TRANSITIONS THROUGH EDUCATION

EDITED BY: Elizabeth Fraser Selkirk Hannah and Divya Jindal-Snape
PUBLISHED IN: Frontiers in Education and Frontiers in Psychology

frontiers Research Topics

ISSN 1664-8714
ISBN 978-2-88974-538-8
DOI 10.3389/978-2-88974-538-8

About Frontiers

Frontiers is more than just an open-access publisher of scholarly articles: it is a pioneering approach to the world of academia, radically improving the way scholarly research is managed. The grand vision of Frontiers is a world where all people have an equal opportunity to seek, share and generate knowledge. Frontiers provides immediate and permanent online open access to all its publications, but this alone is not enough to realize our grand goals.

Frontiers Journal Series

The Frontiers Journal Series is a multi-tier and interdisciplinary set of open-access, online journals, promising a paradigm shift from the current review, selection and dissemination processes in academic publishing. All Frontiers journals are driven by researchers for researchers; therefore, they constitute a service to the scholarly community. At the same time, the Frontiers Journal Series operates on a revolutionary invention, the tiered publishing system, initially addressing specific communities of scholars, and gradually climbing up to broader public understanding, thus serving the interests of the lay society, too.

Dedication to Quality

Each Frontiers article is a landmark of the highest quality, thanks to genuinely collaborative interactions between authors and review editors, who include some of the world's best academicians. Research must be certified by peers before entering a stream of knowledge that may eventually reach the public - and shape society; therefore, Frontiers only applies the most rigorous and unbiased reviews.
Frontiers revolutionizes research publishing by freely delivering the most outstanding research, evaluated with no bias from both the academic and social point of view. By applying the most advanced information technologies, Frontiers is catapulting scholarly publishing into a new generation.

What are Frontiers Research Topics?

Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact

TRANSITIONS THROUGH EDUCATION

Topic Editors:
Elizabeth Fraser Selkirk Hannah, University of Dundee, United Kingdom
Divya Jindal-Snape, University of Dundee, United Kingdom

Citation: Hannah, E. F. S., Jindal-Snape, D., eds. (2022).
Transitions Through Education. Lausanne: Frontiers Media SA.
doi: 10.3389/978-2-88974-538-8

Table of Contents

frontiers in Education

EDITORIAL
published: 28 January 2022
doi: 10.3389/feduc.2022.830999

Editorial: Transitions Through Education

Elizabeth Fraser Selkirk Hannah and Divya Jindal-Snape*

School of Education and Social Work, University of Dundee, Dundee, United Kingdom

Keywords: education, children, young adults, young people, transitions

Editorial on the Research Topic

Transitions Through Education

Throughout our life span we go through a range of different types of transitions. These transitions can be construed from a positive and/or negative discourse, offering challenges and opportunities to grow and develop as human beings. This research topic focuses on the educational transitions of children, young people and young adults in compulsory and post-compulsory education. The aim was to identify and address gaps in the literature; offer new insights in the area; and provide recommendations for policy, practice and future research. In total, there are nine articles, comprising one literature review and eight empirical studies.

Jindal-Snape et al. identify a gap in previous literature reviews of primary-secondary transitions, namely none have focused on researchers' worldviews, use of theories/models and adoption of frameworks. The authors argue that it is important to understand researchers' conceptual frameworks and how these underpin their methodology, interpretation of findings and conclusions. Using a systematic mapping review process, the authors found that most researchers in the 96 papers did not offer their conceptualisation of transition and, of those that did, few used that conceptualisation to underpin the research design and interpretation of findings. The findings from this review have implications for developing a more robust research base which builds on and critiques researchers' theoretical frameworks in the field of educational transitions research.

Three articles focus on transitions during the compulsory education period. Two focus on primary to secondary school transition (Barlow; Stack et al.). Barlow explores the use of drama to support the development of positive peer relationships during this significant period of transition with associated changes in the educational curriculum, physical environment and social relationships with adults and peers. The author identifies a paucity of literature using drama pedagogy during primary-secondary transitions. Using a qualitative research paradigm, adopting Multiple and Multi-dimensional Transitions theory (MMT, Jindal-Snape, 2016), and gathering data before and after the move to secondary school in the Scottish context, the author found that the creative medium enabled pupils to explore their hopes and fears in a safe environment and resulted in the creation of friendships and reduction in anxieties associated with the move. The author recommends further research in the use of drama to support this transition, the adoption of longitudinal research designs, and designs seeking the perspectives of a range of stakeholders. Stack et al. investigate the experiences of children with Autism Spectrum Disorder during primary-secondary transition in Ireland. Drawing on Stage-Environment Fit theory (Eccles et al., 1993), and adopting a qualitative research paradigm, they sought the views of children and parents using semi-structured interviews. They find that the children were, on the whole, more positive about secondary school than primary school and recommend that transition support should be individualised to the needs of the child rather than adopting a universal approach. The third paper (Dunlop), drawing on quantitative and qualitative data from a longitudinal study in one Scottish local authority,

OPEN ACCESS

Edited and reviewed by:
Hyemin Han,
University of Alabama, United States

****Correspondence:***
Elizabeth Fraser Selkirk Hannah
e.hannah@dundee.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *07 December 2021*
Accepted: *10 January 2022*
Published: *28 January 2022*

Citation:
Hannah EFS and Jindal-Snape D (2022) Editorial: Transitions Through Education. Front. Educ. 7:830999. doi: 10.3389/feduc.2022.830999

explores the relationship between wellbeing, attainment, and transitions experiences from pre-school to leaving school and outcomes for young people leaving school. The complexity and individual nature of transitions experiences are highlighted. The author concludes that the concept of "wellbeing needs" should be better defined and adopted and that the concept of attainment has tended to be overly restricted to literacy and maths which may neglect areas where children are more successful.

Four papers focus on the transitions of students in post-compulsory education. Willems et al., in a study conducted in Belgium, focus on the transition of students into the first year of university courses leading to a professional qualification, an area under-represented in extant literature. The authors offer a critical perspective on conceptualisations and the theoretical basis for transitions research in this area and aim to add to our understanding of the processes underpinning students' experiences utilising a qualitative methodology. The authors found a complex inter-relationship between the themes and sub-themes which emerged in the findings and, similar to Stack et al.; Dunlop, commented on the individualised nature of the experiences. Bethel et al. focus on the transitions of international students entering higher education in New Zealand. The authors highlight the multiple transitions (e.g., cultural, educational, social, practical) experienced by students and the potential impact on psychological well-being. The authors are interested in the role of contextual factors which are open to change, such as connectedness, and focus on the mediational role of host national connectedness on the psychological adaptation of international students. Using path analysis to test a predictive model, the authors conclude that host national connectedness is a "complex, multi-faceted construct." Glazzard et al. investigated the transitions of five individuals who identify as lesbian, gay, bisexual, trans, or queer (LGBTQ+) as they enter and progress through higher education. Conceptualising transitions using MMT theory ((Jindal-Snape, 2016), adopting a longitudinal research design, and using a range of methods, the authors found that individuals' transition experiences were largely positive in contrast with the "tragic narratives" in extant literature. The article highlights the multiple and multidimensional transitions of the students over a 3-year period and the significance of identity. The authors recommend a cross-university approach to curriculum design and importance of institutional ethos to support LGBTQ+ students. Mateu et al. offer an insight into the transitions of elite athletes moving into higher education, focusing on a specific degree course, namely Physical Activity, and Sport Sciences (PASS). The researchers set out to investigate participants' perceptions of the negative (barriers and demands) and positive (resources) aspects of the experience, as well as the differential transition pathways. The authors recommend that educational institutions and sports organisations enhance existing approaches to help elite athletes navigate a degree course with both practical and educational components.

Finally, one paper looks at the transitions of early career academics (ECAs) in higher education (Rientes and Hosein). The authors use Social Network Analysis to investigate the lived experiences of individuals who participated in a professional development programme. They found that ECAs tended to find support from their partners or individuals at the same hierarchical level rather than individuals in senior management roles. The authors propose that institutions should consider the development of additional spaces to support the professional development of ECAs and recommend that future research should focus on the social networks of mid-career academics.

To conclude, despite research being conducted in different countries and the adoption of a range of research paradigms, methodologies and methods, authors have highlighted the multiple nature of transitions; offered a balanced discourse; and recommended the importance of individual transitions and individualised support.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

REFERENCES

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., et al. (1993). Development During Adolescence: The Impact of Stage-Environment Fit in Young Adolescents' Experiences in Schools and Families. *Am. Physol.* 48, 90–101. doi:10.1037//0003-066x.48.2.90

Jindal-Snape, D. (2016). *A-Z of Transitions*. London, UK: Palgrave Macmillan.

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Psychology

ORIGINAL RESEARCH
published: 23 June 2020
doi: 10.3389/fpsyg.2020.01367

Living Life Through Sport: The Transition of Elite Spanish Student-Athletes to a University Degree in Physical Activity and Sports Sciences

Pau Mateu[1], Eduard Inglés[1], Miquel Torregrossa[2,3], Renato Francisco Rodrigues Marques[4], Natalia Stambulova[5] and Anna Vilanova[1]*

[1] Institut Nacional d'Educació Física de Catalunya (INEFC), Universitat de Barcelona, Barcelona, Spain, [2] Departament de Psicologia Bàsica, Universitat Autònoma de Barcelona, Barcelona, Spain, [3] Institut de Recerca de l'Esport, Universitat Autònoma de Barcelona, Barcelona, Spain, [4] School of Physical Education and Sport of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil, [5] Akademin för hälsa och välfärd, Högskolan i Halmstad, Halmstad, Sweden

OPEN ACCESS

Edited by:
Divya Jindal-Snape, University of Dundee, United Kingdom

Reviewed by:
Corrado Lupo, University of Turin, Italy
Roberto Ruiz Barquín, Autonomous University of Madrid, Spain

***Correspondence:**
Eduard Inglés
eduard.ingles@gencat.cat

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Psychology

Received: *02 March 2020*
Accepted: *22 May 2020*
Published: *23 June 2020*

Citation:
Mateu P, Inglés E, Torregrossa M, Marques RFR, Stambulova N and Vilanova A (2020) Living Life Through Sport: The Transition of Elite Spanish Student-Athletes to a University Degree in Physical Activity and Sports Sciences. Front. Psychol. 11:1367. doi: 10.3389/fpsyg.2020.01367

Interest in studying the different transitions faced by elite athletes throughout their careers has grown significantly in recent years. While transition from secondary school to university is an important research area in Europe, there is a void of studies on how student-athletes experience the transition to specific degrees. One of the most sought-after university degrees among elite athletes in Spain is a degree in Physical Activity and Sport Sciences (PASS). The first aim of this study was to investigate the main demands, barriers, and resources perceived by elite student-athletes in various phases of dual career transition to a university degree in PASS. The second aim was to identify the transition pathways pursued depending on the subjective importance they attached to sport and education. Eleven elite student-athletes (M_{age} = 20.7, SD = 1.6 years) who were in their second and third year of the degree in PASS participated in semi-structured interviews. Deductive-inductive thematic analysis of the interview transcripts revealed three main themes: (a) general university transition issues, (b) PASS-specific transition issues, and (c) transition pathways. Our results show that the close link between sport and the content of the degree was perceived by the elite student-athletes as their main resource. This link, however, was also perceived as a major barrier as the compulsory practical subjects entailed a risk of injury or overtraining that could affect both athletic and academic development. We noticed how the importance they attached to sport or studies varied at different moments of the transition period, a phenomenon we termed "fluid transition pathways." Dual career promotion for elite athletes is an important part of European sports policy, and our findings provide new knowledge that could help Spanish PASS faculties develop specific assistance programs to support transitioning student-athletes.

Keywords: transition, dual career, elite sport, higher education, sport sciences

INTRODUCTION

In recent years, there has been growing interest in the career transitions experienced by elite athletes at different moments and in different spheres of their lives, such as the transition from junior to senior competition (Chamorro et al., 2016; Torregrossa et al., 2016; Stambulova et al., 2017) and the transition from sport to an alternative career in the wider labor market (Torregrossa et al., 2015; Vilanova and Puig, 2017; Brown et al., 2018).

Career transitions have been defined as "turning phases or shifts in athletes' development associated with a set of specific demands that athletes have to cope with in order to continue successfully in sport and/or other spheres of their life" (Stambulova and Wylleman, 2014, p. 607). According to the holistic athletic career model (Wylleman et al., 2013), elite athletes develop their careers and experience transitions in a range of sporting and non-sporting contexts encompassing athletic, psychological, psychosocial, academic, and financial domains. Transitions can be normative, non-normative, or quasi-normative. Normative transitions are relatively predictable (e.g., transition from junior to senior sport), while non-normative transitions are unpredictable (e.g., transition due to injury) (Stambulova et al., 2009) and quasi-normative transitions are predictable for certain groups of athletes (e.g., transition to non-compulsory education, cultural transitions) (Stambulova, 2016). The ability to predict normative and quasi-normative transitions creates an opportunity to prepare athletes to face them in advance (Alfermann and Stambulova, 2007).

The concept of a dual career, combining sport and education or work, is a growing research area (Aquilina, 2013; Stambulova and Wylleman, 2019). Transition from secondary education to university is a quasi-normative, non-sports-related transition that has been shown to be of great importance in the life of elite student-athletes (ESAs) (Tekavc et al., 2015; Miró et al., 2018). It forms part of the academic-vocational development of ESAs who decide to pursue a dual career in sport and education after secondary school (Aquilina and Henry, 2010; Wylleman et al., 2013; De Brandt, 2017). In a longitudinal study of Spanish ESAs, Pérez-Rivasés et al. (2017) identified four phases within this transition: (a) preparation (last year of secondary school up to university entrance exams), (b) immersion (first contact with university up to first exams), (c) learning (beginning of second semester up to end of first academic year), and (d) adaptation (entire second year).

Transition to higher education among elite athletes has been addressed in numerous studies, many of which have been conducted in the United States (Tracey and Corlett, 1995; Petrie and Stoever, 1997; Giacobbi et al., 2004; Petitpas et al., 2009; Naphy, 2016). In Europe, studies on transitions between different levels of education have provided useful insights into problems associated with these life changes (Stambulova and Wylleman, 2014). Researchers from numerous countries, including the United Kingdom (McKenna and Dunstan-Lewis, 2004; Brown et al., 2015), Belgium (De Brandt, 2017; De Brandt et al., 2018), Slovakia (Geraniosova and Ronkainen, 2015), Italy (Guidotti et al., 2015; Lupo et al., 2017a,b; Brustio et al., 2019), and Spain (Álvarez and López, 2012; Pérez-Rivasés et al., 2017; Mateu et al., 2018b; Miró et al., 2018), have analyzed multiple aspects of transitioning from school to university among ESAs, such as the demands of combining sport and study, the importance of effective dual career assistance systems and competencies such as time management and planning, gender differences in academic qualifications, and perceptions of transitional experiences.

A number of explanatory models have been developed over the years to help define the processes, outcomes, and factors associated with transitions (Schlossberg, 1981; Taylor and Ogilvie, 1994; Stambulova, 2003). The athletic career transition model proposed by Stambulova (2003) is particularly interesting, as it helps explain the different types of transition that may occur in an athlete's career, including transitions into new educational settings (Brown et al., 2015; Stambulova et al., 2015). Stambulova's (2003) model considers transitions to be processes in which athletes must apply different strategies to cope with a series of demands. The effectiveness of these strategies will depend on existing resources and barriers (internal and external factors that facilitate or hinder the coping process). The transition is considered to be successful when the athletes overcome the demands they face; if they are unable to cope, they will experience what Stambulova calls a "crisis transition" and may require psychological support.

Athletic identity is another important factor in the study of career transitions of athletes. This concept has been defined as the degree to which an individual identifies with the athlete role and the importance they give to this life sphere over others (Brewer et al., 1993; Lally, 2007). National and international studies and reviews of career termination in sport have established that athletic identity influences how an athlete adapts to and perceives transition. A high level of athletic identity has been associated with adaptation difficulties and negative emotions and perceptions (Brewer et al., 2000; Alfermann and Stambulova, 2007; Lavallee and Robinson, 2007; Pallarés et al., 2011). Pallarés et al. (2011) described three elite athlete career pathways that varied according to the priority placed on sport and education: (a) a linear path, where sport only is prioritized; (b) a convergent path, where sport is prioritized but combined with education; and (c) a parallel path, where sport and education are given equal priority. According to Miró et al. (2018), ESAs need to have a multidimensional (i.e., athletic, academic, and other) identity if they are to better maintain a dual career in sport and education after secondary school, and having this multidimensional identity offers greater guarantees of transition success. Studies conducted in the United States (Cox et al., 2009) and Taiwan (Huang et al., 2016) have not found athletic identity to be a determining factor in how ESAs perceive barriers in the university environment.

It is not uncommon for elite athletes who decide to go to university to choose to study Physical Activity and Sport Sciences (PASS), as this is a field in which they feel particularly comfortable (Honta, 2007). According to Honta, however, this decision may not always be the most appropriate, as the physical requirements of the curriculum may increase fatigue levels. Furthermore, the wide variety of physical and sporting activities that students studying PASS need to perform in order to pass different subjects (Mateu et al., 2018a) might even have a negative effect on athletic performance as elite athletes are typically highly specialized in a given sport (Honta, 2007). Nonetheless, nearly 20% of Spanish Olympic athletes choose to study a PASS degree (cfr. Iríbar,

2003), and in Spain, there is a royal decree that stipulates that universities must reserve 3% of all university places and 5% of all PASS places for elite athletes (Royal Decree 971/2007, 2007).

While each athlete's career path is unique, common patterns emerge among certain groups of athletes (Alfermann and Stambulova, 2007). A number of studies have examined the transitional experiences of ESAs from specific sports (Gledhill and Harwood, 2015; Tekavc et al., 2015; Guirola et al., 2016; Pink et al., 2018; Gavala-González et al., 2019), but to our knowledge, no studies to date have analyzed the experiences of ESAs enrolled in a specific degree. The first aim of this study was to investigate how ESAs pursuing a dual career in sport and education perceive demands, barriers, and resources during various phases of their transition from school to university to study a degree in PASS. The second aim was to identify the transition pathways followed by the ESAs depending on the subjective importance they attached to sport and education.

MATERIALS AND METHODS

Philosophical Underpinning

This descriptive, retrospective study is framed within the post-positivist paradigm. According to Sparkes and Smith (2014), this position subscribes to realist ontology, that is, it assumes the existence of a single, objective, and understandable external reality, allowing us thus "to formulate rules beyond time and space in order to control and predict" as best as possible (Sparkes and Smith, 2014, p. 11). Lincoln et al. (2011) claim that the ontological position that characterizes post-positivism is critical realism, whereby there is an objective external reality that can only be imperfectly apprehended as observations are fallible, meaning that all theories can be revised. The inherent epistemological approach to post-positivism is a modified dualism/objectivism (Lincoln et al., 2011; Ronkainen et al., 2015) in which researchers are not fully separated from their research. They can get close to the external reality, but they must make efforts to reduce contamination. In other words, they consider that their observations are fallible and that their personal values and positions may shape their understanding of what is being studied.

Setting

The PASS degree is one of the most highly sought-after degrees in Spain and is offered by over 50 public and private universities. This study was carried out at a PASS faculty with over 730 students at a public university in Barcelona. Barcelona is the city in Spain with a strongest sporting tradition; it hosted the 1992 Summer Olympic Games, and it has important structures supporting the practice of elite sport and the development of elite athletes. The PASS faculty has a dual career assistance program that provides support to approximately 50 ESAs. The program offers several services designed to help elite athletes combine their athletic career and studies. ESAs enrolled in the program are given, for example (a) extended periods for requesting single-test evaluations and can (b) be assessed by continuous evaluation despite not having attended 80% of classes, (c) reschedule evaluation activities (exams, assignments, etc.) due to sporting commitments or injuries, (d) enroll part-time, and (e) switch classes to reconcile academic and training schedules. Each ESA also has a tutor, who is a member of the faculty's teaching staff. Tutors are responsible for counseling ESAs and mediating with other lecturers in the event of conflict.

Participants

The participants for this study, who where enrolled in the faculty's dual career assistance program, were recruited by criterion sampling (Sparkes and Smith, 2014), facilitated by the fact that three of the authors (PM, EI, and AV) are tutors in the program. To be eligible for inclusion, the participants had to (a) be an active elite athlete[1], (b) be enrolled in the university's PASS degree, and (c) be in or have recently completed the adaptation phase of transition from secondary to higher education (Pérez-Rivasés et al., 2017) (i.e., they had to be in their second or third year of university). Eleven ESAs (eight men and three women) volunteered to participate in the study and met the selection criteria. The greater presence of men in the sample reflects the distribution of male and female students in the PASS degree in Spain (just 18% of students enrolled in this degree are female) (Serra et al., 2019). At the time of data collection, the ESAs (listed with their pseudonyms in **Table 1**) were aged between 19 and 24 years (M_{age} = 20.7, SD = 1.6). They represented nine different individual or team sports.

Instruments

We opted to conduct semi-structured interviews for data collection since insights into transition to university will be largely determined by individual experiences and perceptions. Semi-structured interviews give participants greater control than questionnaires or structured interviews (Sparkes and Smith, 2014), as they allow them to tell their story in their own words, without limitations. The main tool used to stimulate

[1]In this study, the term "elite athlete" is used as a generic term to refer to an athlete who trains and competes at a high level. We included all types of elite athletes covered by the PASS faculty's dual career assistance program: "high-level athletes" and "high-performance athletes" as per the Spanish Royal Decree 971/2007, 2007 and "Catalan high-level athletes" as per the Catalan Decree 337/2002. Professional athletes, i.e., athletes with an employment relationship with a sports clubs and/or another organization, were included in this definition as well.

TABLE 1 | Characteristics of the participants.

Participant	Sex	Age	Year of study	Sport	Competition level
Glòria	W	20	3rd	Individual	International
Raquel	W	21	2nd	Team	National
Greta	W	24	3rd	Individual	International
Martí	M	19	2nd	Individual	International
Enric	M	19	2nd	Team	Regional
Pol	M	20	3rd	Individual	International
Joaquim	M	20	2nd	Team	International
Gerard	M	20	2nd	Individual	National
Gustau	M	21	3rd	Team	International
Carles	M	21	2nd	Team	International
Cesc	M	23	3rd	Individual	National

W, women; M, men.

contributions was the research diagram, which is a graphic elicitation tool that "may yield contributions from interviewees that are difficult to achieve by verbal exchanges alone" (Crilly et al., 2006). The diagram used in this study was designed based on the theoretical models of Stambulova (2003); Wylleman et al. (2013), and Pérez-Rivasés et al. (2017), and its purpose was to identify the most significant experiences of ESAs studying PASS as they transitioned from secondary school to university. The diagram consisted of an upper timeline indicating the different milestones (e.g., end of last year at secondary school, university entrance exams) along the transition pathway that define the different phases of this process: preparation, immersion, learning, and adaptation (Pérez-Rivasés et al., 2017). The larger central area of the diagram contained two boxes. The box on the left, representing Stambulova's (2003) concepts of demands, resources, and barriers contained the words "situations experienced," accompanied by two smaller boxes stating "facilitators" and "difficulties." To capture information related to the different domains of ESA development (athletic, psychological, psychosocial, academic-vocational, and financial) (Wylleman et al., 2013), the boxes were surrounded by a circular line including the words: "sport," "feelings," "people," "studies/work," and "money." On the right, there was a box stating "solution: actions taken, help from others, circumstances" to capture Stambulova's (2003) concept of coping strategies and other factors that might have helped the ESAs to overcome the demands of transition.

Procedure

We contacted the participants by email to explain the purpose of the study and the associated ethical and logistical issues. All interviews were conducted in the first semester of the 2018–2019 academic year and were held in different locations to suit the needs and preferences of the participants, although most of them were held on campus. Two actions were taken with the aim of minimizing power asymmetries between the interviewer and interviewees (Anyan, 2013). On the one hand, the interviews were conducted by the first author, who unlike the other authors, who all hold stable faculty positions, is a Ph.D. student closer in age to the participants. On the other hand, the interviews were carried out in a relaxed environment such as the faculty canteen or a quiet bar rather than in more formal office spaces. The interviews lasted an average of 49 min. Before beginning the interviews, the participants were reminded about the aim of the study and about data confidentiality and processing issues. They were given pseudonyms to ensure anonymity. They then read and signed the informed consent documents. All interviews were conducted, tape-recorded, and transcribed verbatim.

Data Analysis

We conducted a thematic analysis, which is an appropriate method for understanding people's experiences and perspectives in relation to certain issues (Braun et al., 2016). The data analysis process was both deductive and inductive and consisted of several steps. (1) The authors familiarized themselves with the data by reading and re-reading the transcripts of the interviews. (2) Using the qualitative data analysis software package NVivo 12 (QSR International), we designed a preliminary theory-based proposal for coding the data grounded in the athletic career transition model (Stambulova, 2003), the holistic athletic career model (Wylleman et al., 2013), and the career pathways described by Pallarés et al. (2011) and Miró et al. (2018). As an example, we used the developmental layers described by Wylleman et al. (2013) to distribute the ESAs' experiences into five domains: athletic, psychological, psychosocial, academic, and financial. (3) We then deductively organized the data into the defined categories. (4) We re-read the structured data and created new codes by means of inductive analysis, taking into account both semantic/explicit and latent/implicit information (Braun et al., 2016). (5) We re-reviewed the data and grouped them into three main themes: general university transition issues, PASS-specific transition issues, and transition pathways. (6) The final step of this process was to produce the research report.

The methodological integrity of our research was guaranteed by following the Reporting Standards for Qualitative Research (American Psychological Association, 2020). Considering our inquiry design and approach, the data collection method (semi-structured interview) and instrument (research diagram) were deemed to be the most suitable tools for capturing relevant information to answer the research questions. In addition, the fact that the study was performed by a multidisciplinary, international team with different levels of academic experience, cultural frameworks, and positions will have helped reduce individual and institutional biases among the three authors who work at the PASS faculty. Discussions among the different members of the team helped with research (re)design and data (re)structuring and (re)interpreting. In addition, meetings and discussions helped us explore our own identities and positioning (e.g., Spanish dual career context connoisseurs vs. connoisseurs of other cultural contexts, PASS faculty workers vs. outsiders). Our findings are evidence-based and we provide relevant quotes from the interviews as proof. The authors' engagement in the data collection process is described in the data analysis section. As shown in the discussion section, our findings are insightful and meaningful in relation to the literature and our study goal. We also provide contextual information such as the setting of the study and detailed information about participants that is not just limited to descriptions but also provides explanations on issues such as the gender bias present in the sample.

RESULTS

General University Transition Issues

Several of the ESAs reported stress and a lack of time to study during the preparation phase of the transition process; they attributed this to their sporting commitments, since they were competing and/or training at more than one level at the same time:

Raquel: In the last year of secondary school, I started playing on the senior team, while still playing junior. I was on both teams. And of course, the last year of secondary school, you know that just after you finish, you have *la selectividad* (Spanish university entrance exams), there is much to study. . . I had two games every weekend, and it (studying) was complicated because of this. I was

in the last year of secondary school, I wanted to study PASS, and the entry grades weren't exactly low.

These feelings were even more intense in ESAs who also had work commitments:

> Carles: Every Saturday morning I played with the junior team, in the first half of the afternoon I competed in swimming, in the second half I played with the senior B water polo team, and in the evening I played with the senior A team. I was busy all Saturday. And on Sundays I had to go to the games of the kids I was training. It was chaos.

The immersion phase was generally perceived as a period with significantly greater academic demands compared with secondary school.

> Greta: There was definitely a noticeable change. In fact, I got through secondary school by just going to class and reading my notes the day before each exam. When you start university. . . you start with anatomy, psychology, sports. . . it's a mix, you know? There's a lot of content, and I got to January (first exams) saying "wow."

Transition to university usually coincides with other important transitions, such as the transition from junior to senior competition. In our sample, this transition was perceived as more or less challenging depending on the sport, the level at which the ESAs were competing, and the career path they were pursuing:

> Cesc: If before you had to make "X" time to qualify for a junior championship, which was already quite demanding, now you have to reduce this time by 5 or 8 s to qualify for a senior championship. It's an enormous change. It's not easy. [. . .] When I was at secondary school, qualifying for an international championship was an achievable goal, but now that I'm a senior, I see it as very far away. Whether you like it or not, your motivation drops a little as you suddenly see that you are very far from the minimum qualifying times.
>
> Joaquim: Last year I was still a junior. I moved up to senior this year, but to be honest I haven't noticed the change because both teams usually train at the same time. I have trained with higher-level teams since I was young, and the training sessions often overlapped. When they didn't, I stayed on longer and did two sessions in a row, one for my category and one for the next. As a junior I always trained with the senior team, so I haven't noticed any changes in training load.

An important barrier mentioned by several ESAs in relation to successfully combining their sporting and academic activities was a lack of time to study. As the demands in both areas tended to increase after the transition from school, the ESAs reported that they needed to dedicate more time to achieving their goals in both areas. Not reaching these goals caused them stress and frustration. This perception was shared by athletes involved in team sports and athletes involved in endurance or logistically complex sports such as skiing:

> Pol: Trying to find 2 h a day (to study) was tiring, and I managed to do it, but I felt worn out at the end of the day. And of course, I'd like to think that it didn't affect my skiing tests, that it didn't affect my athletic performance, but I don't know. . . it was hard. And the exam was hard too, I remember that I managed to pass, but I was angry because I didn't get a good grade.
>
> Gustau: I have moved up through every category to reach the top team in my club. It's a very professional level, we train every morning and every afternoon. There are two training sessions a day, and on Saturday we play matches. So that always takes up most of my time.

A lack of foresight and ineffective planning can also result in feelings of stress and frustration:

> Martí: I wanted to do more than I could handle, I started to study for my driving test, to do a ski instructor course. . . and of course, everything came together. Maybe it wasn't just that the intensity of university and sport had increased, I also wanted to do too many things. I remember that I had so much going on in the first term, I was suffering.

Competencies such as efficient time management and planning of different activities and routines were mentioned as important resources to compensate for the aforementioned barriers:

> Carles: You have to be very organized, have everything scheduled, say "now I'm going to do this, then that." If you have 5 min when you don't know what to do, this is when you start overthinking and go crazy. This is when you might break down.

The ability to take difficult decisions in order to successfully combine sport and studies also emerged as an important resource:

> Joaquim: You have to choose what to do. Whether to go for a stroll with your teammates or use that hour and a half to study. Whether to go out and party or get a good night's sleep, get up early and be productive. You have to make decisions that are sometimes hard to make, but. . . I know that the choice is to study or mess things up and have to repeat a subject next year.
>
> Glòria: At the end of the first semester during my second year at university, I wanted to quit the team. [. . .] It was complicated, especially in terms of motivation, feelings. . . I had realized that they didn't value me, understand my situation. They only wanted me to do (motorcycle) trials, trials, and trials, and to give up everything else. But they didn't understand, or didn't want to understand that I didn't want to quit studying to devote myself exclusively to the motorcycle world.

The ESAs did not necessarily have the competencies and skills needed to successfully navigate a career in sport and study when they entered university. Rather, they acquired and developed these as they transitioned through the immersion, learning, and adaptation phases:

> Gustau: (The second year) I liked it more because I'd already been here for a year, I had made friends here in the faculty, I had met a lot people who helped me, for example, by letting me have their notes, I was already more aware of things, of how everything worked. . . I had learnt that I had to go and talk to the lecturers, I knew that I had to smarten up and not wait for my tutor to do things for me. Gerard: I think that in the second year I really learned to work as a team with the people at university. We did a lot of work together and that gave me more confidence in my relationship with others. . . I maybe didn't have this level of trust at first.

Some ESAs remarked that belonging to a sports organization with training schedules that were compatible with their academic commitments was an importance resource for finding a balance between athletic, academic, and also personal and social domains (by freeing up time).

> Enric: Since I finish classes at 14:30, I have time to eat calmly, I have time to rest, and I have 3 or 4 h that I can use to study or as free time. It's a different set-up to the one I had with last year's club, where everything was lumped together, I only had 2 h to organize myself (between classes and training). You could say that things have got better.

In the academic domain, ESAs perceived that their lecturers were sometimes a resource and sometimes a barrier. Whatever the case, the ability to negotiate emerged as an important skill in terms of reconciling academic and athletic obligations:

> Cesc: I always explain things, if I have to miss some classes, I'll mention this in the first few days: "I'm going to miss this, because of that". And you can see when the lecturer is okay with this, when he or she understands. Obviously, you won't stop taking exams, you won't stop handing in assignments. . . but they adapt. "You can switch classes, do that, let's do this, come to my office". . . You can see that. Then there are others who. . . (sighs). . . who seem to overexert themselves because of you.

One of the main resources mentioned in the academic domain was the dual career assistance program and having a tutor who could mediate with the lecturers.

> Glòria: The program helps a lot. Especially as far as missing classes is concerned, there are many lecturers who say "no, your training sessions and travel are included in the 20% of classes you are allowed to miss". There are a lot of lecturers who don't understand what competition is all about. In these cases I talk to my tutor and he explains to them that I won't be able to attend certain classes, and all those things. And on you go.

Another important resource for overcoming academic challenges was support from fellow students:

> Cesc: Without my classmates, I would have failed every single subject. Bear in mind that I can't take notes, I don't know when assignments are due or when exams have to be taken.

PASS-Specific Transition Issues

As per Spanish legislation, participants who were officially listed as elite athletes enjoyed important benefits:

> Gustau: PASS had a higher percentage of positions reserved for those of us on the BOE (official) lists. . . if you are in the top six in Europe or the top four in the world, you enter the BOE lists, and you can get into any university degree with a 5.

Some PASS faculties in Spain require students to pass a series of physical tests in addition to meeting the entry grade. Because of their regional or national status as elite athletes, most of the participants in this study were exempt from taking these tests: "I was already an elite athlete because I had represented Spain in some competitions. So I didn't have to take the physical tests" (Martí). However, participants who did not qualify for this exemption mentioned that the tests were not a problem:

> Enric: I only trained for the swimming test. I took advantage of the days I went to the gym with my football team to do extra work and spent the last half hour in the pool. The rest, with my training, was all "standard."

One of the main barriers associated with combining an elite athlete career and a degree in PASS was the negative impact of practical subjects on training and performance outside the university, as the activities within the degree could cause significant fatigue:

> Pol: We used to have sessions to put training theory in practice on Fridays. And I remember that all the sessions involved maximal fitness tests: Cooper, Navette, Léger-Boucher. . . it was all about endurance. And. . . (blows loudly) it was pretty brutal. [. . .]. The thing is that it was all on top of the training I had to do anyway, it was like doubling the load. There were weekends when I was completely wiped out, knackered, and I would tell my coach "Look [coach's name], I don't know why. . .". But actually it was because I had just done a Cooper test to death in class.

Some ESAs also mentioned difficulties with certain practical subjects due to their high level of sport specialization:

> Glòria: It may seem strange, but the subjects I found most difficult were the sports subjects [. . .]. For example, I found it really difficult to do team sports, anything that involved catching a ball. Those are the subjects I found most difficult, and those are the ones that you would normally say "well, they are the most fun", but I liked them the least, and found them to be the hardest.

The participants were also concerned about injury: "I felt really stiff. Of course, some of the sports-based subjects are demanding, almost dangerous, you know? Doing acrobatics. . . things I don't usually do to avoid getting injured" (Greta). Nonetheless, all the participants who suffered an injury during the transition period were injured while practicing their own sport, not at the faculty. "With these sports, especially judo, rugby, and handball, you can easily get injured. Obviously, there's a lot of contact, a

lot of sudden movements... But I have been lucky not to get injured" (Joaquim).

It is important to note that injuries were perceived a potential barrier to both athletic and academic development, as students' grades could be affected if they were unable to perform certain activities:

> Raquel: There are always two sides, if you get injured, you hurt the team, you can't play, you can't train... But, then, there are your studies. I mean, everything is closely related. If I studied business administration, I could get injured and it would only affect me in sport, but in a degree like this... an injury makes you feel powerless in both areas.

Coaching staff outside the university may facilitate or hinder the successful combination of sport and studies. In an attempt to avoid potentially harmful situations, some of these agents tried to prevent their athletes from doing sport or physical activities at the faculty.

> Martí: I remember that he (the coach) wasn't happy about anything related to contact sports, like judo, rugby, handball... It's true that you are more likely to get injured in all these sports, he wasn't happy at all.

Nevertheless, most coaches were sympathetic to the ESAs' situation and simply requested caution or, on occasions, adapted training loads in accordance with classroom activities:

> Raquel: They didn't restrict us in any way, they know that our degree is what it is. For training they take into account what we are doing at university. For example, on Tuesdays we have practical classes on training theory and we do endurance tests, which are very demanding. And we train on Tuesdays too. The team knows this because we tell them, and they help us a little bit in that they don't push us so much that day, because they understand that this is what a PASS degree is like.

In some cases, some ESAs chose not to mention to their coaches that they were doing certain activities associated with a risk of injury at university to avoid being restricted:

> Pol: If I had an artistic gymnastics exam or something like that... I would not tell him much about that either (laughs). I always think "best not tell him what you've done, because you already know what his answer will be."

The ESAs mobilized different resources to maintain a balance between the physical fatigue caused by their academic and athletic activities and to minimize situations with the greatest potential for injury. For example, they performed university activities with less intensity than required, negotiated a more discreet participation with their lecturers, or counted on the help of fellow students:

> Cesc: I haven't stopped doing things because I have training... Well, at some point, and when I saw that the lecturer understood me better... "well look, today I'm going to stay seated because I have an important competition in 2 days, and it wouldn't be good for me to be running up and down the track."

> Greta: I played rugby and I liked it a lot. That said I was very careful when tackling and stuff, but when it came to running, feinting, doing the exercises... Here I was not afraid of contact, because my classmates know that I'm an elite athlete and they are very careful.

The ESAs mentioned that in most cases their lecturers were aware of their concerns about injury and about the consequences of becoming injured, and that they also knew that they would sometimes have to miss class or an exam due to their sporting commitments outside university. In general, the lecturers offered the possibility of changing certain academic activities and, within certain limits, they adapted the criteria for evaluating certain subjects.

> Enric: I told the sports lecturers with whom I had to do practical classes that I was having an operation, that I would be away for 2 weeks and that I could attend the classes after that but not actually do the exercises or activities until the end of the academic year, because I would have to be in rehabilitation. And they helped me, they said "yes, no problem". Of course, most of the lecturers on the PASS degree have been elite athletes themselves, they can understand that.

There were also some, albeit fewer, mentions of negative experiences with lecturers:

> Greta: I was injured during an emerging sports class [...]. The lecturer said "you have to do it, even my grandmother can do it". And I thought "come on, if the lecturer says this, knowing that as elite athletes we can have these injuries...". Luckily, a classmate said "don't worry, I'll do it for you". And well, when it came to practicing sport, a simulation of a tournament, I did nothing.

Some subjects in the PASS degree are run intensively over a few weeks and they represented a significant barrier for ESAs who did not have flexible training or competition schedules.

> Carles: I wasn't able to participate in the intensive outdoor activity week. Not because I was injured, but because I couldn't afford to miss a week (of training).

The close links between the ESAs' athletic activities outside the university and the content of the degree was highlighted as a significant resource in terms of academic progress. However, it should be noted that the PASS degree has a multidisciplinary curriculum combining knowledge in high-performance sport, health, physical education, sports management, and leisure. Consequently, perceptions of the ease or difficulty of a particular subject varied according to individual preferences:

> Joaquim: It might sound like a cliché, but it's easier to study what you like than what you don't. For example, last year I loved sports psychology and motor skills. They're subjects I really like, that have to do with education, and I found it easy to study them, to learn them. On the other

TABLE 2 | Main resources and barriers perceived.

	Levels of development	Resources	Barriers
General university transition issues	Athletic	Sports organizations with favorable training schedules	Competing and training at more than one level at the same time (junior and senior) Higher athletic demands
	Psychological	Time management and planning Ability to take difficult decisions Ability to negotiate	Feelings of stress, frustration Lack of time to study Lack of foresight, ineffective planning
	Psychosocial	Support from fellow students	
	Academic-vocational	Supportive lecturers Dual career assistance program	Greater academic demands Work commitments Unsupportive lecturers
	Financial	Acknowledgment of impossibility of making a living from sport	
PASS-specific transition issues	Athletic		Sport: overtraining, risk of injury
	Psychological	Ability to negotiate Taking it easy with the practical subjects	
	Psychosocial	Supportive coaching staff Support from fellow students	Unsupportive coaching staff
	Academic-vocational	Close link between sport and content of the degree Favorable legislation Majority presence of former (elite) athletes or other kinds of sports professionals among teaching staff	Practical subjects: overtraining, risk of injury Intensive nature of some subjects (e.g., week of outdoor activities)

> hand, in secondary school, subjects like Catalan, Spanish, English... all that was much more difficult for me (**Table 2**).

Transition Pathways

An empirical taxonomy of the transition pathways (i.e., a taxonomy grounded in empirical data) was identified based on the experiences reported by the ESAs and the priority they assigned to their athletic and academic roles. Three types of pathways were observed. In the first group, the ESAs followed a convergent path where they showed greater commitment to sport than education:

> Gustau: Some people put their degree before sport, they miss many of the morning training sessions. But I've always put training before studying, but at the same time I try to do as much as possible for the degree.

Elite student-athletes on this convergent path perceived greater difficulties associated with the transition to university, although most of them successfully overcame these difficulties, mainly because they were studying a degree that was closely linked to their athletic activities:

> Greta: I want to do things very well, but I can't spend as much time on my studies as I would really like to. It is like... I know I could do better, and I'm not doing better because I have a very time-consuming sport, and this is my priority.
>
> Martí: The pressure starts to increase when you start university. But the truth is that, despite being the first year... as there are many practical subjects, there are many sports... maybe that is why it didn't feel so hard, because I like it.

Nevertheless, despite attaching greater importance to the athletic domain, ESAs who chose this path showed conviction in terms of continuing their studies, as they were aware that having a university degree would be an important asset for them when it came to retiring from sport and pursuing other social and occupational activities.

> Gustau: If you are involved in a minority sport, or are not competing at a very, very high level... having an ADO scholarship (scholarship from the Spanish Olympic Sports Association) and similar stuff that allow you to keep going, that allow you to live... well, you have to smarten up and continue with the degree. If I don't get a degree, what will become of me?

The second transition path followed was the parallel or balanced path, characterized by perceived equal commitment to the academic and athletic domains. This identity balance was indirectly evident in a number of comments, such as the one below, which also shows how strong commitment to both domains gives rise to feelings of stress:

> Gerard: I felt very bad inside... I was always thinking "now I have to train, but I should also study, I can't just be training, I have to study and be able to go to university". This feeling of... if I was not able to do both things at the same time, that meant I would have to give up one or the other. This feeling of "I don't want to give either up, because I like them both"... I wanted to continue as far as I could.

The third path was a convergent path in which ESAs attached greater priority to their studies than to sport:

> Joaquim: I have always thought that education was more important than sport. And if I am here, if I have come all the way from my home town to study this degree, then sport becomes secondary, doesn't it? If they told me "either you stop taking volleyball at university or we will not call you anymore, you will stop playing"... I would say that I'm not going to play with the hockey team anymore. I would either quit, or look for something else, I'm sure that there are other teams that would accept me and not cause any problems. But I would never give up a university subject.

In the cases mentioned above, the ESAs showed stable identities and commitments to the paths they had chosen. We also, however, identified what we term "fluid transition paths" in which ESAs attached varying importance to sport and studies depending on the situation. The following quotes provide examples of these trajectories. In the first case, the change was related to an opportunity to advance the athlete's career in a short period of time:

> Martí: This year I have a more sports-oriented goal, I am looking for a big improvement. Because this year the World Roller Games are being held here in Barcelona. [...] It is a very important competition within the world of skating, within my sport. It's a kind of skating "Olympics", with 11 disciplines. And well, I decided that, since I'd performed well last year, had good results... I want to go one step further. [...] This year I am focusing more on the sports part.

We also observed that qualitative improvements in athletic performance and the consequences of these improvements, such as moving to a new club with a greater chance of success, can also change priorities:

> Raquel: It's true that maybe I had stopped training so I could study, but that is on a general level, ok? In the final year of secondary school and during the university entrance exams. Because well, obviously at that time my studies were more important. In my case, studies have always come before sport. But now that I'm competing at this level, it could be said that the scales have been tipped to an equal position between education and sport.

The overlapping of transition to higher education and transition from junior to senior competition can also influence dual career paths, particularly for ESAs who perceive that the demands of the athletic transition cannot be overcome or are not worth overcoming.

> Pol: The first and second years (at university) were the most conflictive in this regard, because I really, really, really focused on competition then. Now in the third year I have tried to prioritize my studies a little more, although I am still on the senior Catalan team. But I do try to prioritize my studies more (**Figure 1**).

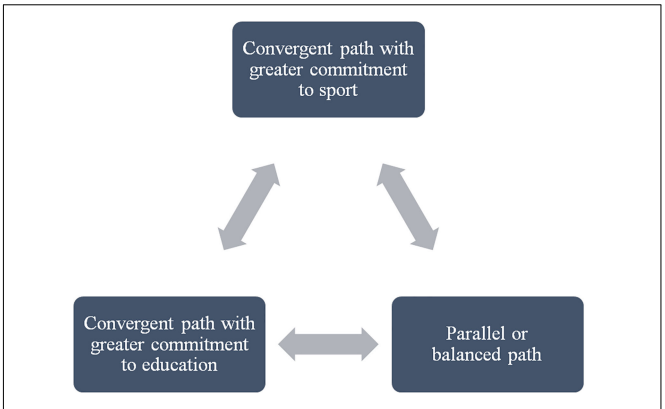


FIGURE 1 | Types and fluidity of transition pathways.

DISCUSSION

To our knowledge, this is the first study to analyze dual careers within the framework of a university degree in PASS. The first aim of the study was to investigate the main perceptions associated with demands, barriers, and resources among ESAs during various phases of their transition from secondary school to a university degree in PASS. The second aim was to identify the transition pathways followed by the ESAs depending on the subjective importance they attached to sport and education. The main findings of our analysis showed that the close link between sport and the content of the degree was perceived as the participants' most relevant resource for overcoming the transition and continuing with their dual career. By contrast, the increased physical demands resulting from the practical side of the degree, together with other factors, such as the transition from junior to senior competition (e.g., higher training loads), represented the most significant barrier, as the risk of injury and overtraining had potentially negative effects for both academic and athletic performance. Lastly, we identified a taxonomy of the transition pathways pursued and observed variations in the importance the ESAs gave to the athletic and academic domains as they moved through the transition process. We termed this phenomenon "fluid transition pathways."

The resources mentioned by the ESAs in the athletic domain have already been identified in previous research and included belonging to a sports organization with compatible training schedules and studying, training, and living in close proximity (Guidotti et al., 2015; Guirola et al., 2016; Pérez-Rivasés et al., 2017). Although transition to higher education usually coincides with the transition from junior to senior competition, which in itself is a challenge (Torregrossa et al., 2016), we found that the ESAs interviewed had differing perceptions of their transition to university. The greatest barrier to pursuing an athletic career and completing a degree in PASS was having to do practical subjects as part of the degree as, supporting reports by Honta (2007), these were associated with a greater risk of suboptimal athletic performance and injury.

The participants showed a range of skills within the psychological domain that helped them cope with the demands

of transitioning from school to university, supporting findings of several European studies that have highlighted the importance of applying and improving these (and other) skills to achieve optimal dual career development among elite athletes in higher education. Key skills and competencies linked to successful dual career management (De Brandt et al., 2018), include self-discipline, effective time management, the ability to set priorities (Petrie and Stoever, 1997; Geraniosova and Ronkainen, 2015; Miró et al., 2018; Brustio et al., 2019), and career planning and exploration (Torregrossa et al., 2015; De Brandt et al., 2018; Miró et al., 2018; Gavala-González et al., 2019). In our series, most of the ESAs were already thinking about employment opportunities after university and after retirement from sport, and this was an important motivator for them. We also observed social intelligence competencies (De Brandt et al., 2018), such as the ability to communicate and negotiate with relevant agents in the academic and athletic environments (Aquilina, 2013) and the ability to seek and accept help from friends and/or classmates (Miró et al., 2018). Finally, we observed emotional competencies, such as the ability to manage stress due to the double demands of academic and athletic commitments (De Brandt et al., 2018). Our research shows how the ESAs gradually acquired some of these competencies as they progressed through the different phases of their transition, possibly explaining why the preparation and immersion phases were perceived as more challenging than the learning and adaptation phases (Giacobbi et al., 2004; Pérez-Rivasés et al., 2017). Brown et al. (2015) call this process "transition toward personal responsibility," which occurs as an ESA accumulates experiences at university and learns the necessary codes, mechanisms, and competencies to progress in this setting. The main barriers that were identified were a lack of time, overlapping of academic and athletic schedules, high expectations in both these domains, and resulting stress (Giacobbi et al., 2004; Brown et al., 2015). Acquisition of stress and expectation management skills (De Brandt et al., 2018) can be essential, as even with good planning and organization, it is not easy to perform well as both an athlete and student (Gavala-González et al., 2019). Faced with the greater time investment required in both domains, most ESAs chose to prioritize the athletic domain, leaving them less time to study (Gavala-González et al., 2019). Contrasting with previous findings (McKenna and Dunstan-Lewis, 2004; Gavala-González et al., 2019), none of the ESAs in our study considered quitting their career as an athlete because of the demands they faced during transition to university.

