers and two fathers) of ASD students (i.e. one girl with ASD; five boys with ASD) transitioning to secondary school. Tobin et al., (2012) conducted two interviews with parents, eighteen months apart. Tobin et al., (2012) noted that schools have multiple networks of communication: school-parent, primary-secondary, within-school communication and school-internal agency communication. Tobin et al., (2012) found, based on parental feedback, if one of these networks of communication was dysfunctional; then the whole transition process was perceived (by parents) in negative terms (Tobin et al., 2012).

This finding has to be met with some caution given the very small parent sample-size. This means it is difficult for these results to be generalised to parents (i.e. mothers and fathers) who have an ASD child transitioning to secondary school.

Dillon and Underwood (2012) also found at the post-transition period that when communication was delivered to parents by the secondary school, it focused predominantly on negative experiences rather than their child's academic achievements or positives experiences. This had an effect of requiring the parents to solve the problem for the school and singling their child as needing specific attention (Dillon & Underwood, 2012). It appears that, based on this finding, that student problems can be perceived by secondary schools, as being the responsibility of the ASD child and parent, rather than one that can be solved collaboratively between home and school.

Hamilton and Wilkinson (2016), using a qualitative design, obtained the perspective of five parents (i.e. four female, one male) of five ASD children (i.e. all male) transitioning to secondary school. Hamilton and Wilkinson (2016) noted an actual reduction in the frequency of school-parent communications, as time progressed. A lack of communication also occurred for parents where some teachers were not able to attend important Individual Education Plan (IEP) meetings (Hamilton & Wilkinson, 2016).

These findings have to be met with some caution, given the very small sample-size, which is skewed towards the female parent view. This means it is difficult for these results to be generalised to parents (i.e. mothers and fathers) who have an ASD child transitioning to secondary school.

Proactive home-school communication can minimise student problems

Tso and Strnadová (2017) used a qualitative design and interviewed fifteen parents (i.e. twelve female, three male) of twelve ASD children, two of which had a learning disability (i.e. dyslexia and dyspraxia) transitioning to mainstream secondary school. Tso and Strnadová (2017) noted that parents appreciated proactive secondary school communication about subsequent school events and to problem-solve issues (Tso and Strnadová, 2017). A positive home-school partnership also occurred when schools supported parents with the implementation of home-based rewards and routines, and collaborated with external ASD-agencies and organisations, as recommended by parents (Tso & Strnadová, 2017).

These findings suggest, that when parents are listened to by the secondary school, school communication is proactive and responsive then positive outcomes for the ASD student (in question) can be achieved. These findings have to be met with some caution, given the relatively small parent sample-size. This means it is difficult for these results to be generalised to the whole population of parents (i.e. mothers and fathers) who have an ASD child transitioning to secondary school.

A lack of ASD expertise in the secondary school environment concerns parents

Several studies have noted at the post-transition period, that parents admitted to feeling

helpless due to a lack of specialist resources or ASD teacher expertise or knowledge within the secondary school system once their child had transitioned to secondary school (Tobin et al, 2012; Dillon & Underwood, 2012; Makin et al., 2017). Hamilton and Wilkinson (2016) have extended on this finding, by noting that parents were often worried about the number of untrained ASD secondary staff (i.e. teachers and support staff) that would support their child.

Hamilton and Wilkinson (2016) also found ASD is often perceived by secondary teachers-as an invisible disorder: the student appeared normal so nothing must be wrong (attitude). Hamilton and Wilkinson (2016) also found some parents would over-compensate for a lack of teacher expertise and knowledge by preparing resources such as a student profile or organising an interest box at the start of the year that is accessible to the student. This suggests parents may use a preventative approach by trying to introduce an effective student system, as a way to reduce the potential for problems to occur for their child.

Teacher view of ASD students transitioning to secondary school

Secondary teachers feel anxious about teaching ASD students

Dann (2011) interviewed a range of teaching staff, including specialist teachers (6) primary and

secondary teachers (6) and teacher support staff (6). Dann (2011) obtained the viewpoints of secondary teachers, who felt anxious about ASD students transitioning to school, in terms of how they would cope with the change (from primary school).

Secondary teachers were aware of the need to share information about ASD students among staff members (Dann, 2011). In addition, regular communication with parents was valued as important by teaching staff (Dann, 2011). Also, getting to know students was viewed as important (Dann; 2011). Teaching staff argued that further specialist training and Professional Development (PD) in ASD was most important and this would help ease their anxiety about teaching ASD students (Dann, 2011). Because of the low ‘teaching staff’ numbers within this research, it is difficult to generalise these results to the general population of secondary teachers.

