



Teachers' Perspectives on the Transition of Autistic Students to Secondary Education: a Systematic Literature Review

Marta Becerril¹ · Patricia Pérez-Fuster² · María Dolores Ordóñez De La Torre¹ · Mechthild Richter³

Received: 9 August 2025 / Accepted: 10 August 2026

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2026

Abstract

In the context of inclusive education, it is essential to identify the educational conditions associated with a successful transition from primary to secondary education for autistic students. This systematic review, conducted following the PRISMA approach and a thematic synthesis method, aimed to analyze teachers' perceptions of strategies and practices that support this process. Ten articles published between 2006 and 2023, involving data from 323 teachers, were reviewed. Six key themes emerged: (1) transition planning process; (2) challenges and objectives; (3) facilitators and barriers to the transition process; (4) collaboration among stakeholders; (5) teaching and organizational practices; and (6) professional development and working conditions. The findings underline the value of using teachers' experiences as a meaningful contribution to shaping inclusive practices.

Keywords Autistic students · Teachers' perspectives · School transition · Primary education · Secondary education · Inclusion

The transition from primary to secondary education, which usually occurs between the ages of 10 and 14, coinciding with the beginning of adolescence, is crucial for students (Jindal-Snape et al., 2020; Strand, 2020). This transition involves significant emotional, academic, social, and

organizational challenges. In particular, it is seen as an important time when students generally move to a larger and more heterogeneous school, with higher expectations of academic achievement, independence, and less scaffolding from teachers (Hanewald, 2013). In addition, important changes occur at the social level, with concern for peer group acceptance being one of the factors influencing increased levels of anxiety and a decline in academic performance and motivation (Frey et al., 2009; Goldstein et al., 2015; Nelemans et al., 2018). Although some of the negative effects, such as a decrease in academic performance, have been described in the short term, research indicates that, for many students, this transition is a critical process and a time when they need adequate support and guidance (Bloyce & Frederickson, 2012).

Children with special educational needs (SEN) may experience more difficult primary–secondary transitions, and they can benefit from personalized transition planning tailored to their needs (Cantali, 2019; Neal & Frederickson, 2016). Over the last decade, the number of autistic students progressing to secondary education in mainstream schools has increased in most European and other high-income countries (Leifler et al., 2021; Lord et al., 2022).

The literature on transition in autistic students describes mixed experiences. Autistic students have been identified

✉ Marta Becerril
marta.becerril@unir.net

Patricia Pérez-Fuster
patricia.perez-fuster@uv.es

María Dolores Ordóñez De La Torre
lola.ordonez@unir.net

Mechthild Richter
mechthild.richter@uni-erfurt.de

¹ Department of Educational Psychology and Psychobiology, Faculty of Education and Humanities, Universidad Internacional de La Rioja (UNIR), Av. de La Paz, 137, 26006 Logroño, La Rioja, Spain

² Department of Developmental and Educational Psychology, Faculty of Psychology and Speech Therapy, Universitat de València (UVEG), Av. Blasco Ibáñez, 21, 46010 Valencia, Comunidad Valenciana, Spain

³ Department of Special Needs Education and Social Education, Faculty of Education, University of Erfurt, Nordhäuser Str. 63, 99089 Erfurt, Thuringia, Germany

as a particularly vulnerable group to experience difficulties during their transition to secondary education (Peters & Brooks, 2016). There is evidence of increased levels of psychopathology in autistic students during this academic transition. For example, Fortuna (2014) evaluated the socio-emotional distress suffered by autistic students who enter secondary education. This study identified different degrees of stress and anxiety that the students themselves related to their concerns about making friends, maintaining those relationships, or even the fact that they had received harassing comments. In this respect, it should be taken into account that during the secondary education stage, autistic students are more likely to be victims of bullying (Matthias et al., 2021; Ochi et al., 2020). Costley et al. (2021) reported that autistic students experience high levels of anxiety throughout their secondary education, despite support put in place by some schools. Sources of anxiety included other people's behavior, fear of the unknown, and sensory sensitivities. On the other hand, research has suggested that for some autistic children, the transition experience can be positive and overcome initial negative expectations (Dann, 2011; Hannah & Topping, 2012). One study revealed that while autistic students adapt positively, their levels of adaptation are lower than those of their typically developing peers (Hebron, 2018). This same study indicated that transition can be a positive experience for autistic students, but they need support during this process and throughout secondary education. Mandy et al. (2016) assessed levels of psychopathology, adaptive functioning, and victimization in the final year of primary school and after one term of secondary education. Even though they found no evidence of increased difficulties during the transition, they described high levels of psychopathology and maladjustment during primary school, which persisted into secondary school.

Whelan et al. (2024) developed a study in which autistic traits (internalizing and externalizing problems, challenging behavior, sleep problems, executive functioning, and academic ability) were associated with school transition outcomes. Larney and Quigley (2006) identified several skills that are essential for student success in secondary education, noting that autistic students may face challenges in developing these skills. These skills included coping with everyday conflicts, developing and maintaining friendships, managing unstructured time, participating in group work, adapting to schedule changes, and processing verbal communication.

In this context, the literature indicates that preparation can be key to successful transition (Hannah & Topping, 2012) and that this vulnerability can be mitigated by protective factors related to the characteristics of educational conditions and practices. For example, Stack et al. (2020) concluded that the successful inclusion of autistic students in mainstream secondary schools depends on tailoring

supportive features of the school environment to their individual needs. Their study examined the perceptions of children and parents regarding school transitions, highlighting the importance of preparation in reducing children's anxiety. The proposed strategies included sharing experiences of success and providing sufficient time for students to familiarize themselves with the new school environment through extended visits before transitioning. They also emphasized the critical role of positive relationships with peers and school staff, as well as the structured secondary school environment, which can be enhanced through adjustments to the curriculum and the implementation of differentiated and supportive systems and structures. Although it is not a specific model to promote the transition between primary and secondary education for autistic students, the Taxonomy for Transition Programming 2.0 (Kohler et al., 2016) offers a structured approach for planning different transitions for young people with special educational needs. One of its main contributions is its focus on five key practices: student-focused planning, student development, interagency collaboration, family engagement, and program structures.

In this sense, there is limited knowledge about the educational conditions and practices that can facilitate or hinder the transition of autistic students. To identify these factors, the importance of considering the perspectives of different stakeholders, such as students, families, and educators is widely recognized throughout the literature (Bruck et al., 2022; Jindal-Snape et al., 2020). Teachers play an integral and multidimensional role in supporting the transition of autistic students from primary to secondary education. They are part of the process either in the beginning and preparation or at the receiving end, when they welcome new students in their classrooms. Teachers are often an important source of information for parents, they prepare students, may exchange with colleagues from other schools, and support the students in their new environments. Therefore, they are designers of the transition process and involved individuals at the same time. On the other hand, they are usually only involved in one part of the transition process, depending on whether they are primary or secondary school teachers. Studies show that differences in primary and secondary school pedagogy and didactics, and a lack of exchange of information, can lead to a transition process that does not prepare the students adequately for the new school (Goos & Decelle, 2016; Makin et al., 2017). Knowing that teachers often feel a lack of preparedness and skills in working with autistic students (Boujut et al., 2017), the manifold responsibilities of teachers in the transition process may be experienced as overwhelming. Previous systematic reviews have documented the perspectives of other stakeholders, particularly autistic students themselves, during the transition to secondary education (Stack et al., 2020) and there is also evidence highlighting the

challenges that these transitions pose for teachers, as well as the strategies they employ to support students (Nuske et al., 2018). Building on this existing body of work, developing a deeper understanding of teachers' perceptions in relation to the complex role of teachers constitutes a complementary contribution to the literature, as it provides an integrated perspective on how educators experience, interpret, and enact their responsibilities throughout the primary–secondary transition process for autistic students.

The aim of this study is to perform a systematic literature review on teachers' perceptions of strategies and practices associated with the transition of autistic students from primary to secondary education. Specifically, it seeks to answer the following research question:

What do teachers perceive as the key factors, strategies, and practices that facilitate or hinder the transition of autistic students from primary to secondary education?

Method

A systematic search strategy was developed for the identification of studies considering the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses Guidelines) approach (Page et al., 2021).

Eligibility Criteria: Inclusion and Exclusion Criteria

The selection was limited to empirical studies. These studies explored the perceptions of general and special education teachers regarding the specific educational transition of autistic students from primary to secondary school, regardless of their autism level, and language and cognitive abilities. Although our review focused on teachers' perceptions, studies that additionally explored the perceptions of other stakeholders, such as students and/or families, were also included.

The primary database search was restricted to studies using qualitative and/or quantitative methodologies, published in peer-reviewed scientific journals between 2013 and 2023 in English.

However, to enhance comprehensiveness and reduce the risk of omitting relevant studies, citation searching (i.e., screening the reference lists of all studies meeting the eligibility criteria) was conducted. Studies identified through this search strategy were eligible for inclusion irrespective of publication year, provided that they met all other predefined inclusion criteria. In addition, a search was also performed on specialized SEN websites published in languages mastered by the authors (Spanish, German, and French). Studies identified through this search strategy in the languages listed previously were eligible for inclusion, provided that they met all inclusion criteria.

Studies referring to educational transitions between other educational stages (e.g., the transition from preprimary to primary education and/or from secondary education to university) were excluded. Studies that did not provide a teacher's perspective, as they focused exclusively on the perspectives of the autistic students and/or their families, were also excluded. Additionally, studies that referred to the description of the psychopathological symptoms experienced by these students during the transition and systematic literature reviews were excluded.

Information Sources and Search Strategy

A systematic search was conducted in May 2024 in the ERIC, Psychology Database, PubMed, Scopus, and Web of Science electronic databases. The search strategy was developed in accordance with the PICO framework (Population, Interest, Context) proposed by the Joanna Briggs Institute (2014). The corresponding search terms for each PICO component are presented in Table 1. The main search terms included “autism”, “autism spectrum disorder”, “ASD”, and “pervasive developmental disorder” (Population); “transition” (Interest); and “secondary school”, “middle school”, and “high school” (Context).