In the psychosocial domain, the ESAs perceived their classmates as essential agents for facilitating the transition to university, supporting previous findings (Miró et al., 2018; Gavala-González et al., 2019). Understanding and support from the ESAs' clubs and coaching staff, and interest in what they were doing, also was an important resource for balancing athletic and academic commitments (Giacobbi et al., 2004; Brown et al., 2015; Guirola et al., 2016). There was also a minority group of ESAs who perceived that sports agents sometimes acted as barriers, showing that there is still a tendency in certain fields and/or in certain organizations to objectify their athletes, to see them as mere results-oriented commodities rather than complex individuals who feel, think, and develop in other life domains besides their sport (Barker-Ruchti et al., 2016). Finally, ESAs who moved far from their homes to study or train experienced more barriers in the psychosocial field, in particular feelings of loneliness, which were experienced with greater intensity in the immersion and learning phases, supporting previous findings (Tracey and Corlett, 1995; Gavala-González et al., 2019).

In the academic domain, the Spanish legislative framework for facilitating access to a university education for elite athletes was perceived as an important resource, again supporting previous findings (Aquilina and Henry, 2010). Other researchers in Europe have reported that participation in a dual career assistance program is a key resource throughout the transitional period, as it helps participants balance their academic and athletic commitments (Stambulova and Wylleman, 2014; Brown et al., 2015; Geraniosova and Ronkainen, 2015; Mateu et al., 2018b). Tutors as both counselors and mediators are an essential part of these programs (McKenna and Dunstan-Lewis, 2004; Mateu et al., 2018b). Nevertheless, it should be noted that at our university, the faculty's teaching staff is not obliged to participate in the dual career assistance program, as lecturers' autonomy prevails over initiatives of this nature in the Spanish university system. Thus, even though most of the lecturers offered flexibility and were sympathetic to the ESAs' situation (Brown et al., 2015; Guirola et al., 2016), conflicts and disagreements may occasionally arise between teaching staff and ESAs (Mateu et al., 2018a). While tutors can mediate in such situations, we also consider it important for ESAs to develop communication and negotiating skills to be able to manage potential conflicts themselves. Finally, while the similarity between the ESAs' athletic activities and the content (and applicability) of the PASS degree was highlighted as a resource (Lupo et al., 2017a), the risk of training overload and injuries was shown as a potential major barrier to normal dual career development, supporting reports by Honta (2007).

In the financial domain, as most ESAs could not afford to make a living from their athletic activity, in either the short or long term (Guirola et al., 2016), they accepted that their education was important for their future. This would explain why even those with a stronger athletic identity showed commitment to their studies (Geraniosova and Ronkainen, 2015; Gavala-González et al., 2019). We therefore understand that the ESAs' limited capacity to accumulate economic capital from their athletic careers motivated them to pursue a dual career.

All the ESAs were very interested in succeeding both as an athlete and a student, which coincides with previous research studies such as that conducted by Lupo et al. (2017b) and Brustio et al. (2019). However, they chose different paths to achieve their goals (McKenna and Dunstan-Lewis, 2004), which is consistent with the work of Miró et al. (2018) and Pallarés et al. (2011) and, in our opinion,

would suggest that the ESAs had multidimensional identities characterized by different degrees of perceived priority attached to the academic and athletic domains. Furthermore, our results suggest that differing subjective importance attached to athletic and academic domains was not a determinant of perceived transition difficulties, possibly because of the already mentioned similarity between the content of the PASS degree and the existing knowledge and skills of the athletes (Honta, 2007). We also observed that different transition paths and hence different levels of commitment to academic and athletic domains can vary over time. We have called this phenomenon "fluid transition paths." Our position thus coincides with that of Hodkinson and Sparkes (1997) in that we do not understand ESA careers as trajectories, in the more deterministic sense of the word, with clear start and end points, but rather as paths with different forks and events that affect decisions and life priorities over time.

We have addressed several aspects associated with transitioning from secondary school to university among a population of Spanish ESAs enrolled in a PASS degree. By providing a better understanding of this complex process, we hope not only to promote reflection in the academic environment but also to encourage the development of measures (establishment and/or improvement of dual career assistance programs, collaboration between universities and clubs, etc.) that could provide ESAs with a better chance of successfully developing and completing a dual career by enhancing the resources available to them and limiting, in so far as is possible, the barriers detected. This goes beyond just providing better academic schedules, which seems to be a good solution for the combination of sport and studies in the general group of Southern European elite student-athletes (Brustio et al., 2019). In the case, for example, of the obligation to complete certain practical subjects as part of the PASS degree, alternative forms of evaluation could perhaps be considered to help overcome this perceived barrier. In this regard, synergies between dual career assistance programs and other university initiatives for students with special education needs could be enhanced. Likewise, we recommended that young elite athletes still in secondary education, together with career guidance counselors, carefully weigh up the benefits and risks associated with pursuing a degree in PASS or similar. And finally, the development of key competences mentioned above (e.g., time management, expectation management, career planning, and stress management) is also an area on which sport psychologists and/or dual career support providers can focus in order to provide elite student-athletes with significant resources to deal with their transition.

The main limitation of our study, like most studies of the transitional experiences of elite athletes, is its retrospective design (Alfermann and Stambulova, 2007). This design means that there was only a single answer available for analysis and also entails a risk of recall bias. Perhaps a longitudinal study, such as the ones carried out by Torregrossa et al. (2015) or Pérez-Rivasés et al. (2017), would have enabled a more detailed analysis of the phenomena studied and their respective complexities. Researchers should continue to investigate transitions to specific university degrees among elite athletes, but should ideally include several data collection points that reflect different moments in time. Different types of universities (e.g., public and private) might also be considered, as in Spain there are important differences between universities in terms of dual career assistance services as academic flexibility or economic support (López de Subijana et al., 2014). It would also be interesting to investigate the experiences of people who are forced to quit their academic or athletic careers during this transition period because they were unable to meet their dual obligations.

CONCLUSION

We have described, for the first time, the experiences of ESAs during their transition from secondary education to a university degree in PASS. Through a thematic analysis of transcripts from semi-structured interviews, we identified a number of perceived demands, barriers, and resources. Having to perform at times risky or strenuous tasks as part of the practical subjects on the curriculum was perceived as an important barrier that could potentially impact both athletic and academic performance. It was not, however, perceived as being sufficiently serious to lead any of the ESAs to contemplate quitting either activity. The empirical taxonomy of the transition pathways pursued by ESAs studying a university degree in PASS, together with the fluidity observed between these pathways, is an important contribution of this study to the literature and our understanding of dual careers and educational transitions in this setting. Based on the above findings, we propose that educational institutions and/or sports organizations design or improve existing initiatives to facilitate the successful combination of an elite career in sport and successful completion of a university degree that is highly sought after by elite athletes in Spain.

DATA AVAILABILITY STATEMENT

The datasets generated for this study will not be made publicly available. Complete interview transcripts could make participants identifiable. Requests to access the datasets should be directed to the corresponding author.

ETHICS STATEMENT

This study was performed in compliance with the Declaration of Helsinki and was reviewed and approved by the Ethics Committee for Clinical Research of the Catalan Sports Council. Written informed consent was obtained from all participants before the interviews and each participant was treated in

accordance with the ethical principles of respect, confidentiality, and anonymity. The provisions of the Spanish Organic Law 15/1999, of December 13, on Personal Data Protection were met during and after the study.

AUTHOR CONTRIBUTIONS

PM, AV, EI, and MT: study design. PM: data collection. PM, AV, EI, MT, and RM: data analysis and interpretation. MT and NS: critical friends. PM, AV, EI, MT, RM, and NS: manuscript preparation. AV: conceptualization and funding procurement. All authors contributed to the article and approved the submitted version.

FUNDING

This work was supported by the Institut Nacional d'Educació Física de Catalunya (INEFC), grant code 2016-PINEFC-00001.

ACKNOWLEDGMENTS

The authors thank the Institut Nacional d'Educació Física de Catalunya (INEFC) of the Generalitat de Catalunya for providing the necessary support for this study. The authors also thank all the elite student-athletes for their availability and participation in this study.

REFERENCES

Alfermann, D., and Stambulova, N. (2007). "Career transitions and career termination," in *Handbook of Sport Psychology*, eds G. Tenenbaum and R. C. Eklund (New York, NY: Wiley), 712–736. doi: 10.1002/9781118270011.ch32

Álvarez, P. R., and López, D. (2012). Armonización entre proceso de aprendizaje y práctica deportiva en universitarios deportistas de alto nivel. *Cult. Cienc. Y Deporte* 7, 201–212. doi: 10.12800/ccd.v7i21.85

American Psychological Association (2020). *Publication manual of the American Psychological Association*, 7th Edn, Washington, DC: American Psychological Association, doi: 10.1037/0000165-000

Anyan, F. (2013). The influence of power shifts in data collection and analysis stages: a focus on qualitative research interview. *Q. Rep.* 18, 1–9.

Aquilina, D. (2013). A study of the relationship between elite athletes' educational development and sporting performance. *Intern. J. Hist. Sport* 30, 374–392. doi: 10.1080/09523367.2013.765723

Aquilina, D., and Henry, I. (2010). Elite athletes and university education in europe: a review of policy and practice in higher education in the european union member states. *Intern. J. Sport Policy Polit.* 2, 25–47. doi: 10.1080/19406941003634024

Barker-Ruchti, N., Barker, D., Rynne, S. B., and Lee, J. (2016). Learning cultures and cultural learning in high-performance sport: opportunities for sport pedagogues. *Phys. Educ. Sport Pedag.* 21, 1–9. doi: 10.1080/17408989.2015.1072512

Braun, V., Clarke, V., and Weate, P. (2016). "Using thematic analysis in sport and exercise research," in *Routledge Handbook of Qualitative Research in Sport and Exercise*, eds B. Smith and A. C. Sparkes (New York, NY: Routledge), 191–205.

Brewer, B. W., Van Raalte, J. L., and Linder, D. E. (1993). Athletic identity: hercules' muscles or achilles heel? *Intern. J. Sport Psychol.* 24, 237–254.

Brewer, B. W., Van Raalte, J. L., and Petitpas, A. J. (2000). "Self-identity issues in sport career transitions," in *Career Transitions in Sport: International Perspectives*, eds D. Lavallee and P. Wylleman (Morgantown, WV: Fitness Information Technology), 29–43.

Brown, C. J., Webb, T. L., Robinson, M. A., and Cotgreave, R. (2018). Athletes' experiences of social support during their transition out of elite sport: an interpretive phenomenological analysis. *Psychol. Sport Exerc.* 36, 71–80. doi: 10.1016/j.psychsport.2018.01.003

Brown, D. J., Fletcher, D., Henry, I., Borrie, A., Emmett, J., Buzza, A., et al. (2015). A British university case study of the transitional experiences of student-athletes. *Psychol. Sport Exerc.* 21, 78–90. doi: 10.1016/j.psychsport.2015.04.002

Brustio, P. R., Rainoldi, A., Mosso, C. O., López de Subijana, C., and Lupo, C. (2019). Italian student-athletes only need a more effective daily schedule to support their dual career. *Sport Sci. Health* 16, 177–182. doi: 10.1007/s11332-019-00594-6

Chamorro, J. L., Torregrossa, M., Sánchez, D., and Amado, D. (2016). El fútbol dentro del campo y fuera de él. Desafíos en la transición a la élite. *Rev. Psicol. Dep.* 25, 81–89.

Cox, R. H., Sadberry, S., McGuire, R. T., and McBride, A. (2009). Predicting student athlete career situation awareness from college experiences. *J. Clin. Sports Psychol.* 3, 156–181. doi: 10.1123/jcsp.3.2.156

Crilly, N., Blackwell, A. F., and Clarkson, P. J. (2006). Graphic elicitation: using research diagrams as interview stimuli. *Q. Res.* 6, 341–366. doi: 10.1177/1468794106065007

De Brandt, K. (2017). *A Holistic Perspective On Student-Athletes' Dual Career Demands, Competencies And Outcomes*, Doctoral dissertation, Vrije Universiteit Brussel, Brussels.

De Brandt, K., Wylleman, P., Torregrossa, M., Schipper-Van Veldhoven, N., Minelli, D., Defruyt, S., et al. (2018). Exploring the factor structure of the dual career competency questionnaire for athletes in european pupil- and student-athletes. *Intern. J. Sport Exerc. Psychol.* doi: 10.1080/1612197X.2018.1511619

Gavala-González, J., Castillo-Rodríguez, A., and Fernández-García, J. C. (2019). Dual career of the U-23 spanish canoeing team. *Front. Psychol.* 10:1783. doi: 10.3389/fpsyg.2019.01783

Geraniosova, K., and Ronkainen, N. (2015). The experience of dual career through Slovak athletes' eyes. physical culture and sport. *Stud. Res.* 66, 53–64. doi: 10.1515/pcssr-2015-0005

Giacobbi, P. R., Lynn, T. K., Wetherington, J. M., Jenkins, J., Bodendorf, M., and Langley, B. (2004). Stress and coping during the transition to university for first-year female athletes. *Sport Psychol.* 18, 1–20. doi: 10.1123/tsp.18.1.1

Gledhill, A., and Harwood, C. (2015). A holistic perspective on career development in UK female soccer players: a negative case analysis. *Psychol. Sport Exerc.* 21, 65–77. doi: 10.1016/j.psychsport.2015.04.003

Guidotti, F., Cortis, C., and Capranica, L. (2015). Dual career of european student-athletes: a systematic literature review. *Kinesiol. Slov.* 21, 5–20.

Guirola, I., Torregrosa, M., Ramis, Y., and Jaenes, J. C. (2016). Remando contracorriente: facilitadores y barreras para compaginar el deporte y los estudios. *Rev. Andaluza Med. Del Dep.* 11, 12–17. doi: 10.1016/j.ramd.2016.08.002

Hodkinson, P., and Sparkes, A. (1997). Careership: a sociological theory of career decision making. *Br. J. Sociol. Educ.* 18, 29–44. doi: 10.1080/0142569970180102

Honta, M. (2007). Organizing the dual sporting-social project for high-level athletes in France: the difficulties of learning collective action. *Intern. Rev. Sociol. Sport* 42, 133–148. doi: 10.1177/1012690207084748

Huang, C.-J., Chou, C.-C., and Hung, T.-M. (2016). College experiences and career barriers among semi-professional student-athletes: the influences of athletic identity and career self-efficacy. *Career Dev. Intern.* 21, 571–586. doi: 10.1108/CDI-09-2015-0127

Iríbar, A. (2003). *La otra Carrera De Los Deportistas*. Madrid: El País.

Lally, P. (2007). Identity and athletic retirement: a prospective study. *Psychol. Sport Exerc.* 8, 85–99. doi: 10.1016/j.psychsport.2006.03.003

Lavallee, D., and Robinson, H. K. (2007). In pursuit of an identity: a qualitative exploration of retirement from women's artistic gymnastics. *Psychol. Sport Exerc.* 8, 119–141. doi: 10.1016/j.psychsport.2006.05.003

Lincoln, Y. S., Lynham, S. A., and Guba, E. G. (2011). "Paradigmatic controversies, contradictions, and emerging confluences, revisited," in *The Sage Handbook of Qualitative Research*, 4th Edn, eds N. K. Denzin and Y. S. Lincoln (London: Sage), 97–128.

López de Subijana, C., Mascaró, F., and Conde, E. (2014). Los servicios de asesoramiento a deportistas de élite en las universidades españolas. *Kronos* 13, 1–9.

Lupo, C., Mosso, C. O., Guidotti, F., Cugliari, G., Pizzigalli, L., and Rainoldi, A. (2017a). Motivation toward dual career of Italian student-athletes enrolled in different university paths. *Sport Sci. Health* 13, 485–494. doi: 10.1007/s11332-016-0327-4

Lupo, C., Mosso, C. O., Guidotti, F., Cugliari, G., Pizzigalli, L., and Rainoldi, A. (2017b). The adapted italian version of the baller identity measurement scale to evaluate the student-athletes' identity in relation to gender, age, type of sport, and competition level. *PLoS One* 12:e0169278. doi: 10.1371/journal.pone.0169278

Mateu, P., Vilanova, A., Andrés, A., and Inglés, E. (2018a). Más allá de la carrera deportiva. Satisfacción percibida por estudiantes-deportistas sobre un programa universitario de apoyo a la carrera dual. *Rev. Española Educ. Física Dep.* 421, 49–58.

Mateu, P., Vilanova, A., and Inglés, E. (2018b). Análisis de las características organizativas de los programas de apoyo a estudiantes-deportistas de élite en el sistema universitario de Cataluña. *Movimento* 24, 1205–1218. doi: 10.22456/1982-8918.8223

McKenna, J., and Dunstan-Lewis, N. (2004). An action research approach to supporting elite student-athletes in higher education. *Eur. Phys. Educ. Rev.* 10, 179–198. doi: 10.1177/1356336X04044070

Miró, S., Pérez-Rivasés, A., Ramis, Y., and Torregrossa, M. (2018). ¿Compaginar o elegir? La transición del bachillerato a la universidad de deportistas de alto rendimiento. *Rev. Psicol. Dep.* 27, 59–68.

Naphy, D. J. (2016). *Understanding The First-Year Student Athlete Experience At Rowan University: A Qualitative Approach*, Doctoral dissertation, Rowan University, Glassboro, NJ.

Pallarés, S., Azócar, F., Torregrosa, M., Selva, C., and Ramis, Y. (2011). Modelos de trayectoria deportiva en waterpolo y su implicación en la transición hacia una carrera profesional alternativa. *Cult. Cienc. Dep.* 6, 93–103. doi: 10.12800/ccd.v6i17.36

Pérez-Rivasés, A., Torregrossa, M., Pallarès, S., Viladrich, C., and Regüela, S. (2017). Seguimiento de la transición a la universidad em mujeres deportistas de alto rendimiento. *Rev. Psicol. Dep.* 26(Suppl. 3), 102–107.

Petitpas, A. J., Brewer, B. W., and Van Raalte, J. L. (2009). "Transitions of the student-athlete: theoretical, empirical, and practical perspectives," in *Counseling and Psychological Services For College Student-Athletes*, ed. E. F. Etzel (Morgantown: Fitness Information Technology), 283–302.

Petrie, T. A., and Stoever, S. (1997). Academic and non-academic predictors of female student athletes' academic performances. *J. Coll. Stud. Dev.* 38, 599–608.

Pink, M., Lonie, B., and Saunders, J. (2018). The challenges of the semi-professional footballer: a case study of the management of dual career development at a Victorian Football League (VFL) club. *Psychol. Sport Exerc.* 35, 160–170. doi: 10.1016/j.psychsport.2017.12.005

Ronkainen, N. J., Kavoura, A., and Ryba, T. V. (2015). A meta-study of athletic identity research in sport psychology: current status and future directions. *Intern. Rev. Sport Exerc. Psychol.* 9, 45–64. doi: 10.1080/1750984X.2015.1096414

Royal Decree 971/2007 (2007). *On high level and high performance athletes Official Bulletin of Spain (BOE, 177)*. Available online at: https://www.boe.es/boe/dias/2007/07/25/pdfs/A32240-32247.pdf (accessed October 10, 2018).

Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *Counsel. Psychol.* 9, 2–18. doi: 10.1177/001100008100900202

Serra, P., Soler, S., Camacho-Miñano, M. J., Rey-Cao, A., and Vilanova, A. (2019). Gendered career choices: paths toward studying a degree in physical activity and sport sciences. *Front. Psychol.* 10:1986. doi: 10.3389/fpsyg.2019.01986

Sparkes, A. C., and Smith, B. (2014). *Qualitative Research Methods In Sport, Exercise And Health. From Process To Product*. Abingdon: Routledge.

Stambulova, N. (2003). "Symptoms of a crisis-transition: a grounded theory study," in *Svensk Idrottspykologisk Förening*, ed. N. Hassmen (Örebro: Örebro University Press), 97–109.

Stambulova, N. (2016). "Athletes' transitions in sport and life: positioning new research trends within the existing system of athlete career knowledge," in *Routledge International Handbook of Sport Psychology*, eds R. J. Schinke, K. R. McGannon, and B. Smith (New York, NY: Routledge), 519–535.

Stambulova, N., Alfetmann, D., Statler, T., and Côté, J. (2009). ISSP position stand: career development and transitions of athletes. *Intern. J. Sport Exerc. Psychol.* 7, 395–412. doi: 10.1080/1612197X.2009.9671916

Stambulova, N., Engström, C., Franck, A., Linnér, L., and Lindahl, K. (2015). Searching for an optimal balance: dual career experiences of Swedish adolescent athletes. *Psychol. Sport Exerc.* 21, 4–14. doi: 10.1016/j.psychsport.2014.08.009

Stambulova, N., Pehrson, S., and Olsson, K. (2017). Phases in the junior-to senior transition of Swedish ice hockey players. From a conceptual framework to an empirical model. *Intern. J. Sports Sci. Coach.* 12, 231–244. doi: 10.1177/1747954117694928

Stambulova, N., and Wylleman, P. (2014). "Athletes' career development and transitions," in *Routledge Companion to Sport and Exercise Psychology*, eds A. Papaioannou and D. Hackfort (London: Routledge), 603–618.

Stambulova, N., and Wylleman, P. (2019). Psychology of athletes' dual careers: a state-of-the-art critical review of the European discourse. *Psychol. Sport Exerc.* 42, 74–88. doi: 10.1016/j.psychsport.2018.11.013

Taylor, J., and Ogilvie, B. C. (1994). A conceptual model of adaptation to retirement among athletes. *J. Appl. Sport Psychol.* 6, 1–20. doi: 10.1080/10413209408406462

Tekavc, J., Wylleman, P., and Ceciæ Erpiè, S. (2015). Perceptions of dual career development among elite level swimmers and basketball players. *Psychol. Sport Exerc.* 21, 27–41. doi: 10.1016/j.psychsport.2015.03.002

Torregrossa, M., Chamorro, J. L., and Ramis, Y. (2016). Transición de júnior a sénior y promoción de carreras duales en el deporte: una revisión interpretativa. *Rev. Psicol. Aplic. Dep. Ejerc. Fís.* 1, 1–10. doi: 10.5093/rpadef2016a6

Torregrossa, M., Ramis, Y., Pallarés, S., Azócar, F., and Selva, C. (2015). Olympic athletes back to retirement: a qualitative longitudinal study. *Psychol. Sport Exerc.* 21, 50–56. doi: 10.1016/j.psychsport.2015.03.003

Tracey, J., and Corlett, J. (1995). The transition experience of first-year university track and field athletes. *J. Fresh. Year Exp.* 7, 82–102.

Vilanova, A., and Puig, N. (2017). Olympic athletes' job Market entry strategies. A typology. *Rev. Intern. Sociol.* 75:98. doi: 10.3989/ris.2017.75.2.15.98

Wylleman, P., Reints, A., and De Knop, P. (2013). "Athletes' careers in Belgium. A holistic perspective to understand and alleviate challenges occurring throughout the athletic and post-sport career," in *Athletes' Careers Across Cultures*, eds N. Stambulova and T. V. Ryba (New York, NY: Routledge), 31–42.

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

ORIGINAL RESEARCH
published: 30 June 2020
doi: 10.3389/feduc.2020.00081

Transitions Into, and Through, Higher Education: The Lived Experiences of Students Who Identify as LGBTQ+

Jonathan Glazzard[1]*, *Divya Jindal-Snape*[2] *and Samuel Stones*[1]

[1] Carnegie School of Education, Leeds Beckett University, Leeds, United Kingdom, [2] School of Education and Social Work, University of Dundee, Dundee, United Kingdom

This study explores the lived experiences of students who identify as lesbian, gay, bisexual, trans, or queer (LGBTQ+) during their transitions into, and through, higher education. Existing literature presents tragic narratives of students with LGBTQ+ identities which position them as victims. This study conceptualizes transitions as complex, multiple, and multi-dimensional rather than linear. The objectives of the study were to explore: the lived experiences of students who identify as LGBTQ+ in higher education; the role that sexuality and/or gender identity play in their lives over the course of their studies and LGBTQ+ students' experiences of transitions into, and through, higher education. The study is longitudinal in design and draws on the experiences of five participants over the duration of a 3-years undergraduate course in a university in the UK. Methods used include semi-structured interviews, audio diaries and visual methods to explore participants' experiences of transitions. Data were coded and analyzed thematically. This study uniquely found that the participants experienced Multiple and Multi-dimensional Transitions during their time at university and that these transitions were largely positive in contrast to the mainly tragic narratives that are dominant within the previous literature. In addition, this is the first study to have explored the experiences of LGBTQ+ students using a longitudinal study design. As far as we are aware, no existing studies apply Multiple and Multi-dimensional Transitions Theory (MMT) to students in higher education who identify as LGBTQ+.

Keywords: transitions, LGBTQ+, students, higher education, inclusion

OPEN ACCESS

Edited by:
Isabel Menezes,
University of Porto, Portugal

Reviewed by:
Jorge Gato,
University of Porto, Portugal
Cinzia Albanesi,
University of Bologna, Italy

***Correspondence:**
Jonathan Glazzard
j.glazzard@leedsbeckett.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *24 March 2020*
Accepted: *19 May 2020*
Published: *30 June 2020*

Citation:
Glazzard J, Jindal-Snape D and Stones S (2020) Transitions Into, and Through, Higher Education: The Lived Experiences of Students Who Identify as LGBTQ+. Front. Educ. 5:81. doi: 10.3389/feduc.2020.00081

INTRODUCTION

Large-scale studies have demonstrated that there is an increasing prevalence of student mental ill health in higher education. In 2016, 49,265 undergraduate students in the UK disclosed a mental health condition compared with 8415 in 2008 [(Universities UK (UUK), 2016)]. In addition, large survey data from Vitae (2018) found that between 2011 and 2015 there was a 50% increase in students accessing well-being services in universities. However, claims about increasing student mental ill health should be treated cautiously as more students might be willing to disclose poor mental health as a result of attempts to destigmatise it in recent years by the UK government and universities [(Department for Education (DfE) Department of Health (DoH), 2017)].

Nevertheless, students who identify as LGBTQ+ have been found to experience an increased risk of developing depression and anxiety (Neves and Hillman, 2017). Going to university

can be both exciting and stressful. Students are expected to navigate Multiple and Multi-dimensional Transitions across different domains (Jindal-Snape, 2016). These are multifaceted and unfold as students interact with academic, social and institutional contexts (Cole, 2017). Students who identify as lesbian, gay, bisexual and trans are at risk of experiencing multiple stressors which can result in negative mental health outcomes (Meyer, 2003; Hatchel et al., 2019).

The academic research on the experiences of LGBTQ+ students in higher education presents a bleak picture. Much of the literature positions LGBTQ+ students as victims, highlighting students' experiences of bullying, harassment and discrimination (for example, Ellis, 2009). Despite this dominant negative portrayal of LGBTQ+ students' experiences, more recent literature has emphasized university as a positive experience which provides students with an opportunity to explore their gender and sexual identities (Formby, 2015). Grimwood (2017) found that university students were more likely to speak up against homophobic, biphobic, and transphobic discrimination in universities than staff, which might indicate that they feel empowered to challenge injustices. To the best of our knowledge, there are no published studies that have explored the experiences of LGBTQ+ students in higher education using a longitudinal study design.

Although existing literature has focused on the experiences of LGBTQ+ students in higher education (Ellis, 2009; Taulke-Johnson, 2010; Tetreault et al., 2013; Formby, 2015), published studies have not explored how students navigate transitions both over time and within the same timeframe across different contexts using a longitudinal study design.

Choice of University

Research indicates that for students who identify as LGBTQ+, perceptions of safety, acceptance and tolerance (Formby, 2014) are important factors which influence university choice-making. Thus, they may choose specific localities which they perceive to be queer-friendly and accepting and they may avoid places which are perceived to be repressive or intolerant (Taulke-Johnson, 2008, 2010; Formby, 2015). These "push and pull" (Formby, 2015, p. 21) factors also reflect broader LGBTQ+ migration patterns (Cant, 1997; Valentine et al., 2003; Howes, 2011; Formby, 2012). For example, research from the UK (Formby, 2015) and the US (Stroup et al., 2014) suggests that discrimination based on sexual orientation is more widespread on rural campuses.

For many students, the prospect of disconnecting from families, friends and home communities to attend university can be daunting (Chow and Healey, 2008). However, research has found that students who identify as LGBTQ+ may desire to escape from heterosexist and homophobic home communities which have "strictly regulated boundaries of acceptable (i.e., heterosexual) behavior" (Taulke-Johnson, 2010, p. 256). Heterosexist communities strongly promote and regulate heterosexuality as a way of life. Strong heterosexist and transphobic discourses within these communities can result in homophobia and transphobia. These serve to both regulate the dominant discourses and to punish those who transgress from them. These environments were "stifling" and "claustrophobic" and "restricted their expression and living out of their gayness due to them continuously being on stage" (Taulke-Johnson, 2010, p. 260) and students are lured by environments which were perceived to be more liberal, open-minded and which offered freedom of expression (Brown, 2000; Binnie, 2004; Weeks, 2007) and in which individuals could be safely "out" (Epstein et al., 2003). They may perceive university environments to be queer-friendly due to perceptions of the level of education and maturity of other students (Taulke-Johnson, 2010). In their desire to escape from "the hetero-saturated nature of their home towns" and "small town heterosexism" (Taulke-Johnson, 2010, p. 258) which forces them to maintain their invisibility, LGBTQ+ students may choose to embrace queer environments where they can construct families of choice (Weeks et al., 2001) and queer social networks which offer an alternative to the heterosexist and often close-knit communities that they have been brought up in.

Student Accommodation

However, Taulke-Johnson (2010) found evidence that university accommodation can be intolerant, unwelcoming, hostile and homophobic. He found evidence of anti-gay sentiments being written on doors of rooms resulting in gay students modifying their behavior so that their "gayness" did not have a visible presence in the accommodation. The homophobic bullying resulted in feelings of isolation and psychological distress as well as feeling obliged to educate housemates in order to change their negative attitudes (Lough Dennell and Logan, 2012; Formby, 2015; Keenan, 2015). Additionally, Valentine et al. (2009) found evidence of inappropriate responses by institutions to homophobic behavior in student accommodation such as institutions moving the victims out of the accommodation rather than the perpetrators. Although some students would have preferred "gay-friendly" housing, others did not want to be segregated into "gay only" accommodation and they wanted their institutions to create safe, inclusive accommodation for all students (Valentine et al., 2009). According to Foucault (1977, p. 172), separate spaces "render visible those who are inside…provide a hold on their conduct…carry the effects of power right to them." Separate housing is not an adequate solution because it creates an 'othering' effect which leads to further marginalization and discrimination. It can make the process of 'othering' visible and results in the creation of colonies of exclusion within mainstream environments (Valentine et al., 2009).

Further, literature from the UK and the US has specifically noted concerns about accommodation for students who identify as trans or as gender non-conforming. These were due to lack of gender-neutral bathrooms and shared bedrooms for these students (Beemyn, 2005; Pomerantz, 2010; Krum et al., 2013; Singh et al., 2013), and due to the negative attitudes and misunderstandings of housemates (Formby, 2015).

Curriculum

Addressing the issues through the curriculum helps to foster inclusive attitudes in all students, regardless of the subject one chooses to study. Keenan (2014) has emphasized the invisibility of LGBTQ+ issues in the higher education curriculum,

supporting earlier research by Ellis (2009). This can result in marginalization and curriculum invisibility is worse for trans students who have reported a lack of trans experiences and trans history reflected in their curriculum (McKinney, 2005; Metro, 2014; NUS, 2014). Attempts to queer the higher education curriculum have not been universal and literature suggests that courses continue to be strongly heteronormative (Formby, 2015). Although some universities celebrate annual events such as Pride and include a commitment to LGBTQ+ equality in their policies, there is evidence in the literature that the higher education curriculum does not seriously address issues around LGBTQ+ equality. Students continue to be presented with the achievements of the "same old straight, white men" and the curriculum is "pale, male and stale" (student participants in Formby, 2015, p. 32). For example, there is evidence which suggests that LGBTQ+ issues are invisible in health-related courses (Formby, 2015), thus presenting students with only a partial perspective on their disciplines. This is surprising given the association between mental health and LGBTQ+ (Bradlow et al., 2017).

Campus Climate

Although one-off celebration and recognition events go some way toward addressing LGBTQ+ diversity and equality, and create a positive campus climate, all students need to understand their responsibilities in promoting inclusion, diversity and equality and LGBTQ+ inclusion is part of this broader agenda.

In the US homophobia on campus is endemic and there is evidence of physical violence and verbal harassment (Ellis, 2009). This has resulted in a "climate of fear" (Ellis, 2009, p. 727) in which students do not feel comfortable disclosing their sexual identity. Additionally, there is evidence of students negotiating their homosexuality by avoiding known lesbian and gay locations, disassociating from known LGBTQ+ people and "passing" off as straight (Ellis, 2009). Research by Rankin et al. (2010) found evidence of name calling, homophobic graffiti and physical abuse, all of which contributed to the creation of a hostile climate for LGBTQ+ students. Students who identified as trans reported higher rates of harassment and LGBTQ+ students of color tended to report race as a reason for experiencing harassment rather than their sexual and gender identity. Research in the UK also presents evidence of homophobia on university campuses (McDermott et al., 2008; Valentine et al., 2009; Keenan, 2014) and a negative campus climate has been related to students considering leaving their course (Tetreault et al., 2013).

Plummer (1995, p. 82) has described the "coming out" process as "the most momentous act in the life of any lesbian or gay person" which does not just occur once and has to be repeated when LGBTQ+ people meet new people in different contexts. This can result in anxiety due to a lack of certainty about others' response. It is difficult to "come out" to their peers at university, especially when they share social spaces with male peers who display anti-gay attitudes and if there is a strong heterosexist discourse in the social and academic spaces of the university. Intolerant, disapproving and hostile environments can force male students to negotiate their homosexual identities by adhering to upheld protocols of traditional masculine behavior (Taulke-Johnson, 2008). This is a form of concealment which Meyer (2003) identified as an effect of proximal stress. They may even frame comments and anti-gay behavior as banter to form friendships with heterosexual peers. However, this "banter" reinforces anti-queer discourses and compulsory heterosexuality (Keenan, 2015), and places pressure on individuals to keep their sexual and gender identities in check.

Aldridge and Somerville (2014) found that nearly a quarter of LGBTQ+ students thought that they would face discrimination from other students. This is an example of proximal stress (Meyer, 2003). Research has also found that fears relating to prejudice and discrimination impacted negatively on levels of "outness" in universities (Formby, 2012, 2013, 2015). This suggests that even where bullying, prejudice and discrimination are not experienced directly, fears around these can impact negatively on LGBTQ+ students' experiences of higher education and thus, campus climate can be influenced by overt or covert factors.

Research by Ellis (2009) reported the existence of homophobia on university campuses in the UK and this also replicates earlier findings in the US (Rankin, 2005). Ellis concluded that "[Lesbian, gay and bisexual] students do not particularly perceive a "climate of fear," but [still] actively behave in ways that respond to such a climate" (Ellis, 2009, p. 733). Ellis found that students deliberately concealed their sexual orientation because they did not feel comfortable disclosing it. Valentine et al. (2009) found that trans students reported a higher proportion of negative treatment, including threat of physical violence, compared to those who identified as LGB and these findings have also been replicated in the US (Garvey and Rankin, 2015). The masculine culture which exists on some university campuses (NUS, 2012) may also make some LGBTQ+ students feel uncomfortable and cause them to conceal their identities (NUS, 2012).

Keenan (2014) found that despite institutional commitments to equality and diversity, the lived experiences of LGBTQ+ students suggests that these policies are often not borne out in practice. It is evident that abuse is still apparent on university campuses, although in the UK verbal abuse is more common than physical abuse (Keenan, 2014). Additionally, other research has found that homophobic language is sometimes explained away merely as "banter" but nevertheless this still pathologises students who identify as LGBTQ+.

Positive Transitions

Gay male students have been portrayed in the academic literature as victims (Taulke-Johnson, 2008) and accounts have documented the impact of homophobia, intolerance and harassment on their psychological well-being, academic achievement and physical health (Brown et al., 2004; Tucker and Potocky-Tripodi, 2006). These accounts situate queer students within a "Martyr-Target-Victim" model (Rofes, 2004, p. 41) and positive accounts are largely unreported and ignored (Taulke-Johnson, 2008). Accounts which portray the "tragic queer" (Rasmussen and Crowley, 2004, p. 428) with a "wounded identity" (Haver, 1997, p. 278) are only partial and they locate queer students within a pathologised framework. These accounts

are largely unquestioned and remain unproblematised and label queer students as victims.

Therefore, although experiences of homophobia, harassment and discrimination are unfortunately a reality for some students, it is important to offer a more balanced perspective which reflects the lived experiences of the queer student population. An alternative narrative which presents non-victimized accounts of their experience offers a more nuanced, inclusive and comprehensive insight into queer students' experiences of higher education (Taulke-Johnson, 2008).

During their time at university queer students can experience fulfilling, enjoyable and empowering experiences. These might potentially include falling in love, developing sexual relationships, establishing new social networks and friendships, and having fun. For some LGBTQ+ students, university is a time when they can explore and develop their self-identities in safe, accepting environments (Taulke-Johnson, 2008). Taulke-Johnson's participants emphasized how they had been able to construct positive LGBTQ+ identities in accepting and liberal environments whilst studying at one UK university. These counter-narratives challenge the dominant discourses of homophobia, victimization and harassment which are well-documented in the literature (Greene and Banerjee, 2006; Kulkin, 2006; Peterson and Gerrity, 2006).

However, despite these positive narratives, university spaces once described as "threateningly straight" (Epstein et al., 2003, p. 138), are places where varying levels of "outness" or self-censorship (Formby, 2012, 2013) may exist. Even where LGBTQ+ students experience university spaces as liberal and accepting, the heterosexist and heteronormative discourse can result in them modifying their behavior so as not to transgress heterosexual norms (Taulke-Johnson, 2008).

Given that there is a paucity of research which present positive narratives of LGBTQ+ students in higher education, this was identified as a priority within the context of this study. Also, since, to the best of our knowledge, no studies have explored LGBTQ+ students' perspectives using a longitudinal study design, this was also a key contributing factor which influenced the design of this study.

CONCEPTUAL FRAMEWORKS

Not all transitions research presents the conceptualization of transitions to university, and not all conceptualization cover all aspects of transitions. Transitions research broadly categorizes higher education transitions into three perspectives; transition as induction, change in identity and becoming (**Table 1**).

We conceptualize transition to university as a dynamic ongoing process of educational, social and psychological adaptation due to changes in context, interpersonal relationships and identity, which can be both exciting and worrying (Jindal-Snape, 2016). This conceptualization can be further understood by using the Multiple and Multi-dimensional Transitions (MMT) Theory (Jindal-Snape, 2012) which acknowledges that higher education students experience multiple changes at the same time, such as moving to a new city, organizational culture, higher academic level. Not only will they adapt to these changes over time, their multiple transitions will trigger transitions for significant others, such as their families and professionals, highlighting the multi-dimensional nature of transitions. Rather than viewing transitions as linear and sequential, MMT theory assumes that multiple transitions occur synchronously. In addition, the theory suggests that transitions for individuals will also result in transitions for other people and institutions that they are connected to.

TABLE 1 | Perspectives on university transitions.

Transition as induction	Transition as identity	Transition as becoming
- Emphasis on induction into higher education and the first-year experience (Krause and Coates, 2008) - Emphasis on the student journey (Furlong, 2009) - Emphasis on linearity and pathway.	- Emphasis on the move from one identity to another (Ecclestone et al., 2010)	- Emphasis on the discontinuous nature of the process of development (Gill et al., 2011). - Reject linearity and the metaphor of a pathway. - Emphasis on individual student trajectories (Pallas, 2003).

We can also understand transitions through Meyer's (2003) theory of Minority Stress which includes three elements: circumstances in the environment (general stressors); experiences in relation to a minority identity (distal stressors); and anticipations and expectations in relation to a minority identity (proximal stressors).

According to Meyer (2003), general stressors are situated within the wider environment. These environmental stressors may include experiences of social deprivation, financial pressures or stressors within relationships. These stressors may be experienced by individuals regardless of minority status. In contrast, minority stressors relate to an individual's identity and their association with a minority group (Meyer, 2003), such as the LGBTQ+ community. Thus, individuals who identify with non-normative gender identities and sexual orientations may experience minority stressors which also intersect with general stressors. According to Meyer (2003) minority stressors are categorized as either distal or proximal stressors.

Distal stressors include the direct experience of rejection, discrimination, prejudice and stigma based on the individual's minority stratus, in this case, LGBTQ+ students. Proximal stressors relate to an individual's perception and appraisal of situations. Students who identify as LGBTQ+ may anticipate rejection, prejudice and discrimination based on their previous experiences (distal stressors) of homophobic, biphobic and transphobic abuse and prejudice. Meyer's model identifies affiliation and social support with others who share the minority status as critical strategies which can "ameliorate" the effects of minority stress and he argued that, in some cases, a minority identity can become a source of strength if individuals use their minority identity as a vehicle to pursue opportunities for affiliation with others who share the minority status.

Transitions can expose individuals to various stressors. However, for individuals with a minority status, such as those

who identify as LGBTQ+, exposure to proximal and distal stressors during transitions can result in negative transitions occurring. We therefore argue that there is an interaction between the two conceptual frameworks which supports their relevance in the present study. The first research question will draw on MMT theory to identify the types of transitions that participants experienced. The second research question addresses whether these transitions were positive or negative. The final research question explores the factors which influenced participants' transitions. To address this third question, we will explore the extent to which minority stress, and other factors, influenced participants' transitions.

RESEARCH QUESTIONS

This study addressed the following research questions.

- What transitions did the participants experience throughout the duration of their higher education studies?
- What were their transitions experiences and their impact on the participants?
- What factors influenced the participants' experiences of transitions?

MATERIALS AND METHODS

This section outlines the research design, the ethical considerations associated with the study and the methods of data collection and data analysis.

In line with our conceptualization of transition as an ongoing process, we undertook a longitudinal study. We used multiple methods of data collection for crystallization of a complex and rich array of perspectives (Richardson and St. Pierre, 2005). To the best of our knowledge, a longitudinal study design has not been adopted with young people who identify as LGBTQ+ before. In addition, we did not source studies which utilized the breadth of research methods that we adopted in this study. Given the sensitivities involved in this research, we used a case study approach. This paper presents a cross-sectional analysis of the data to identify common themes across the cases. These themes included transitions, stress, resilience and coping mechanisms. The theme of "transitions" was then further sub-divided into types of transitions that were evident across the five case studies but not necessarily all evident in each single case study. Types of transitions included identity, social, academic, professional and psychological transitions.

Interviews

Longitudinal narrative interviews can illuminate changes across an aspect of a participant's life (West et al., 2014). Therefore, in-depth semi-structured interviews were used to explore the participants' experiences of transitions into, and through, higher education. Interviews were conducted at three points during the study; once in the first year of their studies, once during the second year and once during the final year. In each interview participants were asked the following questions:

- What social connections and/or personal relationships have you established and how are these going?
- How are you getting on with your academic studies?
- How are you getting on in your accommodation?
- How would you describe your mental health now and why?
- What challenges or successes have you experienced?

In addition, participants were given some ownership of the interviews through identifying pertinent foci for discussion that related to their on-going experiences based on the photographs they had taken and their recorded audio-diaries. Interviews were digitally recorded and transcribed.

Diaries

Audio and written diaries can enable participants to efficiently record their on-going experiences, thus facilitating data collection in real time as participants interact with the different contexts which influence their lives (Williamson et al., 2015); they offer unique insights by capturing critical events as they occur (Bernays et al., 2014). Diary methods can provide "a continuous thread of daily life" (Bernays et al., 2014, p. 629) and they can capture a "record of the ever changing present" (Elliot, 1997, p. 2). For this reason, this method was deemed to be particularly suitable for this longitudinal study. Participants were invited to submit longitudinal audio diaries between interviews. Many used the audio diary method as an opportunity to document and reflect on critical incidents which related to their transitions. No limit was placed on the number of diaries that participants could submit. Participants recorded their audio diaries on their mobile phones and uploaded these as MP3 files to a password protected electronic folder which only they and the researchers had access to.

Photo-Elicitation

To complement data collection through interviews and audio-diaries, photo-elicitation was used, which is becoming increasingly popular in qualitative research (Gibson et al., 2013). Participants were asked to construct meaning from photographs (Dunne et al., 2017) and it helped them express their emotions, feelings and insights (Lopez et al., 2005). The participant-generated photographs also provided opportunities for them to document their ongoing experiences making it particularly suitable for this longitudinal study. Participants were invited to submit photographs between interviews. They were informed that the photographs must not represent people (to ensure that people who had not consented were not in photographs) but should reflect their experiences of transitions. Time was allocated in each interview for participants to provide meaning to the photographs.

PARTICIPANTS

Participants who identified as LGBTQ+ and were in the first year of an undergraduate degree course were recruited. They were recruited from one university in England. The researchers did not know or teach the students. This reduced the power imbalance between the main researcher and the participants. An e-mail was circulated across three university departments to recruit participants to the study. This secured five participants who could demonstrate a sustained commitment to the study over a 3-years

TABLE 2 | Participant details.

Pseudonym	Gender	Sexuality /gender identity	Age	Ethnicity	Number of submitted photographs	Number of submitted audio diaries	Number of words of transcribed interview data
Brentley	Male	Gay	20	White British	5	6	12,370
Christopher	Male	Gay	20	White British	2	3	10,427
Mark	Male	Gay	26	White British	6	7	15,874
Elizabeth	Female	Lesbian	19	White British	3	4	13,129
Andy	Non-binary	Trans	27	White British	8	3	12,075

period. There was no attrition. Details of the participants are shown in **Table 2**. Pseudonyms have been used.

ETHICAL CONSIDERATIONS

Informed consent was sought using a participant information sheet and consent form. Participants were assured of their rights to confidentiality and anonymity. The research explored sensitive aspects of the participants' experiences of transitions including their mental and emotional health. Participants were pre-warned about the sensitive nature of the research and signposted to support services both within and beyond the institution. Ethical approval was obtained by the University's Research Ethics Committee.

DATA COLLECTION

Interviews were digitally recorded and transcribed by the first author. Audio diaries were also transcribed by the first author. Participants submitted photographs to a secure electronic folder. These were discussed during the interviews. The participants' interpretations of the photographs were digitally recorded and transcribed during the interviews by the first author. All transcriptions were verbatim. **Table 2** shows the amount of data that were collected during this study.

DATA ANALYSIS

This study used thematic analysis as the method of analysis. Case studies of each participant were produced from the raw data to illustrate the participants' experiences of transitions. The themes were drawn from the raw data for each participant. Braun and Clarke (2006) have argued that "thematic analysis should be the foundational method for qualitative analysis" (p. 78). The transcripts were analyzed using Braun and Clarke's (2006) six-step model to generate themes. This process was conducted by the first author and the themes were validated by the other authors. Once the themes were identified for each separate case, cross-sectional analysis was used to identify themes from across five case studies (Braun and Clarke, 2006). This process involved comparing the themes from across the cases and identifying the common themes which were evident in all cases.

RESULTS AND DISCUSSION

The following section summarizes the findings arising from the cross-sectional analysis of the five case studies. Brief information is first provided about each participant to set the context.

Brentley

Brentley's initial transitions to university were not smooth. He had started a course the previous year in a different institution and had become heavily involved in the LGBTQ+ scene. He did not develop positive social connections with his peers in student accommodation. Brentley engaged in substance abuse as a result of his participation in the scene and this resulted in poor mental health. Brentley withdrew from his course and re-commenced his higher education the following year at a different university. His second attempt at higher education was much more positive. He excelled on his course and made good social connections due to making a deliberate choice to live with professionals rather than students. He challenged homophobia on campus when he experienced it and demanded changes to university policies and practices to address this.

Christopher

Christopher's initial transitions to university were positive. At the start of his degree he entered a relationship which provided him with positive self-worth. However, during his second year the relationship dissolved, and this had a negative effect on his academic, social and psychological transitions. Christopher accessed support from the university counseling service and eventually his mental health started to improve. With this support he was able to complete his course successfully.

Mark

Mark was a mature student in his late twenties. Prior to coming to university, he had experienced domestic abuse in a relationship, and he had also been raped. His first year of university was dominated by the rape trial and he sought support

from the university counseling service. He was initially rejected by the service because he was informed that the service did not support male rape victims. He successfully challenged this and eventually he was able to gain access to counseling. His mental health improved as time progressed. He developed good social connections through his participation in the LGBTQ+ scene and he experienced positive academic transitions once his mental health started to improve.

Elizabeth

Elizabeth's transitions into student accommodation were not smooth due to experiencing micro-aggressions from peers. She moved out of student accommodation and moved in with her long-term partner who was also studying at a different institution in the same city. Following this, her transitions through university were generally positive. She excelled in her academic studies and it contributed to good self-efficacy. She developed a secure social network of friends and rejected the LGBTQ+ scene. She was undertaking a course of initial teacher education and was exposed to discrimination during one of her placements.

Andy

Andy was a mature student. Andy used they/them pronouns. They had experienced homophobia in the workplace prior to coming to university. At university they became an active member of the LGBTQ+ society and through this they experienced positive social transitions. Academic transitions for Andy were smooth. However, professional transitions were problematic. Like Elizabeth, Andy was training to be a teacher and experienced direct discrimination during one of their school placements. This resulted in Andy challenging university policies and practices in relation to LGBTQ+ inclusion.

MULTIPLE AND MULTI-DIMENSIONAL TRANSITIONS AND SUPPORT SYSTEMS

All five participants experienced transitions across several domains (Jindal-Snape, 2012). These included social, academic, psychological, professional, and identity transitions.