The secondary school environment is a concern for ASD-trained (specialist) teachers

Deacy, Jennings and O’Halloran (2015) obtained the constructive feedback from thirty ASD-trained teachers in Ireland. They were working in primary and secondary schools and had obtained a Post Graduate Certificate/Diploma in Special Education Needs (SEN) (ASD) (Deacy et al., 2015). Based on their expertise and knowledge, their main concerns for ASD students transitioning to secondary school, was: “the new secondary school environment”, followed by the “Social and

emotional aspect” (Deacy et al., 2015, p.295). The “Number of teachers”, and their “Anxiety of the change process” were of less concern (Deacy et al., 2015, p.295). Other studies have raised this concern by parents of ASD children transitioning to secondary school (Dillon & Underwood, 2012; Makin et al., 2017).

Based on their expertise and knowledge, specialist-trained teachers believed a formalised transition phase should be longer for ASD students, compared with non-ASD students: three years in duration where the transition for an ASD student starts two years before they enter secondary school and continues for one year post-secondary school education (Deacy et al., 2015). This suggestion considers the longitudinal educational journey of an ASD student and their complex social and communicative needs.

Given this study focused on thirty teachers with expertise in ASD, the results could be generalised to the general population of teachers with expertise in ASD.

Secondary teachers notice ASD students struggling with the secondary school environment

Mandy et al., (2016a) interviewed twenty primary and secondary teachers and found that the level of adaptive functioning worsened when comparing primary and secondary teacher data, on Vineland Adaptive Behavior Scales, second edition

(i.e. VABS-II). Adaptive functioning in this context, related to the ability of students to meet the demands of Communication, Socialisation and Daily Living (Mandy et al., 2016, p.8) It appears, based on this finding, that secondary teachers do notice when ASD students find it difficult to cope with peers, and adapt to the physical surroundings of a secondary school environment.

Implications for education: proactive school and classroom-based strategies

The following information is a range of transition strategies that were drawn from the research within this literature review. Parents or teachers articulated important transition strategies as they were being interviewed (by researchers), either at the pre or post-transition period(s). Some of these strategies are relevant at school or classroom level.

Studies at the pre-transition period have outlined the importance of orientation/induction visits where students become familiar with their new school environment (Deacy et al., 2015; Mandy et al., 2016a; Tso and Strnadová, 2017). Studies have also highlighted, the need for ASD students to have meeting times with secondary staff, as a way to reduce their anxiety (Mandy et al., 2016a; Deacy et al., 2015). Studies also highlight the importance of secondary school introducing a buddy system as

the student enters secondary school (Dann, 2011; Mandy et al., 2016a).

Deacy et al., (2015) argue that during the post-transition period, a designated transition team member of staff is important, as a way to orientate the student with their new surroundings and thus reduce their anxiety. This person acts as key worker, and can help support the ASD student on a daily basis. Also, a school counsellor should be readily available to ASD students, and can act in a similar role (Tso and Strnadová, 2017).

Within the secondary classroom, designation of a safe place is important (Dillon & Underwood, 2012). This strategy, helps calm the student when they feel escalated or anxious. Dillon and Underwood (2012) have also highlighted the importance of a sensory board, for ASD students, as a replacement to the sensory tactile issues they face within the classroom. Studies have also highlighted the importance of visual supports such as a colour-coded timetable and use of a labelled school map (Tobin et al., 2012; Dillon & Underwood, 2012; Deacy et al., 2015; Mandy et al., 2016a).

Deacy et al., (2015), based on the feedback of specialist ASD teachers, outline that a student's Individual Education Plan (IEP) is organised well in advance-i.e. Some years, before an ASD student, transitions to secondary school. The IEP should be continually reviewed and it should transition with the student to secondary school (Deacy et al., (2015).

Transition as a school systems approach: collaboration is a key to success

Mandy et al., (2016b) obtained the views of teachers and were subsequently able to evaluate the Systemic Transition Education Programme (STEP-ASD) for 17 ASD students (i.e. 13 male, 4 female). This study expands on the work of Mandy et al., (2016a) by using an interventionist approach to help alleviate behavioural and emotional difficulties (Mandy et al., 2016b).

Of these seventeen students, ASD-diagnosis was as follows: Autism (5), Asperger's syndrome (5), ASD/a typical autism: (7). In addition, three of these students were diagnosed with ADHD, three with anxiety, one with depression, one with Obsessive Compulsive Disorder (OCD), and two with behavioural problems (Mandy et al., 2016b).

Moreover, a control group of 20 ASD students (i.e. 17 male, 3 female) had no intervention support (Mandy et al., 2016b). Of these 20 students, ASD diagnosis was as follows: Autism (6), Asperger's syndrome (10), ASD/a typical autism: (4). In terms of emotional and behavioural disorders, four of these students were diagnosed with ADHD, three with anxiety, one with depression, three with a tic disorder, and four with behavioural problems (Mandy et al., 2016b).