Search strings were adapted to the specific syntax of each database. Searches were conducted in the title and/or abstract fields, depending on the database interface. In the primary database search, the following limits were applied where available: publication years (2013–2023), language (English), and peer-reviewed journal articles. The complete search strings for each database are presented in Table 2.

In addition, citation searching was systematically conducted for all studies meeting the eligibility criteria, and a search was also performed on specialized SEN websites with content published in Spanish, German, and French. The process of screening and selecting studies was facilitated by RefWorks bibliography management software.

Study Selection Process

The search performed according to the indicated strategy yielded 382 results. In the first identification phase, coauthor 1 eliminated 6 duplicate articles. Therefore, 376 studies were considered in the screening phase. Screening of titles,

Table 1 Search strategy

Concepts	Search Terms
Population (P)	“autism” OR “ASD” OR “pervasive developmental disorder”
Interest (I)	AND “transition”
Context (Co)	AND “secondary school” OR “middle school” OR “high school”

Table 2 Complete search strategies for each database

Database	Search string	Fields searched	Limits applied	Records retrieved*
ERIC	Abstract (autism OR "autism spectrum disorder" OR ASD OR "pervasive developmental disorder") AND abstract(transition) AND abstract ("secondary school" OR "middle school" OR "high school")	Abstract	2013–2023; English; Peer-reviewed	<i>n</i> = 78
Psychology Database	Title (autism OR "autism spectrum disorder" OR "ASD" OR "pervasive developmental disorder") AND title(transition) AND ("secondary school" OR "middle school" OR "high school")	Any Field (Title, Abstract, Subject Terms)	2013–2023; English; Peer-reviewed	<i>n</i> = 57
PubMed	((autism [Title/Abstract] OR "autism spectrum disorder"[Title/Abstract] OR ASD[Title/Abstract] OR "pervasive developmental disorder"[Title/Abstract]) AND (transition [Title/Abstract] AND (secondary school [Title/Abstract] OR middle school [Title/Abstract] OR high school [Title/Abstract]))	Title/Abstract	2013–2023; English	<i>n</i> = 50
Scopus	(ABS (autism OR "autism spectrum disorder" OR "ASD" OR "pervasive developmental disorder") AND ABS (transition) AND ABS ("secondary school" OR "middle school" OR "high school"))	Abstract	2013–2023; English	<i>n</i> = 116
Web of Science	autism OR "autism spectrum disorder" OR "ASD" OR "pervasive developmental disorder" (Abstract) and transition (Abstract) and "secondary school" OR "middle school" OR "high school" (Abstract)	Abstract	2013–2023; English	<i>n</i> = 81

abstracts, and full texts was primarily conducted by coauthor 1, who applied the predefined eligibility criteria to all identified records. Study selection was therefore mainly carried out by a single reviewer.

After the titles and abstracts were read, 322 studies were excluded, so 54 reports were searched for retrieval. Five reports were not retrieved, and 49 studies were assessed for eligibility. After the full texts were read, seven studies were selected through the database searches.

In addition, coauthor 1 subsequently conducted citation searching, which led to the identification of two additional studies published in 2006 and 2011. Furthermore, coauthor 4 also identified one additional study through a specialized website search published in French. All records identified through these supplementary search methods (i.e., citation searching and searches of specialized SEN websites) were assessed using the same predefined eligibility criteria.

Although most decisions were made by a single reviewer, any uncertainties or borderline cases were discussed between coauthor 1 and coauthor 4 until consensus was

reached. As a result, 10 studies were included in the review. Figure 1 presents the flow diagram of the process used for the selection of studies.

Data Retrieval

Relevant data from the 10 included studies were extracted as follows: (a) country where the empirical study took place; (b) sample size, with the number of participating teachers as well as other nonteacher participants (i.e., parents, students and other professionals); (c) main objectives of the study; (d) research method; and (e) research design.

Data Synthesis Method

The data synthesis was conducted in accordance with Thomas and Harden's (2008) recommendations for the thematic synthesis of qualitative studies within the framework of a systematic review. These authors described the process of thematic synthesis in three stages that can overlap to some degree, and we did so as follows:

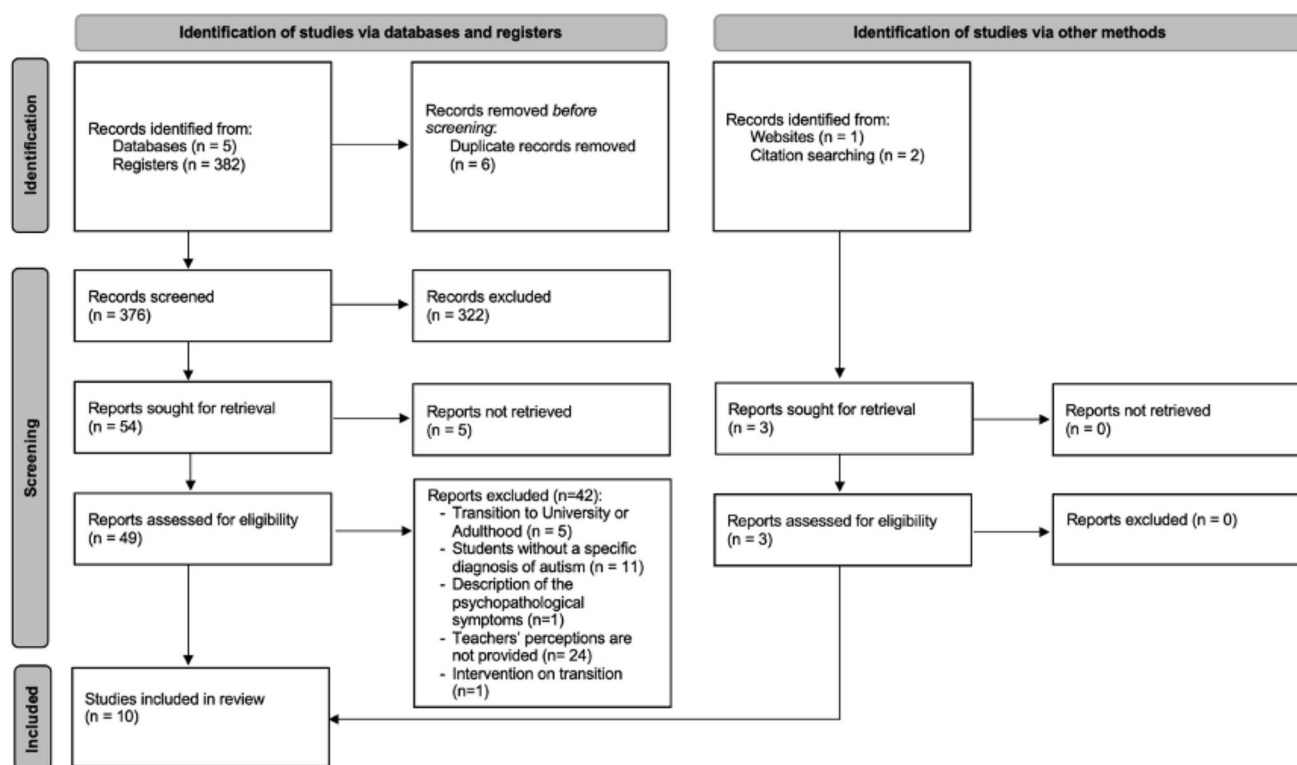


Fig. 1 Flow diagram of the study selection process, including the identification and screening phases. A total of 10 studies were included in the review after these stages. Adapted from Page et al. (2021)

In Stage I, coauthors 1, 2, and 3 compiled the content of the results sections of the selected studies into a Microsoft Word document. Following the aim of this review, only the parts that referred to teachers' perceptions were compiled, and those referring to other stakeholders were excluded. The use of MAXQDA software subsequently facilitated the synthesis method developed in Stages II and III.

In Stage II, the compiled text was coded line by line by the same coauthors. This process allowed codes to be created inductively to capture the content of each sentence. Coders also considered the similarities and differences between the codes to begin grouping them into broader themes, thus creating an initial structure. Coauthors 1 and 2 focused on analyzing the similarities and differences between the codes to establish a definitive structure.

According to Thomas and Harden (2008), the creation of descriptive themes remains closely aligned with the original studies. In contrast, analytical themes involve a deeper level of interpretation, where coders move beyond the primary studies to develop new constructs, explanations, or hypotheses. In Stage III, coauthors 1 and 2 organized these descriptive themes into a comprehensive structure. The final framework was formed of initial codes, detailed subthemes, and analytical themes.

Results

Description of the Studies

A descriptive summary of the 10 reviewed studies is shown in Table 3. All studies were published from 2013 to 2023, except those of Jindal-Snape et al. (2006) and Dann (2011), which were identified through a search of the bibliographic references of the selected studies. Nine studies were conducted in English-speaking countries (i.e., Australia, Ireland, the UK, and the US). One of them (i.e., Beaupré et al., 2017) was carried out in the French-speaking part of Canada, which was identified through a search of websites specializing in SEN.

The studies' sample sizes ranged from 4 to 167 teachers, with a total of 323 teachers included. The studies aimed to gather information on teachers' perceptions of the educational practices implemented in schools to support the transition of these students. They also sought to identify the factors that facilitate this process. In addition, Cumming et al. (2020) analyzed the degree to which the transition planning practices used to support autistic students fit with the Taxonomy for Transition Programming 2.0 previously mentioned (Kohler et al., 2016). Jindal-Snape et al. (2006) assessed differences between the perceptions of students, family members, and teachers.