Apart from Andy, all had moved away from home to study and had to develop new social connections. They all successfully navigated their academic transitions, although for some this was easier than for others. Mark was frustrated about the slow pace of learning on his course. Christopher was able to cope with the academic demands of his course, but he was not motivated by the subject he had chosen to study. Elizabeth, Brentley and Andy all excelled on their courses, and consequently, their self-efficacy improved. They emphasized their academic competence by stating the grades they were achieving. Mark and Andy experienced psychological transitions by accessing support from the counseling service to enable them to overcome previous trauma. All had come to terms with their sexuality or gender identities prior to attending university but most chose not to primarily define their identities in this way. However, Brentley, Elizabeth and Christopher said that they partially concealed their sexuality, not because they felt obliged to do so, but because they did not consider this facet of their identity to be significant.

Navigating professional domains was particularly problematic for Elizabeth and Andy, who were both training to be teachers. However, they used their negative experiences to bring about positive changes at a structural level which resulted in a transition for their institution. The participants navigated these various transitions to varying degrees as they moved between academic, social, psychological, professional and other domains within the same timeframe. Participants' willingness to challenge structural discrimination (Mark) and homophobia (Christopher) also resulted in changes to university policies.

All participants drew on their peer networks to support them through the transitions that they experienced rather than accessing support from their parents. For example, Elizabeth and Christopher drew heavily on the support from their personal relationships and friendships. Elizabeth's transitions also resulted in transitions for her partner when she left her university accommodation to move in with her. Mark, Andy and Brentley gained their social capital from friendship groups, which they had established through shared housing (Brentley), through participation in the scene (Mark, Andy) or through participation in the LGBTQ+ student society (Andy). For all participants, their social connections were critical in supporting them to adapt to the changes that they experienced.

The social capital that the participants held was critical to their ability to adapt to new situations as it enabled them to provide psychosocial support (Lee and Madyun, 2008). Elizabeth drew on her social networks and personal relationship for this purpose when she experienced negative interactions with her peers in student accommodation. Rienties et al. (2015) emphasize how social capital can provide a sense of belonging to a social group. Rienties and Nolan (2014) highlighted the important role of social capital in reinforcing a sense of social identity. Rienties and Jindal-Snape (2016) stressed the role of social capital in providing solidarity and mutual support. The LGBTQ+ society and the scene provided Andy with solidarity, mutual support, a social identity a sense of belonging and social inclusion (Putnam, 2001). These factors played a role in supporting Andy to navigate multiple transitions. Mark's social capital was derived from the scene. Brentley's social capital was derived from his friendship group but also from online networks which facilitated social connectivity and access. Brentley's restricted access to social capital in his first university resulted in him withdrawing from the institution. Thus, limited social capital played a critical role in Brentley's initial negative transitions into higher education. Christopher's social capital was derived from his relationship with his partner, but his resilience was detrimentally affected when this relationship broke down.

Research demonstrates that being part of a group is important for successful transitions (Rienties and Jindal-Snape, 2016). However, so too is self-determination (Deci and Ryan, 1985; Rienties and Jindal-Snape, 2016). Students who are highly motivated with goals and aspirations are more likely to experience successful transitions at university (Rienties and Jindal-Snape, 2016). Self-determination was evident in several case studies. Brentley and Elizabeth were motivated to achieve

good academic results. Mark was motivated to achieve a successful lucrative career as a result of his degree. Their self-determination enabled them to successfully navigate transitions. Self-determination was less evident in Christopher's case and this might explain why he struggled with his course following the breakdown of his relationship. Andy's motivation to advance equality and social justice was a form of self-determination which enabled them to successfully navigate transitions.

The data were consistent with MMT theory (Jindal-Snape, 2012). Transitions were not pre-determined or linear, but rhizomatic. They were an everyday occurrence rather than linear and sequential. The participants experienced synchronous transitions as they navigated different domains daily. Transitions were generally positive in that participants experienced university as largely positive.

Identity Transitions

Transition was not a process of moving from one identity to another (Ecclestone et al., 2010) but a process of exploring multiple identities, often within the same timeframe. Thus, participants weaved in and out of multiple identities (professional, academic, personal, relational and social identities) rather than moving from one identity to another (Jindal-Snape, 2016). For most, their sexuality was not critical to their sense of identity in that they did not use it to define themselves.

The participants also mitigated stress through the extent to which they allowed the LGBTQ+ label to define their identities. Identity transitions were a part of the participants' experiences of university. Although some embraced their LGBTQ+ identities (Andy), others invested in developing their academic (Brentley, Elizabeth) or social identities (Mark, Andy, Elizabeth). The participants were particularly keen to explore multiple identities. However, identity was also a push and pull factor which influenced other transitions as well as being experienced as a transition. Some participants emphasized that their LGBTQ+ identity was not their primary identity (Brentley, Elizabeth). This allowed them to navigate other transitions more smoothly. This was evident, for example, when Brentley rejected the scene and "all that jazz" (Brentley, interview 1) to focus on investing in his academic transitions. Elizabeth was also not invested heavily in her lesbian identity and this enabled her to focus on her academic and social identities. Identity is therefore an influencing factor which enabled some participants to successfully navigate other transitions.

> My LGBT identity does not represent my whole identity. It is part of me. Before I came to university people saw me as a lesbian. But when I came to university, I decided that I could be whoever or whatever I wanted to be. I pushed back my LGBT identity a little and although I have developed friendships with other LGBT people, we don't just talk about being LGBT. We have other interests (Elizabeth, interview 1, October 2017).

> I didn't accept my sexuality and gender at first but now I do. I can't deny who I am. However, my gender and sexuality are only fragments of me. They are not the whole me (Andy, interview 1, November 2017).

Coleman-Fountain (2014) discusses how young LGBT individuals often situate themselves within a post-gay paradigm. That is, they resist being defined by their sexuality or gender identity or even being defined by anything. They question the meaning of labels which trap them into a narrative of struggle and instead often choose to embrace a narrative of emancipation (Cohler and Hammack, 2007) in which sexuality or gender identity are not the prime aspect of a person's identity. It could be argued that repudiating labels is an attempt by individuals with minority identities to establish an identity as an "ordinary' person" (Coleman-Fountain, 2014). Brentley was keen to emphasize that being gay was only one part of his identity and he identified the importance of his identity as a runner, a student and a brother. Elizabeth was proud of her academic identity which was more significant to her than her identity as a lesbian. Mark spoke a lot about his social identity by emphasizing his friendships, but also about his identity as a professional within the workplace. Christopher emphasized his identity as a partner within a relationship rather than his identity as a gay man. Andy emphasized their social and professional identities rather than their non-binary identity. Therefore, it could be argued that these were direct attempts by the participants to emphasize the "ordinariness" of LGBTQ+ people (Richardson, 2004).

Literature demonstrates how some people claim identities through labels, but others resist them (Hammack and Cohler, 2011). Although none of the participants resisted defining themselves by their sexuality or gender identity, some did define themselves by identities that made them appear to be "ordinary," thus refuting divisions based on non-normative identities (Hegna, 2007). Brentley repudiated the stereotypes that are typically associated with being gay, including flamboyancy, dramatization and other associations with "being camp". He acknowledged that being gay meant that he was attracted to other males, but he rejected all the "baggage" that is stereotypically associated with being gay (see also Savin-Williams, 2005; Coleman-Fountain, 2014). For Brentley, these characteristics were not a valid form of masculinity (Coleman-Fountain, 2014) and he sought an authentic identity which extended beyond the boundaries of the caricatures that are dominant in the media and on the LGBTQ+ scene (Savin-Williams, 2005). Christopher, Mark and Elizabeth also acknowledged their sexuality, but they rejected the associated stereotypes and refused to be defined by either of these.

None of the participants denied the labels that related to their sexuality, but they questioned their meaning, particularly Brentley and Elizabeth. Apart from Andy, they turned their sexuality into a secondary characteristic and invested instead in what Appiah (2005) refers to as a narrative of the self. They rejected collective ascriptions. They acknowledged their non-heterosexual feelings but consciously refuted this as the primary aspect of their identity (Dilley, 2010). They refused to be unequally positioned in a hierarchy of sexuality and gender which is embedded with assumptions and stereotypes (Coleman-Fountain, 2014). Although research suggests that traditional labels (gay, lesbian, homosexual) may be perceived as too limiting (Galupo et al., 2016) and are often associated with stigmatization and negative stereotypes (White et al., 2018), most participants

in this study did not reject these labels. However, they did not use the labels to describe a prime aspect of their identities.

Mark's decision to "own" the label when he was subjected to homophobic abuse was a strategy for not internalizing the effects of the distal stressor to which he was exposed. Owning the label was also evident in Brentley's account of his experience in the university gym when he witnessed homophobic language which was explained as banter, and Christopher's account of his experience on the bus when he was subjected to homophobic abuse. However, although these participants identified as gay, it was not the primary component of their identities but when they experienced inequality, they felt compelled to address it, thus demonstrating moral courage.

Within the context of this study, the way in which the participants negotiated their identities served to minimize the effects of minority stress (Meyer, 2003). Their sexuality and gender identities were only one component of their overall identity. They had already integrated these identities into their overall identities. When they experienced minority stress the effects of it were negated by investing in other aspects of their identity. Elizabeth experienced micro-aggressions in university accommodation but her identities as a partner, a friend and a student compensated for the stressors to which she was exposed. Brentley emphasized the importance of being a runner, a brother and a student as well as being gay. These multiple identities helped to mitigate the effects of minority stress. Christopher's identity as a partner within a relationship helped to minimize the effects of micro-aggressions to which he was exposed. Andy's prime identity was derived from being an active member of the LGBTQ+ student society, which helped to negate the effects of minority stress. Mark's identity as a mature student and an employee helped to mitigate the effects of homophobic abuse.

Thus, this study contributes to theory in that it has identified a wider range of coping mechanisms to mitigate minority stress than Meyer (2003) originally suggested in his model.

Social Transitions

Literature demonstrates that self-worth is influenced by the quality of our relationships with others and the extent to which we meet other people's expectations (Jindal-Snape and Miller, 2010). However, during transitions individuals may lose the relationships that have previously contributed to positive or negative self-worth and they may receive different feedback from new relationships which can have a positive or negative effect on self-concept (see the seminal works of Cooley, 1902; Rogers, 1961; Coopersmith, 1967). All participants described difficult experiences prior to coming to university which impacted negatively on their self-worth. However, their social transitions at university were largely positive in that they established new friendships and relationships which contributed positively to their self-worth and therefore their overall self-esteem.

Social transitions facilitated a sense of belonging for the participants. The importance of the LGBTQ+ scene in fostering a sense of belonging for individuals with non-normative identities is a theme in the literature (Holt, 2011). However, although Andy and Mark had embraced the scene, Christopher, Brentley and Elizabeth rejected it and sought their sense of belonging from other sources including friendship groups and relationships. Literature demonstrates that the scene is a paradoxical space which offers support and validation but also presents risks (Valentine et al., 2003; Formby, 2017). It can also be an exclusionary space (Formby, 2017). Brentley experienced the scene both as risky and a place of exclusion, thus resulting in him seeking a sense of belonging from other social networks. He also initially struggled to establish social connections in student halls which resulted in negative social transitions. However, he managed to build good friendships later when he moved into private housing.

> Other students were acting like a bunch of buffoons, pushing each other down the stairs and pulling each other's pants down. I didn't fit in in student halls (Brentley, interview 1, October 2017)

> I was going out, getting drunk and was hung over 3 days a week. I found a gray hair and that was caused by the scene. I had my drink spiked. It is all drama on the scene, people saying, "this person has been with this person" and so on. I could not establish meaningful relationships. The gay scene is like a "stale soup". Every ingredient has touched everything, it is all homogenous and everything tastes the same. Occasionally you get the odd bit of Cajun spice (young new guys) who join which makes it taste better (Brentley, interview 2, October 2018)

> For the last two years, I have deliberately chosen to live with people who have jobs rather than students. I have been able to build strong friendships with the people I live with. (Brentley, interview 3, June 2019).

Christopher and Elizabeth felt excluded on the scene because they did not identify with others and gained their sense of belonging from friendships, intimate relationships, online networks and academic study. Mark and Andy experienced a sense of inclusion and therefore belonging on the scene. Regardless of how their sense of belonging was met, experiencing belonging was critical to the participants' self-esteem. Collective self-esteem refers to an individual's evaluation of their own worthiness within a social group (Hahm et al., 2018). Andy gained this through participating in the LGBTQ+ society which provided a sense of belonging. Research demonstrates that community connectedness is associated with increased psychological and social well-being (Frost and Meyer, 2012). The data in this study also suggest that belonging is associated with self-esteem. Experiencing a sense of belonging in the institution (Elizabeth), within friendship groups (Brentley, Elizabeth), within the LGBTQ+ community (Mark, Andy) and within relationships (Christopher) supported the participants to experience a positive sense of self-worth.

Academic Transitions

All participants experienced smooth academic transitions during their time at university and these provided participants with positive self-worth.

> I love learning. I am getting 70 s and 80 s in my assignments and I am beginning to see myself as an academic (Christopher, interview 1, November 2017)

> I'm just in the coffee shop with my friends and we are discussing Foucault. I never thought I would be bright enough to do things like this. I feel like an academic (Christopher, audio diary, February 2018).

Positive academic transitions were particularly evident with Elizabeth who realized that she had good academic ability at university, despite describing herself as an "average" student during her time at school. Each participant successfully completed their degree course.

> I was labeled as underachieving in sixth form and I felt defeated by it. I thought, what's the point? However, since coming to university I have been diagnosed with dyslexia. I now know that I'm not stupid. I love learning. I am getting 70 s and 80 s in my assignments (Elizabeth, interview 1, October 2017).

Professional Transitions

Transitions into professional roles were not smooth for Elizabeth or Andy. Both were studying on professional teacher training courses and both experienced negativity from colleagues in the workplace during their professional placements. Andy used this negative experience to implement changes to mentor training programmes at the university to ensure that workplace mentors understood their legal duties to prevent discrimination during employment. These two cases demonstrate that universities can meet their legal obligations in relation to ensuring equality for students on campus, but this can break down when students carry out part of their courses within workplace contexts. However, the university is still legally responsible for the entire student experience, even when students are studying away from the campus. Andy and Elizabeth's negative experiences of professional placements resulted in difficult transitions into their chosen profession but also resulted in positive changes to university policies and practices, thus reflecting the multi-dimensional nature of transitions.

Psychological Transitions

Social, professional and identity transitions can impact on psychological transitions. Therefore, transitions in one domain can impact, positively or negatively, on transitions in other domains. We use the term "psychological transitions" to mean the changes to the participants mental health as a result of other transitions. Some participants concealed their identities in the workplace, in their homes and communities to reduce the likelihood of experiencing distal stressors (Andy, Mark, Elizabeth), resulting in internalized homophobia and psychological distress. However, although concealment was a strategy used by some participants as a protective factor to mitigate stress, it resulted in negative psychological transitions. Negative social transitions resulted in Brentley developing poor mental health during his first year at university. Negative professional transitions in the workplace resulted in Andy developing mental ill health and requiring psychological intervention. Mark's negative experiences in a relationship resulted in him self-harming and requiring psychological support. Christopher's relationship break-up also resulted in mental ill health. Lack of agency or restricted agency impacted detrimentally on their identity transitions prior to coming to university. However, during their time at university, participants embraced their multiple identities which resulted in positive psychological transitions. Some participants experienced positive psychological transitions by accessing support from the counseling service to enable them to overcome previous trauma (Mark, Andy).

STRESS

The participants in the study drew on their networks to mitigate the effects of stress. Networks included friends, relationships and family, although support from family networks was not a dominant theme in the narratives. The importance of social networks in alleviating stress is a consistent theme in the literature (Montgomery and McDowell, 2009; Rienties and Jindal-Snape, 2016). Mark and Andy mitigated the effects of stress not only through social networks but also through accessing psychological intervention. The role of psychological intervention in mitigating stress is also a consistent theme in the literature (Meyer, 2003).

Some strategies for mitigating stress were evident through the photo-elicitation. Regardless of the support they gained from others and its role in mitigating stress, the participants also mitigated stress through the extent to which they allowed the LGBTQ+ label to define their identity.

The strategies employed by the participants to mitigate the effects of stress were more varied than those strategies originally outlined in Meyer's (2003) model. Meyer's model of minority stress emphasizes social support as the key approach for mitigating stress. Although the participants did rely on social networks to mitigate stress, they also largely underplayed the significance of their LGBTQ+ identities by embracing other aspects of their identities. This helped to counteract the effects of minority stress.

RESILIENCE

The participants presented themselves as courageous individuals who were prepared to challenge inequality to advance an agenda for social justice. Their courage in addressing discrimination to advance equality and social justice resulted in empowerment which enabled them to stay resilient (Christopher, Mark, Andy). Their ability to invest in their academic identities improved their self-esteem, which made them more resilient to minority stressors (Brentley, Elizabeth). In addition, their ability to negotiate their identities by presenting themselves as heterosexual (Brentley, Mark, Christopher) protected their self-worth which enabled them to be resilient.

In relation to external factors, the participants all developed social networks which enabled them to stay resilient. This

demonstrates the relational nature of resilience (Jindal-Snape and Rienties, 2016). Most established friendships in their accommodation rather than on their course, although for others their capacity to do this was restricted due to not living in student accommodation (Andy). Some chose to participate in the "scene" (Andy, Mark) but others rejected the scene because they did not identify with the scene culture or the other people on the scene (Christopher, Elizabeth, Brentley). The scene was therefore not a consistent source of support for all participants and for Brentley it was a source of stress. Jindal-Snape and Rienties (2016) have highlighted how support networks can become risk factors if they break down. Brentley became increasingly dissatisfied with the scene and it contribute to him developing substance abuse, poor mental health and eventually to him withdrawing from his first university. Although he initially participated in the "scene" he eventually rejected it because it had a detrimental impact on his transition to university. In line with Pachankis et al. (2020) who present a case for intraminority stress, status-based competitive pressures within the LGBTQ+ community contributed, at least partially, to Brentley developing poor mental health. Some participants participated regularly in online networks by joining Grindr (Brentley, Mark). This is a gay dating app which allows people to connect and meet socially or for sex. For these participants, this online platform played a critical role in supporting their resilience because it enabled them to connect with other people who also identified as queer. Elizabeth had formed a strong social network offline and this supported her resilience, particularly when she encountered problems in university accommodation. Mark drew on the support from close friends in his hometown in addition to the friendships he had established in his accommodation and on the scene. None of the participants identified family as a strong source of support. This supports recent research by Gato et al. (2020) who found that LGBTQ+ young people tend not to identify their families as a source of social support, despite this being a dominant theme in the general literature on resilience (Roffey, 2017). For some, relationships with family members had become impaired due to the disclosure of their sexuality or gender identities (Christopher, Mark, Elizabeth). In addition, none of the participants established strong relationships with people on their courses. Friendships were mainly established through participation in the scene (Mark), friends of partners (Elizabeth), friendships established through the LGBTQ+ society (Andy) and friendships within accommodation (Brentley). In addition, although literature has identified the importance of student-staff relationships in supporting student resilience in higher education (Evans and Stevenson, 2011) this did not emerge as a protective factor in the data.

Course and institutional level protective and risk factors were also evident in the data. Out of all the participants, Elizabeth demonstrated the greatest engagement in her studies. Her love of studying her subject in university supported her resilience. Participants highlighted the fact that their taught modules did not include curriculum content on LGBTQ+ identities and experiences, even though this content could have been easily embedded into the curriculum. This aligns with existing literature (Formby, 2015, 2017). In addition, none of the participants were given the opportunity to complete an assessment task on LGBTQ+ identities and experiences, again supporting existing literature (Formby, 2015). This could have been easily embedded into Christopher's film making degree or Elizabeth's education degree. This absence of LGBTQ+ curriculum visibility did not help the participants to experience a sense of belonging at course level and it impacted detrimentally on their academic transitions. It contributed to Brentley withdrawing from his first degree course and it was a factor in explaining why Christopher was not fully invested in his course.

Institutional factors also served as protective and risk factors in relation to resilience. A negative campus climate was evident in some cases (for example Brentley's experience in the changing rooms). However, the participants largely had positive experiences within the institution which served as protective factors. Some participants had engaged in a peer mentoring programme (Christopher, Mark) which provided them with agency and Elizabeth had been given the opportunity by the student union to participate in community volunteering. These actions served as protective factors because they provided the participants with meaningful opportunities to make a positive contribution to their communities and they provided them with agency.

COPING MECHANISMS

Meyer's (2003) model of minority stress identifies coping and social support as an important strategy to mitigate the effects of minority stress. Access to social support networks with others who share the same minority status can provide individuals with solidarity and a positive affirmation of identity. The present study found that although some participants formed collectives and joined social networks with others who also identified as LGBTQ (Mark, Andy), some participants rejected these collectives and networks and developed different coping mechanisms. Brentley and Elizabeth developed their sense of self-competence through experiencing successful academic transitions. They invested in their academic identities and this made them more resilient to the minority stressors which they were exposed to. Their improved self-competence increased their overall self-esteem which helped them to mitigate the effects of stress. The Equality Act 2010 also served as a coping mechanism and supported participants to challenge discrimination that they were exposed to on campus and in school prior to attending university (Brentley, Elizabeth). Some participants drew on social networks with friends who did not identify as LGBTQ+ (Brentley, Mark, Elizabeth). Support from participants' families was not a significant coping mechanism, although Elizabeth drew on support from her partner's family rather than her own family. Some participants drew on counseling services (Christopher, Mark, Andy) as a coping mechanism.

LIMITATIONS

There are several limitations to the study design and data collection process which must be explicitly highlighted. Although the sample size was small and therefore generalizations to other

participants and institutions cannot be made, nonetheless the study provides rich data which could not have been captured through a quantitative study. It was never the intention to claim generalisability. Although we acknowledge that scholars working within the positivist paradigm would criticize the small sample and question the reliability of the findings, nevertheless we believe that this study makes an important contribution to qualitative research.

The sample was male dominated and three out of the five participants were gay. A representative sample would have demonstrated a better representation of different genders, sexual orientations and gender identities. Only one participant was included in the sample who identified as trans and most participants identified as "gay," resulting in a minority of lesbian and bisexual participants. A more carefully selected sample would have included a more equal representation of gender identity and sexual orientation and this would have increased the reliability of the study. In addition, three of the participants were aged between 18 and 21 and only two participants over the age of 21 were included in the sample. No participants were over the age of 30 and therefore the study does not represent the experiences of older LGBTQ+ students who come to university to study undergraduate programmes. This compromises the reliability of the study. The sample was relatively homogenous in that it did not adequately represent intersectional identities, for example the intersectionality between race, disability and non-normative gender identities and sexualities. All participants were white British. In addition, the study focused exclusively on the experiences of undergraduate students. Postgraduate taught students and postgraduate research students were not included in the sample and therefore the study does not represent the full LGBTQ+ student body. Again, this compromises the generalisability of the findings.

FUTURE RESEARCH

Future research should explore the transitions experiences of students with other minority identities which intersect with identities based on sexual orientation and gender. Transitions research could explore the intersections between social class, race, disability and sexual orientation and/or gender identities. In addition, future research should explore lesbian, bisexual and trans students' experiences of transitions. Finally, future research should explore the experiences of postgraduate students who identify as LGBTQ+.

CONCLUSION

All participants had positive and negative experiences of higher education. Higher education was a life phase in which the participants could explore and develop their personal and academic identities, come to terms with their sexual orientation or gender identity and contribute to the development of inclusion. Negative experiences were reported but largely the participants' experiences of transitions were positive.

Each participant experienced Multiple and Multi-dimensional Transitions which they navigated, often within the same timeframe. These included geographic transitions (moving away from home to a new city), social transitions (meeting and establishing friendships and relationships with new people), academic transitions (coping with the demands of academic study in higher education and adapting to new approaches to teaching, learning and assessment) and identity transitions (developing their identities as individuals who identified as LGBTQ+, developing a student identity and transitioning from student identities to professional identities for students studying on professional courses). As they progressed through their studies, they became more confident about their multiple identities and this had a positive impact on their overall sense of self.

The participants had both positive and negative experiences of transitions. Although some participants experienced both distal and proximal stressors due to their sexual orientation or gender identities, each was able to mitigate the effects of these stressors. Overall, all participants had a positive university experience and they navigated the multiple transitions successfully. All participants demonstrated a strong sense of agency and they were proud of their sexual orientation or gender identity. However, two participants actively decided to conceal their personal identities in specific contexts, thus feeling the need to negotiate their identities. Although they recognized that concealment of their identities should not have been necessary, they demonstrated a strong external locus on control, thus protecting their sense of self.

The participants demonstrated a strong sense of resilience which helped them to navigate each of the different transitions successfully. The themes of resilience, agency, locus of control and minority stress were common across all participants. There were variations between the participants in how they navigated the different transitions and the sources of support that they drew upon to foster their resilience. However, what emerged strongly in the data were largely positive narratives rather than victimized accounts which are prevalent in the existing literature.

The data suggest that the institution should ensure that a whole-institutional approach to LGBTQ+ inclusion is implemented, specifically to address aspects such as curriculum inclusivity and to further embed a positive campus climate. The institution should continue to ensure that students undertaking professional placements are not exposed to prejudice or discrimination by continuing to embed LGBTQ+ equality training into professional development courses for workplace mentors.

To our knowledge, this study is the first study to have studied LGBTQ+ students' Multiple and Multi-dimensional Transitions in a university context. It is the first study to our knowledge that has applied MMT theory in this context. In addition, we believe that this is the first study to adopt a longitudinal study design to explore the experiences of students in higher education who identify as LGBTQ+. It

has made a unique contribution in highlighting that these students were not victims, they were active agents in their academic and life transitions. Further, the strategies employed by participants to mitigate stressors go beyond those suggested by Meyer (2003) in his minority stress model. This research supports understanding of how different transitions contribute to participants' experiences of minority stress, resilience and agency and what facilitates and hinders transitions experiences at university.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by University of Dundee Research Ethics Committee. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

JG collected and analyzed the data. JG wrote the first draft of this paper. SS wrote the section on minority stress, checked the references, and formatted the paper. DJ-S edited and wrote the second draft of the paper, and both finalized and approved it. All authors designed the study.

ACKNOWLEDGMENTS

JG wishes to express my thanks to my two doctoral supervisors, Prof. DJ-S and Dr. Linda Corlett who supported me in this work through their expert guidance. We also wish to extend our thanks to the participants for providing their consent to publish their quotations.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2020.00081/full#supplementary-material

REFERENCES

Aldridge, D., and Somerville, C. (2014). *Your Services Your Say: LGBT People's Experiences of Public Services in Scotland*. Edinburgh: Stonewall Scotland.

Appiah, K. A. (2005). *The Ethics of Identity*. Princeton, NJ: Princeton University Press.

Beemyn, B. G. (2005). Making campuses more inclusive of transgender students. *J. Gay Lesbian Issues Educ.* 3, 77–87. doi: 10.1300/J367v03n01_08

Bernays, S., Rhodes, T., and Terzic, K. J. (2014). Embodied accounts of HIV and hope: using audio diaries with interviews. *Qual. Health Res.* 24, 629–640. doi: 10.1177/1049732314528812

Binnie, J. (2004). *The Globalisation of Sexuality*. London: Sage.

Bradlow, J., Bartram, F., Guasp, A., and Jadva, V. (2017). *School Report: The experiences of Lesbian, Gay, bi and Trans Young People in Britain's Schools in 2017*. London, UK: Stonewall.

Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. doi: 10.1191/1478088706qp063oa

Brown, M. (2000). *Closet Space: Geographies of Metaphor From The Body to The Globe*. (London, UK: Routledge).

Brown, R. D., Clarke, B., Gortmaker, V., and Robinson-Keilig, R. (2004). Assessing the campus climate for gay, lesbian, bisexual, and transgender (GLBT). students using a multiple perspectives approach. *J. College Stud. Dev.* 45, 8–26. doi: 10.1353/csd.2004.0003

Cant, B. (1997). *Invented identities? Lesbians and Gays Talk About Migration*. London: Cassell.

Chow, K., and Healey, M. (2008). Place attachment and place identity: first-year undergraduates making the transition from home to university. *J. Environ. Psychol.* 28, 362–372. doi: 10.1016/j.jenvp.2008.02.011

Cohler, B. J., and Hammack, P. L. (2007). The psychological world of the gay teenager: social change, narrative, and normality. *J. Youth Adolesc.* 36, 47–59. doi: 10.1007/s10964-006-9110-1

Cole, J. S. (2017). Concluding comments about student transition to higher education. *High. Educ.* 73, 539–551. doi: 10.1007/s10734-016-0091-z

Coleman-Fountain, E. (2014). *Understanding Narrative Identity Through Lesbian and Gay Youth*. Basingstoke: Palgrave Macmillan.

Cooley, C.H. (1902). *Human Nature and the Social Order*. New York, NY: Charles Scribner's Sons.

Coopersmith, S. (1967). *The Antecedents of Self-Esteem*. San Francisco, CA: Freeman.

Deci, E. L., and Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum.

Department for Education (DfE) and Department of Health (DoH) (2017). *Transforming Children and Young People's Mental Health Provision: a Green Paper*. London, UK: DfE and DoH.

Dilley, P. (2010). New century, new identities: building on a typology of nonheterosexual college men. *J. LGBT Youth* 7, 186–199. doi: 10.1080/19361653.2010.488565

Dunne, L., Hallett, F., Kay, V., and Woolhouse, C. (2017). *Visualizing Inclusion: Employing a Photo-Elicitation Methodology to Explore Views of Inclusive Education, Case Studies*. Available onine at: https://doi.org/10.4135/9781473995215 (accessed February 14, 2020).

Ecclestone, K., Biesta, G., and Hughes, M. (2010). "Transitions in the lifecourse: the role of identity, agency and structure," in *Transitions and Learning through the Lifecourse,* eds. K. Ecclestone, G. Biesta, and M. Hughes (London: Routledge), 1–15.

Elliot, H. (1997). The use of diaries in sociological research on health experience. *Sociol. Rev. Online* 2, 38–48. doi: 10.5153/sro.38

Ellis, S. J. (2009). Diversity and inclusivity at university: a survey of the experiences of lesbian, gay, bisexual and trans (LGBT). students in the UK. *High. Educ.* 57, 723–739. doi: 10.1007/s10734-008-9172-y

Epstein, D., O'Flynn, S., and Telford, D. (2003). *Silenced Sexualities in Schools and Universities*. Stoke on Trent: Trentham Books.

Evans, C., and Stevenson, K. (2011). The experiences of international nursing students studying for a PhD in the UK: a qualitative study. *BMC Nurs.* 10:11. doi: 10.1186/1472-6955-10-11

Formby, E. (2012). *Solidarity But not Similarity? LGBT Communities in the Twenty-First Century*. Sheffield: Sheffield Hallam University.

Formby, E. (2013). Understanding and responding to homophobia and bullying: contrasting staff and young people's views within community settings in England. *Sex. Res. Soc. Policy* 10, 302–16. doi: 10.1007/s13178-013-0135-4

Formby, E. (2014). *The impact of Homophobic and Transphobic Bullying On Education and Employment: A European Survey*. Brussels: IGLYO.

Formby, E. (2017). How should we 'care' for LGBT+ students within higher education? *Pastoral Care Educ.* 35, 205–220. doi: 10.1080/02643944.2017.1363811

Formby, E. (2015). *#FreshersToFinals From freshers' Week to Finals: Understanding LGBT+ Perspectives on, and Experiences of, Higher Education*. Sheffield: Sheffield Hallam University.

Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. Harmondsworth: Penguin.

Frost, D. M., and Meyer, I. H. (2012). Measuring community connectedness among diverse sexual minority populations. *J. Sex Res.* 49, 36–49. doi: 10.1080/00224499.2011.565427

Furlong, A. (2009). Revisiting transitional metaphors: reproducing social inequalities under the conditions of late modernity. *J. Educ. Work* 22, 343–353. doi: 10.1080/13639080903453979

Galupo, M. P., Henise, S. B., and Mercer, N. L. (2016). "The labels don't work very well": transgender individuals' conceptualizations of sexual orientation and sexual identity. *Int. J. Transgender.* 17, 93–104. doi: 10.1080/15532739.2016.1189373

Garvey, J. C., and Rankin, S. R. (2015). The influence of campus experiences on the level of outness among trans-spectrum and queer-spectrum students. *J. Homosexual.* 62, 374–393. doi: 10.1080/00918369.2014.977113

Gato, J., Leal, D., Moleiro, C., Fernandes, T., Nunes, D., Marinho, I., Pizmony-Levy, O., and Freeman, C. (2020). "The worst part was coming back home and feeling like crying": experiences of lesbian, gay, bisexual and trans students in portuguese schools. *Front. Psychol.* 10:2936. doi: 10.3389/fpsyg.2019.02936

Gibson, B. E., Mistry, B., Smith, B., Yoshida, K. K., Abbott, D., Lindsay, S., and Hamdani, Y. (2013). The integrated use of audio diaries, photography, and interviews in research with disabled young men. *Int. J. Qual. Methods* 12, 382–402. doi: 10.1177/160940691301200118

Gill, B. L., Koch, J., Dlugon, E., Andrew, S., and Salamonson, Y. (2011). A standardised orientation program for first year undergraduate students in the College of Health and Science at UWS. A practice report. *Int. J. First Year High. Educ.* 2, 63–69. doi: 10.5204/intjfyhe.v2i1.48

Greene, K., and Banerjee, S. C. (2006). Disease-related stigma: comparing predictors of AIDS and cancer stigma. *J. Homosex.* 50, 185–209. doi: 10.1300/J082v50n04_08

Grimwood, M. E. (2017). What do LGBTQ students say about their experience of university in the UK? *Perspect. Policy Pract. High. Educ.* 21, 140–143. doi: 10.1080/13603108.2016.1203367

Hahm, J., Ro, H., and Olson, E. D. (2018). Sense of belonging to a lesbian, gay, bisexual, and transgender event: the examination of affective bond and collective self-esteem. *J. Travel Tour. Market.* 35, 244–256. doi: 10.1080/10548408.2017.1357519

Hammack, P. L., and Cohler, B. J. (2011). Narrative, identity, and the politics of exclusion: social change and the gay and lesbian life course. *Sex. Res. Soc. Policy* 8, 162–182. doi: 10.1007/s13178-011-0060-3

Hatchel, T., Valido, A., and De Pedro, K. T. (2019), Minority stress among transgender adolescents: the role of peer victimization, school belonging, and ethnicity. *J. Child Family Stud.* 28, 2467–2476. doi: 10.1007/s10826-018-1168-3

Haver, W. (1997). "Queer research: or, how to practise invention to the brink of intelligibility," *in The Eight Technologies of Otherness*, ed. *S.* Golding (London, UK: Routledge), 227–292.

Hegna, K. (2007). Coming out, coming into what? Identification and risks in the 'coming out' story of a norwegian late adolescent gay man. *Sexualities* 10, 582–602. doi: 10.1177/1363460707083170

Holt, M. (2011). Gay men and ambivalence about "gay community": from gay community attachment to personal communities. *Cult. Health Sex.* 13, 857–871. doi: 10.1080/13691058.2011.581390

Howes, R. (2011). *Gay West: Civil Society, Community and LGBT History in Bristol and Bath, 1970 to 2010*. Bristol: SilverWood Books.

Jindal-Snape, D. (2012). *Reconceptualising and facilitating transitions.* (Ph.D. thesis). Trainee Educational Psychologist Research Thesis Conference, University of Dundee, Scotland.

Jindal-Snape, D. (2016). *A-Z of Transitions*. London: Palgrave.

Jindal-Snape, D., and Miller, D. J. (2010). "Understanding transitions through self-esteem and resilience," in *Educational Transitions: Moving Stories from Around the World,* ed. D. Jindal-Snape (London: Routledge), 10–32.

Jindal-Snape, D., and Rienties, B. (Eds.). (2016). "Understanding multiple and multi-dimensional transitions of international higher education students: Setting the scene," in *Multi-dimensional Transitions of International Students to Higher Education* (London: Routledge), 1–18.

Keenan, M. (2014). *Coming Out and Fitting in: A Qualitative Exploration of Lesbian, Gay, Bisexual, Trans and Queer Students' University Experiences*. Nottingham: Nottingham Trent University.

Keenan, M. (2015). *Coming Out, Standing Out, and Being Left Out: Exploring The University Experiences of LGBT Students, Unpublished Paper Presented At From Freshers' Week To Finals: Using LGBT Student Perspectives of Higher Education To Inform Research and Practice Seminar*. London: Society for Research into Higher Education.

Krause, K. L., and Coates, H. (2008). Students' engagement in first-year university. *Assess. Eval. High. Educ.* 33, 493–505. doi: 10.1080/02602930701698892

Krum, T. E., Davis, K. S., and Galupo, M. P. (2013). Gender-inclusive housing preferences: a survey of college-aged transgender students. *J. LGBT Youth* 10, 64–82. doi: 10.1080/19361653.2012.718523

Kulkin, H. S. (2006). 'Factors enhancing adaptive coping and mental health in lesbian youth'. *J. Homosex.* 50, 97–111. doi: 10.1300/J082v50n04_05

Lee, M., and Madyun, N. I. (2008). Critical adult learning of asian immigrant workers: a social network perspective. *Asia Pacific Educ. Rev.* 9, 113–26. doi: 10.1007/BF03026492

Lopez, E. D. S., Eng, E., Robinson, N., and Wang, C. C. (2005). "Photovoice as a community-based participatory research method: a case study with African American breast cancer survivors in rural eastern North Carolina," in *Methods in Community-Based Participatory Research for Health,* eds. B.A. Israel, E. Eng, A.J. Schulz, and E.A. Parker (San Francisco, CA: Jossey-Bass), 326–348.

Lough Dennell, B. L., and Logan, C. (2012). *Life in Scotland for LGBT young people: Education Report*. Edinburgh: LGBT Youth Scotland.

McDermott, E., Roen, K., and Scourfield, J. (2008). Avoiding shame: young LGBT people, homophobia and self-destructive behaviours. *Cult. Health Sex.* 10, 815–829. doi: 10.1080/13691050802380974

McKinney, J. S. (2005). On the margins: A study of the experiences of transgender college students. *J. Gay Lesbian Issues Educ.* 3, 63–76. doi: 10.1300/J367v03n01_07

Metro (2014). *Youth Chances Survey of 16-25 Year Olds: First Reference Report*. (London, UK: Metro).

Meyer, I. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychol. Bull.* 129, 674–697. doi: 10.1037/0033-2909.129.5.674

Montgomery, C., and McDowell, L. (2009). Social networks and the international student experience. *J. Stud. Int. Educ.* 13, 455–66. doi: 10.1177/1028315308321994

Neves, J., and Hillman, N. (2017). *Student Academic Experience.* Survey, Higher Education Academy.

NUS (2012). *Out in Sport: LGBT Students' Experiences of Sport*. London: NUS.

NUS (2014). *Education Beyond The Straight and Narrow: LGBT Students' Experience In Higher Education*. London: NUS.

Pachankis, J. E., Clark, K. A., Burton, C. L., Hughto, J. M. W., Bränström, R., and Keene, D. E. (2020). Sex, status, competition, and exclusion: intraminority stress from within the gay community and gay and bisexual men's mental health. *J. Personal. Soc. Psychol.* doi: 10.1037/pspp0000282. [Epub ahead of print].

Pallas, A. M. (2003). "Educational transitions, trajectories, and pathways," *in Handbook of the life course, eds. J.T. Mortimer, and M.J. Shanahan (New York, NY: Plenum)*, 165–84.

Peterson, T. L., and Gerrity, D. A. (2006). Internalised homophobia, lesbian identity development, and self-esteem in undergraduate women. *J. Homosex.* 50, 49–75. doi: 10.1300/J082v50n04_03

Plummer, K. (1995). *Telling Sexual Stories: Power, Change and Social Worlds.* New York, NY: Routledge.

Pomerantz, L. E. (2010). Winning the housing lottery: changing university housing policies for transgender students. *J. Constitut. Law* 12, 1215–1255. Available online at: https://scholarship.law.upenn.edu/jcl/vol12/iss4/6

Putnam, R. D. (2001). *Bowling Alone: The Collapse and Revival of American Community.* New York, NY: Simon and Schuster.

Rankin, S., Weber, G., Blumenfeld, W., and Frazer, S. (2010). *2010 State of Higher Education For Lesbian, Gay, Bisexual and Transgender People*. Charlotte, NC: Campus Pride.

Rankin, S. R. (2005). Campus climates for sexual minorities. *New Dir. Student Serv.* 111, 17–23. doi: 10.1002/ss.170

Rasmussen, M. L., and Crowley, V. (2004). Editorial overview: wounded identities and the promise of pleasure. *Discourse* 25, 427–430. doi: 10.1080/0159630042000290928

Richardson, D. (2004). Locating sexualities: from here to normality, *Sexualities* 7, 391–411 doi: 10.1177/1363460704047059

Richardson, L., and St. Pierre, E. (2005). "Writing: a method of inquiry," in *The Sage Handbook of Qualitative Research*, 3rd Edn, eds. N. K. Denzin and Y. S. Lincoln (London: Sage Publications Ltd.), 959–978.

Rienties, B., and Jindal-Snape, D. (2016). "A social network perspective on the affect, behaviour and cognition of international and host-national students," in *Multi-Dimensional Transitions of International Students to Higher Education,* eds. D. Jindal-Snape, and B. Rienties (London, UK: Routledge), 53–70. doi: 10.4324/9781315680200

Rienties, B., Johan, N., and Jindal-Snape, D. (2015). A dynamic analysis of social capital-building of international and UK students. *Br. J. Sociol. Educ.* 36, 1212–1235. doi: 10.1080/01425692.2014.886941

Rienties, B., and Nolan, E.-M. (2014). Understanding friendship and learning networks of international and host students using longitudinal social network analysis. *Int. J. Intercult. Relat.* 41, 165–180. doi: 10.1016/j.ijintrel.2013.12.003

Rofes, E. (2004). "*Martyr-target-victim: Interrogating narratives of persecution and suffering among queer youth," in Youth and Sexualities: Pleasure, Subversion, and Insubordination in and Out of Schools,* eds. M. L. Rasmussen, E. Rofes, and S. Talburt (New York, NY: Palgrave Macmillan).

Roffey, S. (2017). Ordinary magic needs ordinary magicians: The power and practice of positive relationships for building youth resilience and wellbeing. *Kognition Pædagogik* 103, 38–57.

Rogers, C. R. (1961). *On Becoming a Person*. (Boston, MA: Houghton Mifflin).

Savin-Williams, R. C. (2005). *The New Gay Teenager*. (Cambridge, MA: Harvard University Press).

Singh, A. A., Meng, S., and Hansen, A. (2013). It's already hard enough being a student: Developing affirming college environments for trans youth. *J. LGBT Youth* 10, 208–223. doi: 10.1080/19361653.2013.800770

Stroup, J., Glass, J., and Cohn, T. J. (2014). The adjustment to U.S. rural college campuses for bisexual students in comparison to gay and lesbian students: an exploratory study. *J. Bisexuality* 14, 94–109. doi: 10.1080/15299716.2014.872482

Taulke-Johnson, R. (2008). Moving beyond homophobia, harassment and intolerance: Gay male university students' alternative narratives. *Discourse* 29, 121–133. doi: 10.1080/01596300701802813

Taulke-Johnson, R. (2010). Queer decisions? Gay male students' university choices. *Stud. High. Educ.* 35, 247–261. doi: 10.1080/03075070903015755

Tetreault, P. A., Fette, R., Meidlinger, P. C., and Hope, D. (2013). Perceptions of campus climate by sexual minorities. *J. Homosex.* 60, 947–964. doi: 10.1080/00918369.2013.774874

Tucker, E. W., and Potocky-Tripodi, M. (2006). Changing heterosexuals' attitudes toward homosexuals: a systematic review of the empirical literature. *Res. Soc. Work Pract.* 16, 176–190. doi: 10.1177/1049731505281385

Universities UK (UUK) (2016). *Minding our Future: Starting a Conversation About The Support of Student Mental Health*. (London, UK: UUK).

Valentine, G., Skelton, T., and Butler, R. (2003). Coming out and outcomes: negotiating lesbian and gay identities with, and in, the family. *Environ. Plann. D Soc. Space* 21, 479–499. doi: 10.1068/d277t

Valentine, G., Wood, N., and Plummer, P. (2009). *The Experience of Lesbian, Gay, Bisexual and Trans Staff and Students in Higher Education*. London: Equality Challenge Unit.

Vitae (2018). *Exploring Wellbeing and Mental Health and Associated Support Services for Postgraduate Researchers*. Institute for Employment Studies. Avaliable online at: https://re.ukri.org/documents/2018/mental-health-report/ (accessed September 28, 2019).

Weeks, J. (2007). *The World We Have Won: The Remaking of Erotic and Intimate Life*. London: Routledge.

Weeks, J., Heaphy, B., and Donovan, C. (2001). *Same Sex Intimacies: Families of Choice and Other Life Experiments*. London: Routledge.

West, L., Bron, A., and Merrill, B. (2014). "Researching student experience," in *Student Voices on Inequalities in European Higher Education*, eds. F. Finnegan, B. Merrill, and C. Thunberg (London, UK: Routledge), 25–36.

White, A. E., Moeller, J., Ivcevic, Z., and Brackett, M. A. (2018). Gender identity and sexual identity labels used by U.S. high school students: A co-occurrence network analysis. *Psychol. Sex. Orient. Gender Divers.* 5, 243–252. doi: 10.1037/sgd0000266

Williamson, I., Leeming, D., Lyttle, S., and Johnson, S. (2015). Evaluating the audio-diary method in qualitative research. *Qual. Res. J.* 15, 20–34. doi: 10.1108/QRJ-04-2014-0014

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

ORIGINAL RESEARCH
published: 28 July 2020
doi: 10.3389/feduc.2020.00137

Complex Transitions of Early Career Academics (ECA): A Mixed Method Study of With Whom ECA Develop and Maintain New Networks

Bart Rienties[1]* *and Anesa Hosein*[2]

[1] The Open University, Institute of Educational Technology, Milton Keynes, United Kingdom, [2] Department of Higher Education, University of Surrey, Guildford, United Kingdom

The purpose of this article is to explore how Early Career Academics (ECAs) cope with their complex and multiple transitions when starting their new role. By focussing on the participants' lived experiences in a professional development (PD) training program to discuss and share practice, we explored how ECAs developed and maintained social network relations. Using social network analysis (SNA) with web crawling of public websites, data was analyzed for 114 participants to determine with whom they shared practice outside PD (i.e., external connectors), the seniority of these connectors, and similarity to their job area. The results highlight that ECA networks were hierarchically flat, whereby their sharing practice network of 238 external connectors composed of their (spousal) partner and (male) colleagues at the same hierarchical level. The persons whom ECAs were least likely to discuss their practice with were people in senior management roles. The results of this study highlight that the creation of a community of practice for discussing and sharing of practice from PD programs appear to be insular. Activities within the organization and the formation of learning communities from PD may become lost as most of the sharing of practice/support comes from participants' partners. Organizations may have to create spaces for sharing practice beyond the PD classroom to further organizational learning.

Keywords: professional development, early-career, transition, social network analysis, web crawling

OPEN ACCESS

Edited by:
Ting-Chia Hsu, National Taiwan Normal University, Taiwan

Reviewed by:
Deepak Gopinath, University of the West of England, United Kingdom
Cristina C. Vieira, University of Coimbra, Portugal

***Correspondence:**
Bart Rienties
bart.rienties@open.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *02 March 2020*
Accepted: *06 July 2020*
Published: *28 July 2020*

Citation:
Rienties B and Hosein A (2020) Complex Transitions of Early Career Academics (ECA): A Mixed Method Study of With Whom ECA Develop and Maintain New Networks. Front. Educ. 5:137. doi: 10.3389/feduc.2020.00137

INTRODUCTION

Early Career Academics (ECAs) go through many transitions in their early stages of their career. While there are many definitions of ECAs, in this study we define ECAs as individuals who have a maximum of 4 years' academic teaching and/or research experience following the completion of their Ph.D. While there are many routes that teachers and ECAs can take after completing a professional doctorate or Ph.D. to further their careers (Jindal-Snape and Ingram, 2013; Spurk et al., 2015), for those who want to stay in academia often a teacher-route, researcher-route, or combined teacher-researcher route is paved with substantial challenges (Adcroft et al., 2010; Uttl et al., 2017), uncertainties (Spurk et al., 2015), and risks (Kalyani et al., 2015; Mittelmeier et al., 2018). As highlighted by a recent report by the Wellcome Trust (2020), of the 4,267 surveyed academics 70% of respondents indicated to be stressed at work, and to experience mental health issues. Furthermore, less than a third of ECAs felt secure in pursuing a research career, and a substantial

number of ECAs indicated a desire to leave academia. Obviously when ECAs are uncertain about their own roles, identities, and careers, this could have substantial negative impacts on supporting the transitions of students and pre-service teachers as well.

One potential solution to these complex issues are to provide appropriate professional development (PD) and support. Across the globe, ECAs follow a range of PD and training programs in order to help them to make a "successful" transition from ECA to obtaining tenure, or to continue their careers outside academia (Tynjälä, 2008; Jippes et al., 2013; Pataraia et al., 2013). On a macro level, several studies (e.g., Bartel, 2000; Almeida and Carneiro, 2009) have found positive return on investment effects of training. On a micro level, a large number of PD studies found that employees were satisfied with training activities (Kirkpatrick and Kirkpatrick, 2006; Stes et al., 2010), indicated to have learned to become more student-centered (Rienties et al., 2013), and gained confidence (Rienties and Hosein, 2015). However, limited empirical research is available about the underlying mechanisms how and with whom ECAs learn outside a PD program. Furthermore, given the focus of this special issue we were keen to explore how people around ECAs (e.g., fellow PD colleagues, colleagues in their department, family, friends) helped or perhaps hindered ECAs' complex transition to become established teachers and/or academics.