Mandy et al., (2016b) at the pre-transition (i.e. last term of primary) and post-transition (i.e. second semester of secondary school) period used specific data-measures. This included: The Strengths Difficulties Questionnaire (SDQ) (for teachers and parents), The Social Communication Disorders Checklist (SCDC) (i.e. for students in the non-intervention (i.e. control) group and intervention group (i.e. STEP-ASD) and a Post-Transition Monitoring Interview (for secondary students) (Mandy et al., 2016b).

Mandy et al., (2016b) found emotional and behaviour problems for ASD students, which were reported by each secondary school, were greatly reduced, after STEP-ASD had been implemented.

Mandy et al., (2016b) argue that STEP-ASD provides an effective systemic approach, including specific pre-transition and post-transition-phase strategies that can be integrated within the primary and secondary setting (Mandy et al., 2016b). Moreover, Mandy et al., (2016b, p.587) argue that the STEP-ASD intervention also has specific benefits for the teachers, where they found the programme “user friendly and informative.”

The first step, a pre-transition phase strategy, includes a (“Bridge”) collaborative meeting consisting of the ASD student, their parents, teaching staff from the primary and secondary sector, and a STEP-ASD professional (Mandy et al, 2016b).

The second step, based on the feedback from step one, involves the STEP-ASD professional writing a student profile and transition management plan, for the ASD student, involving practical ASD-accommodations to be implemented in the school setting (Mandy et al., 2016b). Each document is distributed to secondary teachers (Mandy et al., 2016b).

The third step of STEP-ASD is where educators, including secondary school teachers who teach the particular ASD student, can cross-reference the content of the Transition Management Plan/Student Profile, with the wider, more extensive transition resource (Mandy et al., 2016b). The STEP-ASD professional is subsequently required to ensure secondary teachers are maintaining fidelity of the plan, by regular monitoring of it (Mandy et al., 2016b). It seems that, based on these findings, regular collaboration involving all stakeholders, using an intervention approach, contributes to the success of ASD student transition from primary to secondary school.

Makin et al., (2017) aligns with the work of Mandy et al., (2016b) that school and system-level factors, are more important than child-level factors, in determining the success (or failure) of primary to secondary transition for an ASD student. System-level factors include: the effectiveness of communication between primary and secondary schools in transferring student information, and the ability for schools to make necessary school

modifications (i.e. changes to the school environment) to meet the needs of the ASD student (Makin et al., 2017). Child-level factors relate to the characteristics of the ASD student: their communication level, anxiety level and ASD-symptoms and sensory responsiveness (Makin et al., 2017).

It seems that, based on these findings, educators would find it advantageous to focus on (and modifying) their own school environments, as a way to support ASD students in the transition process.

Conclusion

This literature review has examined the views of all stakeholders who contribute to the primary to secondary school transition process: ASD student, parent(s) and teacher(s). These views are all important because at regular times during the pre and post-transition period, each stakeholder impacts and influences the other.

The reviewed empirical studies have highlighted the impact between-school transition has on ASD students. Each ASD student, transitioning to secondary school, are most likely feeling anxious about attending their new school. Moreover, their school experience is one in which they are often the victim of bullying. Prevalence of anxiety is a risk factor to a successful transition.

This review has also highlighted that parents do feel stressed and anxious, as well. Their ‘lived experience’ of ASD means they regularly advocate for their child. Parents want their ASD child to fit-in socially when they first arrive at secondary school. This is more important than academic aspirations they have for their child. Based on research, they also are likely to worry about the lack of proactive communication within the secondary school and the lack of ASD-expertise among secondary teachers. Yet, when communication is proactive and student problems are readily solved, this can have a positive impact on them, and their child.

This review has also revealed that secondary teachers can have anxiety about ASD students transitioning to secondary school. A lack of ASD training is also concerning to secondary teachers. Anxiety among all stakeholders means the transition process needs to be carefully managed.

Based on the research presented, parents and teachers (including those with ASD-expertise) provided school and classroom-based strategies that can make a significant difference for the ASD student. This review has also explored a successful, collaborative interventionist approach to transition, STEP-ASD, which has reduced significant emotional and behavioural difficulty for the ASD student. This interventionist approach aligns with other research that suggests school level factors such as effective between-school communication and appropriate school modifications are more important in determining the success of transition,

rather than schools focusing on the characteristics of the ASD student.

Finally, even though the two questions outlined in the introduction have been answered, specific gaps in the ASD student between-school transition literature have been identified. Due to the dominant view of research participants: ASD male students, mothers of ASD students and secondary teachers, the viewpoints of: ASD female students, fathers of ASD students, and primary teachers (at the pre-transition phase), are mostly absent in the reviewed literature. Obtaining these latter viewpoints would help expand on the findings located in this review, as would randomised transition studies that compare ASD student findings, with the findings of non-ASD student counterparts.

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