Table 3 Descriptive summary of the included studies

	Country	N (teachers)	N (nonteachers)	Objective	Research Method	Research Design
1. Beaupré et al. (2017)	Canada	25	11 students 10 parents	To report on good practices to facilitate the transition from elementary to secondary school and the inclusion, in secondary school, of autistic students	Qualitative Observations Semistructured interviews	Action Research
2. Cumming et al. (2020)	Australia	13	8 parents	To determine the characteristics of the transition plans and procedures developed for autistic students and ID in mainstream schools. To analyze the degree to which these characteristics are in line with the Kohler et al. model (2016)	Qualitative Semistructured interviews	Cross-sectional Pretransition
3. Dann (2011)	England	18	6 students 6 parents	To explore the experiences of autistic students, their families and teachers during academic transition	Qualitative Focus-Group	Longitudinal Pretransition and Posttransition
4. Deacy et al. (2015)	Ireland	52		To identify good practices regarding planning, process and strategies to facilitate the academic transition of autistic students	Quantitative and qualitative Questionnaire with closed and open questions	Cross-sectional Pretransition or Posttransition
5. Dixon and Tanner (2013)	Australia	4	2 students 2 parents	To explore the experiences of autistic students, their families and teachers about their academic transition	Qualitative Semistructured interviews	Cross-sectional Posttransition
6. Hoy et al. (2018)	England	4	5 students 6 parents	To identify the educational practices that autistic students, their families and teachers consider to benefit academic transition	Qualitative Semistructured interviews	Cross-sectional Posttransition
7. Jindal-Snape et al. (2006)	Scotland	9	5 students 4 parents 5 psychologists 2 Speech and language therapist	To assess: • perceptions of autistic students, their families and teachers in relation to effective transition practices • existence of differences between the perceptions of the different agents	Qualitative Semistructured interviews	Cross-sectional Pretransition
8. Makin et al. (2017)	England	18	15 students 16 parents	To identify factors influencing successful transition	Qualitative Semistructured interviews	Longitudinal Pretransition and Posttransition
9. Rodriguez et al. (2017)	US	153	7 administration staff 14 others	To identify: • educational practices carried out by teachers to facilitate transition, • proposals for improvement considered by teachers and, • practices developed by teachers to favor family-school collaboration during the transition process	Qualitative Online open questionnaire	Cross-sectional Pretransition or Posttransition
10. Strnadová et al. (2016)	Australia	13	14 parents	To explore the experiences of family members and teachers of autistic students and/or Intellectual Disability during academic transition	Qualitative Semistructured interviews	Cross-sectional Pretransition or Posttransition

All studies applied a qualitative methodology using semistructured interviews as an instrument for data collection, with the exceptions of Dann (2011), who used the focus group technique, and Rodriguez et al. (2017), who used an online questionnaire. Deacy et al. (2015) applied both quantitative and qualitative methods by collecting data through a questionnaire with closed and open questions.

With respect to the research design, the majority of studies implemented a cross-sectional design, and only three studies used a longitudinal research design, collecting data

either before and after the educational stage change (Dann, 2011; Makin et al., 2017) or several times after transitioning (Beaupré et al., 2017).

Thematic Synthesis

The process of data synthesis resulted in a final structure of 42 codes, 22 subthemes, and 6 overarching themes. The identified themes and subthemes are shown in Fig. 2 and described below.

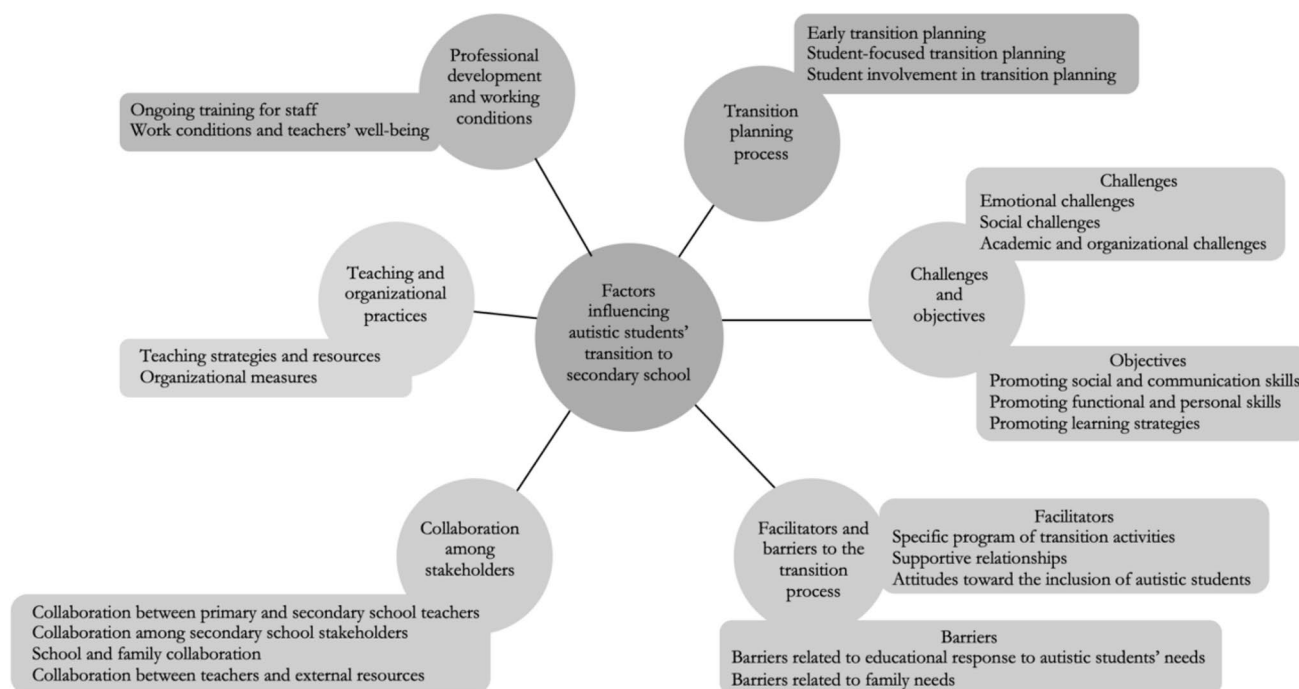


Fig. 2 Structure of the thematic synthesis. The data synthesis process produced a final framework consisting of 42 codes, 22 subthemes, and 6 main overarching themes

Transition Planning Process

This theme was identified in the results of six studies. Teachers referred to the conditions they felt should be taken into account when designing the transition process.

Early Transition Planning The need for early design of the transition plan was identified. As reported by Rodriguez et al. (2017), “Teachers emphasized the suggestions to begin the transition program earlier” (p. 14). Content referring to students’ placement decisions for choosing secondary school was also identified. Specifically, early decision-making is needed about the secondary school placement of the student. In Jindal-Snape et al. (2006), “Several stakeholders suggested that an earlier and more proactive approach to making placement decisions about all children/young people with ASD would be beneficial” (p. 24). In this study, teachers suggest making placement decisions before February of the last year of primary school to avoid uncertainty and anxiety for all stakeholders. Furthermore, teachers reported that delays in this decision-making prevented children from important aspects, such as secondary school staff visiting them in their primary school context.

Student-Focused Transition Planning The content refers to teachers’ perceptions of transition planning while considering the individual needs of autistic students. As reported by a teacher in Rodriguez et al. (2017), “The students’ needs

should be the first priority when planning, not the school’s budget” (p. 10). In Hoy et al. (2018), teachers referred to the importance of having good knowledge of students in general and their needs. They discussed “The importance of gathering information about pupils” (p. 190) and “The importance of staff having good knowledge of the child and their needs” (p. 190). In this study, teachers also stated how they often organized transitions around the students’ interests and in a very flexible way to adapt to their needs.

Student Involvement in Transition Planning Teachers reported the importance of child involvement in decision-making in transition planning. In Deacy et al. (2015), “87% of teachers agreed that the opinion of the student with ASD should be sought during the preparation and transition period” (p. 296). As reported in Makin et al. (2017), “Teachers highlighted the importance of the child to be involved in transition visits and in open discussions with their parents and with the secondary school about their move as early as possible” (p. 13). However, a lack of active involvement among autistic students was identified in Makin et al. (2017). This aspect was considered a serious concern by teachers in Rodriguez et al. (2017).

Challenges and Objectives

The second theme was identified in the results of nine studies. It includes teachers’ perceptions of the challenges

students face during secondary school due to emotional, social, academic, and organizational adjustments. In addition, areas in which teachers felt it was important to prepare autistic students were identified.

Emotional Challenges Teachers reported the emotional challenges that autistic students are likely to face in secondary schools. In one study, staff noted that the transition experience of a group of autistic students was similar to that of other students (Dann, 2011). Anxiety around the change was identified by Deacy et al. (2015), who reported that 43% of teachers indicated that autistic students are challenged by the social-emotional aspects of the transition. Across the revised literature, teachers' perceptions of students' worries prior to school change potentially contribute to their anxiety. These worries are related to uncertainty about what to expect in the new educational setting (Makin et al., 2017) and the fear of being bullied (Hoy et al., 2018). In Makin et al. (2017), "Teachers spoke of how the children, whilst anticipating their move to secondary school, felt anxious and worried because they knew things would be different and were unsure of what to expect" (p. 12). Additionally, an SEN coordinator in Hoy et al. (2018) said that "The biggest question asked by pupils before the transition is about bullying" (p. 188).

Social Challenges Teachers reported on the social challenges that autistic students often face. Difficulties with social skills were identified as a challenge by 83% of the respondents in Deacy et al. (2015). Specifically, they referred to the perception of greater peer support during primary school than during secondary school. As reported in Makin et al. (2017) about children's peers in primary schools, "They were generally very supportive to them, mostly because they had known them for a long time, and showed acceptance and patience towards their differences" (p. 13).