This study is specifically focussed on whether and with whom ECAs engage, socially co-construct and share knowledge beyond the "PD training room" (Bevelander and Page, 2011; Roxå et al., 2011). Uptake of PD and "successful" transition may be dependent on the "external" (i.e., outside the PD training) network of participants (Akkerman and Bakker, 2011; Roxå et al., 2011; Van Waes et al., 2018; Thomas et al., 2019) and/or the organizational cultures within the participants' organizational units or departments (Daly and Finnigan, 2010; Pataraia et al., 2013; Van Waes et al., 2018; Wellcome Trust, 2020). For example, our prior studies on ECAs outside the PD training network of participants (Rienties and Kinchin, 2014; Rienties and Hosein, 2015) indicated that although ECAs developed on average 4.00 social ties after 9 months within their PD program, they also maintained on average 3.63 external social ties outside the PD classroom to discuss the insights from the PD program.

Although identifying the potential impact of "externals" on the complex transition processes is notoriously complex and difficult (Jindal-Snape and Ingram, 2013; Froehlich et al., 2020; Thomas et al., 2020b), one potential methodology that holds some promise is the use of Social network analysis (SNA). An emerging body of research has indicated that SNA can provide transition researchers several analytical tools to make these (in)formal relations amongst participants and people outside the learning context "visible" (Jindal-Snape, 2016; Jindal-Snape and Rienties, 2016; Froehlich et al., 2020). A consistent finding of research using SNA is that formal and informal social network relations strongly influence with whom people learn (Thomas et al., 2019, 2020b; Froehlich et al., 2020), develop coping strategies (Daly and Finnigan, 2010; Daly et al., 2010; Moolenaar et al., 2012), establish new friendship relations (Rienties and Kinchin, 2014), and build (in)formal communities to effectively learn together (Froehlich et al., 2020; Thomas et al., 2020a). At the same time, people (sub)consciously develop strategic network relations with a range of people in order to maximize their network potential (Coleman, 1988; Burt, 1992; Lin, 2001; Roxå et al., 2011). For example, some people link strategically with powerful connectors (e.g., senior managers) within their organization (Lin, 2001), others primarily connect with similar people (e.g., colleagues in the same unit and/or on a similar hierarchical level) (Coleman, 1988; Rehm et al., 2014), while others may maintain relatively more ties with people outside their organization (Bresman, 2010).

These connections can also be linked with the Multiple and Multi-dimensional Transitions (MMT) model of Jindal-Snape (2010), which conceptualizes that in line with a Rubik's cube analogy a change in one aspect (e.g., getting a ECA grant, failing probation) can lead to changes for the ECA in several aspects; changes for one person can lead to changes for the significant others (e.g., having to stay in the region after a successful ECA grant of the partner, having to consider to leave after failed probation of the partner) and vice versa. As argued in the MMT model (Jindal-Snape and Ingram, 2013; Jindal-Snape, 2016), while most transition research focuses on the individual transition only, a more holistic approach taking the wider network of relations into consideration is important to understand the complex multiple transitions that people go through.

Using principles of social capital theory in conjunction with MMT theory, the prime goal of this study is to understand with whom ECAs developed external social relations. While our first (explorative) studies (Rienties and Kinchin, 2014; Rienties and Hosein, 2015) have found that ECAs indeed maintained a range of internal and external social relations, using a larger sample of 114 participants in this follow-up large-scale study we are particularly interested in the characteristics of these "external connectors," and how these external connectors might facilitate or hamper transition processes of ECAs. In particular, given recent findings that hierarchy and seniority of connectors might influence network formations (Edmondson, 2002; Rehm et al., 2014; Thomas et al., 2020a), we specifically focussed on the frequency of contact, the hierarchical position, and type of job role of these external connectors. Therefore, the following research questions were formulated:

(1) With whom do ECAs maintain external relations in order to discuss and share experiences of their transitions from the PD program? What is the basis for their social network relations?
(2) To what extent do hierarchical levels and job roles of external connectors influence the type and frequency of contact?
(a) Are ECAs primarily maintaining strategic connections with senior academics/managers/teachers?, or
(b) Are ECAs primarily maintaining social relations with fellow peers on a similar discipline/hierarchical level/job role?

While a number of studies have conceptualized how professionals build, maintain, and reconstruct their networks (Wenger, 1998; Akkerman and Bakker, 2011; Pataraia et al., 2014), the unique contribution of our study is to measure empirically whether (or not) ECAs share their expertise and lessons-learned in the PD with external connectors, whom have substantial power to influence the strategic direction of an organization, or whether ECAs are primarily sharing with their colleagues on similar hierarchical positions. In this study, we employ a rather innovative approach to link SNA with web crawling techniques to unpack the "public" characteristics of each named external connector. By integrating these two approaches, we aim to unpack whether the boundary impact of PD is primarily shared on a horizontal level, or whether some of the innovative practices discussed in PD are also shared on a vertical level.

SOCIAL NETWORK THEORY, MULTIPLE AND MULTI-DIMENSIONAL TRANSITIONS AND PROFESSIONAL DEVELOPMENT

A range of studies have highlighted the importance of social network formation for learning for ECAs (Pataraia et al., 2014; Rehm et al., 2014; Thomas et al., 2020a). For example, Pataraia et al. (2014) investigated the informal networks of teaching academics using a SNA approach. They were interested in whom academics who were not part of a PD program spoke to about their teaching, the frequency of contact and the themes arising from this conversation. Pataraia et al. (2014) found that the personal networks were strongly localized to the academics' departments and disciplines, and were dependent on whether the majority of the members knew each other well. Similarly, in a schooling context a range of studies have found that with whom an early-career teacher networks is essential for successful transition (Thomas et al., 2019, 2020a,b). For example, in a year-long study of 10 beginning teachers in Belgium (Thomas et al., 2020b) combining four SNA measurements with in-depths interviews with both beginning teachers and their colleagues indicated that many early-career teachers went through diverse complex transitions. Those who effectively managed their network relations and actively built and maintained networks with both experienced colleagues and others outside the school were more able to successfully make their transition (Thomas et al., 2020b).

A substantial body of research has highlighted that the social network around an individual employee influences his/her attitudes (Van Den Bossche and Segers, 2013; Rienties and Hosein, 2015; Thomas et al., 2020a), motivation (Daly et al., 2010), behavior (Jippes et al., 2013; Pataraia et al., 2013) and action (Thomas et al., 2020b). A social network consists of set of nodes (i.e., participants in a PD program) and the relations (or ties) between these nodes (Wassermann and Faust, 1994). In social network theory, the focus of analysis is on measuring and understanding the social interactions between entities (e.g., individuals, organizational units, companies), rather than focussing on individual behavior (Lee, 2010; Bevelander and Page, 2011).

Social Capital and Network Building

Social capital is a concept with probably the largest growth area in organizational network research (Borgatti and Cross, 2003), which is concerned with the value of resources that social network ties hold. Social capital can be defined as "resources embedded in a social structure which are accessed and/or mobilized in purposive action" Social capital is concerned with the value of resources that social network ties hold (Borgatti and Cross, 2003). Social capital can be defined as "resources embedded in a social structure which are accessed and/or mobilized in purposive action" (Lin, 2001). A review of the conceptualisation of social capital by Lee (2010) highlighted three conceptual issues: the use and accessibility of potential resources, social capital formation processes, and network orientations. For example, in a fine-grained analyses of 11 United Kingdom academics Pataraia et al. (2013) found that academics strategically manage their pool of network contacts to provide and receive professional and emotional support.

Generally there are four explanations why sources embedded in social networks will enhance the returns on an individual's actions (Lin, 2001). The first explanation is that embedded resources facilitate *information and knowledge flows* between professionals, which consequently reduces transaction costs, such as sharing of ideas, new innovative practices, or lessons-learned (Moolenaar et al., 2012). In terms of information flows within organizations, in organizational behavior research and to a certain degree in educational research it is well-documented that professionals share information with people with whom they have a common identity, such as colleagues from their division/department (Moolenaar et al., 2012; Rienties and Hosein, 2015). In terms of information flows within organizations, in organizational behavior research and to a certain degree in educational research it is well-documented that professionals share information with people with whom they have a common identity, such as colleagues from their division/department (Daly and Finnigan, 2010; Daly et al., 2010; Thomas et al., 2020b). This is sometimes referred to as the proximity principle. Thus, when participants return to their daily practice after PD training, how knowledge and insights from the training are shared, translated, and embedded into the organization may depend on the formal and informal networks of their colleagues within the department, their respective identity/position (such as a manager), and relationships within the department.

Second, social ties have a substantial *influence* upon how employees deal with PD and organizational change (Daly et al., 2010; Moolenaar et al., 2010; Spurk et al., 2015; Van Waes et al., 2018). For example, if an academic wants to explore a new teaching approach (suggested during the PD) to further fine-tune a particular module or program, and (s)he has a strong connection with senior management, this academic may be more

likely to be given support to develop this "innovation," and would be allowed more risk-taking than someone who has no or weak relations to senior management. For example, Edmondson (2002) found that lower level management employees were more concerned about how senior management and their colleagues perceived them and their quality of work, and hence were less likely to take risks. Furthermore, in an online PD program for 249 managers of a global organization, Rehm et al. (2014) found that senior managers were more central in contributing to discourse in discussion forums, while participants who had a lower hierarchical rank were positioned mostly on the outer fringe of the network. Rehm et al. (2014) argues that the expertise and networks of senior managers could be used by lower level management employees to make their voices heard.

Third, social ties may be conceived as certification of *social credentials*, as it reflects teacher's accessibility to resources through (powerful) social networks and relations, thus his or her social capital (Lin, 2001). If this academic's innovation is successful and his/her colleagues and senior management (i.e., connectors) provide (in)formal recognition, others are more likely to adopt the same innovation, even when no social support is given. For example, in a study measuring the spread of a new medical approach amongst 727 medical specialists, Jippes et al. (2013) found that uptake and spread of this new approach was dependent on the centrality of the clinical supervisor (i.e., senior connector) and the connectivity of its members within the department.

Finally, social networks provide substantial psycho-social support (Moolenaar et al., 2010, 2012), a sense of belonging (Thomas et al., 2020b), and *reinforces identity and recognition* (Lin, 2001). Rienties and Hosein (2015) found that participants in an 18 months PD program used their network contacts for academic, professional, and emotional support. While participants connected with fellow-ECAs in the PD primarily for academic support (i.e., how to cope with the various tasks in the PD program), several ECAs looked for professional support from senior management, either during formal job appraisal sessions or informal meetings (Rienties and Hosein, 2015). In other words, how and with whom people build formal and informal social relations outside PD may have an influence how they can leverage the power of those external connectors to use and apply the concepts from the PD into their own practice and organizational unit.

Beyond the social capital theory often in social network theory a distinction is made between the strength of a tie and the structure of the social network. *Strong ties* support the transfer of tacit, complex knowledge, and joint problem solving (Daly et al., 2010). Coleman (1988) indicates that high, frequent and intensive levels of connectedness between people can encourage formation of trust and stable relations, which in turn enhances fine-grained knowledge sharing and performance (Moolenaar et al., 2012). In social network studies this is commonly referred to as *homophily*, whereby people will be attracted to work (formally/informally) together and develop ties when individuals are (perceived to be) similar in terms of surface-level attributes, such as same gender (Bevelander and Page, 2011), similar interests (Borgatti and Cross, 2003), similar hierarchical position (Rehm et al., 2014; Thomas et al., 2020b), or following the same program/discipline. For example, in study amongst 106 academics, Roxå et al. (2011) found that most academics relied on a relatively small network of key, trusted network contacts to discuss their teaching practice. In particular, proximity of people might influence to whom ECAs might turn to if they have specific issues (Borgatti and Cross, 2003).

In contrast, research by Granovetter (1973) indicates that *weak ties* can allow (new) brokerage information that is not known within a strong dense network. For example, a colleague from university A may meet a network contact from university B from a different discipline only twice a year during a local network event. Nonetheless, substantial new and most importantly non-redundant information (e.g., new grant opportunities, job vacancies, teaching innovations) could be mutually exchanged, which would make these infrequent meetings extremely valuable. Burt (1992) argues that individuals will gain more from social networks if they are able to position themselves on either side of a "bridge," which may provide non-redundant information from different parts of the social network. In line with Borgatti and Cross (2003), a combination of strong ties with a substantial number of weak ties in different social networks will allow people to benefit from the diversity of social capital connections, while maintaining sufficient close and strong links with network connections who can be trusted.

In line with theories of strong versus weak ties, Putnam (2001) distinguishes between bonding and bridging social capital. *Bonding social capital* provides solidarity, mutual reinforcement and support, as commonly found amongst people from the same disciplinary background, or working together in the same PD program (Bevelander and Page, 2011; Rienties and Hosein, 2015). In contrast, *bridging social capital* may provide linkages with different (non-redundant) parts of the social network, thereby facilitating social mobility and potentially new innovations (Burt, 1992; Putnam, 2001). In a PD context, this bridging capital could be developed when ECAs from different organizational units work together and over time build "interdisciplinary" social relations (Rienties and Kinchin, 2014). Finally, in line with social capital theory Lin (2001) argues that having access to a few but powerful (in terms of reputation, credentials, seniority) connectors may be more important than having many links with "powerless" connectors.

Multiple and Multi-Dimensional Transition

In the MMT model (Jindal-Snape, 2010, 2016; Jindal-Snape and Ingram, 2013) there is a further recognition that beyond the professional network significant others (e.g., friends, family, partner) can have a substantial impact on transitions of the ECA, as well as ECAs having an impact on their peers' transitions. For example, in a study of international doctoral students Jindal-Snape and Ingram (2013) found that Ph.D. students were not only focused on their own transition needs but also of their family. In a study amongst 22 Chinese international students studying in New Zealand, Skryme (2016) found that the involvement in Christian religious groups helped several

international students to transition to their new lives abroad, while at the same time providing new perspectives to the host-nationals in these Christian groups. In a recent longitudinal study of an interdisciplinary PD for 15 doctoral students from nine institutions in six European countries showed a complex development of knowledge transfer and knowledge integration over time between participants (Xue et al., 2020). Qualitative follow-up interviews showed that both the set-up and design of the online PD as well as the relative engagement by doctoral students explained why some developed strong knowledge integration while others did not (Xue et al., 2020).

Beyond the local impact of physical connections between ECAs and the local community, there are several studies using SNA and other methodologies who show that several people use social media for support in their transitional journeys. For example, in a study of extreme right-wing groups in Sweden, Törnberg and Törnberg (2020) found that network connections between individual were facilitated by Facebook and other social media outlets. Similarly, Rehm et al. (2020) explored how 2695 teachers used Twitter to discuss about a new educational policy called Education2032, with follow-up interviews of 22 teachers indicating that the discussions helped teachers to make sense of their own identity and the new policies.

In other words, beyond the formal networks arranged within a PD program as well as the formal networks within a particular school or department, informal network relations outside the boundaries of these formal networks could have a substantial impact on transitions of ECAs. In this quantitative study we aimed to explore how 114 ECAs developed relations with external connectors to help them transition into a role as an academic, or perhaps consider to work in a professional context.

MATERIALS AND METHODS

Setting

Hundred and fourteen ECAs from four faculties (arts and social science, business and economics, engineering and physics, health and medical science) at a university ranked consistently in the top 10 percent of league tables in the United Kingdom participated in a 18 months PD program. Participants could only join this program if a substantial part of their tasks were related to teaching undergraduate and post-graduate students. Participants were selected based upon recommendations from senior management, mostly a head of a department. One element in the tenure of these ECAs is successful completion of this PD and becoming a Fellow of the UK Higher Education Academy (renamed recently to Advanced HE) normally within the first 3 years of joining the organization. With an estimated workload of 300 h, the majority of hours were self-study, as only ten face-to-face group meetings of 2–3 h with a professional coach were arranged. Previous studies (Rienties and Kinchin, 2014; Rienties and Hosein, 2015; Jones et al., 2017) have found that this PD program was considered to be valuable to participants in terms of enhancing their teaching and learning practice, network formation, and social support. Furthermore, qualitative follow-up analyses (Rienties and Hosein, 2015) indicated that PD participants primarily relied on their PD peers in terms of academic, professional, and emotional support to make sense of the program, as well as to learn from their peers how to critically reflect on their own teaching and learning practice.

Participants

The average age of the 114 participants was 36 (range 26–57) and 56% of the ECAs were male. Although there was a large age range, all participants were at similar stages of their academic career (i.e., post Ph.D., post Post-doc). No significant differences in terms of demographics or organizational backgrounds were found between the two consecutive implementations, so we merged the datasets. Participants were from 23 different departments, primarily from business (14%), engineering, hospitality and tourism (both 11%), mathematics (7%), psychology and biosciences (both 6%). Ten participants had no other department member following the program in their respective cohort. While according to Finkelstein et al. (2013) most American universities are still relatively homogenous, in our context a large cultural diversity of 27 different nationalities was present, typical for an international science community, within which the largest group of participants (49%) were from the United Kingdom. International participants primarily were from Latin-European and Confucian Asian countries (both 10%), followed by countries from Germanic and Eastern Europe (both 7%).

Instruments

A sequential mixed-method approach was used (Creswell, 2003; Froehlich, 2020). A closed-network analysis in conjunction with an open network approach was first used to determine the external connectors in the ECAs social networks. Secondly, using the results from the survey, an online document analysis was performed to determine the job profile and hierarchical positions of the external connectors.

Social Network Analysis of Friendship, Working, and Learning and Teaching Networks

We used the closed-network analysis (Daly et al., 2010; Bevelander and Page, 2011; Rienties and Kinchin, 2014) after participants had worked together for 9 months to measure the social networks within the PD program consisting of three social network questions (e.g., "I have learned from. . ."), whereby lists with names of the 54 and 60 participants of the two cohorts were provided. Secondly, and most importantly for this study, in order to measure and investigate the role of "external" connectors in PD, we asked participants in an open network approach the following: "In addition to members of the [PD] program, we are interested to know with whom you discuss your learning and teaching issues (e.g., how to prepare for a lecture, how to create an assessment, how to provide feedback). This could for example be with a colleague, a friend, family, or partner who is not following the [PD] program." Participants were asked the name of each external connector, the frequency of contact (as proxy for strength of tie), the type of relation, and where each external connector works (e.g., same department, same institution, external institution, namely).

A response rate of 88% was established for the open and closed SNA questions.

Job Profile and Hierarchical Position of External Connectors

In total 289 external connectors were mentioned by participants. Based upon the provided names and institutional details, the authors identified, through a document analysis approach, whether a public website profile for each connector was present using the Google search engine and the world largest professional network LinkedIn, a practice that is common in SNA (Davison et al., 2011; Rehm et al., 2020). For 251 (87%) connectors, a public website profile was indeed available. For 35 connectors no specific public website was available, of which nine network contacts referred to people from a wider group (e.g., "my colleagues in my department X"), and for seven contacts no specific name was provided (e.g., my wife, my mother).

In order to develop a coherent, reliable coding scheme of the job profile and hierarchical position of external connectors, both authors first independently coded a sample of 20 websites. Most connectors had a clearly identifiable job role and hierarchical function listed on their website, and the pilot sample coding led to nearly identical results between the two coders. Afterward, four separate rankings were established. First, both authors independently analyzed and constructed 56 functional roles based upon the information provided on these websites (e.g., graduate teaching assistant, tutor, lecturer, associate professor, professor). Second, based upon these functional roles, three separate aggregate rankings were generated, namely *seniority in organization* (0–7), *seniority in management role* (0–7), and *seniority in teaching* (0–8), where the higher number denoted more seniority. For 36 network contacts, a second role was identified (e.g., program director and director of lab) while for two network contacts a third role was coded (e.g., program director and director of lab and associate dean). Consensus about the categorisation of the hierarchical levels and job roles was reached after discussions between the two authors. After agreement of the coding structure, the remaining websites were coded by the second author. Finally, the final codings were discussed by both authors and where needed functional roles were realigned.

Data Analysis

The 114 ECAs participated voluntarily in the SNA and free-response exercise. Participants who were not present during the session(s) were contacted via email. The participants were guaranteed that the results would be completely anonymised and participation was voluntary. Social network data were analyzed on a network level using UCINET version 6.694. In terms of the structure of the network, we computed *in-degree Freeman's centrality* of the nodes, as well as the *number of ties* a node was connected to. *Strength of ties* with external connectors was measured by frequency of contact (daily, weekly, monthly, quarterly, yearly). As previous research (Bevelander and Page, 2011; Kalyani et al., 2015) indicated that gender strongly influenced how people developed links over time, we included *gender* in our modeling. As we were primarily interested in the network relations with external connectors, all data was coded and organized in SPSS 22, and Pearson correlations and linear regression modeling were conducted.

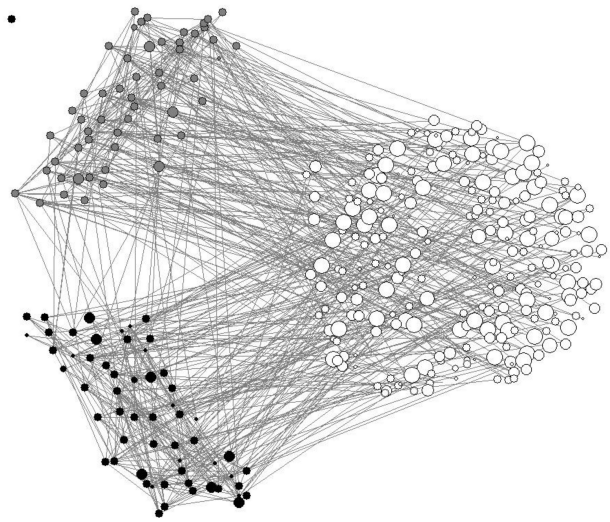


FIGURE 1 | External and internal learning and teaching network (size nodes based upon management role).

RESULTS

Social Network Connections Within and Outside PD

Two hundred and seventy nine "external" connectors (i.e., outside the PD program) were used by the 114 ECAs. Most of these external connectors were male (59%). In terms of frequency of contact, 39% of these connectors were contacted on a weekly basis, 38% on a monthly basis, 11% on a quarterly basis, and 3% were contacted once a year. 9% of these connectors were contacted on a daily basis by ECAs to discuss their teaching practice. In line with proximity theory, 166 (52%) external connectors were colleagues, 52 (16%) were supervisors/senior managers, 51 (16%) were friends, and 36 (13%) were partners. As participants could indicate multiple relations (e.g., friend, colleague, supervisor), these numbers do not add up to exactly 279. Hundred and thirty three (48%) external connectors worked at the same department, and 192 (69%) worked in the same discipline, but not necessarily in the same institute, in line with proximity and homophily principles. In total 114 (41%) of the external connectors did not work at the same institute at the PD participants, indicating potential "weak" ties and bridge building opportunities. This is an important finding as in most research on ECA success and transitions in particular few studies focus on these types of external relations.

As illustrated in **Figure 1**, a complex web of network relations was present during the PD program. On the left of **Figure 1**, the

two consecutive implementations of the PD are illustrated as gray and black nodes, whereby on average 4.84 (*SD* = 2.43) relations were developed and maintained within the PD per academic. Note that several participants from the second implementation learned from participants from the first implementation, as illustrated by the lines between the gray and black nodes. At the same time, a substantial number of links between the PD nodes and people outside the PD (white nodes) were developed. On average 3.17 (*SD* = 2.31) external connectors per ECA were used, indicating that PD participants extensively used connectors outside their PD. In terms of management expertise of these external connectors, a mix of seniority was present (as represented by the relative size of each node). Note that one participant from the second PD implementation did not have any connector to discuss his teaching practice with (and none of the 113 fellow participants indicated to have learned from him), and as a result he was not connected to the network (see the top left in **Figure 1**).

To What Extent Do Hierarchical Roles of Connectors Influence Social Network Formations?

As a next step, we analyzed data for those external connectors whom we could identify a web presence with specific job role descriptors. This implied that 238 connectors were included in our follow-up analyses. In **Table 1**, the mean descriptives and correlations of the number of ties, centrality in the network, frequency of contact, gender (female), the four functional roles/seniority levels, and dummies for the type of relation (e.g., colleague, same discipline) are illustrated. While no significant correlations in terms of functional roles/seniority were found in terms of number of ties or centrality, there were moderately strong negative correlations between frequency of contact and the four hierarchical roles. In other words, ECAs in the PD program were more inclined to maintain frequent network relations with people on similar or lower hierarchical levels while frequency was less with more senior colleagues. As the rhos for the four hierarchical roles were rather similar, this seems to indicate that ECAs preferred to discuss their practice with ECAs in similar (or lower) positions.

As a final step, using linear regression modeling in **Table 2** we analyzed which of our variables predicted the strength of ties with external connectors, in this study approximated by frequency of contact. As the four functional role parameters were strongly correlated and overlapping, we used seniority in management role as a proxy for hierarchical position. In Model 1, strength of ties was primarily negatively predicted by seniority in management role. Adding the type of relation(s) in Model 2, seniority in management role remained the primary predictor, followed by whether (or not) a network contact was a partner. Although only 32% of PD participants indicated to discuss their teaching practice with their partner, if they did they mostly discussed their practice frequently. Finally, in Model 3 we added whether location of the connectors influenced frequency, whereby in addition to seniority in management role and partner dummy external links were significantly negatively predicting frequency of contact.

DISCUSSION

As highlighted in both transition research (Jindal-Snape and Ingram, 2013; Jindal-Snape, 2016) as well as social network theories (Borgatti and Cross, 2003; Froehlich et al., 2020; Thomas et al., 2020a), many people go through multiple complex transitions when starting a new role. In this innovative study, we set out to explore the external social learning relationships of 114 early-career academics (ECAs) within a professional development (PD) program using an innovative combination of SNA with web crawling of external connectors' websites. Our research indicates that our ECAs discussed and shared their teaching practice with 238 external connectors, including their colleagues, friends and their partner. However, these ECAs made only limited usage of senior management networks and expertise for their PD and their teaching practice in particular.

In line with principles of proximity and homophily (Coleman, 1988; Bresman, 2010; Daly et al., 2010; Rienties and Kinchin, 2014) and Research Question 2b, the PD participants shared their practice most widely with their colleagues both within and outside their departments/disciplines and suggest that these PD participants had a high level of connectedness with them. In line with principles of proximity and homophily (Coleman, 1988; Bresman, 2010; Daly et al., 2010; Rienties and Kinchin, 2014) and Research Question 2b, the PD participants shared their practice most widely with their colleagues both within and outside their departments/disciplines and suggest that these PD participants had a high level of connectedness with them. A negative correlation was found between gender and hierarchical roles, whereby male academics were more often present in senior management positions than female academics. Although similar results were found as Bevelander and Page (2011) and Kalyani et al. (2015) with regards to male staff being central to participant's networks, this may be a reflection of the male to female staff ratio where the study took place rather than female participants being less likely to form social networks. Further, the information flow reported by participants in the PD program seemed to be hierarchically flat, that is, based upon the web crawl participants primarily shared information with people who they had a common identity (Daly and Finnigan, 2010; Daly et al., 2010; Rehm et al., 2014).

However, most ECAs had weak ties with respect to sharing practice with senior management and persons within their discipline/department (that is, no or negative correlations in the frequency of contact), participants may not then be able to act as brokers of these information flows to persons in their own department/discipline. This suggests that the value of PD training to a department may be lost as the sharing of new practices or ideas may have slow uptake. A consequence of this is that senior management may become distanced from the training that is provided and may make decisions based on the training they think they their personnel are receiving. In line with recommendations of Lane and Down (2010), departments and

TABLE 1 | Basic descriptive and correlation matrix of external connectors.

	M	*SD*	Range	Number of ties	In degree centrality	Frequency of contact	Gender
Number of ties	1.20	0.58	1–5				
In degree centrality	1.18	0.54	1–5	0.90**			
Frequency of contact	3.37	0.91	1–5	0.03	0.07		
Gender (female)	1.37	0.49	1–2	−0.12	−0.16*	0.03	
Functional role	31.52	13.24	0–53	0.06	0.04	−0.31**	−0.24**
Seniority in organization	4.19	1.89	0–7	0.04	0.01	−0.28**	−0.24**
Seniority in management role	4.19	1.89	0–7	0.04	0.01	−0.28**	−0.24**
Seniority in teaching	4.56	2.73	0–8	0.08	0.06	−0.29**	−0.27**
Colleague	0.67	0.47	0–1	0.18**	0.17*	0.02	0.03
Friend	0.17	0.38	0–1	0.08	0.10	−0.05	0.02
Supervisor	0.21	0.41	0–1	−0.01	0.01	−0.13	−0.07
Partner	0.08	0.28	0–1	−0.10	−0.10	0.25**	0.02
Family	0.02	0.14	0–1	−0.05	−0.05	0.01	0.13
Same department	0.56	0.50	0–1	0.06	0.04	0.01	0.00
Same discipline	0.76	0.43	0–1	0.08	0.08	−0.11	−0.05
External link	0.31	0.46	0–1	− 0.14*	−0.14*	−0.03	0.04

*n = 238. *p < 0.05, **p < 0.01.*

senior management in particular may need to "create a safe space for others to have their voice to harvest the wisdom of different and contrary perspectives to better anticipate what is unforeseen." In other words, a joint effort is needed to allow participants to discuss and share their practice beyond the PD classroom to staff from all levels.

In line with recent studies on cross-boundary management (Bresman, 2010; Akkerman and Bakker, 2011; Thomas et al., 2020b), this study also found the sharing of practice extends beyond the organization and included persons in similar organizations (external links). The number of external links was small and there were weak ties with them which suggest that organizational learning between institutions is also insular. This makes intuitive sense, as connectors who were not working in the same location (e.g., a different university) will be less easy to contact than those colleagues who worked in the same building or on the same campus. Nonetheless, in line with Burt (1992) and Jindal-Snape and Ingram (2013) these external links may be important for potential new information or a trusted perspective of how teaching practices at their institute might be slightly different, therefore providing a potential benchmark for discussion. Indeed, this insularity may be appropriate for organizations with highly valuable information, however, in other organizations such as charities and universities with very similar roles, an openness to sharing practice can minimize the time and money spent on the duplication of methods and encourage innovations and optimisation of practice. There is also a possibility as these were ECAs; they were still maintaining weak ties with their old institutions until they were able to establish strong ties at their new institution.

TABLE 2 | Regression model of strength of external connector contact (i.e., frequency).

	Model 1	Model 2	Model 3
Gender	−0.036	−0.039	−0.036
Seniority in Management role	−0.291***	−0.259***	−0.275***
Colleague		0.200	0.147
Friend		−0.035	−0.014
Supervisor		0.137	0.111
Partner		0.251**	0.299**
Family		0.076	0.106
Same department			−0.064
Same discipline			0.000
External link			−0.228*
R-Sq adj.	0.073	0.093	0.107

*n = 235. *p < 0.05, **p < 0.01, ***p < 0.001.*

A final, important but mostly ignored finding in the social network literature, but this is more acknowledged in the transition literature (Jindal-Snape, 2016), is the role of participants' partners for support in PD. Notably, several participants had strong ties with their partners with respect to sharing their teaching and learning practice. This is perhaps not surprising as they probably have strong bonding social capital and partners are able to provide emotional support to PD participants as well as professional support if the partner works in a similar organization. However, the organizational learning or sharing of information are extended beyond that of the organization and is being shaped by the employee's partner rather than through the collective knowledge of the organization. The strength of the tie may suggest that there is a lack of mentors at a middle or senior management level to help with this offloading of emotion. As organizations are unlikely to "prohibit" participants' sharing with their partners and external connectors, it may be worthwhile that organizations to take a wider holistic perspective in being a social enterprise (Lane and Down, 2010). By recognizing the importance of external social network formation of its employees, in particular the role of partners and colleagues at lower hierarchical levels in providing academic,

professional and emotional support, senior management needs to recognize that management support and measuring the impact of PD may be more complex.

Limitations

A crucial limitation of our findings is that both closed and open social network analyses of learning and teaching networks were self-survey instruments, whereby socially desirable behavior might influence the results. However, a large body of research (Borgatti and Cross, 2003; Daly and Finnigan, 2010; Daly et al., 2010) has found that SNA techniques provide a robust predictor for actual social networks and PD programs, in particular given the high response rates (88%) and similar findings across two consecutive implementations of this PD program. Nonetheless, the framing of the SNA question (focussed on teaching and learning) might have restricted respondents' recall of their network, in particular with senior management.

A second limitation is the accuracy of the data gathering process of job roles and hierarchical positions of external connectors using publicly available websites. Not all professionals keep their job information 100% up to date on their website or LinkedIn profile, although the increased competition amongst academics for scarce (funding) resources (Adcroft et al., 2010) almost requires academics to maintain a public web presence, which might mitigate some of these concerns. A third limitation is that we did not follow-up with the external connectors what kind of information and advice they were sharing with PD participants. Due to recall issues of social network interactions (Neal, 2008), perhaps the intensity of contact and types of information and support exchanged might be different than reported by PD participants. Future research is needed to determine whether reported informal network links by PD participants indeed provide the academic, professional and emotional support.

A fourth and perhaps most important limitation was the lack of qualitative data to understand the complex longitudinal transition experiences, such as for example done by Thomas et al. (2020b) who followed beginning teachers for a year and conducted a range of interviews over time with ECAs and more experienced academics. We also recognize that ECAs are not a monotonous group and their transition journeys from the PD would not be similar and may be dependent on their own unique circumstances and attributes such as their age, gender, race, nationality and discipline. However, this analysis was beyond the scope of our paper. Although we conducted previous qualitative focus group discussions (Rienties and Hosein, 2015), which highlighted that ECAs used the PD and external networks primarily for academic, professional, and emotional support, further longitudinal research would be needed to explore the long-term impacts of external connectors on ECA transitions based on their own unique characteristics. However, our quantitative analyses do indicate a (perceived) importance of those external connectors for allowing ECAs to transition in their new role.

CONCLUSION

Higher Education Institutions use specialized PD training to up-skill their ECAs to ensure they are competitive. The strength, number and type of external connections that these ECAs have can determine the extent and level that new knowledge from PD training is shared within the organization. As there is limited research in exploring these external connectors, this study examined with whom and to what extent that ECAs shared their PD experiences outside the training room. The results suggest that ECAs shared their knowledge quite widely but mainly with people they had a common identity, for example colleagues at a similar stage in career. The results also indicate that these ties tended to be male colleagues. Further, the intensity of knowledge sharing was positively related to sharing of knowledge with their partners and negatively related to senior management personnel. Further research should look at the social networks of mid-career employees, whether they are more likely to maintain ties from their early-career PD training, as well as, from their previous institutions.

DATA AVAILABILITY STATEMENT

The datasets generated for thist study will not be made publicly available. This is highly sensitive data about whom people learn and trust, which is very difficult to anonymize.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

BR collected and analyzed all the initial SNA data and web crawling data. AH double coded and independently verified the web crawling data. BR and AH contributed to the writing of this manuscript. All authors contributed to the article and approved the submitted version.

FUNDING

While no specific funding was provided for this project, we do acknowledge the consistent support from Department of Higher Education at University of Surrey for conducting this and related research.

ACKNOWLEDGMENTS

We are extremely grateful for the support and contributions from the 114 ECAs who supported this research, and dedicated their time to complete the various surveys and questionnaires.

REFERENCES

Adcroft, A., Teckman, J., and Willis, J. (2010). Is higher education in the UK becoming more competitive? *Int. J. Public Sect. Manag.* 23, 578–588. doi: 10.1108/09513551011069040

Akkerman, S. F., and Bakker, A. (2011). Boundary crossing and boundary objects. *Rev. Educ. Res.* 81, 132–169. doi: 10.3102/0034654311404435

Almeida, R., and Carneiro, P. (2009). The return to firm investments in human capital. *Lab. Econ.* 16, 97–106. doi: 10.1016/j.labeco.2008.06.002

Bartel, A. P. (2000). Measuring the employer's return on investments in training: evidence from the literature. *Ind. Relat. J. Econ. Soc.* 39, 502–524. doi: 10.1111/0019-8676.00178

Bevelander, D., and Page, M. J. (2011). Ms. trust: gender, networks and trust—implications for management and education. *Acad. Manag. Learn. Educ.* 10, 623–642. doi: 10.5465/amle.2009.0138

Borgatti, S. P., and Cross, R. (2003). A relational view of information seeking and learning in social networks. *Manag. Sci.* 49, 432–445. doi: 10.1287/mnsc.49.4.432.14428

Bresman, H. (2010). External learning activities and team performance: a multimethod field study. *Organ. Sci.* 21, 81–96. doi: 10.1287/orsc.1080.0413

Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge MA: Harvard University Press.

Coleman, J. S. (1988). Social capital in the creation of human capital. *Am. J. Sociol.* 94, S95–S120.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. London: Sage Publications.

Daly, A. J., and Finnigan, K. S. (2010). A bridge between worlds: understanding network structure to understand change strategy. *J. Educ. Change* 11, 111–138. doi: 10.1007/s10833-009-9102-5

Daly, A. J., Moolenaar, N. M., Bolivar, J. M., and Burke, P. (2010). Relationships in reform: the role of teachers' social networks. *J. Educ. Admin.* 48, 359–391. doi: 10.1108/09578231011041062

Davison, H. K., Maraist, C., and Bing, M. (2011). Friend or foe? The promise and pitfalls of using social networking sites for HR decisions. *J. Bus. Psychol.* 26, 153–159. doi: 10.1007/s10869-011-9215-8

Edmondson, A. C. (2002). The local and variegated nature of learning in organizations: a group-level perspective. *Organ. Sci.* 13, 128–146. doi: 10.1287/orsc.13.2.128.530

Finkelstein, M., Walker, E., and Chen, R. (2013). The American faculty in an age of globalization: predictors of internationalization of research content and professional networks. *High. Educ.* 66, 325–340. doi: 10.1007/s10734-012-9607-3

Froehlich, D. (2020). "Mapping Mixed Methods Approaches to Social Network Analysis in Learning and Education," in *Mixed Methods Approaches to Social Network Analysis*, eds D. Froehlich, M. Rehm, and B. Rienties (London: Routledge), 13–24. doi: 10.4324/9780429056826-2

Froehlich, D., Rehm, M., and Rienties, B. (2020). *Mixed Methods Approaches to Social Network Analysis.* London: Routledge.

Granovetter, M. (1973). The strength of weak ties. *Am. J. Sociol.* 81, 1287–1303.

Jindal-Snape, D. (2010). *Educational Transitions: Moving Stories from Around the World*. Abingdon: Routledge.

Jindal-Snape, D. (2016). *A-Z of Transitions*. London, UK: Palgrave.

Jindal-Snape, D., and Ingram, R. (2013). Understanding and supporting triple transitions of international doctoral students: ELT And SuReCom models. *J. Perspect. Appl. Acad. Pract.* 1, 17–24.

Jindal-Snape, D., and Rienties, B. (eds) (2016). *Multi-Dimensional Transitions of International Students to Higher Education*. London: Routledge.

Jippes, E., Steinert, Y., Pols, J., Achterkamp, M. C., Van Engelen, J. M. L., and Brand, P. L. P. (2013). How do social networks and faculty development courses affect clinical supervisors' adoption of a medical education innovation? An exploratory study. *Acad. Med.* 88, 398–404. doi: 10.1097/acm.0b013e318280d9db

Jones, A., Lygo-Baker, S., Markless, S., Rienties, B., and Di Napoli, R. (2017). Conceptualizing impact in academic development: finding a way through. *High. Educ. Res. Dev.* 36, 116–128. doi: 10.1080/07294360.2016.1176997

Kalyani, R. R., Yeh, H. C., Clark, J. M., Weisfeldt, M. L., Choi, T., and Macdonald, S. M. (2015). Sex differences among career development awardees in the attainment of independent research funding in a department of medicine. *J. Women's Health* 24, 933–939. doi: 10.1089/jwh.2015.5331

Kirkpatrick, D. L., and Kirkpatrick, J. D. (2006). *Evaluating Training Programs*. San Francisco, CA: Berrett-Koehler.

Lane, D. A., and Down, M. (2010). The art of managing for the future: leadership of turbulence. *Manag. Decision* 48, 512–527. doi: 10.1108/00251741011041328

Lee, M. (2010). Researching social capital in education: some conceptual considerations relating to the contribution of network analysis. *Br. J. Sociol. Educ.* 31, 779–792. doi: 10.1080/01425692.2010.515111

Lin, N. (2001). "Theories of capital," in *Social Capital: Theory and Research*, 4 Edn, eds N. Lin, K. S. Cook, and R. S. Burt (New Jersey: Transaction Publisher), 3–18.

Mittelmeier, J., Edwards, R., Davis, S. K., Nguyen, Q., Murphy, V., Brummer, L., et al. (2018). 'A double-edged sword. This is powerful but it could be used destructively': perspectives of early career researchers on learning analytics. *Front. Learn. Res.* 6:20–38.

Moolenaar, N. M., Daly, A. J., and Sleegers, P. J. C. (2010). Occupying the principal position: examining relationships between transformational leadership, social network position, and schools' innovative climate. *Educ. Admin. Q.* 46, 623–670. doi: 10.1177/0013161x10378689

Moolenaar, N. M., Sleegers, P. J. C., and Daly, A. J. (2012). Teaming up: linking collaboration networks, collective efficacy, and student achievement. *Teach. Teach. Educ.* 28, 251–262. doi: 10.1016/j.tate.2011.10.001

Neal, J. W. (2008). "Kracking" the missing data problem: applying krackhardt's cognitive social structures to school-based social networks. *Sociol. Educ.* 81, 140–162. doi: 10.1177/003804070808100202

Pataraia, N., Falconer, I., Margaryan, A., Littlejohn, A., and Fincher, S. (2014). "Who do you talk to about your teaching?"; networking activities among university teachers. *Front. Learn. Res.* 2:4–14.

Pataraia, N., Margaryan, A., Falconer, I., and Littlejohn, A. (2013). How and what do academics learn through their personal networks. *J. Further High. Educ.* 39, 336–357. doi: 10.1080/0309877x.2013.831041

Putnam, R. D. (2001). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Rehm, M., Cornelissen, F., Notten, A., Daly, A., and Supovitz, J. (2020). "Power to the people?! Twitter discussions on (educational) policy processes," in *Mixed Methods Approaches to Social Network Analysis*, eds D. Froehlich, M. Rehm, and B. Rienties (London: Routledge), 231–244. doi: 10.4324/9780429056826-20

Rehm, M., Gijselaers, W., and Segers, M. (2014). Effects of hierarchical levels on social network structures within communities of learning. *Front. Learn. Res.* 2:38–55.

Rienties, B., Brouwer, N., and Lygo-Baker, S. (2013). The effects of online professional development on higher education teachers' beliefs and intentions towards learning facilitation and technology. *Teach. Teach. Educ.* 29, 122–131. doi: 10.1016/j.tate.2012.09.002

Rienties, B., and Hosein, A. (2015). Unpacking (in)formal learning in an academic development programme: a mixed-method social network perspective. *Int. J. Acad. Dev.* 20, 163–177. doi: 10.1080/1360144X.2015.1029928

Rienties, B., and Kinchin, I. M. (2014). Understanding (in)formal learning in an academic development programme: a social network perspective. *Teach. Teach. Educ.* 39, 123–135. doi: 10.1016/j.tate.2014.01.004

Roxå, T., Mårtensson, K., and Alveteg, M. (2011). Understanding and influencing teaching and learning cultures at university: a network approach. *High. Educ.* 62, 99–111. doi: 10.1007/s10734-010-9368-9

Skryme, G. (2016). ""It's about the journey, it's not about uni": chinese international students learning outside the university," in *Multi-Dimensional Transitions of International Students to Higher Education*, eds D. Jindal-Snape and B. Rienties (London: Routledge), 91–105.

Spurk, D., Kauffeld, S., Barthauer, L., and Heinemann, N. S. R. (2015). Fostering networking behavior, career planning and optimism, and subjective career success: an intervention study. *J. Vocat. Behav.* 87, 134–144. doi: 10.1016/j.jvb.2014.12.007

Stes, A., Min-Leliveld, M., Gijbels, D., and Van Petegem, P. (2010). The impact of instructional development in higher education: the state-of-the-art of the research. *Educ. Res. Rev.* 5, 25–49. doi: 10.1016/j.edurev.2009.07.001

Thomas, L., Rienties, B., Tuytens, M., Devos, G., Kelchtermans, G., and Van Der Linde, R. (2020a). Unpacking the dynamics of collegial networks in relation to

beginning teachers' job attitudes. *Res. Pap. Educ.* doi: 10.1080/02671522.2020.1736614

Thomas, L., Tuytens, M., Devos, G., Kelchtermans, G., and Vanderlinde, R. (2020b). "Unpacking the collegial network structure of beginning teachers' primary school teams: a mixed method social network study," in *Mixed Methods Approaches to Social Network Analysis*, eds D. Froehlich, M. Rehm, and B. Rienties (London: Routledge), 139–158. doi: 10.4324/9780429056826-14

Thomas, L., Tuytens, M., Devos, G., Kelchtermans, G., and Vanderlinde, R. (2019). Beginning teachers' professional support: a mixed methods social network study. *Teach. Teach. Educ.* 83, 134–147. doi: 10.1016/j.tate.2019.04.008

Törnberg, P., and Törnberg, A. (2020). "Minding the gap between culture and connectivity: laying the foundations for a relational mixed methods social network analysis," in *Mixed Methods Approaches to Social Network Analysis*, eds D. Froehlich, M. Rehm, and B. Rienties (London: Routledge), 58–71. doi: 10.4324/9780429056826-7

Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educ. Res. Rev.* 3, 130–154.

Uttl, B., White, C. A., and Gonzalez, D. W. (2017). Meta-analysis of faculty's teaching effectiveness: student evaluation of teaching ratings and student learning are not related. *Stud. Educ. Eval.* 54, 22–42. doi: 10.1016/j.stueduc.2016.08.007

Van Den Bossche, P., and Segers, M. (2013). Transfer of training: adding insight through social network analysis. *Educ. Res. Rev.* 8, 37–47. doi: 10.1016/j.edurev.2012.08.002

Van Waes, S., De Maeyer, S., Moolenaar, N. M., Van Petegem, P., and Van Den Bossche, P. (2018). Strengthening networks: a social network intervention among higher education teachers. *Learn. Instruct.* 53, 34–49. doi: 10.1016/j.learninstruc.2017.07.005

Wassermann, S., and Faust, K. (1994). *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.

Wellcome Trust (2020). *What Researchers Think About the Culture They Work*. London: Wellcome Trust.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.

Xue, L., Rienties, B., Van Petegem, W., and Van Wieringen, A. (2020). Learning relations of knowledge transfer (KT) and knowledge integration (KI) of doctoral students during online interdisciplinary training: an exploratory study. *High. Educ. Res. Dev.* doi: 10.1080/07294360.2020.1712679

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

ORIGINAL RESEARCH
published: 11 September 2020
doi: 10.3389/feduc.2020.539950

Cross-Cultural Transition and Psychological Adaptation of International Students: The Mediating Role of Host National Connectedness

Alicia Bethel[1,2], *Colleen Ward*[1]* *and Velichko H. Fetvadjiev*[1,3]

[1] Centre for Applied Cross-Cultural Research, Victoria University of Wellington, Wellington, New Zealand, [2] International Recruitment, Relations and Study Abroad, University of Liverpool, Liverpool, United Kingdom, [3] Department of Social Psychology, University of Amsterdam, Amsterdam, Netherlands

Cross-cultural transitions are challenging and often have detrimental consequences for psychological well-being. This is particularly true for international students at tertiary institutions who are not only transitioning between school and higher education, but also between vastly different educational systems. This study tests a predictive model of psychological adaptation with international students whereby host national connectedness mediates the effects of personal resources and contextual factors on adaptive outcomes. A sample (N = 1527) of international tertiary students in New Zealand completed a survey that measured self-reported English language proficiency, perceived cultural distance, perceived cultural inclusiveness in the classroom, host national connectedness (defined by frequency of contact, number of friends, social support, and general belongingness), and positive (life satisfaction) and negative (psychological symptoms) indicators of psychological adaptation. Path analysis indicated that host national connectedness fully mediated the effects of English language proficiency on psychological symptoms and partially mediated the effects of language proficiency, cultural distance and cultural inclusion in the classroom on life satisfaction and psychological symptoms. The findings highlight the importance of international students' relationships with host nationals, and the results are discussed in relation to strategies that could enhance student-host connectedness during cross-cultural transitions.

Keywords: connectedness, cultural inclusiveness, international students, psychological adaptation, New Zealand, well-being

OPEN ACCESS

Edited by:
Elizabeth Fraser Selkirk Hannah, University of Dundee, United Kingdom

Reviewed by:
Jeroen Huisman, Ghent University, Belgium
Vincent Donche, University of Antwerp, Belgium

***Correspondence:**
Colleen Ward
colleen.ward@vuw.ac.nz

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *03 March 2020*
Accepted: *14 August 2020*
Published: *11 September 2020*

Citation:
Bethel A, Ward C and Fetvadjiev VH (2020) Cross-Cultural Transition and Psychological Adaptation of International Students: The Mediating Role of Host National Connectedness. Front. Educ. 5:539950. doi: 10.3389/feduc.2020.539950

INTRODUCTION

Cross-cultural transitions can be very challenging. Individuals are called upon to learn new skills to operate effectively in an unfamiliar cultural environment, to resolve tensions between differing cultural perspectives and worldviews, and to manage the stresses associated with significant changes in daily life (Ward and Szabó, 2019). In addition, it is critical that individuals establish and maintain social support networks that enhance resources for meeting these demands. While cross-cultural transition can take its toll on psychological well-being in general, the impact of these

pressures is greater in some groups than others. For international students crossing cultures can be particularly stressful given the simultaneous occurrence of multiple transitions. Beyond crossing national and cultural boundaries, they may also experience normative developmental transitions from school to university and non-normative transitions between educational systems based on different values and assumptions (Lun et al., 2010; McGhie, 2017). When multiple transitions such as these occur simultaneously, there is a high probability that subjective well-being will be compromised, particularly if the transitions involve associated stressors such as discrimination (Hanassab, 2006; Lee and Rice, 2007), financial vulnerability (Li and Kaye, 1998; Sawir et al., 2012) and practical problems in daily living, such as securing appropriate accommodation (Bradley, 2000; Sawir et al., 2008). This paper examines the psychological well-being of international students during cross-cultural transition, highlighting the role of host national connectedness (HNC) in fostering positive outcomes.

The study is grounded in psychological theory and research on acculturation (changes in an individual's psychological characteristics and behavioral patterns that arise from sustained intercultural contact) and adaptation (i.e., "feeling well"/psychological adaptation, "doing well"/sociocultural adaptation, and "relating well"/intercultural adaptation) as articulated by Berry and Sam (2016). The over-arching theoretical framework highlights the importance of both individual and contextual factors in shaping the acculturation process and its adaptive (or maladaptive) outcomes (also see Ward and Szabó, 2019). We are particularly interested in the dynamic role of contextual factors for two reasons. First, in terms of theory development, contextual factors have been relatively under-researched compared to individual differences such as personality, motivation, and attitudes. Second, in terms of application, schools and universities have educational and pastoral responsibilities; contextual factors are malleable, and policies and practices can be changed in ways that are more conducive to positive outcomes for international students.

Host National Connectedness

Connectedness has been conceptualized and measured in a myriad of ways. Both objective measures such as the number of friends and frequency of contact (e.g., Bochner et al., 1985; Ward and Searle, 1991; Hendrickson et al., 2011) and subjective assessments, like feelings of belongingness or social support, that capture the more intimate nature of connectedness (Rajapaksa and Dundes, 2002–2003; Ong and Ward, 2005) have been used. At its core connectedness refers to ties among people that foster a sense of belonging and diminish feelings of aloneness (Barber et al., 2005). Moreover, connectedness has been shown to predict international student success during cross-cultural transitions (Yeh and Inose, 2003; Sümer et al., 2008).

International students form multiple connections as they settle into their new academic environments, and all of these have the potential to offer social support and bolster well-being. In terms of student peers, connections occur across three primary groups: host nationals (native-borns), co-nationals (compatriots), and multi-nationals (international students from other national backgrounds), although technological advances have also made retaining home country peer support much easier (Bochner et al., 1977; Bochner, 2006; Lin et al., 2012; Li and Chen, 2014). It has been suggested that each of these friendship networks offers different resources, with co-nationals largely providing emotional support and host nationals offering functional or instrumental assistance (Bochner et al., 1977); however, more recent research has shown that a higher ratio of host national individuals in international students' social networks is associated with their greater satisfaction and contentment (Hendrickson et al., 2011). More broadly, host national connectedness has been shown to attenuate the negative effects of the educational and cultural stressors that international students encounter during their transitions (Kashima and Loh, 2006; Zhang and Goodson, 2011; Cheung and Yue, 2013). It is also linked to higher levels of satisfaction with the international student experience (Rohrlich and Martin, 1991) as well as lower levels of homesickness and social isolation (Ying and Han, 2006; Hendrickson et al., 2011).

Despite the benefits that host national connectedness brings, international students find it difficult to cultivate friendships with local students (Zheng and Berry, 1991). A 2012 Australian national survey indicated that 86% of international students would like to have more Australian friends (Australian Education and International, 2013). Similarly, in a New Zealand national survey, Ward and Masgoret (2004) reported that 70% of international students desired to have more local friends. Indeed, not only international students, but researchers, educators, administrators, and counselors have identified low levels of intercultural engagement between international students and their domestic peers as one of the most significant challenges in international education (Bethel et al., 2016). Therefore, it is useful to examine the antecedents of host national connectedness in international students. In the next section we review key factors that predict HNC and describe how HNC might mediate their effects on psychological well-being in international students.

Antecedents and Outcomes of Host National Connectedness

As with most phenomena, the factors that predict HNC include individual differences as well as situational and contextual factors. Among individual differences language proficiency has been shown to be a strong predictor of connectedness with host nationals (Church, 1982; Masgoret and Gardner, 1999; Poyrazli et al., 2002). Conversely, a low level of language fluency inhibits the formation of intercultural relations (Peacock and Harrison, 2009; Gareis, 2012; Yu and Moskal, 2019). Language proficiency has also been associated with better psychological well-being in international students (Poyrazli et al., 2004; Dao et al., 2007; Cetinkaya-Yildiz et al., 2011). Cao and Meng (2019) integrated these findings in their mediational model of international student adaptation demonstrating that host national connectedness partially mediated the positive effects of language proficiency on adaptive outcomes. Similarly, we hypothesize that English language proficiency will exert both direct and indirect effects on the psychological adaptation of international students with the indirect effects mediated by host national connectedness.

While international students play an active role in their cross-cultural adaptation, there are situational and institutional factors that also come into play. The extent to which international students' bond with their domestic peers as well as their adaptation outcomes are affected by the degree to which the international students' heritage culture differs from their destination culture. This is referred to as cultural distance (Babiker et al., 1980). Early work by Furnham and Bochner (1982) demonstrated that international students in the United Kingdom who originated from high cultural distance countries had more social difficulties relating to British students in terms of everyday activities such as making British friends. More recent research has drawn similar conclusions (Fritz et al., 2008). High cultural distance is likely to lead to parallel lives for international and domestic students partly because having less in common results in fewer bonding opportunities (Montgomery, 2010; Bethel et al., 2016). In addition to the association between cultural distance and lower levels of social connectedness, cultural distance is known to predict negative psychological outcomes for international students (Galchenko and van de Vijver, 2007), including greater anxiety (Fritz et al., 2008) and mood disturbance (Ward and Searle, 1991) and lower levels of life satisfaction (Sam, 2001). Accordingly, we predict that the detrimental effects of cultural distance on international students' well-being will be partially mediated by host national connectedness.

Diversity climates in educational institutions can influence the experiences and outcomes of cross-cultural transitions (Stuart and Ward, 2015). More specifically, diversity climates are known to affect both social connectedness and the psychological adaptation of students from minority backgrounds (Schachner et al., 2015, 2019; Titzmann et al., 2015) including international students (Ward and Masgoret, 2004). Culturally plural and inclusive climates enhance a sense of school belongingness, which leads, in turn, to greater life satisfaction (Schachner et al., 2019). Along similar lines, multicultural classrooms that reflect an appreciation of cultural diversity increase empathy and comfort with peers from different cultural backgrounds, and these positive relationships contribute to greater subjective happiness (Le et al., 2009). Therefore, we hypothesize that cultural inclusiveness in the classroom will predict greater host national connectedness, and host national connectedness will partially mediate the positive effects of inclusiveness on the psychological adaptation of international students.

Finally, personal background factors such as age, gender, and length of residence in the destination country can relate to international students' connectedness with their domestic peers and their overall level of psychological adaptation; however, the research findings on these demographic factors are so inconsistent that it is impossible to derive well-grounded hypotheses. Studies have shown that: older international students have more local friends (Hendrickson, 2016), but younger students have more contact with their domestic peers (Ward and Masgoret, 2004); females are more likely to have meaningful relationships with host nationals (Yang et al., 1994), but males report having more host national friends (Ward and Masgoret, 2004); and relationships between international and domestic students grow during study abroad (Hernández-Nanclares, 2016), but interaction between them decreases over time (Rienties and Nolan, 2014). The associations among these demographic characteristics and the psychological adaptation of international students are likewise highly variable. Females have been shown to experience both higher levels of well-being and more symptoms of anxiety and depression (Bulgan and Çiftçi, 2017; Alharbi and Smith, 2018). Age and length of residence in the destination country have been both positively and negatively associated with psychological adaptation (Ying and Liese, 1994; Wilton and Constantine, 2003; Alharbi and Smith, 2018; Yang et al., 2018). These mixed findings are not surprising as age ranges and length of residence can vary enormously across studies, and how connectedness and well-being play out during cross-cultural transition are also affected by the way in which constructs are measured and the characteristics of the international student sample, educational institutions and national context (Ward and Masgoret, 2004; Le et al., 2009; Geeraert et al., 2019; Schachner et al., 2019). Consequently, we explore the direct and indirect of effects of demographic factors (gender, age, and length of residence) on the psychological adaptation of international students rather than testing specific hypotheses.

In summary, this study tests a mediational model whereby host national connectedness partially mediates the effects of demographic factors, English language proficiency, perceived cultural distance and perceived cultural inclusiveness in the classroom on the psychological adaptation of international students.

METHODS AND MEASUREMENTS

Participants and Procedures

With the support of a New Zealand government agency, an email invitation to participate in an online survey was sent to 23,205 international students studying in tertiary and private training institutions. Of the 23,205 international students invited to participate, 2,823 (12.17%) responded. We eliminated those who indicated they were not international students, no longer studying or had not yet arrived in New Zealand. We also eliminated those who had missing responses to all items on an adaptation outcome variable; this left us with an adjusted response/inclusion rate of 6.58%.

The final sample was made up of 1527 participants (56.7% male) whose ages ranged from 17 to 62 years old (M = 26.68, SD = 6.01). Students originated from 78 countries, with the highest proportions from India (27.2%), the Philippines (9.9%), and China (9.3%). At the time of the survey, participants had lived in New Zealand on average for just over 1 year (M = 15.74 months, SD = 8.40). All students had been in New Zealand for less than five years.

Measures

In addition to demographic information (gender, age, country of origin and length of time in New Zealand), we measured self-reported English language proficiency, perceived cultural distance, perceived cultural inclusion in their educational

environment, host national connectedness and positive and negative indicators of psychological adaptation.

English Language Proficiency

Four self-rated items were used to assess participants' English language proficiency. In line with the most common conventions, participants rated their proficiency in reading, writing, speaking, and comprehension on a scale from *very poor* (1) to *excellent* (6), with a rating of 7 for native speakers (Li et al., 2006; Tomoschuk et al., 2019). We combined the four items for an overall proficiency score, as is typically done in acculturation research (e.g., Sam et al., 2015; Doucerain et al., 2017) so that higher scores indicate greater language proficiency (Cronbach's $\alpha = 0.94$).

Cultural Distance

A 10-item scale adapted from Babiker et al. (1980) was used to evaluate the perceived level of cultural distance between the participants' country of origin and New Zealand. The instructions read "Please rate how much, if at all, your own background differs from that of New Zealand in the following areas," and items included areas such as climate, food, and religion (Searle and Ward, 1990). Responses are measured on a 4-point scale, from *not different* (1) to *very different* (4), with higher scores reflecting greater cultural distance. The measure demonstrated an acceptable level of reliability in this study ($\alpha = 0.85$).

Perceived Cultural Inclusion

To measure perceived cultural inclusion, a 7-item Cultural Inclusiveness in the Classroom Scale (CICS; Ward and Masgoret, 2004) was used. Sample items include "Cultural differences are respected in my institution," and "My lecturers encourage contact between international and local students." Participants responded on a 5-point Likert Scale, *strongly disagree* (1) to *strongly agree* (5) so that higher scores reflect greater inclusiveness ($\alpha = 0.87$).

Host National Connectedness

Given the complexity of the definition of connectedness, multiple measures were needed to capture the intricacy of HNC. We aimed to combine both objective and subjective elements of host national connectedness, where connectedness is conceptualized as a complex, higher-order construct identified by key psychological (e.g., Ong and Ward, 2005) and contextual (e.g., Bochner et al., 1985) indicators known from previous research. Hence, measures tapping the quantity and frequency of host national connections, feelings of connectedness, and support provided by host nationals were used. To measure the number and frequency of host national friends and interactions, ten items (i.e., "Indicate how many close friends you have who are New Zealanders outside of your educational institution," and "How often do you spend free time outside of class with New Zealand students?") were adapted from Ward and Masgoret's (2004) national survey of international students in New Zealand. Responses are given on five-point scales: *none* (1) to *many* (5) and *never* (1) to *very often* (5). Separate mean scale scores were calculated for the two number-of-friends items (Spearman–Brown = 0.59) and for the eight frequency-of-contact items ($\alpha = 0.88$).

Feelings of connectedness were measured with the General Belongingness Scale (Malone et al., 2012). Participants are instructed to think about their relationships with host nationals when responding to the 12-item scale with statements such as "When I am with other people, I feel included," on a 7-point Likert Scale, *strongly disagree* (1) to *strongly agree* (7). Higher overall scores indicate a greater sense of belonging. The measure met the standard reliability criterion ($\alpha = 0.81$) in this study.

Finally, the instructions for the 18-item Index of Sojourner Social Support Scale (Ong and Ward, 2005) were adapted to measure the support that host nationals provide to international students. For example, participants are asked to respond to statements such as, "Think about your relationships with New Zealanders. Indicate how many New Zealanders you know who would listen and talk with you whenever you feel lonely or depressed." The items measure the number of host nationals available to international students in a variety of situations on a five-point scale, *no one* (1) to *many* (5) with higher scores denoting higher levels of social support from host nationals. In this study, the scale demonstrated a high level of reliability ($\alpha = 0.98$).

Psychological Adaptation

To measure psychological adaptation both positive (life satisfaction) and negative (psychological symptoms) indicators were used. The Satisfaction with Life Scale (Diener et al., 1985) uses an agreement scale (from 1 = *strongly disagree* to 7 = *strongly agree*) in response to statements such as "In most ways my life is close to my ideal" and "The conditions of my life are excellent." Higher scores signify greater life satisfaction. In this study, the scale had a reliability of $\alpha = 0.88$.

Finally, we used the 15-item psychological symptoms scale ($\alpha = 0.93$) from a multi-national study of immigrant youth by Berry et al. (2006). The scale asks participants to indicate how often in the last month they had experienced a list of symptoms, particularly depression, anxiety, and psychosomatic complaints, e.g., "I feel unhappy and sad;" "I worry a lot of the time;" and "I feel weak all over." Responses were measured on a five-point scale, from *never* (1) to *most of the time* (5). Higher scores indicate greater frequency of psychological disturbances. The scale had high reliability in this study; Cronbach's $\alpha = 0.93$

RESULTS

The results are presented in three parts: (1) the preliminary analyses, including the psychometric properties of the scales and bivariate correlations; (2) a confirmatory factor analysis for the construction of the HNC variable; and (3) a mediational model of psychological adaptation.

Preliminary Analyses

Table 1 provides the scale reliabilities, mean scores, and standard deviations for the measurement scales. With respect to host national connectedness, it is noteworthy that mean scores for

TABLE 1 | Descriptive statistics and inter-correlations.

	Variable	*M*	*SD*	α	1	2	3	4	5	6	7	8	9	10	11
1.	Gender (1 = male, 2 = female)	–	–												
2.	Age (years)	26.68	6.01	–											
3.	Length of stay (months)	15.74	8.40	–											
4.	English language proficiency	5.15	1.02	0.94	0.04	0.07*	−0.06								
5.	Cultural distance	2.62	0.64	0.85	−0.03	−0.00	0.11**	−0.28**							
6.	Cultural inclusiveness	3.78	0.73	0.87	0.01	0.06	−0.09*	0.05	−0.08*						
7.	General belongingness	4.73	0.80	0.81	0.09**	0.02	−0.07	0.22**	−0.21**	0.43**					
8.	Social support	2.75	0.99	0.98	0.01	−0.05	−0.09*	0.20**	−0.24**	0.32**	0.50**				
9.	Number of friends	2.91	1.12	0.59[a]	−0.13**	−0.03	0.02	0.16**	−0.12**	0.23**	0.36**	0.54**			
10.	Frequency of contact	2.80	0.88	0.88	−0.10**	−0.09*	−0.02	0.08*	−0.08*	0.26**	0.36**	0.50**	0.55**		
11.	Psychological symptoms	1.94	0.72	0.93	0.07*	−0.10**	0.07*	−0.11**	0.19**	−0.22**	−0.36**	−0.17**	−0.17**	−0.14**	
12.	Satisfaction with life	4.60	1.28	0.88	0.07*	0.06	−0.07*	0.17**	−0.19**	0.33**	0.43**	0.34**	0.21**	0.21**	−0.41**

[a] *Spearman–Brown is reported for the two-item measure of number of friends. *p < 0.01, **p < 0.001.*

both the number of host friends (M = 2.91, SD = 1.12, where 2 = one friend and 3 = a few) and the frequency of contact with host nationals (M = 2.80, SD = 0.88, where 2 = seldom and 3 = sometimes) were below the scalar midpoint (i.e., 3 on 5-point scales). A similar pattern emerged for social support (M = 2.75, SD = 0.99), suggesting that connectedness to host nationals may be a struggle for international students even though the findings for belongingness were more positive (M = 4.73, SD = 0.80).

Table 1 also reports the bivariate correlations among variables. The findings show that the four indicators of host national connectedness (number of local friends, frequency of contact with New Zealanders, social support and belongingness) were significantly inter-related, with medium to large effect sizes. Each indicator was also associated with life satisfaction and psychological symptoms in the expected direction although in these cases the effect sizes were small to medium. Moreover, language proficiency, cultural distance and cultural inclusiveness were significantly related to the adaptation outcomes as expected, most commonly with small effect sizes.

With respect to demographic factors, females tended to experience a slightly greater sense of belongingness although they had fewer friends and less frequent contact with their domestic peers. They reported greater life satisfaction, but also more psychological symptoms. Age was associated with better English language proficiency, but negatively correlated with frequency of contact with local students and psychological symptoms. Length of residence was related to less perceived cultural inclusiveness, social support and life satisfaction, but greater cultural distance and psychological symptoms. All of the effect sizes for these relationships were small.

Measuring Host National Connectedness

A confirmatory factor analysis was conducted in M*plus* version 7.4 (Muthén and Muthén, 2012) to assess our theoretical model of HNC with four indicators: frequency of contact, number of friends, social support, and general belongingness. We first estimated the single-factor model with the four independent indicators and obtained the following results: $\chi^2(2, N = 1527) = 52.37$, $p < 0.001$, CFI = 0.97, RMSEA = 0.13, SRMR = 0.03. The modification indices suggested the correlation between the error terms of social support and general belongingness be added. The correlation is theoretically justifiable as both indicators are subjective measures of HNC, measuring the affective nature of connectedness rather than the quantitative, objective measures of friendships and contact. We allowed the error terms of social support and general belongingness to be correlated and obtained the following results for the modified model: $\chi^2(1, N = 1527) = 0.76$, *ns.*, CFI = 1, RMSEA = 0.00, SRMR = 0.00. The model is presented in **Figure 1**. As can be seen in the figure, each of the four indicators loaded strongly on HNC. The HNC component score was used in the mediational model.

Testing the Mediational Model

We conducted a mediation path analysis in M*plus*, starting with the saturated model including gender, age, length of stay, English proficiency, cultural distance, and cultural inclusion in the classroom as predictors; HNC as the mediator; and psychological symptoms and life satisfaction as outcomes (Kline, 2015). Length of stay in New Zealand had no significant effect on HNC or either outcome, so we removed it from the model. We further simplified the model by removing the non-significant direct effect of English proficiency on psychological symptoms. The resulting model is presented in **Figure 2**. This model, still close to the saturated model, had an excellent fit, $\chi^2(1, N = 1527) = 0.89$, *ns*; CFI = 1, RMSEA = 0.00, SRMR = 0.00. The indirect effects of gender and age were significant at 0.01 and those of the other predictors, at 0.001; the 95% confidence intervals from bootstrapped analyses using 1000 samples did not straddle zero (see **Table 2** for all indirect effects). These findings indicate that host national connectedness mediated entirely the effect of English language proficiency on psychological symptoms, and partially all other effects.

DISCUSSION

The present study identified host national connectedness as a critical factor in international students' successful adaptation to

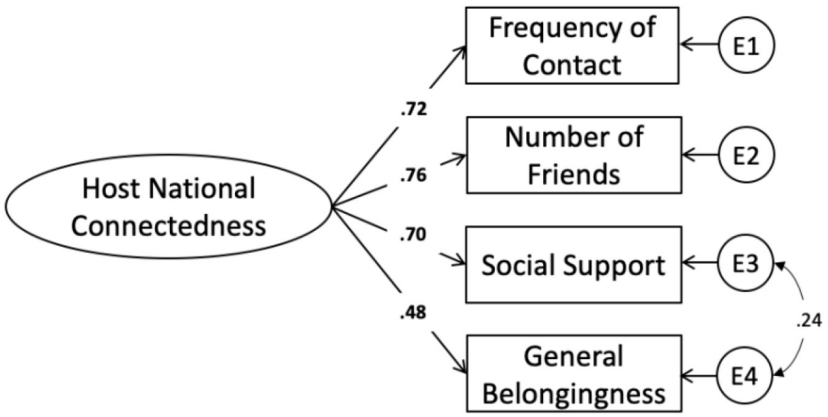


FIGURE 1 | HNC confirmatory factor analysis.

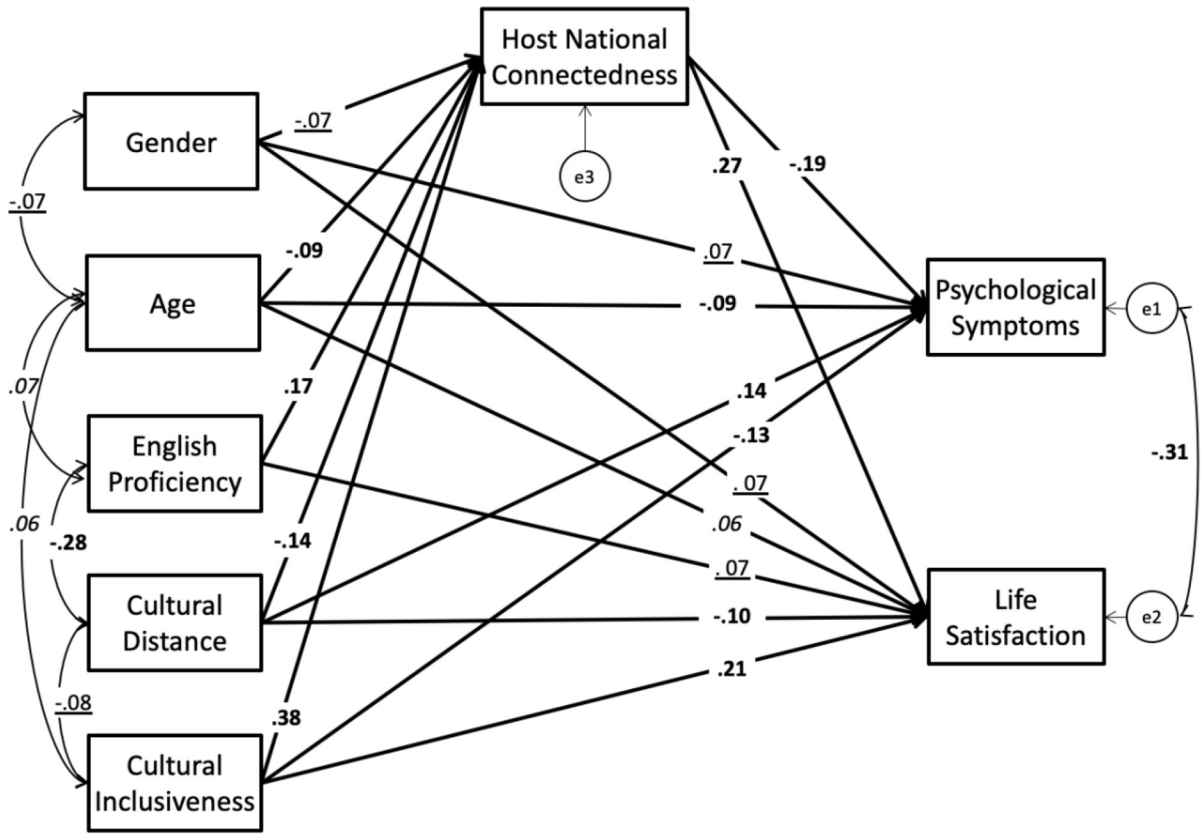


FIGURE 2 | Mediational model of psychological adaptation. Standardized coefficients are displayed. Coefficients significant at 0.05 are italicized, and those significant at 0.01 are underlined; all other coefficients are significant at 0.001.

cross-cultural transition. It was hypothesized that host national connectedness mediates the effects of personal resources, such as language proficiency, and contextual factors, such as perceived cultural distance and inclusiveness, on the psychological adaptation of international students. The hypotheses were confirmed. English language proficiency and cultural inclusiveness in the classroom predicted greater connectedness, and cultural distance predicted less connectedness for international students. Host national connectedness, in turn, predicted a higher level of life satisfaction and fewer psychological symptoms. With respect to demographic factors, being younger and female were related to less connectedness and more psychological symptoms; however, being older and female were associated with greater life satisfaction. Length of

TABLE 2 | Standardized indirect effects on psychological symptoms and life satisfaction through host national connectedness.

Effect by outcome	β	*SE*	*p*	95% CI
Psychological symptoms				
Gender (female)	0.01	0.01	0.005	0.01, 0.02
Age	0.02	0.01	0.002	0.01, 0.03
English proficiency	− 0.03	0.01	< 0.001	− 0.04, −0.02
Cultural distance	0.03	0.01	< 0.001	0.02, 0.04
Cultural inclusiveness	− 0.07	0.01	< 0.001	− 0.09, −0.05
Satisfaction with life				
Gender (female)	− 0.02	0.01	0.004	− 0.03, −0.01
Age	− 0.02	0.01	0.001	− 0.04, −0.01
English proficiency	0.04	0.01	< 0.001	0.03, 0.06
Cultural distance	− 0.04	0.01	< 0.001	− 0.05, −0.02
Cultural inclusiveness	0.10	0.01	< 0.001	0.08, 0.12

residence was negatively related to perceived social support and psychological adaptation. It should be emphasized that the effects of the demographic factors were small.

Host national connectedness is a complex construct. It can be conceptualized and measured in different ways, but essentially refers to ties that foster a sense of belongingness, dispel loneliness and offer a source of social support. Interpersonal contact and friendships are two indicators of these ties. The international literature has repeatedly noted the infrequency of social interactions between overseas and domestic students and described the low occurrence of intercultural friendships as a serious issue, not only for students, but also for educational institutions that aspire to enhance cultural awareness and cultivate global citizens (Smart et al., 2000; Smith and Khawaja, 2011; Quinton, 2020). In this study the ties between international students and host nationals both within and outside of their educational institutions were relatively weak, a common finding in New Zealand and abroad (Bochner et al., 1977, 1985; Volet and Ang, 1998; Ward and Masgoret, 2004; Neri and Ville, 2008; Townsend and Poh, 2008), especially for East Asian students in Western countries (Rienties et al., 2013).

Despite the obstacles to developing bonds with host nationals, connectedness is a strong predictor of psychological adaptation during cross-cultural transition. The findings in our study converge with the broader literature that links host national ties with international students' well-being (Kashima and Loh, 2006; Ying and Han, 2006; Hendrickson et al., 2011; Cheung and Yue, 2013; Bender et al., 2019; Shu et al., 2020). While multiple sources of social support can bolster psychological adjustment in international students (Bender et al., 2019), a higher ratio of host nationals in one's social networks is associated with greater satisfaction and contentment (Hendrickson et al., 2011). Therefore, it is worthwhile to consider the factors that might enhance connectedness and lead to better adaptive outcomes for international students.

In this study a mix of personal and contextual factors were investigated as antecedents of host national connectedness, i.e., English language proficiency, cultural distance, cultural inclusiveness in the classroom and demographic characteristics. In line with our hypothesized model, English language proficiency predicted greater host national connectedness. This is in agreement with those studies that point to an association between native language proficiency and greater social capital and social support; stronger national ties and feelings of belongingness; and less loneliness (Poyrazli et al., 2004; Montgomery and McDowell, 2009; Rienties et al., 2012; Pham and Tran, 2015). Indeed, the inability to speak the native language fluently is a major obstacle both to embeddedness in the national culture and to the maintenance of psychological well-being during cross-cultural transitions (Cetinkaya-Yildiz et al., 2011; Wang et al., 2015; Cao et al., 2017; Taušová et al., 2019). Paralleling our findings on life satisfaction, Cao and Meng (2019) reported that language proficiency had both direct and indirect effects on international students' social adaptation with the indirect effects mediated by their ties with host nationals. Similarly, we found that host national connectedness partially mediated the effects of language proficiency on life satisfaction; however, it fully mediated the effects language proficiency on psychological symptoms. Both studies highlight the critical role that connectedness plays in adapting to cross-cultural transitions.

Host national connectedness also partially mediated the negative effects of cultural distance on the adaptation outcomes. Again, this finding is in accordance with international student research. Cultural distance has been assessed in different ways, both as objective measures of difference and as individuals' perceived dissimilarity between heritage and contact cultures. In both cases research demonstrates that cultural distance is associated with lower levels of host national connectedness (Furnham and Bochner, 1982; Fritz et al., 2008; Rienties et al., 2013; McGarvey et al., 2015; Bethel et al., 2016). There is also strong evidence that cultural distance has a detrimental influence on the psychological adaptation of overseas students (Ward and Searle, 1991; Furukawa, 1997; Sam, 2001; Galchenko and van de Vijver, 2007; Fritz et al., 2008). Not surprisingly, larger cultural differences mean that overseas students and host nationals have less in common upon which to base intimate contact and personal friendships. In addition, greater cultural distance presents more intense adjustive demands and taxes coping resources, resulting in lower levels of psychological well-being (Ward and Szabó, 2019).

In recent years there has been an evolving body of research on diversity climates in schools and how these impact the experiences of students from minority backgrounds. Experimental and longitudinal studies have provided ample evidence that diversity and inclusion norms affect intercultural experiences and outcomes (Nesdale et al., 2005; Titzmann et al., 2015; Tropp et al., 2016). Research has shown that teachers and peers shape educational environments that influence students' intercultural relations and psychological well-being. Inclusive classroom norms are known to predict more intercultural friendships (Titzmann et al., 2015; Tropp et al., 2014). They also enhance a sense of belongingness for minority students, which leads, in turn, to better psychological and academic outcomes (Schachner et al., 2019). Our findings converge with these trends; specifically, cultural inclusiveness in the classroom predicted better psychological adaptation for international

students, and its effects were partially mediated by host national connectedness.

Finally, we explored the relationships among demographic characteristics, host national connectedness and psychological well-being. The finding that younger students and males have a stronger sense of connectedness to host nationals is consistent with the results of Ward and Masgoret's (2004) national survey of international students in New Zealand. Specifically, younger international students reported having more contact with their domestic peers, and males reported having more local friends. The findings on psychological adaptation were mixed. Females had more symptoms of psychological distress, largely in terms of anxiety and depression, a finding that is in accordance with international student research as well as established gender differences in mental health (Rosenfield and Smith, 2012; Alharbi and Smith, 2018); however, females also had higher levels of life satisfaction. This finding diverges from previous studies with international students (Sam, 2001; Gebregergis et al., 2019) including those conducted in New Zealand (Ward and Masgoret, 2004; Ward et al., 2009a). These studies failed to find significant gender differences in life satisfaction – as was the conclusion of a recent meta-analysis on this topic (Batz-Barbarich et al., 2018). As the effect size was small in this study, and as we have no theory-based explanation for this finding, it may be a spurious result. Finally, there was evidence, albeit with small effect sizes, that psychological adaptation was poorer in younger students. There is some evidence that higher levels of psychological distress are found in younger international students (Bulgan and Çiftçi, 2017; Alharbi and Smith, 2018), which may be due in part to normative developmental changes. Certainly, research has shown an increased risk for depression during the period of emerging adulthood (Rohde et al., 2013), which is in the lower age range of our sample.

While our findings on host national connectedness are not novel in themselves, the study advances theory and research on the adaptation of international students in four ways: (1) it offers a more complex conceptualization of connectedness by combining quantitative and qualitative assessments of contact and intimacy; (2) it integrates personal and contextual factors in a mediational model; (3) it reiterates the important, but often overlooked, point that international students' adaptation is not only a product of their motivation and skills, but is also a product of their environments; and (4) it provides insights into policies and practices that can be implemented in educational institutions to increase the likelihood of stronger ties and greater connectedness between international students and their domestic peers.

Research Applications

Studies have consistently shown that international students expect and desire frequent contact with host nationals in both academic and social settings and that lack of intercultural interaction is seen as problematic (Choi, 1997; Trice, 2004; Ward and Masgoret, 2004). Research is equally clear that intercultural contact is perceived as more important and valuable by international students than their domestic peers (Beaver and Tuck, 1998; Volet and Ang, 1998; Smart et al., 2000). What can educational institutions do to foster meaningful connections between international and domestic students? How can they enrich international student experiences and enhance psychological well-being during cross-cultural transition?

Tertiary institutions can and do offer foundational language courses for non-native speakers, but they must also ensure that entry requirements for higher education are sufficiently high to enable meaningful social relationships and academic success. However, it is equally, if not more, important to address the institutions' diversity climate. More specifically, it is critical to ensure diversity-receptive norms throughout educational institutions. In the broadest sense these norms should reflect frequent intercultural contact, a widespread valuing of cultural diversity, and the policies and practices that support and accommodate that diversity (Schachner et al., 2016, 2019; Schwarzenthal et al., 2018; Stuart and Ward, 2019; Ward et al., 2020). Such norms enhance not only social relations, but also academic performance and psychological well-being for minority students and in many instances for majority groups as well (Titzmann et al., 2015; Schachner et al., 2019).

Norms for intercultural contact can be strengthened through peer-pairing, buddy and mentoring programs between domestic students and international students (Quintrell and Westwood, 1994; Pritchard and Skinner, 2002), intercultural activities in residential halls (Todd and Nesdale, 1997), extra-curricular activities (Hendrickson, 2018) and intercultural team work in the classroom (Woods et al., 2013; Rienties and Nolan, 2014; Rienties et al., 2014), all of which have been shown to increase connections between overseas and local students. Intercultural contact and diversity-valuing norms in educational institutions can be shaped by academic staff. Not only can they structure course material and assignments to promote positive intercultural contact, but they are a powerful normative reference group and can enable positive social change (Deakins, 2009; Leask, 2009). For example, students' perceptions of teachers' readiness to foster intercultural contact and their interest in students' diverse cultural backgrounds are associated with stronger feelings of belongingness and more positive intergroup relations between majority and minority students (Schwarzenthal et al., 2018; Schachner et al., 2019).

It is clear from the evidence that multicultural norm-setting in educational institutions can strengthen intercultural bonds and bolster the psychological well-being of international students. Although setting new norms can modify behaviors (Miller and Prentice, 2016), this is not always easy to achieve. Resistance to change, an absence of coordination, lack of social feedback, and "high costs" of modifying behaviors can present obstacles to shifting norms (Nyborg et al., 2016). Despite these barriers, a clear route to fostering multicultural norms in educational institutions is by introducing multicultural policies. Indeed, research has shown that multicultural policies in educational settings reduce the gaps in belongingness and academic achievement between students from majority and minority backgrounds (Celeste et al., 2019). Nyborg et al. (2016) have provided insights into the dynamic process of policy-initiated norm change in their discussion of social norms as solutions to a range of global challenges. They

argue that policies create visible behavioral changes that can reach "tipping points," altering individuals' expectations about what other people will and should do. Moreover, individuals are more likely to conform to these expectations as the frequency of the expected behaviors increases, particularly if the behaviors are reinforced by positive social feedback, and non-conformity is sanctioned. In contrast to top-down, policy-initiated norm-setting, Cislaghi and Heise (2018) have advocated for "people led" norm-setting where bottom-up changes in community norms are undertaken in ways that are compatible with the social and cultural context. This opens up future possibilities for students to be more actively involved in institutional change.

Limitations and Future Research

Despite the important findings and applications of this research, the use of cross-sectional survey data is a major limitation. While our mediational model is grounded in theory and research on cross-cultural transition and psychological adaptation of international students, longitudinal data are needed to confirm the direction of the relationships amongst the variables of interest. It is also important to acknowledge that survey research such as this cannot determine causal relationships. When we refer to "exerting effects on. . ." in the description of the mediational model, we are referring to statistical effects rather than causal effects. Future studies should go beyond survey research and integrate experimental approaches to determine cause and effect relationships between the proposed antecedents and outcomes of host national connectedness. It is also recommended that qualitative methods be adopted for more in-depth explorations of the nuances and richness of the international student experience.

Although the study has a large sample size, the overall response rate for the survey was low (6.58%). It is not uncommon for web-based surveys to return less than 10% response rates (Fricker, 2008; Van Mol, 2017); however, this can introduce bias into the research. More broadly, biases such as social desirability responding, acquiescence and avoidance of scalar extremes, are known to threaten the validity of self-report surveys (Johnson et al., 2011). Self-ratings of language proficiency in particular can be problematic as meta-analyses have shown that self-ratings are only moderately correlated with performance measures (Zell and Krizan, 2014). It is also important to bear in mind that the research was conducted in New Zealand where most of the international students originate from Asian countries. The extent to which this might affect the study's external validity is unknown.

Although the study has shed light on connectedness between international students and host nationals, it does not directly take into account the perceptions, attitudes and behaviors of members of the host society. This is important as research has shown that domestic students view international students in a stereotypic fashion (Spencer-Rodgers, 2001) and see them as posing realistic and symbolic threat (Ward et al., 2009b). They also often lack interest and motivation for intercultural interactions (Smart et al., 2000). Ultimately, host national connectedness is a reciprocal process (Ujitani and Volet, 2008), and the perspectives of local students and their wider community need to be taken into account. It would be worthwhile to investigate this topic in future research.

CONCLUDING COMMENTS

The present research has added to the current body of literature by conceptualizing and measuring host national connectedness as a complex, multi-faceted construct. Both objective aspects (such as number of host national friends and frequency of interaction with host nationals) and subjective aspects (such as feelings of belongingness and social support) should be included in the assessment of host national connectedness to fully capture its complexity. Moreover, the study demonstrates that it is important to go beyond the consideration of individual differences and to incorporate contextual variables for predicting host national connectedness and the psychological adaptation of international students. Most importantly, the findings suggest that connections with host nationals may serve as a functional mechanism through which international students ease their transition stress and cope with cultural differences. As international education increases across the globe, how best to enhance intercultural connectedness remains an important question for students, teachers, counselors, administrators and policy makers.

DATA AVAILABILITY STATEMENT

The dataset generated for this study is available on request to the corresponding author.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the School of Psychology Human Ethics Committee under the delegated authority of Victoria University of Wellington's Human Ethics Committee. In accordance with the pre-survey information provided to participants, completion of the survey was deemed to indicate informed consent.

AUTHOR CONTRIBUTIONS

AB designed the study, undertook the data collection and analysis and produced a master's thesis under the supervision of CW, who revised and updated the thesis text for publication. VF conducted additional statistical analyses and contributed to writing the final manuscript. All authors contributed to the article and approved the submitted version.

FUNDING

The research was funded by the School of Psychology, Victoria University of Wellington (Grant number 85050).

REFERENCES

Alharbi, E. S., and Smith, A. P. (2018). Review of the literature on stress and wellbeing of international students in English-speaking countries. *Internat. Educ. Stud.* 11, 22–44. doi: 10.5539/ies.v11n6p22

Australian Education and International (2013). *International student survey 2012: Overview report*. Canberra: Commonwealth of Australia.

Babiker, I. E., Cox, J. L., and Miller, P. M. (1980). The measurement of cultural distance and its relationship to medical consultations, symptomatology and examination performance of overseas students at Edinburgh University. *Soc. Psych.* 15, 109–116. doi: 10.1007/BF00578141

Barber, B. K., Stolz, H. E., and Olsen, J. A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monogr. Soc Res. Child Devel.* 70, 1–147. doi: 10.1111/j.1540-5834.2005.00365.x

Batz-Barbarich, C., Tay, L., Kuykendall, L., and Cheung, H. K. (2018). A meta-analysis of gender differences in subjective well-being estimating effect sizes and associations with gender inequality. *Psychol. Sci.* 29, 1491–1503. doi: 10.1177/0956797618774796

Beaver, B., and Tuck, B. (1998). The adjustment of overseas students at a tertiary institution in New Zealand. *New Zealand J. Educa. Stud.* 33, 167–179.

Bender, M., van Osch, Y., Sleegers, W., and Ye, M. (2019). Social support benefits psychological adjustment of international students. *J. Crosscultural Psychol.* 50, 827–847. doi: 10.1177/0022022119861151

Berry, J. W., Phinney, J. S., Sam, D. L., and Vedder, P. (eds) (2006). *Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts*. Mahwah, NJ: Lawrence Erlbaum.

Berry, J. W., and Sam, D. L. (2016). "Theoretical perspectives," in *The Cambridge handbook of acculturation psychology*, 2nd Edn, eds D. L. Sam and J. W. Berry (Cambridge: Cambridge University Press), 11–29.

Bethel, A., Szabo, A., and Ward, C. (2016). "Parallel lives: Predicting and enhancing connections between international and domestic students," in *Multi-Dimensional Transitions of International Students to Higher Education*, eds D. Jindal-Snape and B. Rienties. (London: Taylor & Francis), 21–36.

Bochner, S. (2006). "Sojourners," in *The Cambridge Handbook of Acculturation Psychology*, eds D. L. Sam and J. W. Berry (New York: Cambridge University Press), 181–197.

Bochner, S., Hutnik, N., and Furnham, A. (1985). The friendship patterns of overseas and host students in an Oxford student residence. *J. Soc. Psychol.* 125, 689–694. doi: 10.1080/00224545.1985.9713540

Bochner, S., McLeod, B. V., and Lin, A. (1977). Friendship patterns of overseas students: A functional model. *Internat. J. Psychol.* 12, 277–294.

Bradley, G. (2000). Responding effectively to the mental health needs of international students. *High. Educ.* 39, 417–433. doi: 10.1023/A:1003938714191

Bulgan, G., and Çiftçi, A. (2017). Psychological adaptation, martial satisfaction and academic self-efficacy of international students. *J. Internat. Stud.* 7, 687–702. doi: 10.5281/zenodo.570028

Cao, C., and Meng, Q. (2019). Mapping the paths from language proficiency to adaptation in Chinese students in a non-English speaking country: An integrative model of mediation. *Curr. Psychol. J. Div. Perspect. Div. Psychol. Issues* 38, 1564–1575. doi: 10.1007/s12144-017-9708-3

Cao, C., Zhu, C., and Meng, Q. (2017). Predicting Chinese international students' acculturation strategies from socio-demographic variables and social ties. *Asian J. Soc. Psychol.* 20, 85–96. doi: 10.1111/ajsp.12171

Celeste, L., Baysu, G., Phalet, K., Meeussen, L., and Kende, J. (2019). Can school diversity climates reduce belonging and achievement gaps between minority and majority youth? Multiculturalism, colorblindness and assimilationism addressed. *Personal. Soc. Psychol. Bull.* 45, 1603–1618. doi: 10.1177/0146167219838577

Cetinkaya-Yildiz, E., Cakir, S. G., and Kondakci, Y. (2011). Psychological distress among international students in Turkey. *Internat. J. Intercult. Relat.* 35, 534–539. doi: 10.1016/j.ijintrel.2011.04.001

Cheung, C.-K., and Yue, X. D. (2013). Sustaining resilience through local connectedness among sojourn students. *Soc. Indicat. Res.* 111, 785–800. doi: 10.1007/s11205-012-0034-8

Choi, M. (1997). Korean students in Australian universities: Intercultural issues. *High. Educ. Res. Dev.* 16, 263–282. doi: 10.1080/0729436970160302

Church, A. (1982). Sojourner adjustment. *Psychol. Bull.* 91, 540–572. doi: 10.1037/0033-2909.91.3.540

Cislaghi, B., and Heise, L. (2018). Theory and practice of social norms interventions: Eight common pitfalls. *Globalizat. Health* 14, 83. doi: 10.1186/s12992-018-0398-x

Dao, T. K., Lee, D., and Chang, H. (2007). Acculturation level, perceived English fluency, perceived social support level, and depression among Taiwanese international students. *College Stu. J.* 41, 287–295.

Deakins, E. (2009). Helping students value cultural diversity through research-based teaching. *High. Educ. Res. Dev.* 28, 209–226. doi: 10.1080/07294360902725074

Diener, E., Emmons, R. A., Larsen, R. J., and Griffin, S. (1985). The satisfaction with life scale. *J. Personal. Assess.* 49, 71–75. doi: 10.1207/s15327752jpa4901_13

Doucerain, M. M., Deschênes, S. S., Gouin, J.-P., Amiot, C. E., and Ryder, A. G. (2017). Initial mainstream cultural orientations predict early social participation in the mainstream cultural group. *Personal. Soc. Psychol. Bull.* 43, 245–258.

Fricker, R. D. (2008). "Factors reflecting response rates for web and e-mail surveys," in *The Sage handbook of online research methods*, eds N. Fielding, R. M. Lee, and G. Blank (Los Angeles, CA: Sage), 195–216. doi: 10.4135/9780857020055

Fritz, M. V., Chin, D., and DeMarinis, V. (2008). Anxiety, acculturation and adjustment among international and American students. *Internat. J. Intercult. Relat.* 32, 244–259. doi: 10.1016/j.ijintrel.2008.01.001

Furnham, A., and Bochner, S. (1982). "Social difficulty in a foreign culture: An empirical analysis of culture shock," in *Cultures in contact: Studies in cross-cultural interaction*, ed S. Bochner (Oxford: Pergamon Press).

Furukawa, T. (1997). Cultural distance and its relationship to psychological adjustment of international exchange students. *Psychiat. Clinic. Neurosci.* 51, 87–91. doi: 10.1111/j.1440-1819.1997.tb02367.x

Galchenko, I., and van de Vijver, F. J. R. (2007). The role of perceived cultural distance in the acculturation of exchange students in Russia. *Internat. J. Intercult. Relat.* 31, 181–197. doi: 10.1016/j.ijintrel.2006.03.004

Gareis, E. (2012). Intercultural friendship: Effects of home and host region. *J. Internat. Intercultural Commun.* 5, 309–328. doi: 10.1080/17513057.2012.691525

Gebregergis, W. T., Tekie, D., Yikealo, D., and Habte, A. (2019). Antecedents of psychological adjustment of international students studying in China: The roles of self-efficacy and self-esteem. *Open J. Soc. Sci.* 7, 233–254. doi: 10.4236/jss.2019.72019

Geeraert, N., Li, R., Ward, C., Gelfand, M., and Demes, K. A. (2019). A tight spot: How personality moderates the impact of social norms on sojourner adaptation. *Psychol. Sci.* 30, 333–342. doi: 10.1177/0956797618815488

Hanassab, S. (2006). Diversity, international students, and perceived discrimination: Implications for educators and counselors. *J. Stud. Internat. Edu.* 10, 157–172. doi: 10.1177/1028315305283051

Hendrickson, B. (2016). Comparing international students friendship networks in Buenos Aires: Direct enrolment programs versus study abroad centers. *Front. Interdiscipl. J. Stud. Abroad* 27, 47–69.

Hendrickson, B. (2018). Intercultural connectors: Explaining the influence of extra-curricular activities and tutor programs on international student friendship network development. *Internat. J. Intercult. Relat.* 63, 1–16. doi: 10.1016/j.ijintrel.2017.11.002

Hendrickson, B., Rosen, D., and Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *Internat. J. Intercult. Relat.* 35, 281–295. doi: 10.1016/j.ijintrel.2010.08.001

Hernández-Nanclares, N. (2016). "The transition processes of Erasmus students: Motivation, social networks and academic performance," in *Multi-Dimensional Transitions of International Students to Higher Education*, eds D. Jindal-Snape and B. Rienties (London: Routledge), 240–255.

Johnson, T. P., Shavitt, S., and Holbrook, A. L. (2011). "Survey response styles across cultures," in *Cross-cultural research methods in psychology*, eds D. Matsumoto and F. J. R. van de Vijver (New York: Cambridge University Press).

Kashima, E. S., and Loh, E. (2006). International students' acculturation: Effects of international, conational and local ties and need for closure. *Internat. J. Intercult. Relat.* 30, 471–485. doi: 10.1016/j.ijintrel.2005.12.003

Kline, R. B. (2015). *Principles and practice of structural equation modeling*, 4th Edn. New York, NY: Guilford.

Le, T. N., Lai, M. H., and Wallen, J. (2009). Multiculturalism and subjective happiness as mediated by relational variables. *Cult. Div. Ethnic Minor. Psychol.* 15, 303–313. doi: 10.1037/a0015507

Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *J. Stud. Int. Educ.* 13, 205–221. doi: 10.1177/1028315308329786

Lee, J. J., and Rice, C. (2007). Welcome to America? International students' perceptions of discrimination. *High. Educat.* 53, 381–409.

Li, P., Sepanski, S., and Zhao, X. (2006). Language history questionnaire: A web-based interface for bilingual research. *Behav. Res. Methods* 38, 202–210. doi: 10.3758/bf03192770

Li, R. Y., and Kaye, M. (1998). Understanding international students' concerns and problems. *J. High. Educat. Policy Manage.* 20, 41–50. doi: 10.1080/1360080980200105

Li, X., and Chen, W. (2014). Facebook or renren? A comparative study of social networking site use and social capital among Chinese international students in the United States. *Comput. Human Behav.* 35, 116–123. doi: 10.1016/j.chb.2014.02.012

Lin, J.-H., Peng, W., Kim, M., Kim, S. Y., and LaRose, R. (2012). Social networking and adjustments among international students. *New Med. Soc.* 14, 421–440. doi: 10.1177/1461444811418627

Lun, V. M.-C., Fischer, R., and Ward, C. (2010). Exploring cultural differences in critical thinking: Is it about my thinking style or the language I speak? *Learn. Indivi. Differ.* 20, 604–616. doi: 10.1016/j.lindif.2010.07.001

Malone, G. P., Pillow, D. R., and Osman, A. (2012). The general belongingness scale (GBS): Assessing achieved belongingness. *Personal. Individ. Differ.* 52, 311–316. doi: 10.1016/j.paid.2011.10.027

Masgoret, A.-M., and Gardner, R. C. (1999). A causal model of Spanish immigrant adaptation in Canada. *J. Multilingual Multicult. Dev.* 20, 216–236. doi: 10.1080/01434639908666378

McGarvey, A., Brugha, R., Conroy, R. M., Clarke, E., and Byrne, E. (2015). International students' experience of a Western medical school: A mixed methods study exploring the early years in the context of social and cultural adjustment compared to students from the host country. *BMC Med. Educat.* 15:111. doi: 10.1186/s12909-015-0394-2

McGhie, V. (2017). Entering university studies: Identifying enabling factors for a successful transition from school to university. *High. Educat.* 73, 407–422. doi: 10.1007/s10734-016-0100-2

Miller, D. T., and Prentice, D. A. (2016). Changing norms to change behavior. *Annu. Rev. Psychol.* 67, 339–361. doi: 10.1146/annurev-psych-010814-015013

Montgomery, C. (2010). *Understanding the international student experience: Universities in the 21st century*. London: Palgrave MacMillan.