Academic and Organizational Challenges Academic adjustment is one of the challenges identified by many teachers. Teachers in Makin et al. (2017) noted that differences in secondary school pedagogy were challenging for children, and this aspect "was considered to be potentially problematic for these children" (p. 13). The high number of teachers that autistic students encounter in secondary school is another significant factor in the transition process, identified by 33% of the respondents in Deacy et al. (2015). Additionally, studies have identified potential difficulties related to the new physical environment because secondary schools are generally much larger than primary schools (Makin et al., 2017). This aspect was identified as a challenge by 53%

of the respondents in Deacy et al. (2015). Finally, differences in the provision of support are also highlighted, as reported in Makin et al. (2017) as follows:

The high level and consistency from teaching assistants, which they felt allowed the children to access both the curriculum and less structured times of the day. Teachers spoke of the often-close staff–pupil relationships, which they felt would be very different to what they would receive in secondary school (p.13).

Promoting Social and Communication Skills In various studies, social and communication skills have been identified as targets by teachers. In Beaupré et al. (2017), the development of a social skills program was recognized as facilitating inclusion during the transition. In Jindal-Snape et al. (2006), primary school teachers considered a small workgroup focusing on the child's social and communication skills development as an effective measure, whereas secondary school teachers emphasized intense support for the development of social communication skills as a strategy for facilitating transition. In two other studies, teachers identified the specific support needed for developing and keeping friends as a priority (Makin et al., 2017; Rodriguez et al., 2017).

Promoting Functional and Personal Skills Promoting functional and personal skills was identified as a key objective across studies. Independence was identified by teachers as the main aspect to be developed in autistic students (Cumming et al., 2020; Makin et al., 2017; Rodriguez et al., 2017). The responsibility of secondary school teachers in developing this independence was highlighted in Makin et al. (2017): "One difference emphasized by teachers was the role of secondary schools in encouraging children to be as independent as possible, fostering greater flexibility" (p.13). Teaching self-determination skills was also mentioned by teachers as a target so that students can meet their needs independently (Rodriguez et al., 2017). The need to promote emotional skills to prepare students for their transition was also discussed by teachers in Cumming et al. (2020).

Promoting Learning Strategies Teachers referred to the need to promote learning strategies for students to cope with the following aspects: frequent changes in routines (Rodriguez et al., 2017; Strnadová et al., 2016), working cooperatively, and academic demands from multiple teachers (Rodriguez et al., 2017).

Facilitators and Barriers to the Transition Process

This theme was identified in the results of nine studies. Facilitators are described considering the importance given

to transition activities, supportive relationships, and attitudes toward inclusion. Barriers are described considering the needs of autistic students and their families.

Specific Program of Transition Activities Teachers identified specific activities to be developed in primary school to facilitate the anticipation of the characteristics of the new educational setting. Visits to secondary schools of autistic students are the most common practice (Beaupré et al., 2017; Cumming et al., 2020; Dann, 2011; Deacy et al., 2015; Dixon & Tanner, 2013; Hoy et al., 2018; Makin et al., 2017; Rodriguez et al., 2017). In addition, in Deacy et al. (2015), induction days appeared as a more complex and participatory activity than visits to help autistic students become accustomed to their new school environment. The importance of secondary school staff visiting primary school autistic students has also been highlighted (Cumming et al., 2020; Deacy et al., 2015; Hoy et al., 2018). In addition, teachers described specific activities based on visual support for autistic students to become familiar with the new context. Anticipatory activities through social stories were identified. Its use was described as a powerful strategy to be implemented before moving to the new school (Cumming et al., 2020; Deacy et al., 2015; Hoy et al., 2018) and afterwards (Deacy et al., 2015). The development of anticipatory activities through video priming strategies was also highlighted by primary and secondary teachers in Deacy et al. (2015). Finally, secondary teachers described other activities, such as providing a map of the new school (Deacy et al., 2015; Dixon & Tanner, 2013) or sending primary schools' photographs of the places where autistic students will be and of the staff they will be with (Hoy et al., 2018).

Supportive Relationships Relationships between autistic students and their teachers have been identified as important conditions for facilitating transition (Cumming, et al., 2020; Deacy et al., 2015). In Deacy et al. (2015), "90% agreed that the relationship between the student with ASD and a key staff member is crucial for successful transition" (p. 298). In addition, content refers to teachers' perceptions of the importance of relationships with other school personnel, such as caretakers, psychologists, or support teachers (Dann, 2011; Makin et al., 2017).

Teachers also highlighted the importance of the relationships of autistic students with their peers (Cumming et al., 2020; Makin et al., 2017). The following set of initiatives was identified in secondary schools to promote the construction of supportive relationships and socialization: the involvement of peer volunteers through peer mentoring programs (Beaupré et al., 2017; Rodriguez et al., 2017), buddy

systems (Dann, 2011; Deacy et al., 2015), circles of friends (Deacy et al., 2015; Jindal-Snape et al., 2006), and lunch-time activities (Deacy et al., 2015).

Attitudes toward the Inclusion of Autistic Students In Jindal-Snape et al. (2006), primary school teachers indicated that teachers' positive expectations worked to support transition. In particular, they referred to the importance of confidence that autistic students could access the mainstream curriculum in secondary education and the need to avoid seeing autistic students as different from others. In Makin et al. (2017), secondary school teachers stated that having good knowledge and understanding of autism and experience teaching autistic children was essential to support a positive transition. Finally, in Dann (2011), teachers reflected on the importance of attitudes toward inclusion during transition:

Staff also felt that attitudes of subject staff are important and that all staff need to take responsibility for these pupils to ensure inclusion: ... every teacher here is a teacher of special needs and it's trying to get that message across (p. 302).

Barriers Related to Educational Response to Autistic Students' Needs The secondary teachers highlighted the lack of access to real mainstream environments (Jindal-Snape et al., 2006) and the constraints of autistic students' knowledge of visual support use (Hoy et al., 2018). For example, teachers in Hoy et al. (2018) affirmed that "a lot of kids carry visual supports with them and don't necessarily know how to use them because they need training and practice" (p. 192). Teachers also identified other negative conditions, such as the absence of adaptation to the physical environment of secondary schools (Dixon & Tanner, 2013). The teachers in this study stated that "There was no discussion of the structure of the next year's timetable, teachers, classrooms, and allocated playground areas. In addition, no reference was made to the day-to-day realities of the physical aspects of playground experiences" (p. 39). Finally, teachers reported that inadequate resources and funding hinder the support provided to autistic students, making effective transitions challenging (Cumming et al., 2020).

Barriers Related to Family Needs Teachers identified limited family knowledge of visual supports as schools do not provide sufficient training for parents on how to use them, limiting their ability to support their children at home (Hoy et al., 2018). Teachers noted that some parents of autistic students may be overly protective, which can hinder the child's adaptation to new environments (Cumming et al., 2020). Furthermore, in Makin et al. (2017), teachers

perceived that parental anxiety or anticipation of too many difficulties could influence their children, potentially affecting the school's ability to work effectively with the family during transition.

Collaboration among Stakeholders

This theme was identified in the results of eight studies. The results are presented across the following subthemes.

Collaboration between Primary and Secondary School Teachers

Teachers identified the following effective practices: (a) to support secondary staff in getting to know individual children before they transition (Makin et al., 2017); (b) to develop close liaison and communication between primary and secondary resource teachers (Deacy et al., 2015); and (c) to improve information sharing procedures between schools (Cumming et al., 2020). Teachers have also identified several conditions that limit this collaboration: (a) a lack of time to visit primary schools and collaborate (Cumming et al., 2020; Rodriguez et al., 2017; Strnadová et al., 2016); (b) a lack of time for primary school teachers to report detailed information about their students (Cumming et al., 2020); and (c) tensions about who is mainly responsible for transition success (Strnadová et al., 2016).

Collaboration among Secondary School Stakeholders

Teachers stressed the importance of secondary school stakeholders' collaboration and emphasized the following positive practices: (a) sharing information about autistic students among all staff members (Dann, 2011), including the children's individual education plan (IEP) (Makin et al., 2017); (b) creating spaces to foster communication between them about effective or ineffective strategies with particular students (Hoy et al., 2018); (c) adding flexibility to the work schedule to encourage formal consultation among stakeholders (Beaupré et al., 2017); and (d) facilitating the exchange of teachers' knowledge and experience related to an inclusive school culture (Beaupré et al., 2017).

School and Family Collaboration The importance of school-home collaboration was perceived by teachers as essential for a successful transition. Teachers indicated that communication with parents was necessary (Cumming et al., 2020; Dann, 2011; Deacy et al., 2015) and perceived families as liaisons, considering discussions with them necessary to build specific knowledge about the children in their new context (Makin et al., 2017). In Cumming et al. (2020), primary and secondary school teachers reported that facilitating communication with parents was one of their responsibilities during transitions. In this study, teachers felt that they could empower parents by (a) making them feel comfortable and

encouraging open communication that allowed them to participate in the transition process and IEP meetings; (b) facilitating their access to school; (c) providing information on school–family communication procedures; and (d) allowing them to participate in early planning. Supportive measures were implemented by secondary teachers to make the transition easier for families, including orientation days for parents, informing them about their child's transition progress (Strnadová et al., 2016), and IEP meetings with parents and school special education personnel (Rodriguez et al., 2017).

Collaboration between Teachers and External Resources

In Deacy et al. (2015), secondary school teachers noted the value of external educational psychology services as a beneficial resource, but primary school teachers highlighted the need for more support from these services. In addition, teachers in Beaupré et al. (2017) stressed the benefits of the regular presence of specialized resources within the school, as well as collaboration with other schools in the community. In this study, teachers perceived visits to schools with experience in the inclusion of autistic students as an important strategy for learning successful inclusion practices.

Teaching and Organizational Practices

This theme was identified in the results of six studies and is described below.