Montgomery, C., and McDowell, L. (2009). Social networks and the international student experience. *J. Stud. Int. Educ.* 13, 455–466. doi: 10.1177/1028315308321994

Muthén, L. K., and Muthén, B. O. (2012). *Mplus User's Guide (7th ed.)*. Muthén & Muthén.

Neri, F. V., and Ville, S. (2008). Social capital renewal and the academic performance of international students in Australia. *J. Socio Econ.* 37, 1515–1538. doi: 10.1016/j.socec.2007.03.010

Nesdale, D., Griffith, J., Durkin, K., and Maass, A. (2005). Empathy, group norms and children's ethnic attitudes. *Appl. Devel. Psychol.* 26, 623–637. doi: 10.1016/j.appdev.2005.08.003

Nyborg, K., Anderies, J. M., Dannenberg, A., Lindahl, T., Schill, C., Schlüter, M., et al. (2016). Social norms as solutions. *Science* 354, 42–43. doi: 10.1126/science.aaf8317

Ong, A. S. J., and Ward, C. (2005). The construction and validation of a social support measure for sojourners: The index of sojourner social support (ISSS) scale. *J. Cross Cult. Psychol.* 36, 637–661. doi: 10.1177/0022022105280508

Peacock, N., and Harrison, N. (2009). "It's so much easier to go with what's easy:" "Mindfulness" and the discourse between home and international students in the United Kingdom. *J. Stud. Internat. Educ.* 13, 487–508. doi: 10.1177/1028315308319508

Pham, L., and Tran, L. (2015). Understanding the symbolic capital of intercultural interactions: A case study of international students in Australia. *Internat. Stud. Sociol. Educat.* 5, 204–224. doi: 10.1080/09620214.2015.1069720

Poyrazli, S., Arbona, C., Nora, A., McPherson, R., and Pisecco, S. (2002). Relation between assertiveness, academic self-efficacy, and psychosocial adjustment among international graduate students. *J. Colleg. Stud. Devel.* 43, 632–642.

Poyrazli, S., Kavanaugh, P. R., Baker, A., and Al-Timimi, N. (2004). Social support and demographic correlates of acculturative stress in international students. *J. Coll.Counsel.* 7, 73–82. doi: 10.1002/j.2161-1882.2004.tb00261.x

Pritchard, R. M. O., and Skinner, B. (2002). Cross-cultural partnerships between home and international students. *J. Stud. Internat. Educ.* 6, 323–353. doi: 10.1177/102831502237639

Quinton, W. J. (2020). So close and yet so far? Predictors of international students' socialization with host nationals. *Internat. J. Intercult. Relat.* 74, 7–16. doi: 10.1016/j.ijintrel.2019.10.003

Quintrell, N., and Westwood, M. (1994). The influence of a peer-pairing programme on international students' first year experience and the use of student services. *High. Educ. Res. Devel.* 13, 49–57. doi: 10.1080/0729436940130105

Rajapaksa, S., and Dundes, L. (2002-2003). It's a long way home: International student adjustment to living in the United States. *J. Colleg. Stud. Retent.* 4, 15–28. doi: 10.2190/5HCY-U2Q9-KVGL-8M3K

Rienties, B., Beausaert, S., Grohnert, T., Niemantsverdriet, S., and Kommers, P. (2012). Understanding academic performance of international students: The role of ethnicity, academic and social integration. *High. Educa.* 63, 685–700. doi: 10.1007/s10734-011-9468-1

Rienties, B., Heliot, Y., and Jindal-Snape, D. (2013). Understanding social learning relations of international students in a large classroom using social network analysis. *High. Educ* 66, 489–504. doi: 10.1007/s10734-013-9617-9

Rienties, B., Johan, N., and Jindal-Snape, D. (2014). A dynamic analysis of social capital- building of international and UK students. *Br. J. Sociol. Educ.* 36, 1212–1235. doi: 10.108001425692.2014.88692

Rienties, B., and Nolan, E.-M. (2014). Understanding friendship and learning networks of international and host students using longitudinal social network analysis. *Internat. J. Intercult. Relat.* 41, 165–180. doi: 10.1016/j.ijintrel.2013.12.003

Rohde, P., Lewinsohn, P. M., Klein, D. N., Seeley, J. R., and Gau, J. M. (2013). Key characteristics of major depressive disorder occurring during childhood, adolescence, emerging adulthood and adulthood. *Clin. Psychol. Sci.* 1, 41–53. doi: 10.1177/2167702612457599

Rohrlich, B. F., and Martin, J. N. (1991). Host country and re-entry adjustment of student sojourners. *Internat. J. Intercult. Relat* 15, 163–182. doi: 10.1016/0147-1767(91)90027-E

Rosenfield, S., and Smith, D. (2012). "Gender and mental health: Do men and women have different amounts or types of problems?," in eds T. L. Scheid and T. N. Brown (New York: Cambridge University Press), 256–267. doi: 10.1017/CBO9780511984945.017

Sam, D. L. (2001). Satisfaction with life among international students: An exploratory study. *Soc. Indicat. Res.* 53, 315–337. doi: 10.1023/A:1007108614571

Sam, D. L., Tetteh, D. C., and Amponsah, B. (2015). Satisfaction with life and psychological symptoms among international students in Ghana and their correlates. *Internat. J. Intercult Relat.* 49, 156–167. doi: 10.1016/j.ijintrel.2015.09.001

Sawir, E., Marginson, S., Deumert, A., Nyland, C., and Ramia, G. (2008). Loneliness and international students: an Australian study. *J. Stud. Int. Educ.* 12, 148–180. doi: 10.1177/1028315307299699

Sawir, E., Marginson, S., Forbes-Mewett, H., Nyland, C., and Ramia, G. (2012). International student security and English language proficiency. *J. Stud. Int. Educ.* 16, 434–454. doi: 10.1177/1028315311435418

Schachner, M. K., Brenick, A., Noack, P., van de Vijver, F. J. R., and Heizmann, B. (2015). Structural and normative conditions for interethnic friendships in multiethnic classrooms. *Internat. J. Intercult. Relat.* 47, 1–12. doi: 10.1016/j.ijintrel.2015.02.003

Schachner, M. K., Noack, P., van de Vijver, F. J. R., and Eckstein, K. (2016). Cultural diversity climate and psychological adjustment at school- Equality and inclusion versus cultural pluralism. *Child Devel.* 87, 1175–1191. doi: 10.1111/cdev.12536

Schachner, M. K., Schwarzenthal, M., van de Vijver, F. J. R., and Noack, P. (2019). How all students can belong and achieve: Effects of the cultural diversity climate amongst students of immigrant and non-immigrant background in Germany. *J. Educat. Psychol.* 111, 703–716. doi: 10.1037/edu0000303

Schwarzenthal, M., Schachner, M. K., van der Vijver, F. J. R., and Juang, L. (2018). Equal but different: Effects of equality/inclusion and cultural pluralism on intergroup outcomes in multi-ethnic classrooms. *Cult. Div. Ethnic Minor. Psychol.* 24, 260–271. doi: 10.1037/cdp0000173

Searle, W., and Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *Internat. J. Intercult. Relat.* 14, 449–464. doi: 10.1016/0147-1767(90)90030-Z

Shu, F., Ahmed, S. F., Pickett, M. L., Ayman, R., and McAbee, S. T. (2020). Social support perceptions, network characteristics, and international student adjustment. *Internat. J. Intercult. Relat.* 74, 136–148. doi: 10.1016/j.ijintrel.2019.11.002

Smart, D., Volet, S., and Ang, G. (2000). *Fostering social cohesion in universities: Bridging the cultural divide*. Canberra: Department of Education, Training, and Youth Affairs.

Smith, R. A., and Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *Internat. J. Intercult. Relat.* 35, 699–713. doi: 10.1016/j.ijintrel.2011.08.004

Spencer-Rodgers, J. (2001). Consensual and individual stereotypic beliefs about international students by American host nationals. *Internat. J. Intercult. Relat.* 25, 639–657. doi: 10.1016/S0147-1767(01)00029-3

Stuart, J., and Ward, C. (2015). "The ecology of acculturation," in *Counselling across cultures: Toward inclusive cultural empathy*, 7th Edn, eds P. Pedersen, J. G. Draguns, W. J. Lonner, J. E. Trimble, and M. Scharrón-del Rio (Thousand Oaks, CA: Sage), 383–405.

Stuart, J., and Ward, C. (2019). Exploring everyday experiences of cultural diversity: The construction, validation and application of the Normative Multiculturalism Scale. *Europ. J. Soc. Psychol.* 49, 313–332. doi: 10.1002/ejsp.2542

Sümer, S., Poyrazli, S., and Grahame, K. (2008). Predictors of depression and anxiety among international students. *J. Counsel. Devel.* 86, 429–437. doi: 10.1002/j.1556-6678.2008.tb00531.x

Taušová, J., Bender, M., Dimitrova, R., and van de Vijver, F. J. R. (2019). The role of perceived cultural distance, personal growth initiatives, language proficiencies, and tridimensional acculturation orientations for psychological adjustment among international students. *Internat. J. Intercult. Relat.* 69, 11–23. doi: 10.1016/j.ijintrel.2018.11.004

Titzmann, P. F., Brenick, A., and Silbereisen, R. K. (2015). Friendships fighting prejudice: A longitudinal perspective on adolescents' cross-group friendships with immigrants. *J Youth Adolescent* 44, 1318–1331. doi: 10.1007/s10964-015-0256-6

Todd, P., and Nesdale, D. (1997). Promoting intercultural contact between Australian and international university students. *J. High. Educ. Policy Administr.* 19, 61–76. doi: 10.1080/1360080970190108

Tomoschuk, B., Ferreira, V. S., and Gollan, T. H. (2019). When a seven is not a seven: Self-ratings of bilingual language proficiency differ between and within language populations. *Bilingualism Language Cognition* 22, 516–536.

Townsend, P., and Poh, H. J. (2008). An exploratory study of international students studying and living in a regional area. *J. Market. High. Educ.* 18, 240–263. doi: 10.1080/08841240802487411

Trice, A. (2004). Mixing it up: International graduate students' social interactions with American students. *J. Colleg. Stud. Devel.* 45, 671–687. doi: 10.1353/csd.2004.0074

Tropp, L. R., O'Brien, T. C., González Gutierrez, R., Valdenegro, D., Migacheva, K., Tezanos-Pinto, P., et al. (2016). How school norms, peer norms and discrimination predict interethnic experiences among ethnic minority and majority youth. *Child Devel.* 87, 1436–1451. doi: 10.1111/cdev.12608

Tropp, L. R., O'Brien, T. C., and Migacheva, K. (2014). How peer norms of inclusion and exclusion predict children's interest in cross-ethnic friendships. *J. Soc. Issues* 70, 151–166. doi: 10.1111/josi.12052

Ujitani, E., and Volet, S. (2008). Socio-emotional challenges in international education: Insight into reciprocal understanding and intercultural relational development. *J. Res. Internat. Educ.* 7, 279–303. doi: 10.1177/1475240908099975

Van Mol, C. (2017). Improving web survey efficiency: The impact of an extra reminder and reminder content on web survey response. *Internat. J. Soc. Res. Methodol* 20, 317–327. doi: 10.1080/13645579.2016.1185255

Volet, S., and Ang, G. (1998). Culturally mixed groups on international campuses: An opportunity for international learning. *High. Educat. Res. Develop.* 17, 5–23.

Wang, K., Wei, M., and Chen, H.-H. (2015). Social factors in cross-national adjustment: Subjective well-being trajectories among Chinese international students. *Counsel. Psychol.* 43, 272–298. doi: 10.1177/0011000014566470

Ward, C., Fischer, R., Lam, F. S. Z., and Hall, L. (2009a). The convergent, discriminant and incremental validity of scores on a self-report measure of cultural intelligence. *Educat. Psychol. Measure.* 69, 85–105. doi: 10.1177/0013164408322001

Ward, C., Masgoret, A.-M., and Gezentsvey, M. (2009b). Investigating attitudes toward international students: Programs and policy implications for social integration and international education. *Soc. Issues Policy Rev.* 3, 79–102. doi: 10.1111/j.1751-2409.2009.01011.x

Ward, C., Kim, I., Karl, J. A., Epstein, S., and Park, H.-J. (2020). How normative multiculturalism relates to immigrant well-being. *Cult Dive. Ethnic Minor. Psychol.* doi: 10.1037/cdp0000317

Ward, C., and Masgoret, A.-M. (2004). *The experiences of international students in New Zealand: Report on the results of the national survey*. Wellington: Ministry of Education.

Ward, C., and Searle, W. (1991). The impact of value discrepancies and cultural identity on psychological and sociocultural adjustment of sojourners. *Internat. J. Intercult. Relat.* 15, 209–225. doi: 10.1016/0147-1767(91)90030-K

Ward, C., and Szabó, Á (2019). "Affect, behavior, cognition and development: Adding to the alphabet of acculturation," in *Handbook of culture and psychology*, eds D. Matsumoto and H. S. Hwang (New York: Oxford University Press), 640–692.

Wilton, L., and Constantine, M. G. (2003). Length of residence, cultural adjustment difficulties, and psychological distress symptoms in Asian and Latin America international college students. *J. Colleg. Counsel.* 6, 177–186. doi: 10.1002/j.2161-1882.2003.tb00238.x

Woods, P., Poropat, A., Barker, M., Hills, R., Hibbins, R., and Borbasi, S. (2013). Building friendships through a cross-cultural mentoring program. *Internat. J. Intercult. Relat.* 37, 523–535. doi: 10.1016/j.ijintrel.2013.08.004

Yang, B., Teraoka, M., Eichenfield, G. A., and Audas, M. C. (1994). Meaningful relationships between Asian international and U.S. college students: A descriptive study. *Colleg. Stud. J.* 28, 108–115.

Yang, Y., Zhang, Y., and Sheldon, K. M. (2018). Self-determined motivation for study abroad predicts lower culture shock and greater wellbeing among international students: The mediating role of basic needs satisfaction. *Internat. J. Intercult. Relat.* 63, 95–104. doi: 10.1016/j.ijintrel.2017.10.005

Yeh, J. Y., and Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counsel. Psychol. Quart.* 16, 15–28. doi: 10.1080/0951507031000114058

Ying, Y. W., and Han, M. (2006). The contribution of personality, acculturative stressors, and social affiliation to adjustment: A longitudinal study of Taiwanese students in the United States. *Internat. J. Intercult. Relat.* 30, 623–635. doi: 10.1016/j.ijintrel.2006.02.001

Ying, Y. W., and Liese, L. H. (1994). Initial adjustment of Taiwanese students to the United States: The impact of post-arrival variables. *J. Cross Cult. Psychol.* 25, 466–477. doi: 10.1177/0022022194254003

Yu, Y., and Moskal, M. (2019). Missing intercultural engagements in the university experiences of Chinese international students in the UK. *J. Comparat. Internat. Educat.* 49, 654–671.

Zell, E., and Krizan, Z. (2014). Do people have insight into their abilities? A metasynthesis. *Perspect. Psychol. Sci.* 9, 111–125. doi: 10.1177/1745691613518075

Zhang, J., and Goodson, P. (2011). Acculturation and psychosocial adjustment of Chinese international students: Examining mediation and moderation effects. *Internat. J. Intercult. Relations* 35, 614–627. doi: 10.1016/j.ijintrel.2010.11.004

Zheng, X., and Berry, J. W. (1991). Psychological adaptation of Chinese sojourners. *Internat. J. Psychol.* 26, 451–470. doi: 10.1016/j.ijintrel.2010.11.004

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

ORIGINAL RESEARCH
published: 11 December 2020
doi: 10.3389/feduc.2020.551574

Student and Parent Perspectives of the Transition From Primary to Secondary School for Students With Autism Spectrum Disorder

Karen Stack, Jennifer E. Symonds and William Kinsella*

School of Education, University College Dublin, Dublin, Ireland

Objective: Transition from primary school to secondary school is an important point in a young person's development. Children's experiences at transition have been found to have an enduring impact on their social and academic performance and potentially their success or failure at secondary school. This primary-secondary transition frequently presents challenges for children with Autism Spectrum Disorder (ASD), resulting in uncertainty and anxiety. The objective of this study was to explore the perceptions of children with ASD, on the topic of which features of school environment fit more or less well with their needs, as they transferred from primary to secondary schools.

Method: Semi-structured interviews were used to gather the experiences of 6 students with ASD, and their parents, before and after the transition to secondary school. A thematic analysis of these data identified common themes that captured the fits and misfits between the children's needs and their primary and secondary school environments.

Result: Overall, participants voiced more positive perspectives of secondary school than primary school. Data analysis identified themes of feelings about school, peer relationships, relationship with school staff, curriculum, school organization, and accommodations.

Conclusion: Inclusion and integration of students with ASD in mainstream secondary schools at transition can be a positive experience when the school environments are a good fit with the individual needs of each child with ASD. The transition can be challenging for children when a one size fits all approach is taken.

Keywords: autism, transition, primary school, secondary school, ASD, school transition

OPEN ACCESS

Edited by:
Caroline Bond,
The University of Manchester,
United Kingdom

Reviewed by:
Yini Liao,
Sun Yat-sen University, China
Siobhan O'Hagan,
Halton Borough Council,
United Kingdom

****Correspondence:***
Karen Stack
karen.stack@ucdconnect.ie

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *13 April 2020*
Accepted: *19 November 2020*
Published: *11 December 2020*

Citation:
Stack K, Symonds JE and Kinsella W (2020) Student and Parent Perspectives of the Transition From Primary to Secondary School for Students With Autism Spectrum Disorder. Front. Educ. 5:551574. doi: 10.3389/feduc.2020.551574

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by enduring deficits in social communication and social interaction in addition to patterns of restricted and repetitive behaviors, interests, or activities across multiple contexts (American Psychiatric Association, 2013). ASD is a spectrum condition, and the wide-ranging presentations of ASD result in significant disparities in functional characteristics from one individual to another and variable levels of performance across domains (Powell et al., 2018).

Transition from primary to secondary school represents a significant milestone in a child's educational career. As a group, children with ASD have been identified as particularly vulnerable

sto difficulties at this period, given their identified challenges with managing transitions (Makin et al., 2017). There is a dearth of research in an Irish context regarding the transition experience of Irish students with ASD. Previous research in other countries concerning ASD and the primary-secondary transition has focused on the perspectives and experiences of pupils and stakeholders on the transition process, and corresponding supports available to students (Hoy et al., 2018; Richter et al., 2019b). Relatively few studies have considered the change that students experience in the specific features of school environments, and the suitability of the school environments to meet the needs of the individual students with ASD at school transition. Information about the characteristics of school environments that favor or support students with ASD could help inform decisions regarding school placement. Additionally, this information could help inform school practices regarding supporting students with ASD around transitions.

This study aimed to expand on previous knowledge regarding the primary-secondary transition for children with ASD by evoking parents' and children's views of the features of school environment before and after school transition, that were considered to be a fit or misfit with the children's psychosocial needs.

PRIMARY-SECONDARY TRANSITION

A large volume of research has examined issues relating to transition from primary school to secondary school for all students (Bloyce and Frederickson, 2012; Jindal-Snape, 2016). A consistent finding is a decline in students' educational outcomes, motivation and engagement (Jindal-Snape et al., 2019). Another common theme is how relationships with peers and teachers positively or negatively impact students' adaptation after transition (Jindal-Snape et al., 2019). Perceived teacher support is associated with students' motivation and perceptions of a positive school climate after transition (Hanewald, 2013). Support from peers at transition is a protective factor, and peers have considerable influence in shaping children's attitudes about transition before the move (Waters et al., 2014).

Transition preparation has been identified as an essential factor in determining the success of the transition. While cooperation between schools is important, the role of the secondary school in the preparation process is emphasized (Evangelou et al., 2008). Additional notable influences include continuity of the curriculum in secondary school and adjusting to the demands of social relationships (Jindal-Snape et al., 2020). The importance of including and enabling students at the transition has also been emphasized (Hebron, 2017a). Relational and academic supports in schools (e.g., positive teacher-student relationships, and the curriculum taught by subject specialists) have been identified as a protective factor for children's mental and emotional well-being at transition (Lester and Cross, 2015). Criticism of existing transition research is the tendency to focus on the negative aspects of the process as opposed to providing a more balanced outlook (Topping, 2011). In outlining the primary-secondary transition as an ongoing process, the lack of formal training for primary and secondary teachers in supporting children during transition has been highlighted (Jindal-Snape and Cantali, 2019).

TRANSITION AND SCHOOL FIT

School fit has been described as the match between a student's school, and their psychosocial needs (e.g., for emotional support, self-esteem, competence, and autonomy) (Bahena et al., 2016). Stage environment fit (SEF) theory (Eccles and Midgley, 1989) drew from person-environment interaction (PEI) theory (Hunt, 1975) to explore the impact of transitions on adolescent development (Eccles and Roeser, 2009). SEF theory suggests that change in students' attitudes to school following transition is not necessarily a feature of the move itself, but is the result of a mismatch between the emotional, cognitive and social needs of the individual student and the environment of the school to which they transition (Eccles and Roeser, 2009). A systematic review of adolescent psychological development at school transition identified several of these key person-environment interactions that influence children's psychosocial functioning and well-being (Symonds and Galton, 2014). These interactions included the fit or misfit between the child's needs for safety, relatedness, autonomy, competency, enjoyment and identity development, and their experiences of teachers and peers, school environment, curriculum, and pedagogy.

PRIMARY—SECONDARY TRANSITION FOR CHILDREN WITH ASD

Considering the key characteristics of ASD such as difficulties with change, rigid thinking styles, social interaction difficulties, and sensory challenges, it is not unusual that students with ASD can be particularly vulnerable transferring to a new school (Richter et al., 2019b). Given the variability in the presentation of ASD (Fletcher-Watson and Happé, 2019), previous research has found considerable heterogeneity within the transition requirements of students with ASD (Dillon and Underwood, 2012; Fortuna, 2014; Richter et al., 2019a). Although such students are at considerably higher risk of complications during the primary-secondary transition, these risks can be mitigated by environmental or familial protective factors (Hannah and Topping, 2013).

Accordingly, the psychosocial outcomes of school transition for students with ASD are mixed in the literature. Some of these students have reported experiences of transition that were positive and better than anticipated (Hannah and Topping, 2013; Fortuna, 2014), and in line with their typically developing counterparts (Zeedyk et al., 2003). Differences have been observed between the positive experiences of those transferring to a specialist ASD provision, or to a supportive mainstream setting, compared to the negative experiences of those moving to mainstream with no support (Dann, 2011). However, others have reported a fundamentally negative experience of transition regardless of the type of provision to which a student was transferring (Makin et al., 2017).

A systematic review applying Evangelou et al.'s (2008) criteria for transition success found that, while transition concerns for students with ASD were equivalent to their typically developing peers, their ASD diagnosis added a layer of complexity to the transition (Richter et al., 2019b). This research identified that, in addition to typical transition concerns, specific issues related to the transition of students with ASD, such as transition planning, student-teacher relationships, and teacher well-being (Richter et al., 2019b). The importance of transition planning cannot be understated with a personalized approach unique to each individual student with ASD being a necessity (Hebron, 2017b). Because of the importance of systems-level factors, such as delays in identifying placement, and poor transition planning at primary level, on students' positive adaptation after school transition, it is essential to ensure a good fit between the student with ASD and their school environment both before, during and after the transition (Makin et al., 2017).

PARENT AND CHILD PERSPECTIVES

Although parents have been identified as playing a pivotal role in supporting a child's transition (Stoner et al., 2007), there is limited research on parents' perspectives of their children's transition from primary to secondary (Dillon and Underwood, 2012). Similarly, parents' perceptions of school fit at transition within existing research literature is sparse, which is surprising given they are uniquely placed to offer valuable insight into their child's needs, given their knowledge of their children across various environments and developmental stages (Bahena et al., 2016). Additionally, including children's first-person accounts of transferring between schools with ASD is important for building the evidence base. This is critical because these children are the experts on ASD and are less likely than non-autistic people to view ASD through a deficit defined lens (Gillespie-Lynch et al., 2017). Including the perspectives of children on their transition experiences can help inform practitioners of the appropriate supports required at transition (Hannah and Topping, 2013).

EDUCATIONAL PROVISION FOR STUDENTS WITH ASD IN IRELAND

Similar to the United Kingdom, most children in Ireland enter secondary school at age 12 after attending primary school for 8 years. This timing roughly equates to the transfer to from middle school to high school in the United States. Secondary school (or post-primary school) finishes at around age 18/19 years in Ireland. The Irish school system is not differentiated by ability (there are no tracked schools) and children with mild to moderate special needs are often educated in mainstream schools alongside children without identified special needs.

In Ireland, one in 65 students in schools has been diagnosed with ASD representing 1.55 per cent of the student population (National Council for Special Education, 2016). This calculation is based on school-aged children with ASD in state-funded schools. Government policy and legislation have moved toward a policy of inclusion resulting in an increasing number of students with ASD accessing mainstream education with specialist teaching support or special ASD classes (Parsons et al., 2011).

Within mainstream schools, students are placed in either a special class for ASD or they remain in mainstream classes and generally receive supplementary teaching based of their level of need (McCoy et al., 2020). In Ireland, a special class generally serves the function of a "home room" that children go to when they are not attending subject specialist classes throughout the day. Additionally, children can be assigned access to a Special Needs Assistant where they are deemed to have specific additional needs that require extra support. The department defines these as additional and significant care needs and proposes that SNA support is necessary to enable the pupil to attend school, to integrate successfully with their peers, and to minimize the impact of the behavior of students with SEN on other in the class (McCoy et al., 2014). Currently in Ireland, special ASD classes comprise a staffing ratio of one teacher and a minimum of two special needs assistants (SNAs) for every six children (Daly et al., 2016). ASD classes are in operation at primary and secondary level for students with ASD diagnoses. Students in these classes often have Individual Education Plans (IEPs) and structured timetabled school days with integration in mainstream (where possible) (Daly et al., 2016). In primary school, a considerable discrepancy exists in how the curriculum is delivered within ASD classes (Finlay et al., 2019).

There is no formalized transition to secondary school programme for students with ASD, and transition practices vary from school to school (Daly et al., 2016). While school have been found to engage appropriately with the transition process regarding students with ASD, a need for more evidenced based practice has been identified (Deacy et al., 2015).

THE CURRENT STUDY

This research aimed to explore the perspectives of students with ASD and their parents on their transition from primary to secondary school using the lens of school fit. It is hoped that this comprehensive examination of the interactions between the pupils' needs and the school environment across school transition will help identify environmental adaptations or practices that can better support students with ASD. By considering how the needs of pupils with ASD fit with their environment before and after transition, it could emerge that there are features of the school environment that work better for pupils with ASD at either primary or secondary levels. This knowledge could be used to inform practice at the alternative level (primary or secondary). Additionally, given that previous research has identified the importance of planning for students with ASD, this research will explore parents' and children's perspectives on their transition planning. Finally, it is hoped that a review of the transition experiences from the perspectives of two of the key stakeholders will identify any unnecessary challenges existing within the school environment, which could help inform future policy and procedures for supporting school transitions for students with ASD. The current study is the first study on the lived experiences of Irish children with ASD as they

transfer from primary to secondary school, and the following five research questions guided the research:

1. What were the perceived fits between the school environment and the individual child's needs in the last term of primary school?
2. What were the perceived fits between the school environment and the individual child's needs in the first term of secondary school?
3. What were the perceived misfits between the school environment and the individual child's needs in the last term of primary school?
4. What were the perceived misfits between the school environment and the individual child's needs in the first term of secondary school?
5. Which transition planning experiences did the children and parents perceive as being helpful?

METHODS

Participants and Procedures

Ethical approval was obtained from the Ethics Committee of the university to which the researchers are attached. The research complied with ethical guidelines from the Psychological Society of Ireland's (PSI) Code of Professional Ethics (Psychological Society of Ireland, 2019), and the PSI's Guidelines on Confidentiality and Record-Keeping in Practice (Psychological Society of Ireland, 2011). Written informed consent was obtained from adult participants and assent was obtained from child participants. The children's assent form was presented in an accessible format, posted in advance of interviews, and administered again before the start of the interview to ensure comprehension and agreement. Given the debate in the ASD literature concerning person-first language vs. identity-first language, the participants indicated how they would like to be described in the research through a questionnaire administered immediately before the second interview.

Six children (one girl, five boys) with ASD and their parents were recruited from a service providing diagnostic and intervention services to children with ASD attending mainstream schools. Participant inclusion criteria were that children had to (1) be transferring from a mainstream primary school to a mainstream secondary school within the service's locality; (2) have received a clinical diagnosis from a multidisciplinary team of an autistic spectrum disorder (including autistic disorder and Asperger Syndrome), according to international classification instruments; and (3) not have a diagnosed intellectual disability.

Participants were recruited using convenience sampling. A single local multidisciplinary service was chosen to recruit participants from, because of an existing working relationship between the service and the first author. This relationship allowed the first author to seek additional guidance and resources from the service, if so required, when researching with the vulnerable children. Information about the study was distributed by the service clinicians to all parents of children with a diagnosis of ASD within the service who were attending the last year of a mainstream primary school. A total of six mothers self-selected for their children to participate in the study.

The six children had a diagnosis of ASD according to ICD-10 criteria: three with Asperger's Syndrome and three with Childhood Autism. Two children had a history of school refusal; one had changed primary schools, and the other had a reduced school day. No child attended the same school as another child in the study. The schools were in both rural and urban locations. Three children were transferring from mainstream primary to mainstream secondary school, two were transferring from a mainstream special class in primary school to a special class in mainstream secondary school, and one was transferring from a mainstream primary class to a special class in mainstream secondary school. All the children had IQ scores reported in the Average Range or higher in their most recent cognitive assessments. None of the children were accessing supports for Speech and Language difficulties beyond the communication difficulties associated with ASD. See **Table 1** for a detailed profile of each young person.

Semi-structured interviews were conducted by the first author in the final term of primary school, and again 8 weeks into the first term of secondary school. The interviews were conducted in quiet environments, at either the multidisciplinary service ($n = 2$) or at the participants' homes ($n = 4$) and were of 20 to 30 min duration. The first author followed recommendations on conducting semi-structured interviews with families living with ASD (Cridland et al., 2015). Interviews were audio recorded and all audio recordings were transcribed by the first author.

Many considerations were considered within the interview process given the vulnerable nature of young people with ASD in an attempt to ensure the validity of the data. Participants were given the option of having a familiar adult present to reduce anxiety (Fayette and Bond, 2018). Only one child requested a parent to be present for one interview. The researcher asked open-ended, non-leading questions, and reassured the child from the outset that there were no right or wrong answers (Kvale and Brinkmann, 2015). To ensure reliability in the research, the same interview schedule and interviewer were utilized throughout the study.

Interview Schedules

Semi-structured interviews were chosen given their ability to elicit rich information through discourse, flexible structure, and assistance in developing rapport with the participants (Martin et al., 2019). Interview questions were structured around the notions of fit and misfit between features of the school environment and the developing child, before and after transition (Eccles and Midgley, 1989). The questions asked children and parents their views on which features of school elicited positive emotions in the child (e.g., liking and interest) and negative emotions in the child (e.g., disliking and boredom), and on which features of school fit well or misfit with the child as a person. The same question topics were repeated for children and parents, before and after transition. Additional questions on how well the child had settled into secondary school were included in the post-transition interview schedule.

TABLE 1 | Number of Child/Parent References per theme.

Themes and Sub-Themes	Child Data		Parental Data	
	Number of Childrens	Number of References	Number of Parents	Number of References
Fit Primary School				
Feelings About School	2	2	2	3
Peer Relationships	6	11	6	13
Relationship With School Staff	5	8	6	20
Curriculum	6	27	5	13
School Organization	2	4	4	11
Accommodations	5	9	4	19
Fit Secondary School				
Feelings About School	6	9	6	13
Peer Relationships	6	17	6	14
Relationship With School Staff	6	18	5	14
Curriculum	6	29	6	26
School Organization	6	23	6	27
Accommodations	4	8	4	23
Misfit Primary School				
Feelings About School	4	4	5	13
Peer Relationships	1	2	4	11
Relationship With School Staff	6	13	4	19
Curriculum	6	16	5	12
School Organization	2	9	4	14
Lack of Accommodations	4	8	4	7
Misfit Secondary School				
Peer Relationships	5	11	3	7
Relationship With School Staff	5	10	4	16
Curriculum	5	18	5	13
School Organization	4	20	4	19
Lack of Accommodations	1	1	4	16

To ensure that the questions worked well for the participants, they were reviewed by experts in ASD (a first-year college student with ASD and members of a multidisciplinary services team). This resulted in each question being presented separately on a card to the child participant, as well as the questions being asked aloud to help reduce anxiety and enable the child to remember each question. Draft interview schedules were piloted with one child with ASD and his mother, in his first year of secondary school.

Analysis Plan

A total of 24 interviews were conducted: with the six children before, and after transition ($n = 12$), and with the six mothers before and after transition ($n = 12$). NVivo version 12 was used to analyse the interview transcripts. The data from parents and children were pooled into sets representing views on fit and misfit before and after transition, and each set was analyzed separately using thematic analysis (Braun and Clarke, 2006, 2012). Data were firstly coded as fit or misfit based on positive or negative comments or observations, then the data were coded inductively within these frameworks. For the purposes of anonymity all participants will be referred to as "hey" in the analysis.

RESULTS

The results section is organized by fits and misfits at primary and secondary school. Within each section we have summarized the main results by theme. **Tables 2–5** contain quotes from participants to illustrate these findings with the voices of parents and children. We have also summarized the main fits and misfits in **Table 6**, with attention paid to the discontinuities (identified differences in experience) between primary and secondary schooling.

Perceived Fits in Primary School

Across the parent and child interviews, six themes emerged that suggested a fit between the child and their primary school environment. See **Table 1** on page 19 outlining the number of participants and number of participant references per theme at each time point.

Fit 1: Feelings About Primary School

Two of the six children and their parents identified that the children liked their primary school. The parents acknowledged that while there were "stressors" for their children in school, the children were happy at school and generally liked going there.

TABLE 2 | Fits pre-transition.

Theme	Selected Quotes
Feelings About School	• "School can be fun" (C6) • "I think he likes it quite a lot. He likes his routine" (PC6)
Peer Relationships	• "They just kinda make it easier."(C4) • "I mean he'd be lost he'd be lost without them (friends)" (PC6)
Relationships with School Staff	• " Like they let you talk if you need to talk and if you don't want to talk then they leave you for a while to regulate and stuff" (C1) • "When that teacher was there it was the best" (PC2)
Curriculum	• "I guess science is one thing I'm very interested in"(C2) • "He just thinks that he's not good but yeah he actually is good at everything" (PC3)
School Organization	• "If I need to get out of the class and go to the unit I can just tell the teacher and I can just go to the unit. Like there's no questions asked." (C1) • "The kindness that the staff show everyone, autistic or otherwise is amazing" (PC1)
Accommodations	• "Sometimes people need a break from time to time like just go somewhere for 5 min and take a break" (C5) • "I mean the classes would do movement breaks which involved everybody, so he wasn't singled out." (PC6)

TABLE 3 | Fits post-transition.

Theme	Selected Quotes
Feelings About School	• "It's fun, it's better than what I expected it to be" (C5) • "School is still school, but no comparison, no school refusal. He comes home singing; he just seems happy" (PC4)
Peer Relationships	• "My friends in my primary… made fun of me and I just didn't really mind but I can like now notice the difference so much now because nobody does it in my school now so it's really good" (C5) • "His friends were like 'I am nervous', and he was like 'dude me too I'm nervous'. But you know maybe they help each other" (PC2)
Relationships With School Staff	• "In the new school it's their job to be good at one subject and it's just better the teachers seemed better suited to teach" (C4) • "She's had a chat with and make sure he was okay, asking him 'is there anything else we can be doing"' (PC5)
Curriculum	• "The maths is more advanced, like it's more complicated or difficult" (C6) • "I think he just challenges him mentally; I think he learns new things and sees new things" (PC3)
School Organization	• "It's just the dynamic is so different, like you aren't dependent on one teacher to teach you and like let's say you have a bad teacher it doesn't mean you have a bad teacher every day of the year, it just means you've a bad teacher like maybe twice a week which is really really good" (C4) • "He said he loves the fact that he's got a different subject every 40 min, whereas I suppose in primary it was kind of the same thing" (PC3)
Accommodations	• "There is literally three people you can talk to" (C3) • "The resource center is the place where they seem to feel safest at the moment definitely. Staff wise as well as peer wise" (PC1)

The two children discussed how they liked school and that it was "fun" sometimes.

Fit 2: Peer Relationships at Primary School

All six children and five parents discussed positive aspects of the child's relationships with their peers in primary school. Children spoke about how they had friends in school they could relate to with the same interests, with some identifying their friends as being the best thing about school. For some of the children who found school difficult, peers were a source of comfort in the yard or for helping understand the teachers' instructions. One parent disclosed that contact with peers was the thing that encouraged their child to go to school most days.

Fit 3 Relationships With Primary School Staff

Five parents and three children spoke about the importance of having teachers who understood the children and their needs. Most of these children and parents referred to support teachers or Special Needs Assistants (SNAs) rather than class teachers in this regard. Children explained the importance of having someone to help them solve problems and talk things through. Three parents reported that when their child had a positive relationship with the class teacher, the stress levels at home decreased. Parents explained that when teachers or staff took the time to understand the child and their needs, it preempted issues before they arose. Parents did not generally describe the teachers in terms of how well they understood ASD; instead they represented the teachers as being *"kind"* and *"supportive."* One parent whose child was having a particularly difficult time in school acknowledged that having one person in the school who was seen as a *"safety person"* by the child made life easier for both her and her child. Another parent described the difficulties in getting their child to school every day, and how when they were late, they would meet the principal. He would greet them with small talk and chat, as opposed to berating the child for being late, which he understood would only exacerbate the problem.

Fit 4: Primary School Curriculum

All students and five parents were able to identify at least one subject that the child was good at in primary school. Three parents referred to their children as being good academically, and four students described themselves as being "good at maths." Three students liked Art, PE, and Science, describing Science as "interesting" and Art and PE as "fun." Two students found English interesting.

Fit 5: Primary School Organization

Parents described the importance of issues such as bullying being dealt with as they arose, as they felt this had the effect of making

TABLE 4 | Misfits pre-transition.

Theme	Selected Quotes
Feelings About School	• "I think in a different school he probably would have thrived more, but I don't know… he did not feel safe." (PC4) • "So when he comes to me in the house he's just like a bomb" (PC2) • "Not that much." (C4)
Peer Relationships	• "He was being picked on a for a couple of years" (PC5) • "I know they do it to everyone, but it still feels like it's just you" (C4)
Relationships With School Staff	• "Hold it in (when upset). Because if I let it out in school the teacher would give out to me more." (C4) • "He felt like in the primary school they did not mix them with some other kids so that was saying to him why is there any problem with us, we can do everything that those ones can do" (PC2)
Curriculum	• "And then there's Irish which I find AGHHRRRR (Very angry noise) basically is it (fist banging angry noises)" C3 • "He really dislikes Irish he I suppose that be his weakest subject" (PC6) • "I'd struggle with doing the homework and sometimes when I'm in school I'd worry so much that I'd forget a book in school" (C5)
School Organization	• "Then there's PE the teachers take away a time from PE if you do something wrong. Even though PE is part of the curriculum"(C4) • "I wasn't allowed to talk to his SNA in third class due this rule that parents were not allowed talk to SNAs. They absolutely refused to let me meet the woman, know her name, anything" (PC4)
Lack of Accommodations	• "I just want to go to the normal classes cuz I felt like I was kinda being treated like a child" (C2) • "No allowances are made for the fact that this child has difficulties and getting cross with him could ruin his whole day" (PC2)

TABLE 5 | Misfits post-transition.

Theme	Selected Quotes
Feelings About School	• "We've had days where they've refused, and cried and we've had 2 days where they've just not gone to school because the thoughts were just too overwhelming" (PC1)
Peer Relationships	• "He's quite rigid in that respect he likes to be doing what he's supposed to do, and he doesn't like noise and messing" (PC6) • "It was quite easy in primary school—you make friends in junior infants as little kids but in secondary school it's a bit harder to make friends" (C6)
Relationships With School Staff	• "We play and laugh loud they will come and say you are making too much noise, but the other ones that are normal nobody is saying that to them" (C2) • "Has someone sitting next to him monitoring him and he doesn't like that" (PC4)
Curriculum	• "Well in general there's more homework… on average you have two books per subject that already 18 books you're taking home" (C3) • "German, French Irish, I think he struggles with languages, I mean he never liked Irish at school," (PC6)
School Organization	• "Well sometimes people would get lost and it's very crowded in the hallways" (C6) • "There are three lockers on top of each other and all the children go there at the same time and he's lucky because he has a top one but there are two children under him so I don't even know how they can manage" (PC3)
Lack of Accommodations	• "She (teacher) said that and I need a copy for her class, she doesn't like the fact that I use my laptop" (C4) • "It's like they have the understanding… they've read books and they can say okay autism is difficultly in this area… [*but*] let's throw all of my preconceived notions out the window and let's see what this small person brings, does that make sense" (PC1)

the child feel safe in school. One student who had changed schools following a period of school refusal described *"feeling safe"* in the new primary school as they navigated the school day between the mainstream and special class. Another student outlined how they were happy that there were three final year classes in their school, as this meant the class sizes were smaller at around 20 per class. Two parents spoke about how all children were treated equally in the school regardless of diagnosis.

Fit 6: Accommodations at Primary School

Five children identified that access to sensory or movement breaks greatly helped them engage with learning and school generally. Students described how movement or a break from the class helped them *"concentrate"* and described themselves as *"refreshed"* after this break. Four parents also emphasized the importance of these breaks, and spoke about how teachers incorporated these breaks into the class routine. Three parents talked about the value of having a space for their child to access when they needed it. Three parents outlined how the school had accommodated their child with the provision of either a physical space or by having an identified person they could approach. Finally, two parents described sensory difficulties their child had concerning the school uniform and acknowledged that their school had been very accommodating in allowing them flexibility with the wearing of the uniform.

Perceived Fits in Secondary School

The post-transition data fit well into the same broad pattern of themes as the pre-transition data, regarding fits between the children and the school environment.

Fit 1: Feelings About Secondary School

All parents and children reported positive experiences of secondary schooling post-transition. Most parents and children explained that secondary school was better than primary school and had exceeded expectations in some cases. One child reported that they liked secondary school but was also struggling with

TABLE 6 | Fits and misfits across transition (discontinuities in bold).

	Pre-Transition	Post-Transition
Fits	Friends at school with the same interests Kind and understanding teachers (SNAs) Fun subjects (art, science) Feeling competent at subjects Schools managing bullying incidents well **Smaller class sizes** Sensory/movement breaks **Flexibility around wearing school uniform**	Making new friends who help with schoolwork and routines Feeling accepted by friends for who they are Transferring with friends from primary school Kind and understanding teachers **Subject specialist teaching** **New subject choices** **Better facilities for subjects** Accommodations for homework **Movement between classes** **Structured activities at break** **Special classes as a base**
Misfits	Bullying and teasing Peers misbehaving in class Being treated 'differently' by SNAs Irish language learning Homework **Lessons not stimulating enough** **Not enough breaks** Lack of school support for planning for transition to secondary school	Being teased, witnessing bullying Peers misbehaving in class Being treated 'differently' by SNAs Language learning (including Irish) Homework **Lockers in main corridors** **No uniform accommodations** **Not being able to access laptops in every class**

aspects of the school day, and therefore admitted that they had mixed feelings overall. All the parents were assured that their children had adapted to the new schools, with some admitting that, although the child had been initially more enamored, and the "*novelty had worn off*," the child still liked school and was happy to attend.

Fit 2: Peer Relationships at Secondary School

All of the children and most of the parents spoke about the importance of peers in secondary school. Five parents talked about the new friends their children had made in their new schools. Parents also communicated about how the friends appeared to be supporting each other in terms of reassuring each other, understanding homework and understanding teacher instructions. Children and some parents highlighted that the children felt a level of acceptance from their new friends that had not been present in primary school. Some children spoke about the reassurance of having understanding friends or peers who had transferred with them from primary school.

Fit 3 Relationship With Secondary School Staff

This theme was much more salient for the children than their parents. All of the children identified teachers that they found *"funny," "kind," "genuine," and "interesting."* Some children remarked how teachers had more in-depth knowledge of their subjects in secondary and in some cases reported a shared interest with their teachers. Three children felt that their teachers gave explicit instructions which they found reassuring. Parents felt that the staff were "*kind and caring*" and two parents noted that teachers appeared to be *"checking in"* with their child throughout the day to preempt difficulties before they arose.

Fit 4: Secondary School Curriculum

For nearly all parents and children, the introduction of new subject choices at secondary school was a positive feature. All the children who had the option of the technical subjects (i.e., woodwork and metalwork) reported enjoying them. Parents and students acknowledged that subjects seemed to have more depth in secondary school which made them more appealing. For parents, this contributed to their child being more challenged than they had been in primary school. Two students identified PE as being much better, with one remarking that access to gym equipment facilitated more meaningful movement breaks than primary school. In terms of competency, all students and parents identified at least one subject the children were good at in secondary school. Parents were a little less sure than their children as they felt it is still "early days" and many had not had results from the school yet. Some children acknowledged that, in some subjects, they were revising work already covered at primary, but they were reassured by this. Some of the children accessed support classes during their school day to help complete some of their homework. Other children remarked that they liked that homework did not always have to be completed the day it was assigned in secondary. These children identified these accommodations for doing homework as a big positive to secondary school.

Fit 5: Secondary School Organization

For the children, there appeared to be many aspects of the secondary school environment that were more favorable than at primary school. Children outlined that they liked the opportunities for additional movement when moving between classes and having different teachers. For some children, the rules at secondary appeared more reasonable than primary. For many of the children, the experience of break time was significantly improved; children could attend structured lunchtime activities such as camera club, or the library or find a quieter space away from the crowds if they wished. The children in the sample felt this provided them with a *"freedom"* they did not have in primary school. Parents commented that they thought their child felt safer in school and that generally, the ethos of their child's secondary school was well-matched with their needs.

Fit 6: Secondary School Accommodations

Interestingly, this theme was not as salient for the children as it had been in primary school, as it appears that the child's need for movement breaks were reasonably satisfied by moving classes. Three children identified the folders that their schools use to organize their books and materials as being helpful. Many parents and children emphasized the importance of having a designated place or a person available for times of stress and anxiety. Parents appeared satisfied with the level of support their children were receiving at secondary school, feeling that there was a "team of staff" supporting their child. For the children accessing a special

class at secondary school, having their lockers and individual workstation in the base class was a welcome resource.

Perceived Misfits in Primary School

Regarding misfits, the data readily converged into the same six themes that were found for fits between school environment and children's needs.

Misfit 1: Feelings About Primary School

Four parents acknowledged that their child did not like school, with two describing a long history of school refusal. Three of the parents spoke about how the distress caused by school attendance permeated into their child's home life. One parent described it as *"horrendous,"* how her child "*cried every day for years; it was horrific!*". Other parents talked about how their child needed time every evening to *"decompress."* The parent of one child who stated that they liked school, spoke about how their mood started to deteriorate on Sunday afternoon in anticipation of the return to school. The children were less clear, with two describing being ambivalent toward school with their feelings changing day to day, and another two being very clear that there was nothing about school they liked at all.

Misfit 2: Peer Relationships at Primary School

The issues of peer relationships negatively impacting the child were more salient for the parents than the students. Two children described incidences of peers being "annoying" for touching their belongings or teasing. Three parents described occurrences of their child being bullied, with the bullying going unaddressed by the school for many years. Parents also spoke about the difficulties their children had in managing friends' poor behavior in the classroom and how the unpredictability of this behavior led to increased anxiety and problems negotiating the relationships.

Misfit 3: Relationship With Primary School Staff

Four out of the six children spoke about difficulties in their interactions with their teachers. Some children spoke about having difficulty understanding instructions in the classrooms. Two children and three parents emphasized how the children had been treated differently to their typically developing peers because of their diagnosis of ASD. Both parents (3) and the children (3) described *'not feeling heard'* or *"believed,"* and as a result often no longer reported issues to the school, as they did not expect their problems to be addressed. Children and parents highlighted the importance of *"trust"* for the young people with ASD in the sample. They needed to be sure that the staff member was consistent with their commitments. Parents spoke about difficulties with the relationship between their child and the SNA, with the child seeking more freedom and independence from being *"followed by the SNA."*

Misfit 4: Primary School Curriculum

Irish represented the biggest challenge for all parents and children in the study, who were studying the subject (two students had exemptions from studying Irish). Children spoke about how they could not understand Irish and reported that it made no sense and how they could not understand why everyone in the class was more proficient than them with the subject. Homework was identified as another significant stressor for three children and two parents. Four children also stated that they were not interested in maths, or that most of the subjects had no meaning and were repetitive. One parent also felt that there was not enough stimulation within the academic content for their child in primary school.