Teaching Strategies and Resources Several orientations regarding teaching strategies were identified to respond to the needs of autistic students in secondary schools. One of the main orientations involved supporting particular motivations and developing individualized teaching strategies for autistic students' learning (Beaupré et al., 2017; Dann, 2011). In Beaupré et al. (2017), teachers mentioned how they differentiated their instruction through practices to maintain predictable routines and make transitions or task changes more flexible. Furthermore, the teachers described the use of an explicit teaching strategy through simple, visual and sequential explanations, frequently providing important information. In the long term, planning classes to anticipate upcoming assignments and assessments and allowing extra time to take exams were also mentioned by teachers as important measures. Finally, content referring to the use of resources for task organization, such as clear and coded timetables (Dann, 2011; Deacy et al., 2015; Makin et al., 2017; Strnadová et al., 2016) and task checklists (Strnadová et al., 2016), was identified.

Organizational Measures According to Beaupré et al. (2017), the direct support service for autistic students was

the main organizational measure at secondary schools. In this study, teachers indicated that this service contributed to student well-being, the maintenance of a good academic level, the improvement in social skills, and their inclusion with peers in the regular high school class. In Makin et al. (2017), teachers reported the importance of having a designated "safe space" in the school to which autistic students could go when they felt overwhelmed by a situation. In addition, the general characteristics of these schools that favor transition were identified. Teachers expressed the belief that schools that were smaller and had an accessible environment promoted successful transitions (Cumming, et al., 2020). Finally, teachers also stressed the need for more stability in the secondary school in which autistic students were enrolled. For example, in Beaupré et al. (2017), teachers mentioned that it should be guaranteed that they can complete all years of secondary education in the same school. Furthermore, organizational measures at the mainstream classroom level were identified in Beaupré et al. (2017). These measures refer to the need to have a support professional, especially in classes with a high number of students, and limit the number of subject-specific teachers. Other studies have identified measures that combine the attendance of autistic students in both mainstream and special classrooms. Cumming et al. (2020) reported that autistic students go to mainstream classrooms for some subjects and to special units for others. In Dann (2011), teachers described it as a positive experience in which autistic students only went to mainstream classrooms for limited subjects, such as tutorial periods, music, physical education, and technology.

Professional Development and Working Conditions

The last theme was identified on the basis of the results of four studies and is described below.

Ongoing Training for Staff The content referred to the teachers' perceived need for appropriate training to improve their skills in promoting the inclusion of autistic students. The following areas were identified: (a) general autism characteristics, specific thinking patterns, motivation, communication, and behavior management (Beaupré et al., 2017); (b) implementation of visual supports (Hoy et al., 2018); and (c) strategies to differentiate the curriculum and assess the learning process (Jindal-Snape et al., 2006). In Dann's (2011) study, specialized teachers expressed difficulty in offering training to all schoolteachers and pointed to the lack of training. For example, a teacher stated, "When inclusion first came about we were told that mainstream schools would be given training to cope and sadly I think

most people have learned on the hoof as they've been going along. I think training is a huge thing that needs support and needs time" (p. 303).

Work Conditions and Teachers' Well-being Teachers and support staff have emphasized the emotional impact and stress of working with autistic students, which contributes to absenteeism and health problems (Dann, 2011; Jindal-Snape et al., 2006). In Dann (2011), "Emotions run really high, I think, when staff are dealing with pupils like this ... I don't think you can underestimate the stresses some of these children put on staff" (p. 298). Furthermore, teachers consider staff stability a key factor in implementing effective intervention practices for the transition of autistic students (Beaupré et al., 2017).

Discussion

Emphasizing the significance of teachers' narratives is essential for developing more effective interventions for autistic students. This review sought to synthesize research that explored how teachers perceive the transition of autistic students from primary to secondary school, aiming to understand important educational strategies and practices. Furthermore, it is necessary to highlight that teachers' experiences are shaped by the context they are part of. Non-inclusive structures, lack of training, resources and staff impact their daily work. The main results are discussed below in light of the key factors identified. Implications for practice, policy, and teacher education are presented in a dedicated subsection.

The early design of transition plans was highlighted across studies. Specific issues emerged concerning the placement of autistic students in secondary schools, with a particular need for early decision-making to alleviate uncertainty, especially for families. This finding is consistent with research indicating that planning and preparation are essential for autistic students to successfully transition (Stack et al., 2021; Waters et al., 2014). It was also identified as important for prioritizing the needs of autistic students, which implies collecting comprehensive information about them and adopting a flexible stance. Additionally, there was an emphasis on involving autistic students in decision-making processes. Involving students in the transition planning process seems to be a condition for a positive transition experience to secondary school, leading to a sense of inclusion and belonging to the school community (Hebron, 2018). However, the literature reveals that autistic students have minimal active involvement in the transition planning process (Chandroo et al., 2018; Webster et al., 2022). Emotional challenges, including anxiety, were a common

concern, with teachers highlighting autistic students' worries about uncertainty in the new educational setting and fears of being bullied. Thus, the development of functional and personal competencies such as self-sufficiency and self-determination was identified as a key objective to facilitate the transition. Teachers also stressed that autistic students may encounter social challenges during their transition to secondary school, and studies highlighted the importance of developing social and communication skills. These findings are consistent with research showing that the emotional and social functioning of autistic students is particularly vulnerable during the transition, requiring support strategies (Fortuna et al., 2014). Continued challenges beyond the initial transition also exist, with autistic students in mainstream settings experiencing higher levels of anxiety and anger than their peers without SEN (Hebron & Humphrey, 2012). Social positioning within the classroom also appears relevant, as having a respected and valued role may support smoother transitions (Richter et al., 2019). At the same time, teachers' emphasis on developing students' skills may reflect a tendency to place responsibility for adaptation primarily on autistic students rather than on contextual change.

Academic and organizational adjustment was identified by teachers as a major challenge in the transition to secondary school. Differences in pedagogy and school structure—particularly the shift to having multiple-subject teachers—were perceived as especially difficult for autistic students. In secondary education, support was described as less frequent and personalized, which may hinder students' access to the curriculum and their ability to manage less structured parts of the day. These findings align with Minnie's (2024) study, in which autistic students reported feeling overwhelmed by the need to adapt to differing expectations across teachers.

Different specific activities have emerged as facilitators of autistic students' transitions. The most prevalent practice involved visits to secondary schools, whereas secondary school staff visiting autistic primary school students was identified as a less frequent practice. Teachers described specific activities based on the use of visual supports as anticipatory methods: social stories, video priming, providing students with a map of the new school, and sharing photographs of secondary school staff. Visual supports and anticipatory strategies have traditionally been considered important educational resources for autistic children (Jordan, 1999; Jordan & Powell, 1995) and currently continue to be useful, as stated in good autism education practice reports (e.g., Guldberg et al., 2019).

Relationships between autistic students and their teachers and other school personnel, such as caretakers, psychologists, or support teachers, are crucial for a successful transition. The importance of peer relationships for autistic students is also recognized by secondary school teachers,

who have developed a range of initiatives, including peer mentoring programs, buddy systems, circles of friends, and lunchtime activities. These findings imply the need to ensure high levels of support and regular contact with key adults in different areas and peers, highlighting the importance of developing trusting relationships.

Teachers' attitudes toward the inclusion of autistic students appeared to be another key factor in facilitating the transition process. The secondary school teachers emphasized the importance of fostering inclusive attitudes, stating that it is important for each subject teacher to understand that they should take responsibility for supporting the inclusion of autistic students. This finding is consistent with previous research, which indicates that positive attitudes toward inclusive education are essential for its successful implementation (Dignath et al., 2022). Teachers' negative attitudes toward autistic students can be a barrier to implementing inclusive education, as these attitudes appear to be associated with their daily teaching practices and the use of strategies and interventions (Han & Cumming, 2022). Several systematic reviews have focused on teachers' attitudes toward the inclusion of students with SEN (van Steen & Wilson, 2020; Yada et al., 2022) and autistic students in particular (Gómez-Marí et al., 2022; Kofidou et al., 2017), concluding that their attitudes impact inclusive practices. Gómez-Marí et al. (2022) noted knowledge, experience, and training as variables that moderate attitudes. This finding is in line with ours, as secondary school teachers indicated that a thorough knowledge of autism and previous experience working with autistic students were crucial to facilitating transition (Makin et al., 2017). Additionally, primary school teachers stressed the importance of believing in the ability of autistic students to succeed in mainstream secondary education curricula. This result is congruent with other literature highlighting the importance of expectations about the learning that autistic students can achieve, with low expectations being a barrier to inclusion (Solís et al., 2019).

Barriers related to the use of visual supports were also identified, particularly when students were not familiar with them or when supports changed during transition. Another barrier identified referred to the lack of adaptation of secondary school spaces to accommodate the needs of autistic students transitioning. These findings highlight the importance of considering environmental and contextual factors in inclusive education (UNESCO, 2005).

Collaboration emerged as a factor influencing the transition process across studies, with evidence highlighting both challenges and effective practices at multiple levels. At the inter-school level, the results outlined challenges and key practices in facilitating the transition between primary and secondary teachers. In the present study, limiting factors included time constraints for visiting primary schools and

a lack of time for primary school teachers to give full feedback on students' progress and needs. Teachers also considered the tensions between primary and secondary teachers in terms of disagreements over who is responsible for ensuring a successful transition as a barrier. On the other hand, key practices included supporting secondary staff familiar with autistic students before their transition, developing close liaison and communication between primary and secondary teachers, and improving information-sharing procedures between schools. These findings are consistent with previous literature (Nuske et al., 2019). At the secondary school level, the results also indicated the relevance of coordinated interaction among staff members. Previous studies have also shown the need for better communication between professionals about transition plans and their implementation (Bruck et al., 2022). Reported practices included sharing information about autistic students among all staff members, creating spaces for communication between staff about effective strategies, adding flexibility to work schedules to encourage formal consultation, and facilitating the exchange of teachers' knowledge and experience regarding an inclusive school culture.

At the family-school level, communication with parents was deemed necessary, with teachers perceiving families as essential liaisons to understand individual children's needs and plan the transition accordingly. Teachers also felt responsible for empowering parents by facilitating communication, allowing participation, providing information, and offering supportive measures such as orientation days and IEP meetings. Similarly, previous research has also identified the utilization of parents' knowledge of their children as an important condition for more authentic inclusion and smoother transitions (Tso & Strnadová, 2017).

Teachers emphasized several key orientations related to teaching strategies that are essential for addressing the needs of autistic students in secondary schools. These orientations include supporting individual motivations and developing personalized teaching strategies; maintaining predictable routines; employing explicit teaching through simple, visual, and sequential explanations; planning classes in the long term; and utilizing punctual resources for task organization, such as clear and coded timetables and task checklists. These strategies are part of the educational initiatives that have been designed for autistic students for a long time (Jordan, 1999; Jordan & Powell, 1995).

At the institutional level, there are organizational measures that teachers perceive as important in secondary education to promote transition. Teachers emphasized the importance of a direct support service for autistic students as well as the provision of designated "safe spaces" for autistic students. Smaller secondary schools, an accessible environment, and stable enrollment procedures were

also deemed important by teachers. At the mainstream classroom level, organizational measures included additional support teachers for autistic students, ensuring stability within class groups. The findings also highlighted the effectiveness of organizational measures that combine support in both mainstream and special classrooms. These organizational measures can be seen as generally inclusive actions and are also essential for reinforcing the transition process.

The need for professional training in several areas for a successful transition, including (a) autism knowledge, communication, and behavior management; (b) the implementation of visual supports; and (c) curriculum adaptations, has been identified. Recent studies have shown how training autism teachers in these and other related areas can have a positive effect on students' school experiences and inclusion (Supianto, 2025; Tagavi et al., 2024).

Working with autistic students has been identified by teachers as a source of stress and health issues. In line with these findings, previous reviews and meta-analytic studies have confirmed that special education teachers are particularly vulnerable to burnout (Brunsting et al., 2014; Park & Shin, 2020). However, evidence suggests that stress experienced by teachers is often linked not to the presence of autistic students, but to insufficient support, training, and systemic barriers (Roberts & Simpson, 2016). Another finding to consider is the need for a stable team of teachers within schools. High turnover of teachers can create additional stress during the already challenging transition to secondary school.

Implications for Practice, Policy, and Teacher Education

Implications for Practice

The findings identify several actionable strategies to support autistic students during the transition to secondary education. Early and structured transition planning appears to be an important consideration, including timely decision-making regarding school placement and the systematic collection of individualized student information. A learner-centered approach may facilitate this process by ensuring that autistic students are actively involved in transition planning and have opportunities to communicate their preferences and needs. Anticipatory activities, such as school visits and familiarization with staff and spaces, may also be beneficial in supporting the transition. Supporting emotional well-being is also essential. This includes addressing anxiety related to uncertainty and bullying, and promoting social inclusion through structured peer-based initiatives such as buddy systems or mentoring programs.

In classroom practice, teachers can support students' transitions by taking existing friendships into account and grouping students from the same primary school in the same classes whenever possible (Wang & Eccles, 2012). Teachers should implement predictable routines, explicit and structured instruction, and visual supports (e.g., social stories, visual schedules, video priming) to increase environmental predictability. Although a significant proportion of autistic students benefit from visual supports, they need opportunities to learn and practise how to use them effectively, especially when these supports change during the transition. Families may also benefit from guidance on how to help children use visual supports and generalize their use across home and other settings.

The findings also highlight the importance of facilitating participation in cooperative learning and supporting navigation across multiple-subject teaching contexts. Importantly, these practices should be embedded within inclusive environments that promote interaction between autistic and non-autistic students, rather than placing the responsibility for adaptation solely on the autistic student.

The role of families in the lives of SEN students has also been studied to date (Lupea et al., 2024), highlighting the necessity of fostering parental confidence and assuaging fears regarding their child's condition to reduce anxiety and overprotection (Issabayeva et al., 2024), among other aspects, which can facilitate good transition and inclusion practices. In general, involving families in the transition planning process appears to be an important component of a positive transition experience to secondary school, leading to a sense of belonging to the school community (Hebron, 2018).

Implications for Policy

At the policy level, the findings suggest the importance of strengthening structural conditions that enable effective transitions. Policymakers may wish to consider ensuring the provision of adequate resources, staff, and training to support inclusive practices across educational stages. The findings also suggest that the development of coordinated transition frameworks, including the potential implementation of dedicated transition coordinators may facilitate continuity of support. Policies can also promote systematic collaboration between primary and secondary schools by facilitating time and structures for communication, as well as the use of secure digital platforms for information sharing. In addition, clearly defining each stakeholder's responsibilities within the transition process (e.g., teachers, support staff, school leaders, and families) may help reduce ambiguity, improve coordination, and ensure accountability.

As outlined in the guidelines for inclusion (UNESCO, 2005), schools are responsible for making reasonable adjustments, including those related to physical spaces, which can help SEN students feel more comfortable. Investments in inclusive school environments are therefore essential, including the provision of safe spaces for autistic students. Additionally, policies aimed at improving teacher retention, reducing workload, and supporting teacher well-being are important, as systemic factors significantly impact both teacher experiences and student outcomes. To increase SEN teachers' retention and, in turn, improve transition and inclusion practices, policymakers may wish to consider measures in line with previous studies, which have highlighted the need to assess working conditions, offer financial compensation, redistribute routine paperwork, and support early-career teachers (Billingsley & Bettini, 2019).

The potential role of perceived support has been found to decrease burnout by reducing stress and emotional exhaustion among teachers (Langher et al., 2017). Considering this, policymakers may also consider providing institutions and teachers with as much effective support as possible, informing them of all the services they have access to and the collaborations they can build to find such support. This should be especially the case for circumstances in which teachers face stressful work conditions, such as in the transition from primary to secondary education. Providing high-quality support helps teachers not only deal better with stressful work situations but also be more positive about inclusion (Avramidis & Norwich, 2002).

Implications for Teacher Education

The review highlights the importance of both initial teacher education and ongoing professional development in supporting successful transitions. Teacher education programs may benefit from including comprehensive training on autism, covering areas such as communication, behavior support, use of visual supports, and curriculum adaptation. This is considered a necessary action to overcome prejudices, breakdown, and develop more realistic expectations of students' abilities to adapt to secondary education.

Professional development opportunities are likely to be more valuable when they are continuous and practice-oriented, enabling teachers to apply evidence-based strategies in real and diverse educational contexts. Joint training initiatives involving primary and secondary teachers may be particularly beneficial in fostering shared understanding and improving coordination across educational stages. Furthermore, teacher education should explicitly address inclusive pedagogies, emphasizing the need to adapt educational environments and practices, rather than positioning autistic students as solely responsible for adjustment.

Interpreting Findings Within Structural and Institutional Contexts

While the findings presented and discussed in this article highlight key factors influencing the transition from primary to secondary education, it is important to interpret teachers' perspectives within the broader institutional and structural contexts in which they are situated.

Teachers have a multidimensional role in complex transition processes. This opens up positive prospects, as they themselves can actively contribute to shaping the transition process in various ways. However, teachers' perspectives should not be interpreted in isolation, but rather understood as situated within specific institutional and structural contexts. Factors such as limited resources, insufficient training in autism, and systemic constraints within secondary education settings may significantly shape how teachers perceive and respond to transition-related challenges. Often, they are operating in a context that offers only minimal scope for this. In this sense, some of the difficulties attributed to autistic students may, at least in part, reflect broader structural barriers rather than student-level characteristics alone. The limited capacity of schools to provide individualized support, alongside pressures related to curriculum demands and classroom management, can restrict teachers' ability to enact inclusive practices. In the worst case, this can lead to the students themselves being seen as barriers rather than as co-creators of the transition process and everyday school life.

Limitations and Future Research Directions

Several limitations should be acknowledged in this review. One limitation is that the screening and study selection processes were primarily conducted by a single reviewer. Although predefined eligibility criteria were consistently applied and uncertainties were discussed with a second reviewer to reach consensus, the absence of independent double screening may have increased the risk of selection bias or omission of relevant studies. Consequently, this methodological limitation should be considered when interpreting the findings.

Another limitation is the small number of studies identified, some of which include a very small number of teachers, despite the relevance of the subject studied. In addition, two of the included studies were published before 2013 and were identified exclusively through citation searching rather than the primary database search. Although these studies met all predefined eligibility criteria and contributed relevant evidence, it is possible that other earlier studies meeting the same criteria were not identified because they were

not connected to the reference lists of the included articles. This potential omission should be considered when interpreting the findings.

In this review, only the perspectives of teachers were analyzed. However, the transition process involves other professionals, such as educational psychologists and speech-language therapists whose perspectives should be considered when identifying comprehensive and holistic strategies. In this context, an evaluation of the transition of children from primary to secondary school is necessary. For this purpose, a reliable measurement tool that encompasses the perspectives of all key stakeholders, including students, families, teachers, and other school staff, is essential. The findings of the present review can inform the development of research instruments that provide systematic information about this specific transition for autistic students. They also provide a useful basis for identifying the teacher-related dimensions that such instruments should incorporate.

A further limitation is that the findings synthesised in this review reflect teachers' perceptions regarding the usefulness of different transition practices and supports. Although these perceptions provide valuable insights into educators' experiences, they should not be interpreted as evidence of the effectiveness of these practices. The effectiveness of specific transition strategies should be established through empirical research specifically designed to evaluate their impact.

The literature reveals a lack of longitudinal studies with large samples from diverse educational systems. Most studies originate from English-speaking countries, resulting in limited or no representation of other global regions, limiting the scope and applicability of the current findings. This geographical concentration is particularly relevant given that educational systems and resource availability vary substantially across countries, which may influence how transition processes are conceptualized and implemented. In addition, global reports highlight persistent disparities in access to inclusive education, as well as differences in the extent to which education systems are able to provide adequate support, infrastructure, and trained personnel (UNESCO, 2020). Therefore, caution is warranted when transferring these findings to other educational contexts, particularly those with different policy frameworks, levels of resources, or stages of development in inclusive education. Future research would benefit from including a more diverse range of geographical and educational contexts to better capture this variability.