Misfit 5: Primary School Organization

Children and parents expressed concern about the rigidity of some of the primary school and classroom rules, remarking how flexibility is expected from children with ASD. However, the school system does not allow for flexibility when dealing with students with additional needs. Half of the parents mentioned the sensory challenges in the school environment, such as desks seated too close to each other, students cramped together for noisy assembly and wearing an uncomfortable uniform. Since the children in the special classes had a "place" to go to when overwhelmed, these issues were more prevalent for children in the mainstream environment.

Misfit 6: Lack of Primary School Accommodations

Parents were concerned about the lack of understanding around ASD by primary school support staff, particularly regarding supporting their child's transition to secondary school. In parents' and children's descriptions, there was an inconsistency in the approach taken by primary schools in preparing the child with ASD for secondary school. Some parents also reported the school being reluctant to give the child with ASD special treatment in preparing for school transition. One child who was in the ASD class expressed regret that he was not allowed to spend more time in the mainstream class, and others spoke about the expectations being higher in the mainstream class. Finally, one child and two parents spoke about not accessing breaks from the classroom or having a break scheduled for a particular time, and the child could not access breaks outside of this time regardless of the circumstances.

Perceived Misfits in Secondary School

Across the parent and child interviews, the same dominant six themes best categorized the different types of misfits between the child and their new secondary school environment.

Misfit 1: Feelings About Secondary School

None of the students expressed any entirely negative feelings about secondary school. Only one child in the sample had mixed feelings, and their parent had concerns over whether they would be able to continue in their secondary school.

Misfit 2: Peer Relationships

Parents and children identified other children's misbehavior in class as a problem. These were mainly low-level behaviors such as talking out of turn and messing in class, but the children still reported the behaviors as "annoying." Additionally, two parents expressed concern that, despite requests beforehand, their children had been separated from the majority of their primary school peers in their new schools. The challenges faced by children with social communication difficulties were evident in children's descriptions of situations of negotiating

relationships with their class peers. No child reported experiences of bullying in their new school. However, difficulties in managing incidences of teasing, joking and witnessing other people being bullied were described by parents and children alike.

Misfit 3 Relationships With Secondary School Staff

Three of the children in the sample felt that the SNAs treated them differently from their mainstream peers, which frustrated the children and caused them to reject the support offered by the SNA. The children wanted the same independence as their mainstream peers and rejected being "followed" and "treated like a child." Children commented that if they did not like the teacher, it impacted on their interest in the subject in question.

Misfit 4: Secondary School Curriculum

Homework remained a source of stress for many of the children, most notably the children in the mainstream classes who did not have access to homework classes in school. Children reported difficulty managing the books, writing homework down from the board and having to do homework at the weekend. While two children in the sample had secured an exemption from Irish at secondary school, languages remained the most challenging subject for many of the children who were studying them, as expressed by both parents and children. Most of the children could identify a subject they found boring.

Misfit 5: Secondary School Organization

The main feature of the secondary school environment reported to concern parents and children alike was the locker system. They emphasized that the lockers were too small, and the locker area was overwhelming. Lockers were noted to be an issue for the children attending mainstream classes exclusively. Unsurprisingly, given the difficulties people with ASD have in processing sensory information, many children and their parents spoke about problems managing busy corridors, locker areas and the associated noises. Transport was an area of difficulty for some children as this significantly increased the length of their school day. Getting used to wearing the new uniform was difficult for some children, particularly those who had uniform accommodations at primary school.

Misfit 6: Lack of Secondary School Accommodations

Most parents and children reported that they had been accustomed to managing the difficulties outlined in the previous section. However, parents and children expressed concern about accessing support. Notably, this was only the parents of children in the mainstream environment. One parent expressed disbelief that her son could not access any of the supports available to children in the ASD center in the school he was attending. For two of the children, difficulties concerning continuity of accessing their laptops was observed. Additionally, parents felt that while the staff in school might have had a general understanding of ASD, some had difficulty applying the information to individual children's needs. This was particularly evident for the children who "masked" their struggles or who did not appear to have overt ASD behaviors.

Helpful Transition Planning Experiences

All the parents and children in the sample reported that they accessed significant transition preparation. For the most part, this consisted of visits to the secondary school. Some children described completing worksheets and workbooks in school that supported the transition. Two children received additional support in terms of color coding books, managing books and understanding timetables. One child described how teachers from a secondary school provided workshops to all the 6th class students in the school over 3 weeks, on organization skills for secondary school. One school produced a specific booklet for all students with additional needs, with crucial information about the school and school environment, including photographs of the support staff. While the children described the workbook and worksheets as helpful, one child emphasized that they did not find them useful because they were about secondary school generally and not about their specific school. "The primary school they don't have papers for the specific school they're just off the main primary stuff about secondary school, so you won't really get much information" (C2).

Both parents and children emphasized the importance of visiting the secondary school before transfer, for reducing much of the impending anxiety around the transition. Most students visited the secondary school twice, but the majority of the students had many more visits. These visits allowed the children to meet other children, meet teachers and support staff, meet their identified contact person, tour the school and familiarize themselves with the surroundings, have their questions answered. One child summed up the importance of these visits

> "I usually get anxious and stuff… for example if I were to go into first day of school and wouldn't know what the school would look like, I'd just get butterflies in my tummy and I'd just get all worked up because I wouldn't know what was going on or anything, but when I went to the school to see how it is and stuff it helped a lot because now I'm going to know what to do, so now I won't be as worked up" (C4).

Parents and children also spoke extensively about how the secondary schools delivered a gradual introduction to the school timetable and curriculum after the students started at the end of August. These first few days focused on first-year bonding, information classes on secondary school practices, and familiarization with the timetable. Children also described how the school rules were more relaxed and not fully enforced for the first few weeks until students became acclimatized to the new environment. Some schools had support teams for the incoming first year students comprised of older peers, and this was reported to be very helpful. Generally, the parents and children identified the gradual start with reduced days at the beginning of the school as the most beneficial thing to help them become accustomed to their new school.

DISCUSSION

Six children with ASD and their parents were interviewed in the last term of primary school and again during the first term in secondary school. The interviews elicited their perceptions of the features of primary and secondary school environments that fit or misfit with the individual children's needs. Children and parents also provided their perspectives on the positive and negative aspects of the transition planning process. The results documented several examples of fit and misfit, pre- and post-transition, within the major themes of feelings about school, peer relationships, relationships with school staff, curriculum, school organization, and accommodations. In the discussion, we examine how children's and parents' perceptions of those features of schooling altered across the transition, to summarize the most supportive and problematic features of school environment at transition for children with ASD.

Feelings About School

Research has suggested that for some children with ASD, the experience of transition to secondary school is overwhelmingly positive (Dann, 2011), exceeds expectations (Hannah and Topping, 2013), and allows for optimism regarding the move (Mandy et al., 2016). Similarly, for most children and parents in this study, their feelings about school generally were more positive in secondary school than in primary school. Children reported that they liked secondary better than primary and that it was better than they expected. Encouragement can be obtained from the fact that negative experiences of primary school for many of the children in the sample were not evident in the early stages post-transition to secondary school.

Peer Relationships

Peer relationships are crucial given their impact on student engagement in learning as well as protecting from stress (Topping, 2011; Symonds and Hargreaves, 2014). Despite their difficulties with social understanding and social interactions, and similar to their typically developing peers, many children with ASD are interested in forming friendships and being involved in social groups (Dillon et al., 2016). In the current research, all the participants emphasized the importance of peer relationships before and after the primary-secondary transition. They identified peer supports as playing a significant role in their happiness in school. Similar to previous findings (Richter et al., 2019a), the students and their parents reported feeling generally accepted by peers, with parents remarking on the quality of the friendships. The larger secondary school environment often provides more significant opportunities for developing friendships (Hebron, 2017a).

Relationships With School Staff

Emotionally supportive student-teacher relationships are a protective factor in encouraging student engagement in learning at transition (Symonds and Hargreaves, 2014). They are a critical factor in influencing transition success for students with ASD, whereby difficulties in such relationships cause considerable stress to students, parents and teachers themselves (Richter et al., 2019b). In primary school, the study children and their parents spoke mostly about support staff (resource or special class teacher, SNA) in this regard, with almost none mentioning mainstream class teachers unless it was in the context of a negative experience. However, like Dann (2011), the students and parents in the current research spoke positively about the secondary school teachers describing them as "fun" and "genuine," as well as "kind and caring." This finding corroborates the suggestion that a good understanding of ASD is not as important as an approachable and progressive attitude by teachers (Richter et al., 2019a).

Curriculum

The participants in this study welcomed the choice of subjects available at secondary school. This variety affords children with ASD an opportunity to explore their interests that is not an option for them at primary school (Neal and Frederickson, 2016). Additionally, the interest the children displayed in their school subjects is essential given that academic interest has been recognized as suggestive of a positive transition (Peters and Brooks, 2016).

Homework emerged as a concern in previous research given the challenge people with ASD have when separate environments such as home and school intersect (Dillon and Underwood, 2012). It is not surprising, therefore, that homework represented a talking point for most participants before and after the transition. Following transition, the children in the ASD classes described the benefits of having opportunities during the day to complete their homework.

School Organization

Comparable to findings by Neal and Frederickson (2016), the results suggested that the children valued many of the changes in school environment occurring due to transition to secondary school. Participants spoke about the benefits of moving class every 40 min, not having the same teacher all day, and the benefits of clearly defined rules and structures.

As with previous research (Makin et al., 2017), the children in this research identified many supports available to the entire school population as helpful, e.g., timetables, homework journals. Many practices identified as supportive in primary school were evident within the secondary school environment. This was evident in the fact that all participants spoke about the need for movement breaks from the classroom in primary school, whereas after transferring, it was only mentioned by one parent. Following the transition, a significant issue for the children attending mainstream was the locker system. However, for children in the ASD classes, this was not an issue as their lockers were in the ASD base classes.

Parents reported that primary schools seemed reluctant to allow sufficient differential treatment for students with ASD, compared to secondary schools that appeared to acknowledge to a greater extent that some students required differential arrangements. This finding is significant given the impact of students' perceptions of school climate on their mental and emotional well-being over the transition period (Lester and Cross, 2015).

Accommodations

Participants identified a "safe place" or "alternative place" to go at break times or when they needed to regulate themselves as a feature of secondary school that appealed to them, compared to their primary school where everyone had to go to the yard at lunchtime. This is important given that unstructured times of the day, such as breaks, have been identified as challenging for students with ASD (Deacy et al., 2015). It is consistent with previous findings regarding the benefits of a designated space for children with ASD (Dann, 2011; Hoy et al., 2018).

Children were also positive about having special classes (or "units") that they could attend when they were not being taught by mainstream subject specialist teachers. The prevalence of special classes was far greater at secondary school and provided children with a respite from the more complex social environment including that experienced at break and lunch time. Having school lockers in the special class at secondary school was also a protective factor for one child, whereas other children found this aspect of school organization stressful when their lockers were in the main corridors.

Some have argued that the concept of an ASD class goes against principles of inclusion (see Hornby, 2015 for further information). However, one child and their parent in the sample who transitioned from a mainstream primary school class to an ASD class at secondary reported feeling more included at secondary school than in primary school.

One participant was at times struggling with the transition and a lack of understanding regarding the subtle presentation of ASD was attributed to precipitating many of the ongoing challenges they faced in school. School staff need to acknowledge the heterogeneous presentation of needs regarding children with ASD (Dillon and Underwood, 2012), as there is no one defined method of supporting children with ASD at transition (Tso and Strnadová, 2017).

Preparation

The importance of transition planning has been emphasized in the literature (Evangelou et al., 2008), particularly for students with ASD (Richter et al., 2019b), whose experience of transition is more extreme than that of their typically developing peers (Dann, 2011). Participants identified pre-transition visits to their secondary school as being most helpful. This is consistent with previous findings relating both to children with ASD (Dann, 2011; Neal and Frederickson, 2016) and their typically developing peers (Zeedyk et al., 2003).

Continuities and Discontinuities in Experience

There were several continuities in the fits that children experienced when moving from primary to secondary school. These included friendships, and kind and understanding teachers. There were also continuities in the misfits they experienced, including being teased, becoming distressed by their peers' disruptive behavior in class, being treated "differently" by SNAs (who often followed the children around school), and learning foreign languages with the most difficulties reported for learning Irish.

There were also discontinuities in school organization across the transition. These generated a larger number of observed fits at secondary school: feeling more accepted by friends for being "who they are," the move to subject specialist teaching, new subject choices, better facilities for school subjects, accommodations for homework, movement between classes, and having special classes as a base. There were also discontinuities which generated new misfits including having lockers in main corridors, no uniform accommodations, and not being able to access laptops in every class. Many of these fits at secondary school, such as enjoying the move to subject specialist teaching and being able to move around the school more frequently have been identified in other studies of children without identified needs (Symonds and Hargreaves, 2014). These findings therefore could represent fits that are adaptive for most children but have particular relevance for meeting the needs of children with ASD.

Implications for Practice

Children perceived many psychological fits in secondary school, including provision of more specialized support for ASD, making new friends, and having caring teachers. This finding implies that educational and psychological practitioners might help alleviate children's anxieties about transition by telling them "good news" stories based on this study and similar research. The increased choice of school subjects at secondary school was a positive experience for children. Schools could build on this result by ensuring that children with ASD receive a broad and balanced curriculum no matter what their level of need. Children's enjoyment of movement breaks at secondary school, including moving between classes, could inform primary schools where educators might increase the frequency of times during the day that children with ASD (and all children) can move about freely. Having a safe space, such as an ASD classroom, to retreat to at secondary school was also appreciated by several children, implying that "safe spaces" for children with ASD might also be helpful in primary schools. Finally, giving children adequate time to familiarize themselves with their new school environment before the transition was important to alleviate anxieties therefore extended pre-transition visits to secondary schools is recommended for children with ASD.

Limitations

A limitation of the current research is the small sample size and representativeness of the participants, who were a self-selected group from a relatively small geographical area. Other limitations relate to gender imbalance in the sample, that all student participants were quite high functioning, the absence of fathers' perspectives amongst the parent voices, the absence of perspectives of school personnel, and that the research was completed early in the transition process. Nevertheless, this is the first study to examine the transition to secondary school experiences of Irish children with ASD and it is an in-depth study examining the perspectives of students with

ASD and their parents at two time points in the transition process. The findings provide perspectives that future research could explore.

Longitudinal research has suggested that positive attitudes experienced by children with ASD following transition decline over time (Hebron, 2017b), and also that transition to secondary is not a static process and instead exists on a continuum (Jindal-Snape and Cantali, 2019). Therefore, a longitudinal study could explore the experiences of children with ASD as they transition through each school year.

CONCLUSION

The transition to secondary school has been identified as a significant period in the life of students with ASD. Despite the literature concerning transition proposing mixed experiences, the sentiment surrounding transition is generally negative, adding or creating unnecessary anxiety regarding the move. As with previous studies, this research has emphasized the importance of appropriate preparation and cooperation between all the stakeholders. Overall, it appeared that the highly structured secondary school environment involved changes to the curriculum, supportive systems and structures, and overall school climate that was more effective at meeting the needs of the individual children in the sample that their primary schools. This study highlighted aspects of school climate and culture that are essential in ensuring a good fit between the individual needs of children with ASD and their chosen schools.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article are from a small potentially identifiable sample. Access to the anonymised data can be requested by email to the authors.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the UCD Human Research Ethics Committee. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

AUTHOR CONTRIBUTIONS

KS: conceptualization, data curation, formal analysis, investigation, methodology, project administration, writing—original draft, and writing—review and editing. JS: conceptualization, methodology, supervision, and writing—review and editing. WK: conceptualization, supervision, and writing—review and editing. All authors contributed to the article and approved the submitted version.

ACKNOWLEDGMENTS

The authors would like to thank the participants of this study for giving their time generously and trusting us to share their experiences. They would also like to acknowledge the support of the management and staff in the Brothers of Charity (BOC).

REFERENCES

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-5®)*. Arlington, VA: American Psychiatric Publishing.

Bahena, S., Schueler, B. E., McIntyre, J., and Gehlbach, H. (2016). Assessing parent perceptions of school fit: the development and measurement qualities of a survey scale. *Appl. Dev. Sci.* 20, 121–134. doi: 10.1080/10888691.2015.1085308

Bloyce, J., and Frederickson, N. (2012). Intervening to improve the transfer to secondary school. *Educ. Psychol. Pract.* 28, 1–18. doi: 10.1080/02667363.2011.639345

Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. doi: 10.1191/1478088706qp063oa

Braun, V., and Clarke, V. (2012). "Thematic Analysis," in *APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological*, eds H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, and D. Rindskopf (Washington, DC: American Psychological Association). p. 57–71.

Cridland, E. K., Jones, S. C., Caputi, P., and Magee, C. A. (2015). Qualitative research with families living with autism spectrum disorder: recommendations for conducting semistructured interviews. *J. Intellect. Dev. Disabil.* 40, 78–91. doi: 10.3109/13668250.2014.964191

Daly, P., Ring, E., Egan, M., Fitzgerald, J., Griffin, C., Long, S., et al. (2016*). An Evaluation of Education Provision for Students With Autism Spectrum Disorder in Ireland*. Trim: National Council for Special Education. Retrieved from: https://ncse.ie/wp-content/uploads/2016/07/5_NCSE-Education-Provision-ASD-Students-No21.pdf

Dann, R. (2011). Secondary transition experiences for pupils with Autistic Spectrum Conditions (ASCs). *Educ. Psychol. Pract.* 27, 293–312. doi: 10.1080/02667363.2011.603534

Deacy, E., Jennings, F., and O'Halloran, A. (2015). Transition of students with autistic spectrum disorders from primary to post-primary school: a framework for success. *Support Learn.* 30, 292–304. doi: 10.1111/1467-9604.12102

Dillon, G. V., and Underwood, J. D. (2012). Parental perspectives of students with autism spectrum disorders transferring from primary to secondary school in the United Kingdom. *Focus Autism Other Dev. Disablil.* 27, 111–121. doi: 10.1177/1088357612441827

Dillon, G. V., Underwood, J. D., and Freemantle, L. J. (2016). Autism and the UK secondary school experience. *Focus. Autism. Other Dev. Disablil.* 31, 221–230. doi: 10.1177/1088357614539833

Eccles, J., and Midgley, C. (1989). Stage-environment fit: developmentally appropriate classrooms for young adolescents. *Res. Motivat. Educ.* 3, 139–186.

Eccles, J., and Roeser, R. W. (2009). Schools, academic motivation, and stage-environment fit *Handb. Adol. Psychol.* 1, 404–434. doi: 10.1002/9780470479193.adlpsy001013

Evangelou, M., Taggart, B., Sylva, K., Melhuish, E., Sammons, P., and Siraj-Blatchford, I. (2008). *What Makes a Successful Transition From Primary to Secondary School*? Research Report No. DCSF-RR019. Department for Children; Schools and Families; Institute of Education; University of London.

Fayette, R., and Bond, C. (2018). A systematic literature review of qualitative research methods for eliciting the views of young people with ASD about their educational experiences. *Eur. J. Spec. Needs Educ.* 33, 349–365. doi: 10.1080/08856257.2017.1314111

Finlay, C., Kinsella, W., and Prendeville, P. (2019). The professional development needs of primary teachers in special classes for children with autism in the republic of Ireland. *Prof. Dev. Educ.* 1–21. doi: 10.1080/19415257.2019.1696872. [Epub ahead of print].

Fletcher-Watson, S., and Happé, F. (2019). *Autism: A New Introduction to Psychological Theory and Current Debate*, 2nd Edn. Abbingdon: Routledge.

Fortuna, R. (2014). The social and emotional functioning of students with an autistic spectrum disorder during the transition between primary and secondary schools. *Support Learn.* 29, 177–191. doi: 10.1111/1467-9604.12056

Gillespie-Lynch, K., Kapp, S. K., Brooks, P. J., Pickens, J., and Schwartzman, B. (2017). Whose expertise is it? Evidence for autistic adults as critical autism experts. *Front. Psychol.* 8:438. doi: 10.3389/fpsyg.2017.00438

Hanewald, R. (2013). Transition between primary and secondary school: why it is important and how it can be supported. *Aust. J. Teacher Educ.* 38:7. doi: 10.14221/ajte.2013v38n1.7

Hannah, E. F., and Topping, K. J. (2013). The transition from primary to secondary school: perspectives of students with autism spectrum disorder and their parents. *Int. J. Spec. Educ,* 28, 145–157. Available online at: http://www.internationalsped.com/articles.cfm?y=2013&v=28&n=1

Hebron, J. (2017a). School connectedness and the primary to secondary school transition for young people with autism spectrum conditions. *Br. J. Educ. Psychol.* 88, 396–409. doi: 10.1111/bjep.12190

Hebron, J. (2017b). "The transition from primary to secondary school for students with autism spectrum conditions," in *Supporting Social Inclusion for Students With Autism Spectrum Disorders,* ed C. A. Little (Abingdon: Routledge), 84–99.

Hornby, G. (2015). Inclusive special education: development of a new theory for the education of children with special educational needs and disabilities. *Br. J. Special Educ.* 42, 234–256. doi: 10.1111/1467-8578.12101

Hoy, K., Parsons, S., and Kovshoff, H. (2018). Inclusive school practices supporting the primary to secondary transition for autistic children: pupil, teacher, and parental perspectives. *Adv. Autism* 4, 184–196. doi: 10.1108/AIA-05-2018-0016

Hunt, D. E. (1975). Person-environment interaction: a challenge found wanting before it was tried. *Rev. Educ. Res.* 45, 209–230. doi: 10.3102/00346543045002209

Jindal-Snape, D. (2016). *AZ of Transitions*. London: Palgrave Macmillan.

Jindal-Snape, D., and Cantali, D. (2019). A four-stage longitudinal study exploring pupils' experiences, preparation and support systems during primary–secondary school transitions. *Br. Educ. Res. J.* 45, 1255–1278. doi: 10.1002/berj.3561

Jindal-Snape, D., Cantali, D., MacGillivray, S., and Hannah, E. (2019). *Primary-Secondary Transitions: A Systematic Literature Review*. Social Research Series. Edinburgh: Scottish Government.

Jindal-Snape, D., Hannah, E. F. S., Cantali, D., Barlow, W., and MacGillivray, S. (2020). Systematic literature review of primary–secondary transitions: international research. *Rev. Educ.* 8, 526–566. doi: 10.1002/rev3.3197

Kvale, S., and Brinkmann, S. (2015). *InterViews : Learning the Craft of Qualitative Research Interviewing,* 3rd Edn. Los Angeles, CA: Sage Publications.

Lester, L., and Cross, D. (2015). The relationship between school climate and mental and emotional wellbeing over the transition from primary to secondary school. *Psychol. Well Being* 5:9. doi: 10.1186/s13612-015-0037-8

Makin, C., Hill, V., and Pellicano, E. (2017). The primary-to-secondary school transition for children on the autism spectrum: a multi-informant mixed-methods study. *Autism Dev. Lang. Impairm.* 2:1–18. doi: 10.1177/2396941516684834

Mandy, W., Murin, M., Baykaner, O., Staunton, S., Hellriegel, J., Anderson, S., et al. (2016). The transition from primary to secondary school in mainstream education for children with autism spectrum disorder. *Autism* 20, 5–13. doi: 10.1177/1362361314562616

Martin, T., Dixon, R., Verenikina, I., and Costley, D. (2019). Transitioning primary school students with autism spectrum disorder from a special education setting to a mainstream classroom: successes and difficulties. *Int. J. Inclus. Educ.* doi: 10.1080/13603116.2019.1568597. [Epub ahead of print].

McCoy, S., Banks, J., Frawley, D., Watson, D., Shevlin, M., and Smyth, F. (2014). *Understanding Special Class Provision in Ireland. Phase 1: Findings From a National Survey of Schools.* Available online at: http://ncse.ie/wp-content/uploads/2014/10/Report_16_special_classes_30_04_14.pdf

McCoy, S., Shevlin, M., and Rose, R. (2020). Secondary school transition for students with special educational needs in Ireland. *Eur. J. Spec. Needs Educ.* 35, 154–170. doi: 10.1080/08856257.2019.1628338

National Council for Special Education (2016). *Supporting Students With Autism Spectrum Disorder in Schools NCSE POLICY ADVICE NO. 5.* Retrieved from: http://ncse.ie/wp-content/uploads/2016/07/1_NCSE-Supporting-Students-ASD-Schools.pdf

Neal, S., and Frederickson, N. (2016). ASD Transition to mainstream secondary: a positive experience? *Educ. Psychol. Pract.* 32, 355–373. doi: 10.1080/02667363.2016.1193478

Parsons, S., Guldberg, K., MacLeod, A., Jones, G., Prunty, A., and Balfe, T. (2011). International review of the evidence on best practice in educational provision for children on the autism spectrum. *Eur. J. Spec. Needs Educ.* 26, 47–63. doi: 10.1080/08856257.2011.543532

Peters, R., and Brooks, R. (2016). Parental perspectives on the transition to secondary school for students with Asperger syndrome and high-functioning autism: a pilot survey study. *Br. J. Special Educ.* 43, 75–91. doi: 10.1111/1467-8578.12125

Powell., K. K., Heymann, P., Tsatsanis, K. D., and Chawarska, K. (2018). "Assessment and diagnosis of infants and toddlers with autism spectrum disorder," in *Assessment of Autism Spectrum Disorder, 2nd Edn*, eds. S. Golstein and S. Ozonoff (The Guilford Press), p. 96–129.

Psychological Society of Ireland (2011). *Guidelines on Confidentiality and Record Keeping*. Available online at: https://www.psychologicalsociety.ie/source/PSI%20Guidelines%20on%20Confidentiality%20%26%20Record%20Keeping%20in%20Practice%20(final).pdf

Psychological Society of Ireland (2019). *Code of Professional Ethics*. Available online at: https://www.psychologicalsociety.ie/footer/Code-of-Ethics

Richter, M., Flavier, E., Popa-Roch, M., and Clément, C. (2019a). Perceptions on the primary-secondary school transition from french students with autism spectrum disorder and their parents. *Eur. J. Spec. Needs Educ.* 35, 171–187. doi: 10.1080/08856257.2019.1643145

Richter, M., Popa-Roch, M., and Clément, C. (2019b). Successful transition from primary to secondary school for students with autism spectrum disorder: a systematic literature review. *J. Res. Childhood Educ.* 33, 382–398. doi: 10.1080/02568543.2019.1630870

Stoner, J. B., Angell, M. E., House, J. J., and Bock, S. J. (2007). Transitions: perspectives from parents of young children with autism spectrum disorder (ASD). *J. Dev. Phys. Disabil.* 19, 23–39. doi: 10.1007/s10882-007-9034-z

Symonds, J., and Galton, M. (2014). Moving to the next school at age 10–14 years: an international review of psychological development at school transition. *Rev. Educ.* 2, 1–27. doi: 10.1002/rev3.3021

Symonds, J., and Hargreaves, L. (2014). Emotional and motivational engagement at school transition: a qualitative stage-environment fit study. *J. Early Adolesc.* 36, 54–85. doi: 10.1177/0272431614556348

Topping, K. (2011). Primary–secondary transition: differences between teachers' and children's perceptions. *Improv. Sch.* 14, 268–285. doi: 10.1177/1365480211419587

Tso, M., and Strnadová, I. (2017). Students with autism transitioning from primary to secondary schools: parents' perspectives and experiences. *Int. J. Incl. Educ.* 21, 389–403. doi: 10.1080/13603116.2016.1197324

Waters, S., Lester, L., and Cross, D. (2014). How does support from peers compare with support from adults as students transition to secondary school? *J. Adol. Health* 54, 543–549. doi: 10.1016/j.jadohealth.2013.10.012

Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., and Lindsay, K. (2003). Negotiating the transition from primary to secondary school: perceptions of pupils, parents and teachers. *Sch. Psychol. Int.* 24, 67–79. doi: 10.1177/0143034303024001010

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

ORIGINAL RESEARCH
published: 06 January 2021
doi: 10.3389/feduc.2020.546243

Primary-Secondary Transition – Building Hopes and Diminishing Fears Through Drama

*William D. Barlow**

School of Education, University of Aberdeen, Aberdeen, United Kingdom

This case study explores how pupils might address the issues of bullying and friendships during primary-secondary transition through drama conventions. The research was implemented on the west coast of Scotland during the final four weeks of primary education in three associated primary seven classes. Research methods included pupil questionnaires (primary and secondary school), teacher observations, researcher's diary, semi-structured interviews (teachers) and a focus group (pupils). The data suggest that some pupils conceptualized their primary-secondary transition as 'moving up'. However, as the drama developed pupils recognized the multiple and multi-dimensional aspects of their transition. In addition, pupil and teachers indicated that when pupils engage with a drama transition curriculum, it supports the promotion of friendships while diminishes fears and provides strategies for those who might encounter bullying.

Keywords: friendships, primary-secondary transition, bullying - prevention and control, drama education, drama conventions

OPEN ACCESS

Edited by:
David Montgomery,
New York University, United States

Reviewed by:
Geraldine Scanlon,
Dublin City University, Ireland
Selina Busby,
Royal Central School of Speech and Drama, United Kingdom

***Correspondence:**
William D. Barlow
william.barlow@abdn.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *27 March 2020*
Accepted: *09 September 2020*
Published: *06 January 2021*

Citation:
Barlow WD (2021) Primary-Secondary Transition – Building Hopes and Diminishing Fears Through Drama. Front. Educ. 5:546243. doi: 10.3389/feduc.2020.546243

CONCEPTUALIZATION OF PRIMARY-SECONDARY TRANSITION

Globally, school aged children and young people encounter transitions throughout their schooling and lives. As such, transitions are an ongoing and dynamic psychological process requiring multiple social and educational adaptations over time, due to changes in context, relationships and identity which require ongoing support (Jindal-Snape, 2018). Educational transitions often consist of a normative transfer from primary (or its equivalent) to secondary school and happens, for most people, at the same time in their lifespan (Symonds, 2015). For example, primary-secondary transition coincides with the pre-adolescence or adolescence stage (10–14 years old), with pupils experiencing both physiological and psychological changes, marking the end of their physical childhood and commencement of adolescence (Ng-Knight et al., 2016). Therefore, some might conceptualize transitions as a status passage with pupils changing schools to become a different type of pupil (e.g., a 'secondary pupil'). This change in status is sometimes termed the 'Big Fish Little Pond Effect (BFLPE)', where pupils were once the biggest in primary and then become the smallest in secondary, and suggests that transition is focused on the movement between schools (Seaton et al., 2009). However, according to Multiple and Multi-dimensional Transitions (MMT) theory, individuals can experience multiple transitions, in several domains (e.g., social and academic) and contexts (e.g., school and home) at the same time. In turn, each transition can impact and interact with others, resulting in multiple and multi-dimensional transitions (e.g., one parent gets a new job, in a different location, which causes the family to relocate house and school) (Jindal-Snape, 2016). Therefore, transitions are complex, non-linear, ever evolving and require a holistic understanding

(Jindal-Snape, 2016). Few primary-secondary studies outline pupil conceptualization of transitions (Jindal-Snape et al., 2020).

PRIMARY-SECONDARY TRANSITION - A THEORETICAL PERSPECTIVE

International literature suggests that primary-secondary transitions can be a satisfying, fulfilling and successful process for many pupils (Galton, 2010). Indeed, many pupils look forward to experiencing larger and better equipped facilities, and having increased responsibility (Scottish Executive, 2007). An example of increased responsibility, for secondary pupils, might include navigating and understanding their individual timetables, managing subject equipment and traversing to multiple classrooms (Symonds, 2009). As a result of, and due to the specialist subject nature of secondary education, pupils often experience multiple teaching styles with the potential for increased pedagogical challenge and depth (Robinson and Fielding, 2007). However, some pupils might experience negative and mixed feelings toward primary-secondary transition (Jindal-Snape and Miller, 2008). For example, pupils moving from the generally smaller and more familiar primary environment, to that of the larger and unfamiliar secondary, can result in them missing their primary teacher (City of Birmingham Education Department, 1975). Additionally, pupils might develop anxieties about getting lost as they navigate and adapt to the larger school building (Caulfield et al., 2005). Pupil navigation of their new school terrain requires adjustment to longer school days, timetabling (Hallinan and Hallinan, 1992), new subjects, multiple teaching styles and pedagogical approaches (Robinson and Fielding, 2007). Consequently, pupils might be concerned about increased academic pressure, workload and becoming overwhelmed (Karagiannopoulou, 1999).

Alongside pupils' workload concerns, they might become anxious about maintaining/establishing peer friendships (Weller, 2007). Peer friendships can be important due to pupils hearing negative transition myths passed down across the generations. These myths include having one's head flushed down the toilet, being bullied by older pupils (Symonds, 2009) and encountering humiliating experiences (Delamont, 1991). All of which can culminate in attainment dips (Alexander, 2010). Consequently, pupils might experience increased stress levels during (and due to) their primary-secondary transition which, for some, could be described as traumatic (Jindal-Snape and Miller, 2008). However, initial transition anxiety often subsides once pupils settle into their new school (Rice et al., 2011). Waters et al. (2014) suggests that pupils' who have a positive transition attitude are likely to have successful transitions.

Transitions can be multiple and simultaneous which might result in people feeling that they have little autonomy. Self-determination theory suggests that individuals have three innate psychological needs: competence (one feels capable and effective), autonomy (one's control of their actions) and relatedness (the development and creation of close personal relationships). It is how these needs are satisfied which helps to support one's motivation and well-being (Ryan and Deci, 2000). For example, relationships can be in flux during primary-secondary transitions due to leaving established friendships while also having to make new ones. In addition, pupils might question their competence to maneuver the changes to their new secondary context and relationships while feeling that their voice isn't being heard. Jindal-Snape (2012) suggests that educators should find meaningful opportunities for pupil voice in transitions e.g., creative approaches like drama (Jindal-Snape, 2016).

To support successful primary-secondary transition in Scotland, The Scottish Government commissioned a systematic literature review, authored by Jindal-Snape et al. (2019). The review reported a decline in education outcomes upon entering secondary school, with dips in pupil motivation and school engagement and increased levels of absence/school dropout. Moreover, it highlighted that transitions can negatively impact pupils' sense of school belonging and their social, emotional and mental health with higher levels of anxiety and depression. Although the review indicates that the literature mainly focuses on negative aspects, it also suggests that pupils can experience mixed and positive emotions surrounding transitions. The review made nine recommendations to support successful school transitions by developing a sense of belonging in primary before moving to secondary school through peer networks and buddy schemes; this should be extended into secondary. Pupils should develop secure attachments with peers and secondary school staff via activities in the new school and residential experience(s). Primary and secondary staff should have an ongoing dialog regarding the pedagogical approaches between sectors, with staff collaborating and learning alongside one another. Pedagogically, pupils should experience a problem based pedagogy which focusses on emotional and social skill development. There should be a national level policy overview on curricular structures and the creation of resources required to facilitate successful transitions. Finally, equal partnership with parents in transition planning and preparation and tailored transition supports for pupils with additional support needs should be implemented.

IDENTITY AND FRIENDSHIPS DURING PRIMARY-SECONDARY TRANSITION

Some international transition researchers might view primary-secondary transition as a status passage, where individuals change into new social roles and identities that could be more responsible, mature or demanding (Glaser and Strauss, 1971). These new roles and identities are shaped through pupils' interactions with their peers; friendships are a concern during the transition process (Galton, 2010). Friends and peers, who are also experiencing the transition process together, become mechanisms of support by offering advice (including emotional support) to one another (Bokhorst et al., 2010). For example, during the transition process, pupils evaluate friendships based

on shared interests (Symonds, 2009). In doing so, they might initially use previous friendships as support mechanisms and discard them in favor of new ones (Lucey and Reay, 2000). Once in a new friendship, pupils are introduced to likeminded individuals and thus a 'snowball effect' ensues which increases their social capital (Weller, 2007).

BULLYING DURING PRIMARY-SECONDARY TRANSITION

Bullying is a universal phenomenon (Joronen et al., 2012). It is defined as intentional and repetitive negative behaviors aimed at individuals or groups who cannot defend themselves (Olweus, 2013). Bullying tends to peak during late childhood and early adolescence which often coincides with primary-secondary transition (Cross et al., 2018). Notwithstanding the biological changes that pupils often experience around this time, and the increase status of peer relationships (Pellegrini and Long, 2002), school transition itself appears to independently add to an increase in bullying (Rigby, 1996).

Being bullied in secondary school is a fear for many causing stress and anxiety (Symonds, 2015). A Scottish study by Zeedyk et al. (2003) indicates that although most secondary pupils reported school to be better than expected, concerns about being bullied were more prevalent than in a comparison group of primary pupils. Focusing on bullying post transfer to middle school in the United States of America (USA), Nansel et al. (2007) indicate that more than half of sixth graders stated that they were involved in bullying and victimization during the middle-school transition. In addition, they found that pupils who were classed as bullies, or bully victims during sixth grade displayed poorer school adjustments over their non-involved peers (Nansel et al., 2007). Furthermore, bullying and victimization continued over time, with more than half of pupils who were involved in bullying and/or victimization in sixth grade also reporting continued involvement in seventh grade. As a result, the study suggests that involvement in bullying others or being a victim of bullying may be a risk factor for poorer adjustment in the transfer school (Nansel et al., 2007). Similarly, a USA study by Farmer et al. investigating the continuity and change in pupils' involvement in bullying across the transition from primary to middle school, found that pupils who have increased levels of externalizing and internalizing problems in primary are at greater risk of being involved in bullying behaviors (either as a bully or a victim) in their next school (Farmer et al., 2015). Pellegrini and Long (2002) USA study suggests that post transition alters group dynamics and promotes bullying in males (by threatening other males with physical violence – they tend not to target females) and in females (by verbally taunting other females). Generally, incidents of bullying and aggression tended to increase with the transition to middle school and subsequently decline. This might be due to using bullying acts to manage peer dominance and relationships in social groupings during transitions (Pellegrini and Long, 2002).

Cross et al. (2018) three year Australian study of 3,462 pupils (mean age 13) sought to reduce bullying by encouraging its non-acceptance, increase bully victims supports from staff and peers, improve empathy and social competence, increased friendships and school connectedness, and reduce negative behaviors, absenteeism and loneliness. They indicate that bullying incidents reduced the year following the pupils' transition to secondary school and suggest that pupils' knowledge of peer support networks lowered bullying anxiety as well as increasing school connectedness and pro-victim attitudes (Cross et al., 2018). Cross et al. (2018), suggest that primary-secondary transition is a time where pupils require additional support to reduce bullying. They recommend the end of primary and the beginning of secondary as a suitable time to support pupils in their non-acceptance of bullying (Cross et al., 2018).

CREATIVE EDUCATION AND TRANSITION RESEARCH

Creative pedagogies support successful transition as they develop pupils' self-esteem, agency and voice (Jindal-Snape, 2012). Furthermore, using creative approaches increases levels of confidence, imagination and ability to face challenge, resilience motivation, engagement and health and wellbeing (irrespective of age) (Bancroft et al., 2008; Toma et al., 2014). Despite the literature supporting the use of creative pedagogies during primary-secondary transition, Symonds (2015: 14) suggests that pupils might view play-based approaches as 'childish behaviors from primary' which they require to surpass. However, by stopping playing, pupils might negate the potential benefits of play (Whitebread and Basilio, 2013). Vygotsky (1974) argues that play was central to children's communication, meaning making and self-regulation. In addition, Bruner (1986) suggests that play, which is voluntary, self-initiated and focused on the process, develops pupils' problem-solving skills relevant to their interests. Therefore, pupils (and secondary teachers - see Symonds, 2015) might limit opportunities for a meaningful and play-centered transition pedagogy due to negative internal and external perspectives on playing.

PLAY, PLAYFULNESS AND DRAMA

Play, a forerunner to drama, requires pupils to accept and create a fictional world through a sense of 'playfulness' (Winston, 2004). Playfulness is a form of social interaction which empowers pupils to symbolically transform objects and actions into new meanings (Neelands and Goode, 2015). Consequently, pupils manipulate language, objects and space to establish new realities giving voice to issues which might have previously been voiceless (Neelands, 2012). Thus, pupils' playfulness is shaped by their individual and collective understanding of the cultural environments. It is from a child's innate capacity for play, and the knowledge they develop from their participation in and on the play, that dramatic activity is created (Winston and Tandy, 2009). For example, as

play develops it becomes structured by the dramatic form (either through devising or scripted activities) while still maintaining its playfulness. However, there should be a balance between mindfulness (the ability to be metacognitive of the drama work by taking the human content and context seriously) and playfulness during the creation of the drama activity. Resultantly, pupils must be cognizant as to how the drama experience might change people and the world which they share and shape (Neelands, 2012).

DRAMA

Drama is a socially constructed medium which empowers participants to explore and problem-solve issues central to the human condition. Working collectively in the drama framework, participants enter 'as if' scenarios which require emotional, cognitive and physical responses. Participants use their real-world knowledge to influence the fictional narrative by rehearsing alternative possibilities through role-play (Neelands and Goode, 2015).

Role playing requires pupils to adopt the attitudes and beliefs of a role and develop their understanding of another person's stance (Özbek, 2014). Although role players do not require the skills of an actor, they nevertheless draw upon human experience and the skills of living itself. Vygotsky's construct of perezhivanie (Vygotsky, 1994) (which is interpreted as 'lived experience' or 'emotional lived experience') is useful in drama education as the learning focuses on human experience and emotions. When in role, pupils cultivate the 'lived emotional experience' through dramatic action by interpreting the actions (and reactions) of their role in relation to those around them, and, by default, provides the opportunity to alter their behaviors in action (Davis and Dolan, 2016). Therefore, using the lived experience of the role and the environmental situation of the drama (perezhivanie) empowers participants to broaden their experience and make new understandings through the dramatic form (Heathcote, 1984).

One approach to support the creation of new understanding, through the dramatic form, is via Drama Conventions (Neelands and Goode, 2015). Drama Conventions are focusing structures or forms which suspend the usual relationships of people, place and time. Such structures develop dramatic form and content by enabling pupils to scrutinize, analyze and understand human behavior and actions in the 'here and now.' Even though the drama may be set in the future, the action is unfolding in the metaphorical present (Neelands and Goode, 2015). The resulting metaphorical present echoes meanings from the actual present which creates a felt knowledge (Clark et al., 1997) and universal understanding (McGregor et al., 1977).

Universal understanding does not mean universality of agreement, as participants might interpret metaphors and symbols differently. Bolton (1986) explains this through the construct of the dramatic metaphor with its meaning created in the dialectic setup between the actual and fictional context. Dramatic metaphor requires participants to operate on two levels of emotion. The first level refers to emotions drawn from the fiction which represents those in the real world, and the second, which does not require the expression of real first-order emotions, focuses on the ambivalence of being sad, yet not sad, happy, yet not happy, angry, yet not angry (Bolton, 1986). Vygotsky (1974: 548) labeled this as the 'dual affect' explaining, 'the child weeps in play as a patient, but revels as a player.' The dual affect is like Boal (1995) 'metaxis'; 'the state of belonging completely and simultaneously to two different, autonomous worlds; the image of reality and the reality of the image' (43). Carroll (1988): (13) offers a further elaboration of metaxis as, 'a mental attitude, a way of holding two worlds in mind, the role and the dramatic form, simultaneously in the drama frame.' Framing is used to show the multiple possibilities and perspectives for role interpretation and event relationship. Therefore, dual affect, metaxis and dramatic metaphor provides a fictional safety-net for participants to understand and rehearse possible futures without ever accruing the consequences of those actions in the real world (Goode, 2014).

SAFETY IN DRAMA

Although, the emotions experienced by pupils through role play are a result of the life conditions explored in the drama, some educators, in the Anglo-American cultural tradition, might refrain from engaging in strong emotions in teaching, and in doing so miss important learning opportunities (Nimmo, 1998). For example, some educators might be concerned about pupil protection and safety when adopting roles that are close to themselves. This is understandable as when pupils engage in socially constructed learning activities, they come into conflict with their preconceptions, which can cause some anxiety and confusion (Heyward, 2010). Thus, when pupils challenge one another's ideas they undertake a process of cognitive conflict which is central to Piaget's theories of cognitive development (Hamilton and Ghatala, 1994). In turn, pupils' interactions supports their understanding of multiple perspectives, which is conducive to cognitive development, as they attempt to understand the emotional confusion and disturbance engendered by differing views (New, 1998). Reflecting on multiple perspectives enables pupils to challenge dominant stances (Alton-Lee, 2003), which can lead to change and new understanding (Landy and Montgomery, 2012). Therefore, protection should not solely focus on protecting pupils *from the emotion*, as without emotion engagement there might be limits to the learning potential, and instead centre on protecting learners *into the emotion*. Consequently, educators should structure drama work to ensure that any risks are perceived rather than actual (Bolton, 1984).

To support creative and structured risk-taking educators should offer source materials that are rooted in human experience. This enables pupils to connect with the source and locate it in either their personal or collective experience. Therefore, it is important that initial bullying discussions are dealt with sensitively and at a slow pace. Pupils should be offered the opportunity to step out of the discussions (and subsequent drama activity) if they do not feel ready to discuss

these emotions (Fisher and Smith, 2010). Indeed, it is the teacher's responsibility to establish the drama and support pupil ongoing engagement with the creation of the fiction (O'Neill, 1995). When the teacher works in role, pupils feel protected within the fiction as they help to create the drama while scaffolding the learning experience (Heathcote and Bolton, 1994) and establishing its rules within it (O'Neill, 1995). Central to these rules is the concept that participants acknowledge that the drama is being lived at life rate in an agreed place, time and circumstance through multiple roles (Wagner, 1976). This means that the roles become more recognizable to the pupils and a relationship begins to form between the drama and the real world (Neelands and Goode, 2015). However, although the drama is being run at life rate, this does not mean that pupils are consistently in role. Indeed, it is important that pupils are given the opportunity to reflect in and on the action throughout the drama experience (Neelands and Goode, 2015). Consequently, there requires to be a clear divide between the drama and real world by ensuring that pupils' de-role and de-brief (O'Toole and Dunn, 2002). For example, if a pupil feels that they are blurring the boundaries between the role and reality, they might wish to assume a spectator function outside of the drama world, thus assuming various levels of commitment within the drama activity (Heyward, 2010).

DRAMA, BULLYING AND PUPIL CONNECTEDNESS

An overarching aspect of drama is to support pupils in their ability to make sense of the world and to effect behavioral change (Bolton and Heathcote, 1998). This is because drama provides pupils with the distance to see themselves as others do while enabling them to experience 'reality' from multiple perspectives (Bagshaw and Lepp, 2005). As such, drama empowers pupils to explore issues relevant to their lives and investigate how their autonomy and interconnectedness creates positive changes for society (Neelands, 2009).

A relevant issue which globally impacts pupils is school bullying. To counter the impact of bullying, schools might traditionally discuss the topic. However, pupils prefer to use drama (in comparison to other pedagogical approaches) to investigate these issues (Crothers et al., 2005). Johnson (2001) argues that drama provides pupils with a safe fictional context to create conflict themed scenarios to explore, reflect upon and develop their understanding of bullying. Therefore, learning within and reflecting on the fiction enables pupils to process their thoughts and emotions while creating solutions for bullying. This is achieved when pupils listen to and share their anxieties, and make connections to others' experiences/opinions, without directly engaging in negative behaviors themselves (Johnson, 2001).

Goodwin et al. (2019) Irish study required pupils to watch a one-act scripted performance, which highlighted the roles of the bullying bystanders, focusing on a bullying incident in the school playground. Pupils, aged between 12–15 years, then conceptualize their understanding of bullying and participated in drama workshops to generate bullying prevention strategies for their school. Data indicates that the drama intervention enabled pupils to explore their understanding of the topic of bullying in a non-threatening and sensitive manner. Moreover, the researchers suggest that drama bullying prevention strategies should be facilitated with multiple year groups (not just one particular year set), and that schools should incorporate pupils' solutions for bullying in their anti-bullying policies (Goodwin et al., 2019).

Joronen et al. (2012) Finish study implemented a drama program using control and intervention groups with 190 primary school pupils. The study aimed to enhance social relationships and minimize school bullying using drama sessions, follow-up activities at home and three parents' evenings focusing on social well-being issues. Questionnaire data was obtained pre and post intervention and resulted in improvement in social relationships and a decrease in the number of bully victims (Joronen et al., 2012). Drama was also used in Graves et al. (2007) USA study to build social skills, self-control, understanding of emotions and conflict resolution. This study was implemented over 12 weeks with 2, 440 students in public middle and high schools (Graves et al., 2007). Pupils displayed a decrease in their relational physical aggression levels and increased their knowledge and strategies to deal with bullying (Graves et al., 2007). This is like Beale and Scott (2001) findings where they sought to understand the causes of bullying through drama and noted a decrease in aggressive incidents post drama intervention. The researchers indicate that this might be due to drama's ability to develop positive social relationships between peers, while also enabling them to generate effective ways of dealing with bullying behaviors (Beale and Scott, 2001).