Although the importance of directly involving autistic students in planning their transition is recognized, there are still barriers that limit their participation. Thus, research should focus on identifying these obstacles and developing strategies to foster their active involvement in

decision-making. Another particularly relevant line focuses on the impact of key interpersonal relationships, both with adults and peers, on the success of the transition process. It would be valuable to study how the continuity of meaningful relationships (such as grouping students from the same primary school in the same class) can facilitate adaptation. It is also essential to explore in greater depth the factors that influence collaboration between schools at different stages and between schools and families and analyze how these relationships are built, maintained, and strengthened.

With respect to the organizational characteristics of schools, how elements such as the size of the school, the distribution of spaces, or the stability of the teaching staff affect the inclusion and adaptation of autistic students in their new educational environment should be investigated. With respect to teacher attrition, further research is needed to better identify the factors that promote retention and how these factors impact the transition experience. It would also be valuable to explore the organizational conditions that may contribute to the burnout of teachers involved in these transition processes.

Finally, given the relevance of teacher training, future research could focus on assessing which models of professional development are most effective in improving teachers' knowledge, attitudes, and practices in relation to the transition and inclusion of autistic learners.

Conclusions

This systematic review highlights key educational strategies and practices influencing the primary to secondary school transitions of autistic students, drawing on ten studies in which teachers' perspectives constitute the main source of data. The increase in the number of autistic children in mainstream schools in many countries has led to new challenges. The findings of this study can guide policymakers and leaders in education on enhancing the transition process for autistic students.

This research highlights the importance of incorporating teachers' narratives as a valuable resource for the development of inclusive policies and practices. Taking into account the teachers' voices allowed us to identify specific barriers to and facilitators of the transition process, as well as to promote structural and cultural changes that contribute to improving the school trajectories of autistic students.

Overall, the findings reinforce the need to conceptualize teachers not only as implementers of transition practices but as key systemic actors in the design and coordination of inclusive transition processes. Recognizing and supporting this multifaceted role is essential to ensure more effective and inclusive transitions for autistic students.

Declarations

Conflict of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147. <https://doi.org/10.1080/008856250210129056>
- Beaupré, P., Gauthier, M., & Germain, M. P. (2017). Des pratiques gagnantes pour la transition au secondaire des élèves autistes. *Enfance en Difficulté*, 5, 73–99. <https://doi.org/10.7202/1043355ar>
- Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. <https://doi.org/10.3102/0034654319862495>
- Bloyce, J., & Frederickson, N. (2012). Intervening to improve the transfer to secondary school. *Educational Psychology in Practice*, 28(1), 1–18. <https://doi.org/10.1080/02667363.2011.639345>
- Boujut, E., Popa-Roch, M., Palomares, E.-A., Dean, A., & Cappe, E. (2017). Self-efficacy and burnout in teachers of students with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 36, 8–20. <https://doi.org/10.1016/j.rasd.2017.01.002>
- Bruck, S., Webster, A. A., & Clark, T. (2022). Transition support for students on the autism spectrum: A multiple stakeholder perspective. *Journal of Research in Special Educational Needs*, 22(1), 3–17. <https://doi.org/10.1111/1471-3802.12509>
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681–711. <https://doi.org/10.1353/etc.2014.0032>
- Cantali, D. (2019). Moving to secondary school for children with ASN: A systematic review of international literature. *British Journal of Special Education*, 46(1), 29–52. <https://doi.org/10.1111/1467-8578.12258>
- Chandroo, R., Strnadová, I., & Cumming, T. (2018). A systematic review of the involvement of students with autism spectrum disorder in the transition planning process: Need for voice and empowerment. *Research in Developmental Disabilities*, 83, 8–17. <https://doi.org/10.1016/j.ridd.2018.07.011>
- Costley, D., Emerson, A., Ropar, D., & Sheppard, E. (2021). The anxiety caused by secondary schools for autistic adolescents: In their own words. *Education Sciences*, 11(11), 726. <https://doi.org/10.3390/educsci11110726>
- Cumming, T. M., Strnadová, I., & Danker, J. (2020). Transitions of students with autism and intellectual disabilities in inclusive settings: The nexus between recommended and actual practice. *Australasian Journal of Special and Inclusive Education*, 44(1), 28–45. <https://doi.org/10.1017/jsi.2020.1>
- Dann, R. (2011). Secondary transition experiences for pupils with autistic spectrum conditions (ASCs). *Educational Psychology in Practice*, 27(3), 293–312. <https://doi.org/10.1080/02667363.2011.603534>
- Deacy, E., Jennings, F., & O'Halloran, A. (2015). Transition of students with autistic spectrum disorders from primary to post-primary school: A framework for success. *Support for Learning*, 30(4), 292–304. <https://doi.org/10.1111/1467-9604.12102>
- Dignath, C., Rimm-Kaufman, S., van Ewijk, R., & Kunter, M. (2022). Teachers' beliefs about inclusive education and insights on what contributes to those beliefs: A meta-analytical study. *Educational*

- Psychology Review*, 34(4), 2609–2660. <https://doi.org/10.1007/s10648-022-09695-0>
- Dixon, R. M., & Tanner, K. (2013). The experience of transitioning two adolescents with asperger syndrome in academically focused high schools. *Australasian Journal of Special Education*, 37(1), 28–48. <https://doi.org/10.1017/jse.2013.5>
- Fortuna, R. (2014). The social and emotional functioning of students with an autistic spectrum disorder during the transition between primary and secondary schools: Autism and transition. *Support for Learning*, 29(2), 177–191. <https://doi.org/10.1111/1467-9604.12056>
- Frey, A., Ruchkin, V., Martin, A., & Schwab-Stone, M. (2009). Adolescents in transition: School and family characteristics in the development of violent behaviors entering high school. *Child Psychiatry and Human Development*, 40(1), 1–13. <https://doi.org/10.1007/s10578-008-0105-x>
- Goldstein, S. E., Boxer, P., & Rudolph, E. (2015). Middle school transition stress: Links with academic performance, motivation, and school experiences. *Contemporary School Psychology*, 19(1), 21–29. <https://doi.org/10.1007/s40688-014-0044-4>
- Gómez-Mari, I., Sanz-Cervera, P., & Tárraga-Mínguez, R. (2022). Teachers' attitudes toward autism spectrum disorder: A systematic review. *Education Sciences*, 12(2), 138. <https://doi.org/10.3390/educsci12020138>
- Goos, M., & Decelle, A. (2016). Mind the gap! Perceptions of teachers, principals and teacher educators regarding the primary-secondary school transition in Flanders. *Paper Presented at the EAPRIL Conference, Porto, Portugal., 2016*, 239.
- Guldborg, K., Bradley, R., Wittemeyer, K., Briscoombe, J., Phillips, C., & Jones, G. (2019). *Good autism practice: Full report*. Autism Education Trust.
- Han, C., & Cumming, T. M. (2022). Teachers' beliefs about the provision of education for students with autism spectrum disorder: A systematic review. *Review Journal of Autism and Developmental Disorders*, 11(3), 545–563. <https://doi.org/10.1007/s40489-022-00350-6>
- Hanewald, R. (2013). Transition between primary and secondary school: Why it is important and how it can be supported. *Australian Journal of Teacher Education*, 38(1), 62–74. <https://doi.org/10.14221/ajte.2013v38n1.7>
- Hannah, E. F., & Topping, K. J. (2012). Anxiety levels in students with autism spectrum disorder making the transition from primary to secondary school. *Education and Training in Autism and Developmental Disabilities*, 47(2), 198–209.
- Hebron, J. S. (2018). School connectedness and the primary to secondary school transition for young people with autism spectrum conditions. *British Journal of Educational Psychology*, 88(3), 396–409. <https://doi.org/10.1111/bjep.12190>
- Hebron, J. S., & Humphrey, N. (2012). Mental health difficulties among young people with autistic spectrum disorders in mainstream secondary schools: A comparative study. *Journal of Research in Special Educational Needs*, 14(1), 22–32. <https://doi.org/10.1111/j.1471-3802.2012.01246.x>
- Hoy, K., Parsons, S., & Kovshoff, H. (2018). Inclusive school practices supporting the primary to secondary transition for autistic children: Pupil, teacher, and parental perspectives. *Advances in Autism*, 4(4), 184–196. <https://doi.org/10.1108/AIA-05-2018-0016>
- Issabayeva, Z., Sapargaliyeva, A., Shubayeva, G., Shalabayeva, K., & Ismagambetova, G. (2024). Psychological and pedagogical support for parents of children with special educational needs. *Continuity in Education*, 5(1), 66–75. <https://doi.org/10.5334/cie.103>
- *Jindal-Snape, D., Douglas, W., Topping, K. J., Kerr, C., & Smith, E. F. (2006). Autistic spectrum disorders and primary-secondary transition. *International Journal of Special Education*, 21(2), 18–31
- Jindal-Snape, D., Hannah, E. F. S., Cantali, D., Barlow, W., & MacGillivray, S. (2020). Systematic literature review of primary-secondary transitions: International research. *Review of Education*, 8(2), 526–566. <https://doi.org/10.1002/rev3.3197>
- Joanna Briggs Institute. (2014). *Joanna Briggs Institute reviewers' manual: 2014 edition*. University of Adelaide.
- Jordan, R. (1999). *Autistic spectrum disorders: An introductory handbook for practitioners*. David Fulton Publishers.
- Jordan, R., & Powell, S. (1995). *Understanding and teaching children with autism*. John Wiley & Sons.
- Kofidou, C., Mantzikos, C., Chatzitheodorou, G., Kyparissos, N., Karali, A. (2017). Teachers' Perceptions and Attitudes on the inclusive education of Students with Autism Spectrum Disorders (ASD): A Literature Review. *Dialogoi! Theory and Praxis in Education*, 3, 35–68. <https://doi.org/10.12681/dial.11965>
- Kohler, P. D., Gothberg, J. E., Fowler, C., & Coyle, J. (2016). *Taxonomy for transition programming 2.0: A model for planning, organizing, and evaluating transition education, services, and programs*. Western Michigan University.
- Langher, V., Caputo, A., & Ricci, M. E. (2017). The potential role of perceived support for reduction of special education teachers' burnout. *International Journal of Educational Psychology*, 6(2), 120–147. <https://doi.org/10.17583/ijep.2017.2126>
- Larney, R., & Quigley, J. (2006). Exploring current practice for supporting pupils with autistic spectrum disorders during primary to secondary transition. *Educational Psychology in Scotland*, 8(1), 2–5. <https://doi.org/10.53841/bpsepis.2006.8.1.2>
- Leifler, E., Carpelan, G., Zakrevska, A., Bölte, S., & Jonsson, U. (2021). Does the learning environment 'make the grade'? A systematic review of accommodations for children on the autism spectrum in mainstream school. *Scandinavian Journal of Occupational Therapy*, 28(8), 582–597. <https://doi.org/10.1080/11038128.2020.1832145>
- Lord, C., Charman, T., Havdahl, A., Carbone, P., Anagnostou, E., Boyd, B., Carr, T., De Vries, P. J., Dissanayake, C., Divan, G., Freitag, C. M., Gotelli, M. M., Kasari, C., Knapp, M., Mundy, P., Plank, A., Scahill, L., Servili, C., Shattuck, P., & McCauley, J. B. (2022). The Lancet commission on the future of care and clinical research in autism. *Lancet*, 399(10321), 271–334. [https://doi.org/10.1016/S0140-6736\(21\)01541-5](https://doi.org/10.1016/S0140-6736(21)01541-5)
- Lupea, C., Rus, M., Sandu, M. L., & Rus, C. V. (2024). The role of the family in the lives of children with SEN. *Technium Social Sciences Journal*, 55(1), 248–261. <https://doi.org/10.47577/tssj.v55i1.10695>
- Makin, C., Hill, V., & Pellicano, E. (2017). The primary-to-secondary school transition for children on the autism spectrum: A multi-informant mixed-methods study. *Autism & Developmental Language Impairments*. <https://doi.org/10.1177/2396941516684834>
- Mandy, W., Murin, M., Baykaner, O., Staunton, S., Cobb, R., Hellriegel, J., Anderson, S., & Skuse, D. (2016). Easing the transition to secondary education for children with autism spectrum disorder: An evaluation of the Systemic Transition in Education Programme for Autism Spectrum Disorder (STEP-ASD). *Autism*, 20(5), 580–590. <https://doi.org/10.1177/1362361315598892>
- Matthias, C., LaVelle, J. M., Johnson, D. R., Wu, Y. C., & Thurlow, M. L. (2021). Exploring predictors of bullying and victimization of students with autism spectrum disorder (ASD): Findings from NLTS 2012. *Journal of Autism and Developmental Disorders*, 51, 4632–4643. <https://doi.org/10.1007/s10803-021-04907-y>
- Minnie, C. A. (2024). Transition from primary to secondary school from the perspectives of students with autism spectrum disorder and concomitant intellectual giftedness. *Australasian Journal of Special and Inclusive Education*, 48(1), 16–29. <https://doi.org/10.1017/jsi.2023.14>
- Neal, S., & Frederickson, N. (2016). ASD transition to mainstream secondary: A positive experience? *Educational Psychology in Practice*, 32(4), 355–373. <https://doi.org/10.1080/02667363.2016.1193478>

- Nelemans, S. A., Hale, W. W., Branje, S. J., Meeus, W. H., & Rudolph, K. D. (2018). Individual differences in anxiety trajectories from grades 2 to 8: Impact of the middle school transition. *Development and Psychopathology*, 30(4), 1487–1501. <https://doi.org/10.1017/S0954579417001584>
- Nuske, H. J., McGhee Hassrick, E., Bronstein, B., Hauptman, L., Aponte, C., Levato, L., & Smith, T. (2019). Broken bridges—new school transitions for students with autism spectrum disorder: A systematic review on difficulties and strategies for success. *Autism*, 23(2), 306–325. <https://doi.org/10.1177/1362361318754529>
- Ochi, M., Kawabe, K., Ochi, S., Miyama, T., Horiuchi, F., & Ueno, S. I. (2020). School refusal and bullying in children with autism spectrum disorder. *Child and Adolescent Psychiatry and Mental Health*, 14, Article 17. <https://doi.org/10.1186/s13034-020-00325-7>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., & Alonso-Fernández, S. (2021). Declaración PRISMA 2020: Una guía actualizada para la publicación de revisiones sistemáticas. *Revista española de cardiología*, 74(9), 790–799. <https://doi.org/10.1016/j.recesp.2021.06.016>
- Park, E. Y., & Shin, M. (2020). A meta-analysis of special education teachers' burnout. *SAGE Open*. <https://doi.org/10.1177/2158244020918297>
- Peters, R., & Brooks, R. (2016). Parental perspectives on the transition to secondary school for students with Asperger syndrome and high-functioning autism: A pilot survey study. *British Journal of Special Education*, 43(1), 75–91. <https://doi.org/10.1111/1467-8578.12125>
- Richter, M., Popa-Roch, M., & Clément, C. (2019). Successful transition from primary to secondary school for students with autism spectrum disorder: A systematic literature review. *Journal of Research in Childhood Education*, 33(3), 382–398. <https://doi.org/10.1080/02568543.2019.1630870>
- Roberts, J., & Simpson, K. (2016). A review of research into stakeholder perspectives on inclusion of students with autism in mainstream schools. *International Journal of Inclusive Education*, 20(10), 1084–1096. <https://doi.org/10.1080/13603116.2016.1145267>
- Rodriguez, C. D., Cumming, T. M., & Strnadová, I. (2017). Current practices in schooling transitions of students with developmental disabilities. *International Journal of Educational Research*, 83, 1–19. <https://doi.org/10.1016/j.ijer.2017.02.006>
- Solís, P., Pedrosa, I., & Mateos-Fernández, L. M. (2019). Assessment and interpretation of teachers' attitudes towards students with disabilities. *Culture and Education*, 31(3), 576–608. <https://doi.org/10.1080/11356405.2019.1630955>
- Stack, K., Symonds, J. E., & Kinsella, W. (2020). Student and parent perspectives of the transition from primary to secondary school for students with autism spectrum disorder. *Frontiers in Education*. <https://doi.org/10.3389/educ.2020.551574>
- Stack, K., Symonds, J. E., & Kinsella, W. (2021). The perspectives of students with autism spectrum disorder on the transition from primary to secondary school: A systematic literature review. *Research in Autism Spectrum Disorders*, 84, Article 101782. <https://doi.org/10.3389/educ.2020.551574>
- Strand, G. M. (2020). Supporting the transition to secondary school: The voices of lower secondary leaders and teachers. *Educational Research*, 62(2), 129–145. <https://doi.org/10.1080/00131881.2020.1750305>
- *Strnadová, I., Cumming, T. M., & Danker, J. (2016). Transitions for students with intellectual disability and/or autism spectrum disorder: Carer and teacher perspectives. *Australasian Journal of Special Education*, 40(2), 141–156. <https://doi.org/10.1017/jse.2016.2>
- Supianto (2025). Enhancing Professional Development for Educators Supporting Autistic Students. *Evidence-Based Practice in Child and Adolescent Mental Health*, 1–2. <https://doi.org/10.1080/23794925.2025.2457619>
- Tagavi, D. M., Harbin, S. G., Hugh, M. L., Hernandez, A. M., Joshi, M., Pullmann, M. D., & Locke, J. (2024). Examining professional development for special education teachers, general education teachers, and paraeducators who support autistic elementary students. *Evidence-Based Practice in Child and Adolescent Mental Health*, 1–18. <https://doi.org/10.1080/23794925.2024.2378419>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*. <https://doi.org/10.1186/1471-2288-8-45>
- Tso, M., & Strnadová, I. (2017). Students with autism transitioning from primary to secondary schools: Parents' perspectives and experiences. *International Journal of Inclusive Education*, 21(4), 389–403.
- UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education—All means all*. UNESCO.
- United Nations Educational, Scientific and Cultural Organization. (2005). *Guidelines for inclusion: Ensuring access to education for all*. UNESCO.
- van Steen, T., & Wilson, C. (2020). Individual and cultural factors in teachers' attitudes towards inclusion: A meta-analysis. *Teaching and Teacher Education*, 95, Article 103127. <https://doi.org/10.1016/j.tate.2020.103127>
- Wang, M. T., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, 83(3), 877–895. <https://doi.org/10.1111/j.1467-8624.2012.01745.x>
- Waters, S. K., Lester, L., & Cross, D. (2014). Transition to secondary school: Expectation versus experience. *Australian Journal of Education*, 58(2), 153–166. <https://doi.org/10.1177/0004944114523371>
- Webster, A., Bruck, S., & Saggars, B. (2022). Supporting self-determination of autistic students in transitions. *Research in Developmental Disabilities*, 128, Article 104301. <https://doi.org/10.1016/j.ridd.2022.104301>
- Whelan, M., McGillivray, J., & Rinehart, N. J. (2024). Using life course theory to explore the association between autistic traits, child, family, and school factors and the successful transition to secondary school. *Journal of Autism and Developmental Disorders*, 54(6), 2333–2346. <https://doi.org/10.1007/s10803-022-05845-z>
- Yada, A., Leskinen, M., Savolainen, H., & Schwab, S. (2022). Meta-analysis of the relationship between teachers' self-efficacy and attitudes toward inclusive education. *Teaching and Teacher Education*, 109, Article 103521. <https://doi.org/10.1016/j.tate.2021.103521>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.