Burton (2015) international study 'Acting Against Bullying', used drama techniques to regress bullying in associated primary and secondary schools. A key aspect to Burton (2015) study was the adaptation of Boal's (1995) Forum Theatre (FT). FT involves either a predetermined scenario or one that is developed with the participants. In both approaches, the actions of the oppressor(s) results in the scenario ending in an undesirable way for the protagonist. An oppressor is a person/structure/belief system that presents a challenge to the oppressed. The play is performed to spect-actors (audience is both spectator 'spect' and 'actor') and then a facilitator (also known as a Joker) asks the spect-actors to discuss the play. The play is re-performed, enabling the spect-actors to intervene, when they notice a challenge for the protagonist. Thereafter, the spect-actor might swap roles with an actor, offer alternatives or questions. As such, the spect-actor attempts to change the scenario while the antagonist seeks to remain resolute to the original performance (Boal, 1995). Instead of the FT being one scene, Burton (2015) adapted it to be performed over three with peer teaching – he terms this enhanced FT. Pupils observered all three scenes and then provided alternative solutions to de-escalate the conflict between the characters. Using a mixed-method research design, the researcher's suggest that pupils increased their understanding of why people bully and its consequences, while also noting a decline in school bullying incidents and an increase in self-confidence and esteem amongst those being bullied (Burton, 2015). Due to data on using drama to investigate bullying,

Ross and Nelson (2014) recommends that therapists adopt it to address social functioning, peer-relationships and conflict management with school pupils.

PREVIOUS STUDIES USING DRAMA DURING PRIMARY-SECONDARY TRANSITIONS

Few studies have adopted a drama pedagogy during primary-secondary transition (Jindal-Snape et al., 2011). Those studies that have adopted drama approaches suggest it creates an emancipatory transition pedagogy developing pupils' well-being, social skills, agency and motivation (Walsh-Bowers, 1992; Jindal-Snape et al., 2011; Hammond, 2016). Walsh-Bowers (1992) Canadian study, used drama to support 103 rural incoming junior high school pupils (from 8 schools) which minimized their transition anxiety. They concluded that it had a positive experience on social-development, emotional understanding, motivation, and reduced stress levels (Walsh-Bowers, 1992). Jindal-Snape et al. (2011) used creative drama approaches to investigate primary-secondary transition which involved 357 pupils, 12 teachers and 4 drama professional facilitators. The study suggested that the drama intervention effectively supported pupils' understanding of the emotional issues relating to transition due to the establishment of an emotional safety-net. In addition, their study indicated that drama enabled pupils to create realistic scenarios, with a degree of anonymity, while empowering them to rehearse real life transition contexts and creating an engaging learning environment irrespective of academic ability (Jindal-Snape et al., 2011). Hammond (2016) used FT to understand how pupils and teachers made sense of, and overcame, transition barriers. His study concluded that FT supports pupils' transition by promoting their assertiveness, self-talk, resilience, ability to make friends and have discussions with adults (Hammond, 2016).

SUMMARY OF LITERATURE

Primary-secondary transition research highlights that transition can be an emancipatory experience. However, for some pupils, primary-secondary transition can negatively impact learning and social well-being (Jindal-Snape, 2016). While it is important to recognize the experiences of all pupils (positive and negative), Jindal-Snape et al. (2019) literature review suggests that transition research predominantly focuses on negative rather than positive transition experiences. Therefore, it could be argued that it is important to discuss and support pupils through a pedagogy that focuses on their voice and promotes the positive aspects of transition. In doing so, educators might begin to scaffold pupils, by enabling them to discuss their transition issues in a secure space without it ever becoming a comfort zone (Neelands, 2009). Unfortunately, there are few studies reporting on using drama (in its multiple forms) at transition. This is unusual as play, the forerunner to drama, is a natural mode of communication for many pupils (Hammond, 2016).

DRAMA CONVENTIONS STRUCTURED IN THIS STUDY

Three one-and-a-half-hour drama lessons were facilitated in each primary school. The stimulus centered on a fictional character called Samantha which included her hopes and fears for making friends, not fitting in, moving to a bigger school and getting lost, gaining greater independence, experiencing new subjects/teachers and challenging herself academically.

METHODOLOGICAL APPROACH AND METHODS

This study was implemented in three primary schools and their associated secondary school on the west coast of Scotland. In Scotland, pupils move to secondary between the ages of 11.5 and 12.5; therefore, pupil participant ages ranged from 11 to 13.5 years old. Unlike previous studies using drama at transition (Walsh-Bowers, 1992; Jindal-Snape et al., 2011; Hammond, 2016), this study gathered data in three ethnically diverse urban primary schools, with high levels of multiple deprivation, and the associated secondary. Furthermore, the researcher was a participant-observer (Bryman, 2012) working alongside the pupils/teachers in role via the drama convention Teacher-in-Role or Teacher-out-of-Role (Neelands and Goode, 2015). Several sources of data were used to crystallize the complexity of multiple perspectives offered (Richardson and St Pierre, 2005).

SAMPLE AND RECRUITMENT

Pupils

Final year primary pupils enrolled in the study irrespective of whether they were intending to move to the associated secondary school or not. This ensured that any potential benefits were experienced by all pupils and, as the study was implemented during the school day, limited cover issues for pupils and staff. The researcher organized an information sharing event in each school and issued pupil research booklets, consent forms, answered questions and reminded pupils of their rights, including that of withdrawal; no pupil exercised this right. The questionnaire was issued at the end of the final lesson and all pupils, who attended the associated secondary school, completed a subsequent questionnaire at the end of the first academic semester. A pupil focus group was undertaken in each primary school with six randomly chosen pupils.

Teachers

Each of the three primary school's final year primary seven teachers participated in the study as partial participant observers (Bryman, 2012). All three teachers completed an observation protocol sheet during the lessons and participated in a one-to-one semi-structured interview.

RESEARCH DESIGN, METHODS, ANALYSIS AND ETHICS

A multiple case study approach was adopted. Case studies are bound in a specific time and place where the researcher gathers data, from multiple sources, which are rich in context (Creswell, 2014). They are easily understood by a wide range of audiences due to the ability of the writer to describe the study's unique features and events (often spontaneous and uncontrollable) (Nisbet and Watt, 1984). This means that results are not generalizable and can be prone to observer bias despite attempts toward reflexive practice by the researcher (Nisbet and Watt, 1984). In addition, participants' memories may bias their interpretation of events (Shaughnessy et al., 2003). Despite these issues, case studies are used by drama education researchers due to the methodology striking a chord, '. . .with the forms of knowledge created by the art form of drama itself' (Winston, 2006: 43). Therefore, the flexibility offered in a case study approach meets the special condition of drama education by responding, in real time, to pupils' actions and meaning making.

Questionnaires

Open questionnaires were designed to enable pupils to write freely without the limitations of pre-set answers, thus allowing detailed and fuller responses (Cohen et al., 2011) and providing 'illuminating clarification' (Bucknall, 2014: 76). Questions were phrased to prevent any leading responses and used appropriate language (Munn and Drever, 1990). A questionnaire was issued at the end of lesson three and recorded pupils' reflections over the lessons. An example question was 'What does transition mean to you?' which aimed to understand pupils' conceptualization of transitions. A secondary school questionnaire was issued at the end of the first academic semester to consider pupils' reflections of primary-secondary transition in the secondary context. An example question was 'Have you experienced, or seen anyone experience, bullying like Samantha encountered? If so, what was it and did the drama lessons help you deal it?', which aimed to understand if pupils recognized Samantha's experiences in their own primary-secondary transition, and if they used the supports outlined in the drama in the real world.

Teacher Semi-Structured Interviews

Menter et al. (2011) suggests that the conversational tone of a semi-structured interview, enables interviewees to develop a narrative based on their specific experiences. In turn, the researcher matched questions to the teachers' observations. However, as the researcher was a colleague of the teachers it meant that extra emphasis was required to promote the ethical safeguards surrounding confidentiality and anonymity. Observation protocol sheets were used, during the 45-min interview, to stimulate the discussion. Interview notes, written by the researcher (specific to the teacher) were provided for member checking. An example question was 'How did the drama work support pupils to navigate their primary-secondary transition hopes and fears?' which aimed to understand the teachers' thoughts on using drama to support pupils' primary-secondary transition.

Pupil Focus Groups

Focus groups enable pupils to discuss their views, attitudes and experiences relating to the research (Menter et al., 2011). A focus group of six pupils (three males and females - randomly chosen by the teacher to limit researcher bias) was convened in a breakout area after the third lesson and lasted approximately thirty minutes. Pupils were reminded of their research rights and offered the recording equipment to control. General questions on the drama were asked followed by more specific ones on primary-secondary transition. The researcher notes were summarized and offered for member checking. The purpose of the focus group was to support the other data sets by gaining a deeper understanding of pupils' experiences of using drama before their transition to secondary school. An example question was, 'Bullying was an important topic in your drama, why was this and what have you learned about bullying through drama?', which aimed to understand the relevance of bullying in the drama and how this related to pupils' real world experiences.

Teacher Observations of Sessions

As the researcher was participating alongside the pupils it was necessary for the teacher to record the lesson events in a protocol sheet (Creswell, 2014). This study adopted a similar protocol sheet to the one used by McNaughton (2008), which was separated into each section of the drama (Creswell, 2014).

Researcher Diary

Research diaries have been used widely in drama education to record and explore participants' voices and support teacher-researcher's analysis of the drama process (Taylor, 1998). Therefore, the diary approach adopted in this study was to log and reflect on the activities (Bryman, 2012). This enabled the researcher to dialog with himself surrounding the emerging issues in the drama and were written-up after each session (Taylor, 1998).

Data Analysis

Data analysis commenced after each data collection point. Using Miles et al. (2014) framework for qualitative analysis, the researcher initially familiarized himself with the data at each stage by reading the collective response and drilling down into individual responses. Next, the data was transcribed and assigned first level descriptive codes for sorting. Second level pattern codes were used to group the first level codes together to form emerging patterns. Thereafter, the pattern codes were mapped, and points of communality emerged as themes which unified the codes.

RESULTS

See **Table 1** for an overview of the named conventions.

TABLE 1 | Drama lesson overview.

Lesson one
Spectrum-of-difference Pupils stand on an imaginary line representing how they feel about their transition. The left and right ends of the line represented 'I'm looking forward to going to secondary' and 'I'm not sure about going to secondary' respectively. Pupils note their position and discuss their choices. Purpose: Pupils to determine and express their understanding and feelings of transition.
Teacher-in-role The researcher enters the drama world, adopting the role of Samantha, sharing her transition thoughts and feelings. Purpose: Modeling role adoption and identifying the human context of the drama. Pupils establish ownership by discuss their own primary-secondary transition thoughts.
Role-on-the-wall Pupils, representing Samantha, draw a human outline where they note her transition facts inside the Role-on-the-Wall. Outside of the Role-on-the-Wall, pupils write questions for Samantha. Pupils re-visited their Role-on-the-Wall throughout the sessions. Purpose: Pupils reflect and develop an understanding of Samantha, and her experiences of transitions, by writing their thoughts and questions.
Hot-seating (with teacher-in-role) The researcher, in role as Samantha, answers pupils' questions from their Role-on-the-Wall. Purpose: To highlight Samantha's motivation, personality and encourage insights into the relationship between transition attitudes and experiences - including how transition events might affect attitudes.
Still-image (Also known as tableau) Pupils, in groups, select a key moment from Samantha's story (Teacher-in-Role) and create a Still-Image using their bodies. Purpose: Asking pupils to select key moments highlights aspects of the story which resonate with them. Supporting pupils' understanding of transitions processes.
Thought-tracking Pupils add to their Still-Images by creating a Thought Track which reveals the role's thoughts. This is achieved by pupils tapping the shoulder of a character and speaking their thoughts aloud. Purpose: Reflection and analysis of situation and roles enables pupils to hear others' thoughts and generate sensitive responses. Pupils reflect on whether their external observations of Samantha and her peers align to the character's inner thoughts, or not. Therefore, pupils develop a deeper understanding between public and private primary-secondary transition thoughts.
Lesson two
The ripple Linking to the previous Still Images and Thought Tracks, pupils bring their images to life. All characters make one movement and sound in turn. Purpose: Pupils analyze the context and character relations to build belief in the action and reflect upon the reality/realities of feelings being represented.
Small-group play-making (SGPM) Groups devise improvisations representing the key moments during Samantha's transition.

(Continued)

TABLE 1 | Continued

Purpose: Building upon The Ripple, pupils run the scene at life rate to represent their hypotheses or demonstrate alternative views/actions. Therefore, SGPM enables pupils to express their understanding of Samantha and others' transitions.
A-day-in-the-life Working backwards from a key moment during Samantha's first day in secondary, groups devise scenes to complete the historical gaps between their performances. Purpose: Discussing the influences that motivate Samantha, and other characters' actions, each scene represents the multiple and multidimensional aspects of transitions. Emphasis is placed on the characters' inner thoughts/conflicts/tensions and how they shape the transition events and circumstances depicted.
Narration Groups are labeled A–D with each pairing providing the narration for their counterpart's presentation. Group A narrates for Group B offering narrations of Samantha's primary seven peers' transition hopes and fears. Group B narrates Group A's scene providing Samantha's transition hopes and fears. Group C narrates Group D's presentation via Samantha's reflections on her past transitions. Group D narrates Group C's presentation on Samantha's parents' hopes and fears for her primary-secondary transition. Purpose: Narration provides additional information to shape and form the activity while arousing curiosity and emphasizing the mood and atmosphere. Listening to the narrations help pupils reflect on the multiple and multidimensional impacts of transition.
Lesson three
Teacher-in-role The researcher in role as a primary Head Teacher asks pupils (in a collective role of Samantha's Primary 7 teacher) what should be included in Samantha's primary-secondary transition report. Purpose: To provide space for pupils to discuss Samantha's transition report content and reflect upon their learning about the transition process.
Diaries-letters-journals-messages Pupils (in the collective role of Samantha's primary teacher) write Samantha's primary-secondary transition report. Purpose: Writing in role, as a primary teacher, is structured to enable pupils the opportunity to reflect and recognize the additional support needs that others might encounter during transitions.
Mantle-of-the-expert Pupils adopt the expert role of a teacher at Samantha's secondary school. A meeting is held and the 'secondary teachers' discuss what supports they/their department could provide Samantha. Purpose: To help pupils understand the transition and anti-bullying supports available in secondary school.
Forum-theater Linking to Mantle-of-the-Expert, pupils create scenes based on the transition supports that they devised as teachers. Pupils as spect-actors observe the scenes and stop the action when they notice a challenge for the protagonist and/or if the action losses its authenticity. Purpose: Pupils provide transition advice.

(Continued)

TABLE 1 | Continued

Spectrum-of-difference
Pupils recreate their Spectrum-of-Difference and stand at their original position from lesson one. Next, pupils are asked to remain or stand at a new point on the spectrum if there was a change in their primary-secondary transition outlook. Purpose: Reflection on their transition learning and their forthcoming primary-secondary transition.

Primary-Secondary Transition Conceptualization

Pre-transition Data

During Spectrum-of-Difference teachers noted that most pupils looked forward to secondary,

> Most children on plus side a minority on minus side. Good justification–losing friends/new friends. Dislike of primary. New subjects. (Teacher L, Observation protocol sheet).

The majority of pupils stated that they were excited about their transition,

> I feel excited because it is going to be different from [primary school] (School L, questionnaire pupil 4).

However, some pupils remarked that,

> I am a little bit worried to go to [secondary school] (School P, questionnaire pupil 18)

While others commented that they had a mixture of emotions,

> I'm excited cause you can do art and music and my brother is in second year. But I'm kinda sad about leaving [primary school's name] cause I'll miss my friends and [class teacher's name] says that the work is harder and I need help with my work so I'm not sure about it (School G, questionnaire pupil 21).

The researcher noted that some pupils' position on the line didn't reflect their transition feelings,

> It was interesting to see that the pupils didn't always stand on the Spectrum-of-Difference which bore a true reflection of their feelings. One pupil said, "I just didn't want to upset my friends who aren't looking forward to going because I was happy to go" (Researcher's diary - notes on school L pupil 9's comments).

During the focus group, pupils were surprised at their peers' location on the Spectrum-of-Difference,

School P	
Pupil 2	Yea, some thought they were confident about going to secondary and others thought they weren't confident.
Researcher	How did that make you feel?
Pupil 2	Surprised
Researcher	Why were you surprised?
Pupil 2	You think a completely different thing about them. . .
Researcher	. . .Yeah?.
Pupil 2	. . .Not to judge people, listen to their opinion first before you judge.
Pupil 5	Yeah, I thought going to [secondary school] was going to be a bit scary, but listening to everyone, it made me think that it wasn't going to be that bad. So, it kind of made me think not to worry about that stuff and think about the good stuff.

Teachers noted that Spectrum-of-Difference helped to hear transition perspectives,

> The line thing, it was also good for the ones who had negative feelings knowing that there were other people who felt the same as them (Teacher L - Semi-structured interview).

However, some pupils' stance on the Spectrum-of-Difference surprised them,

> It was more the line about who was going to be sad to go and who wanted to go as there were quite a few boys who wanted to stay that surprised me - how honest they were about their feelings (Teacher P - Semi-structured interview).

Teacher P (Observation protocol sheet) indicated that the drama was,

> ...effective in exploring and developing the story and understanding their mixed emotions and what transition meant to them.

During the pupil focus group some pupils reflected that the drama supported their changing status in relation to the 'Big Fish Little Pond Effect (BFLPE)' (Seaton et al., 2009),

School P	
Pupil 4	In primary you are one of the older children but when we go to high school you are going to be the youngest and we need to climb the ladder again.
Researcher	How does that make you feel?
Pupil 4	Scared, restarting your life again. We were the smallest, and then the biggest now we are the smallest again
Pupil 5	But I'm excited about it all too. Like having all the subjects and new teachers and friends.

Pupils' conceptual understanding of transitions advanced during 'A-Day-in-the-Life',

> When we did the 24 h (*sic*) thing, you gotta see how one bit hit another bit and how your mum and dad feel and the teacher, cause (*sic*) they can get sad about you going to [secondary school] and they don't want you to be sad, and they've got other stuff happen (*sic*) as well like my little sister and going to work and how she will get me there (*sic*) [school]. So it's like just showing you how going to [secondary school] can hit everyone. I dinny (*sic*) really think that me going to [secondary school] done that (School G – questionnaire pupil 8).

Understanding transition consequences and pupils' hopes and fears was discussed through Forum Theater,

School G

Pupil 2	Samantha she asked to play with people they said no, but then because we told her to use her interests and they wanted to be her friend.
Researcher	How did that help?
Pupil 3	When you are nervous, you don't put all your attention into your work. But now she is more confident she can pay more attention to her work.
Pupil 4	Samantha is now not going to get worried, she is not going to get stressed, she is going to eat well, she is going to sleep well so that will help her work. Because in the play she wasn't really being kind to herself and we changed that so she was kind to herself.

Post-transition Data (Secondary Questionnaire Data)

Pupil 4 reflected that their Tableaux (an alternative name for Still-Image) helped their understanding of others' transition thoughts,

> It was very fun (*sic*) and we all did tableaus (*sic*) and helped Samantha. We learned how some people react in secondary school and need help fitting in.

Pupil 31 noted that the drama helped alleviate their concerns around the 'BFLPE' (Seaton et al., 2009) by developing their confidence,

> I was worried about moving up to [secondary school]. I think that now I am more confident and my thoughts are that it made me feel better.

Pupil 26 reflected that the drama work also advanced their understanding of transitions,

> I thought it was good because it helped me get ready for [secondary school] and that we are all doing transitions all the time.

Friendships

Pre-transition Data

Pupils recognized that friendships alter during transitions,

> I will miss my friends cause some of my friends are going to a different school (School G pupil 16 - Questionnaire 1).

Friendships were discussed during Teacher-in-Role,

School L

Pupil 4	When you were acting out Samantha, she had friends at the start and then she felt uncomfortable and at the end she had friends again.
Pupil 3	She had no friends, but then she got friends back because of all the support that was put in.

Once the researcher de-roled the pupils questioned Samantha, which focused on social emotional issues,

> It was interesting that the pupils centered their questions to Samantha on social emotional issues - "Do you still have your primary school pals?" "Have you ever been bullied?" – were these questions based on their own hopes and fears? (Research diary - notes of questions asked by pupils 7 and 14 School L)

Hot-Seating helped pupils devise relevant transition questions and offer advice,

> Generating good qs to ask Sam - Good feedback too. Great advice offered: "Everyone feels like this. We can make new friends together. We are all human." (Teacher G - Observation protocol sheet).

By asking relevant questions pupils suggested that,

School G

Pupil 6	I kinda understood her because I felt like her. I wanted to give her a hug and be friends, so she didn't feel worried about school.

While recognizing the importance of maintaining friends during transition,

> Children identify that friendships are important for a successful transition (Teacher L - Observation protocol sheet).

During the Still-Images, pupils created a caring image of students gathered around Samantha

> Once the pupils performed their Still-Image I asked the class what they thought was happening in the image. One pupil responded, "They just want to be pals together, sir, so that they are all going to help each other when they get to [secondary school]." I was struck at the importance the pupils placed on having strong friendship bonds going into secondary school – was this their way of highlighting the importance of social and emotional aspects of primary-secondary transitions? (Researcher diary - School G.).

In School P, pupils layered a Still-Image with Thought Tracking to gain a greater understanding of their character's transition thoughts,

School P

Pupil 3	You could hear about what they were thinking inside.
Researcher	Did that surprise you?
Pupil 3	I knew that Samantha wasn't confident, but then we found out she had no supporters and no one to help her.
Pupil 4	Yeah, but then we all helped her because she was our friend in the play and you need to help your friends when you are going to secondary.

Teachers felt that layering Still-Images and Thought Tracking developed pupils' understanding of friendships by vocalizing internal dialogs,

> I think it is a good thing for the transition. I think when you touched them on their shoulders, they were able to speak in role, you could see the Thought Tracking and you could

see they were very in tune with the character. You could see the empathy toward their friends (Teacher L - Semi-structured Interview).

During Mantle of the Expert pupils explained ways for Samantha (and themselves) to make friends in secondary school,

School L
Pupil 4 When we were doing the role as the teachers. . .We came up with a few thoughts and like we could take her to clubs and all that and like show her around the school. If she would have one or two friends, then that would be OK she can get into a group with a couple of people. . .it kinda just showed me that I could join clubs and make new friends and they would like help me.

Post-transition Data (Secondary Questionnaire Data)

Developing friendships through drama was noted by pupil 32,

You get used to the school and you have your old friends and we all help each other. I got lost in the corridors and [teacher's name] helped me find my class and you make new friends because there are nice people in [secondary school] so it's good to have friends.

The impact of this was highlighted by pupil 4,

In primary I done a play about Samantha coming to [secondary school] and it helped me now (*sic*) how to make new friends and no (*sic*) worry if ma (*sic*) old friends stop being ma (*sic*) friends becose (*sic*) I can make new ones.

Bullying

Pre-transition Data

Some pupils indicated fears of being bullied,

I'm nervous because people say that you get bullied (School L pupil 11's comments).

The theme of bullying became a central component during Still-Images,

My favorite part was when we did the images about Samantha getting bullied because I now (*sic*) what it feels like to be bullied (School P pupil 2 - Questionnaire 1).

Small-Group Play-Making built upon pupils' Still-Images and Thought Tracks and were used to create short rehearsed improvisations on the bully's motivations. The pupils indicated that the bullies bullied Samantha to increase their status,

Acting in groups – because it's telling you how some people treat others just because they want to be popular or cool (School G pupil 2 - Questionnaire 1).

The bully's motives were discussed during the pupil focus groups,

School G
Pupil 1 When we were acting out about the bullying and more of it and more why would people want to bully, when do they bully and how do they bully. And before I didn't know most of the things, but I did know about bullying, but since I have been doing drama and acting it out I know why people might bully and they need help too.

Pupils suggested that A-Day-in-the-Life helped them understand the available anti-bullying supports,

School L
Pupil 3 If you were bullied and you were worried the next day, and the next day and they next day after that, you could go onto the worry website and get a group of friends. And don't hang about with the bullies if you see them walking by, just walk away. It shows that kids are being bullied and you don't just have to fear the bullies, and you can't stand up to them.
Pupil 2 That's what we did in the day drama and we telt [told] her to use the worry box and the teacher can read it.

Teacher L (Teacher L - Observation protocol sheet) noted,

I liked it when there seemed to be quite a lot about bullying and when they had to be the teacher. I think that seemed to cause more of a dilemma for them because, while they always want to be the teacher and be in charge, I think when they had to come up with solutions, they found this difficult. I think that is good because it's making them have to think and see something from a different perspective and try and empathize as well.

Teacher G felt that the drama helped pupils discuss their behaviors at transition,

The drama allowed them to understand her behavior and relate it to their own transition. I don't think they would have been able to do this without the drama (Observation protocol Sheet - Teacher G).

In summary, Teacher G (Observational Protocol sheet) suggest that learning about bullying through drama,

...was good because it was making them think more critically rather than being told, sort of making them explore and investigate rather than just listen.

Post-transition Data (Secondary Questionnaire Data)

Pupils indicated that drama helped them recognize bullying behaviors at transitions,

It was good because it helped us about bullying and if anyone was being bullied to help them (pupil 6).

And that they would support peers by asking them,

what's wrong and try to help because telling feelings to someone might stop something wrong happening (pupil 21).

Pupils reflected that the drama supported their empathetic skills,

> Yes, a little bit because I kind of knew what it must be like for her (pupil 9).

Pupil 2 noted that the drama taught him/her what to do when witnessing bullying,

> I saw a boy called [pupil's name] getting bullied and I told him to go to the office to go see the HT. It did help me because we told Samantha to tell a teacher.

Some pupils that had encountered bullying suggested,

> A boy called [pupil's name] was being mean to me and it made me think about Sam and that I shouldn't just take it and that nobody should be treated that way because it is not fair to the person who's getting bullied. So, after a bit I told and Mr. [teacher's name] and he said to [pupil's name] and he hasn't been mean to me since (pupil 17).

However, some pupils noted that the bullying scenarios didn't transfer into reality,

> I thought that many people bullied and pushed to the side and nobody should be treated that way but it doesn't happen (pupil 27).

Pupil 38 suggested that the drama helped their transition learning,

> When you are acting it out you are experiencing it, and then when the teacher tells you it just sounds like a bunch of words, but when you are experiencing it, you feel it.

DISCUSSION

See **Table 1** for an overview of the named conventions.

Pupil Primary-Secondary Transition Conceptualization

Jindal-Snape et al. (2020) argue that few primary-secondary studies have sought to understand pupils' conceptualization of primary-secondary transition transition. In addition, often international transition studies often focus on the negative discourses (Jindal-Snape et al., 2020). However, when pupils were asked about their primary-secondary transition, the majority indicated that they were looking forward to the new opportunities such as making friends and experiencing new subjects. This supports Jindal-Snape et al. (2020) findings that transitions do not necessarily translate to negative prospect for all pupils. Though, this is not to say that pupils did not have any negative or mixed transition feelings. Indeed, the drama activity supported pupils' understanding of the range of transition perspectives. For example, when pupils discussed their conceptualization of primary-secondary transition, through Spectrum- of-Difference, they indicated that they viewed their transition, and their changing status, through the construct of 'Big Fish Little Fish Effect (Seaton et al., 2009). This resulted in some pupils voicing their mixed feelings toward transition and concerns of being the biggest pupils in primary to the smallest in secondary. Also, some pupils voiced concerns regarding being bullied in secondary school and missing their teacher; these issues are often discussed in the international literature (Symonds, 2015). Some pupils' opinions regarding their transitions surprised their teacher. This raises questions as to how the pupil/learner voice was heard before the drama intervention. Indeed, if pupils were previously voiceless during their transition learning, then there is a chance that their needs might not have been supported as the teacher did not anticipate any additional support needs for said pupils. However, as Jindal-Snape et al. (2019) suggest, the process of primary-secondary transition can cause additional support needs (ASN) for pupils irrespective to whether they have an ASN record or not. Therefore, it is important that pupils can explore and express their transition conceptualization and understanding before any move. In doing so, this might afford pupils the opportunity to express their feelings and discuss supports with peers and teacher(s) (Jindal-Snape, 2012).

Although most pupils indicated that they were looking forward to their transition, during the Spectrum-of-Difference some deliberately stood at points which didn't reflect their transition feelings. When asked why, pupils indicated that they didn't wish to upset peers, who were worried about the transition, as they were looking forward to their own transition. While this displays empathy and a recognition of their peers' needs, it also highlights that some pupils did not view transition as a single event that only impacted them. Instead, pupils recognized the interconnectedness of the transition process, and that some of their peers would require additional support (Neelands, 2009; Jindal-Snape, 2016).

As pupils structured the drama work, their understanding of the multiple and multidimensional transitions which influence their primary-secondary transition developed (Jindal-Snape, 2016). For example, during 'A-Day-in-the-Life' pupils collectively worked through timeframes in their school day - breakfast (with their family), getting to school, first period, lunchtime with peers and going home/spending time with their family. School G pupil 8 recognized that the protagonist's transitions exacerbated other transitions for his/her family. In doing so, the pupil was cognizant that his/her transition would impact his/her mum, dad and teacher's feelings. Moreover, the pupil was also alert to how his/her transition would impact on travel arrangements and childcare implications for his/her sibling. Therefore, pupil 8 conceptualization of transitions possibly developed due to his/her involvement in the drama activity (Jindal-Snape, 2016).

During Forum Theater, pupils recognized their influence on the success of their transition. By stopping the action and offering alternatives, pupils discussed how they could alter Samantha's transition through reflection, collaboration and compromise (Boudreault, 2010). By problem solving Samantha's transition issues, pupils merged their thoughts and feelings collectively to create multiple realities for the characters and in turn related these to their own lives. Therefore, during the drama conventions

pupils collectively and individually found a way to have their views listened to and actioned, in a meaningful manner, which is essential for their self-determination (Deci and Ryan, 2010).

Friendships

A support network is important during primary-secondary transition and having friends to guide one another through the process can contribute to positive mental health (Miller et al., 2015). Pupils indicated, during Spectrum-of-Difference, that moving with friends to their secondary school is important for a successful transition (Jindal-Snape, 2019). During Teacher-in-Role, pupils highlighted how losing friends might negatively impact Samantha's (and their own) transition. This is not surprising as friends become just as important as parents/carers for offering social support and advice during transitions (Bokhorst et al., 2010). For example, during the Still-Images pupils advanced their understanding of the transition narrative by focusing and reflecting on a key moment in Samantha's transition journey which focused on her need for secure friendships (Woolland, 2014). This suggests that the pupil used Still-Image to enact their ideas and visualize their thinking around the need for secure friendship during transition (Hertzberg, 2001).

The theme of friendships during transitions was furthered when pupils layered their Still-Images through Thought-Tracking. In doing so, pupils pledged their friendship toward Samantha and stated that they would help others experiencing similar situations. It appears that pupils were suggesting that a 'snowball effect' would be created to establish new friendships (Weller, 2007). This was furthered during Mantle of the Expert when pupils, playing the role of teacher, suggested creating groups for Samantha to join, enabling her to have likeminded individuals to play alongside. Symonds (2015) suggests that when teachers group pupils together, based on their subject interests, it offers them a homogenous group of peers to establish new friendships. Therefore, the pupils' suggestions during Mantle of the Expert was akin to what would happen in the real world. This suggests that pupils based their fictional ideas on their understanding of transition supports, prior experiences of groupings and empathy for peers. Furthermore, by attempting to solve Samantha's friendship concerns, pupils were also aiming to alleviate their own worries on this matter (Prendiville and Toye, 2007). This might be due to the drama's ability to provide pupils with opportunities to test themselves in imaginary scenarios and rehearse issues which are concerning them through the guise of a character. When pupils are in character it provides a degree of anonymity as they can discuss their transition concerns as if it were the character speaking and not themselves (Jindal-Snape et al., 2011). Therefore, drama provides an imaginative frame to test themselves within the fictional world, gain insights and provide hope to their real-world pursuits (Barton and Booth, 1990).

The drama may have enabled pupils to develop closer bonds with their friends in primary and provided them with strategies to make new ones in secondary school. Indeed, pupils throughout the drama declared that they would help one another in their move to secondary school. This might have created a sense of solidarity between the pupils (Garcia, 1998) and a second order identity as people grappling together (Neelands, 2007). For example, pupils created scenarios where they offered one another protection from social isolation and victimization. In doing so, pupils attempted to understand others' needs and values while reflecting on their wants (Neelands, 2007). Therefore, by walking in someone's shoes, pupils paused their own world to act 'as if' in order to problem solve while developing their empathetic skills (Hammond, 2016). Hammond (2016) suggests that pupils can develop their empathetic skills through reflection and discussion by considering the context, cultural beliefs, social norms and personal experiences investigated in the work. This supports teacher L's comments that the pupils were 'in tune' with the characters and thus developed a greater connection with their friends before transition. High quality friendships and good relationships with classmates help to support pupil self-esteem and resilience during transitions (Symonds, 2015). This was confirmed through the secondary questionnaires which suggested the drama helped them to maintain their primary friendships, and provided them with the confidence to make new friends in secondary.

Bullying

Most scenes centered around the theme of bullying. This isn't surprising as international transition research indicates that bullying concerns can be a significant stressor during the primary-secondary transition process (Pellegrini and Long, 2002). However, during the discussion and reflection on the drama, most pupils indicated that they didn't think that they would be bullied in secondary school, though they did wish to help those who were being bullied. This is unsurprising as pupils often take a strong stance regarding the justice and fairness of the drama they are creating (Neelands, 1992). It appears that working collectively to problem-solve the central issue of bullying, helped pupils to be supportive of one another (Baldwin, 2012). Similarly, Burton (2015) indicates that drama is a suitable approach to use to investigate the complexities of bullying in a safe and secure manner. Indeed, Jindal-Snape (2012) highlights that using drama to create and investigate transition issues like bullying helps develop pupils' self-esteem, confidence and resilience.

Through the creation of bullying scenes, pupils challenged their beliefs on the issue being investigated (Bolton and Heathcote, 1998). As such, pupils developed empathy toward the bully victims and their understanding of the consequences of bullying. This is like Joronen et al. (2012) findings where drama helped pupils' understanding of the causes of bullying. Indeed, pupils indicated that due to their participation in the drama, and reflection on it, that they were able to effectively deal with bullying incidents in secondary school (Burton, 2015).

To effectively deal with potential bullying incidents, pupils discussed their feelings around bullying with one another and sought to activate change. Their actions within the drama world became a template as to how they might react in similar scenarios within the real world. For example, during the Still-Images pupils

discussed a bullying moment in Samantha's life outside of the fiction and then created this in the drama world. In doing so, pupils discussed their bullying concerns in a secure space and then attempted to crystallize their understanding through the fiction. The pupils then layered the Still-Image with a Thought Track to increase their understanding of the character's purpose in the scene. Therefore, pupils created an approach to articulate their character's thoughts by giving a psychological commentary of the physical action (Neelands and Goode, 2015).

Increasing pupil understanding of character's psychological make-up empowered pupils to suggest supports to be actioned in secondary school. This was most notable during the Mantle of the Expert activity where pupils assume expert roles as teachers in order to effect positive change for Samantha. For example, pupils wrote in role explaining what they would do as teachers to support Samantha's transition. The teachers and pupils reported that this developed their understanding of the collective supports available during the transition process and helped minimize their bullying anxieties. This concurs with Baldwin and Fleming (2003) suggestion that when pupils write in role they begin to empathize with others and experience multiple behaviors.

In secondary school, most pupils indicated that they didn't directly experience bullying themselves, though did notice others being bullied or bullying. The pupils suggested that the drama work helped them recognize bullying incidents and how to support those being bullied by showing kindness by advocating for the bully victim. Pupils indicated that enacting the scenarios supported them in offering advice and directing a bully victim to the Head Teacher. In addition, some pupils indicated that they had encountered bullying incidents and due to their involvement in the drama, they were reminded of what Samantha did to end it. This suggests that the pupils were linking their learning in the fiction to the real world and positively benefitted as a result. The pupils' experience helped to socially construct a shared understanding of what bullying is, and how this comes to impact people individually or as part of a wider grouping, and how they can stop and prevent it from continuing (Neelands, 2009). Therefore, due to pupils' engagement and creation of the drama world, based on their transition questions, they explored issues which were meaningful to their needs (Rousseau et al., 2007). It appears that using drama to create a problem-solving pedagogy enabled pupils to collectively respond to universal concerns like bullying. This then created a pedagogy where pupils could enact fiction based on their hopes and concerns by providing meaningful child-centered responses which could be reflected and actioned in the real world (Mavroudis and Bournelli, 2016). In turn, pupils reported that using drama helped reduce their bullying concerns and provided them with strategies to use in secondary school.

CONCLUSION

Using drama conventions appears to be a suitable problem-based pedagogy focusing on pupil emotional and social skill enhancement. It creates a positive transition discourse by empowering pupils to establish a sense of belonging with peers before moving to secondary. This was achieved by pupils creating peer networks, generated through drama group work, which continued during the first term of secondary school. Pupil exploration of transition hopes and diminishing bullying fears and friendships during primary-secondary transition was developed in a sensitive and non-threatening manner. This is due to pupils working together, through an aesthetic medium, to increase their understanding and respect for others' perspectives. For example, the use of a metaphorical emotional safety-net, through the process of acting 'as if,' supported a felt understanding which provides pupils with role anonymity to express their transition thoughts and feelings. In turn, this enabled pupils to advance their understanding of abstract transition constructs through a fictional lens, which empowers them to collectively meaning make and support one another's transition process. Pupils suggest that this was an appropriate way to learn about primary-secondary transition, and the issues surrounding bullying and friendships; more so than traditional teaching approaches. For example, pupils offered tangible pupil-led strategies to reduce bullying during their transitions and maintain/forge new friendships in secondary school. In addition, pupils developed their friendships, which is a significant aspect for a successful transition, and reported that working alongside their peers helped them to alleviate their transition concerns. Furthermore, pupils' conceptualization of primary-secondary transition appears to have developed from a movement between sectors to an ongoing process. Therefore, the use of drama conventions to support the teaching and learning regarding primary-secondary transition, particularly the issues surrounding bullying and friendships, should be undertaken in primary classrooms and potentially meets, in part, the recommendations outlined by Jindal-Snape et al. (2019).

RECOMMENDATIONS FOR FUTURE RESEARCH

Drama research is required to discuss the implication of this study in a mixture of locations (rural and urban). Future research should adopt drama strategies in both primary and secondary settings via a bridging unit exploring pre and post primary-secondary transition issues. However, due to the conceptualization of transitions as multiple and multidimensional, research should also investigate how drama might support ongoing transitions throughout the school and wider life. In addition, in recognition to Jindal-Snape et al. (2019) recommendations, this should include a full range of participants (e.g., pupils, teachers and parents – including those with additional support needs), to provide a rich interpretation of multiple transition perspectives. Furthermore, multiple perspectives should also include pupils who are looked after by the state and those with English as an additional language. In doing so, additional longitudinal data, via a mixture of qualitative and quantitative designs, could be gathered to show

any impact and insight for a wide range of pupils from multiple contexts and (potentially) social-economic backgrounds.

LIMITATIONS

There are limitations to this study. The sample size altered between primary and secondary - this was mainly due to pupil absenteeism and transitioning to an alternative secondary school. However, as Jindal-Snape and Cantali (2019) indicate, attrition is inevitable in studies where pupils volunteer. This study was implemented in one Scottish Local Authority with one secondary and its three associated primary schools. A case study design means that the findings cannot be generalized; despite the issues raised being like the limited studies using drama at transitions and wider international literature. The participants' views were given freely, and data recordings were shared with them for member checking. However, due to the power imbalance between a participant and researcher, it is feasible to suggest that the trustworthiness of their views might have been affected. There was no drama intervention implemented in the secondary school. Although this study addresses Jindal-Snape et al. (2011) suggestion for a longitudinal study it does not provide data for ongoing transitions throughout secondary education. No data was gathered from parents/carers or pupils with additional support needs.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by University of Strathclyde. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

REFERENCES

Alexander, R. (ed.) (2010). *Children, their world, their education: Final report and recommendations of the Cambridge Primary Review*. New York, NY: Routledge.

Alton-Lee, A. (2003). *Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis*. Wellington, New Zealand: Ministry of Education.

Bagshaw, D., and Lepp, M. (2005). Ethical considerations in drama and conflict resolution research in Swedish and Australian schools. *Conflict Resolut. Q.* 22, 381–396. doi: 10.1002/crq.109

Baldwin, P. (2012). *With drama in Mind: Real Learning in Imagined World*, 2nd Edn. Stafford: Network Educational Press Ltd.

Baldwin, P., and Fleming, K. (2003). *Teaching Literacy through Drama*. New York, NY: Routledge Falmer.

Bancroft, S., Fawcett, M., and Hay, P. (2008). *Researching Children Researching the World: 5 × 5 × 5 = Creativity*. Stoke-on-Trent: Trentham Books.

Barton, B., and Booth, D. (1990). *Stories in the Classroom: Storytelling, Reading Aloud and Roleplaying with Children. Markham*. Ontario: Pembroke Publishers Ltd.

Beale, A. V., and Scott, P. C. (2001). "Bullybusters": using drama to empower students to take a stand against bullying behavior. *Prof. Sch. Counsel.* 4, 300–305.

Boal, A. (1995). *The Rainbow of Desire*. London: Routledge.

Bokhorst, L. C., Sumter, R. S., and Westenberg, M. P. (2010). Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: who is perceived as most supportive? *Soc. Dev.* 19, 417–426. doi: 10.1111/j.1467-9507.2009.00540.x

Bolton, G. (1984). *Drama as Education*. London: Longman.

Bolton, G. (1986). *Selected Writing in Drama Education*. London: Longman.

Bolton, G., and Heathcote, D. (1998). "Teaching culture through drama," in *Language Learning in Intercultural Perspective. Approaches through Drama and Ethnography*, eds M. Byram and M. Fleming (Cambridge: Cambridge University Press), 158–177.

Boudreault, C. (2010). The benefits of using drama in the ESL/EFL Classroom. *Internet TESL J.* 16, 139–143.

Bruner, J. (1986). *Two Modes of Thought Actual Minds, Possible Worlds*. Cambridge, MA: Harvard University Press, 11–43.

Bryman, A. (2012). *Social Research Methods*, 5th Edn. New York: Oxford University Press.

Bucknall, S. (2014). "Doing qualitative research with children and young people," in *Understanding Research with Children and Young People*, eds A. Clark, R. Flewitt, M. Hammersley, and M. Robb (London: Sage), 69–84. doi: 10.4135/9781526435637.n5

Burton, B. (2015). "Drama, conflict and bullying: working with adolescent refugess," in *How Drama Activates Learning Contemporary Research and Practice. London and*, eds M. Anderson and J. Dunn (New York: Bloomsbury Publishing Plc), 64–77.

Carroll, J. (1988). Terra incognita: mapping drama talk. *Natl. Assoc. Drama Educ. J.* 12, 13–21.

Caulfield, C., Hill, M., and Shelton, A. (2005). *The Experiences of Black and Minority Ethnic Young People Following the Transition to Secondary School*. Edinburgh: Scottish Council for Research in Education.

City of Birmingham Education Department (1975). *Continuity in Education: Junior to Secondary*. Birmingham: Birmingham Education Development Centre.

Clark, J., Dobson, W., Goode, T., and Neelands, J. (1997). *Lessons for the Living: Drama and the Integrated Curriculum*. Newmarket, ON: Mayfair Cornerstone.

Cohen, L., Manion, L., and Morrison, K. (2011). *Research Methods in Education*, 7th Edn. New York, NY: Routledge.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th Edn. California: Sage Publications, Inc.

Cross, D., Shaw, T., Epstein, M., Pearce, N., Barnes, A., Burns, S., et al. (2018). Impact of the Friendly Schools whole-school intervention on transition to secondary school and adolescent bullying behaviour. *Eur. J. Educ.* 53, 495–513.

Crothers, L. M., Field, J. E., and Kolbert, J. B. (2005). Navigating power, control, and being nice: aggression in adolescent girls' friendships. *J. Counsel. Dev.* 83, 349–354. doi: 10.1002/j.1556-6678.2005.tb00354.x

Davis, S., and Dolan, K. (2016). Contagious learning: drama, experience and " Perezhivanie". *Int. Res. Early Childhood Educ.* 7, 50–67.

Deci, E. L., and Ryan, R. M. (2010). "Self-determination," in *The Corsini Encyclopedia of Psychology*, eds C. Nemeroff and W. E. Craighead (Hoboken, NJ: John Wiley & Sons), 1–2. doi: 10.1007/978-1-349-24918-3_1

Delamont, S. (1991). The HIT LIST and other horror stories: sex roles and school transfer. *Sociol. Rev.* 39, 238–259. doi: 10.1111/j.1467-954x.1991.tb02980.x

Farmer, T. W., Irvin, M. J., Motoca, L. M., Leung, M. C., Hutchins, B. C., Brooks, D. S., et al. (2015). Externalizing and internalizing behavior problems, peer affiliations, and bullying involvement across the transition to middle school. *J. Emot. Behav. Disord.* 23, 3–16. doi: 10.1177/1063426613491286

Fisher, T. A., and Smith, L. L. (2010). First do no harm: informed consent principles for trust and understanding in applied theatre practice. *J. Appl. Arts Health* 1, 157–164. doi: 10.1386/jaah.1.2.157_1

Galton, M. (2010). "Moving to secondary school: what do pupils in England say about the experience?," in *Educational Transitions: Moving Stories from around the world*, ed. D. Jindal-Snape (New York: Routledge), 107–124.

Garcia, L. (1998). Creating community in a university production of Bocon! *Res. Drama Educ.* 3, 155–166.

Glaser, B. G., and Strauss, A. L. (1971). *Status Passage*. Chicago, IL: Aldine Atherton Inc.

Goode, T. (2014). Exploring the fictions of reality. *Drama Nordisk Dramapedagogisk Tidsskrift* 3, 26–27.

Goodwin, J., Bradley, S. K., Donohoe, P., Queen, K., O'Shea, M., and Horgan, A. (2019). Bullying in schools: an evaluation of the use of drama in bullying prevention. *J. Creat. Ment. Health* 14, 329–342. doi: 10.1080/15401383.2019.1623147

Graves, K. N., Frabutt, J. M., and Vigliano, D. (2007). Teaching conflict resolution skills to middle and high school students through interactive drama and role play. *J. Sch. Violence* 6, 57–79. doi: 10.1300/j202v06n04_04

Hallinan, P., and Hallinan, P. (1992). Seven into eight will go: transition from primary to secondary school. *Educ. Dev. Psychol.* 9, 30–38. doi: 10.1017/s0816512200026663

Hamilton, R., and Ghatala, E. S. (1994). *Learning and Instruction*. New York, NY: McGraw-Hill.

Hammond, N. (2016). Making a drama out of transition: challenges and opportunities at times of change. *Res. Pap. Educ.* 31, 299–315. doi: 10.1080/02671522.2015.1029963

Heathcote, D. (1984). "Dorothy Heathcote's notes," in *Dorothy Heathcote: Collected Writings on Education and Drama*, eds L. Johnson and C. O'Neill (London: Hutchinson), 202–210.

Heathcote, D., and Bolton, G. (1994). *Drama for Learning: Dorothy Heathcote's Mantle of the Expert Approach to Education*. Portsmouth, NH: Heinemann.

Hertzberg, M. (2001). *Using Drama to Enhance the Reading of Narrative Texts*. Available: http://www.proceedings.com.au/aate/aate_papers/105_hertzberg.htm (accessed March 2, 2020).

Heyward, P. (2010). Emotional engagement through drama: strategies to assist learning through role-play. *Int. J. Teach. Learn. High. Educ.* 22, 197–204.

Jindal-Snape, D. (2012). Portraying children's voices through creative approaches to enhance their transition experience and improve the transition practice. *Learn. Landsc.* 6, 223–240. doi: 10.36510/learnland.v6i1.584

Jindal-Snape, D. (2016). *A-Z of Transitions*. Basingstoke: Palgrave Macmillan.

Jindal-Snape, D. (2018). "Transitions from early years to primary and primary to secondary," in *Scottish Education*, Fifth Edn, eds T. G. K. Bryce, W. M. Humes, D. Gillies, and A. Kennedy (Edinburgh: Edinburgh University Press), 281–291.

Jindal-Snape, D. (2019). "Primary-secondary transition," in *Learning to Teach in the Secondary School: A Companion to School Experience*, 8th Edn, eds S. Capel, M. Leask, and T. Tuner (Abingdon: Routledge), 184–197.

Jindal-Snape, D., and Cantali, D. (2019). A four-stage longitudinal study exploring pupils' experiences, preparation and support systems during primary-secondary school transitions. *Br. Educ. Res. J.* 45, 1255–1278. doi: 10.1002/berj.3561

Jindal-Snape, D., Cantali, D., MacGillivray, S., and Hannah, E. (2019). *Primary to Secondary School Transitions: Systematic Literature Review*. Edinburgh: The Scottish Government.

Jindal-Snape, D., Hannah, F. S. H., Cantali, D., Barlow, W., and MacGillivray, S. (2020). Systematic literature review of primary secondary transitions: international research. *Rev. Educ.* 8, 526–566. doi: 10.1002/rev3.3197

Jindal-Snape, D., and Miller, D. J. (2008). A challenge of living? Understanding the psycho-social processes of the child during primary-secondary transition through resilience and self-esteem theories. *Educ. Psychol. Rev.* 20, 217–236. doi: 10.1007/s10648-008-9074-7

Jindal-Snape, D., Vettraino, E., Lowson, A., and McDuff, W. (2011). Using creative drama to facilitate primary–secondary transition. *Int. J. Primary Element. Early Years Educ.* 39, 383–394. doi: 10.1080/03004271003727531

Johnson, C. (2001). Helping children to manage emotions which trigger aggressive acts: an approach through Drama in School. *Early Child Dev. Care* 166, 109–118. doi: 10.1080/0300443011660109

Joronen, K., Konu, A., Rankin, H. S., and Åstedt-Kurki, P. (2012). An evaluation of a drama program to enhance social relationships and anti-bullying at elementary school: a controlled study. *Health Promot. Int.* 27, 5–14. doi: 10.1093/heapro/dar012

Karagiannopoulou, E. (1999). Stress on transfer from primary to secondary school: the contributions of A-trait, life events and family functioning. *Psychol. Educ. Rev.* 23, 27–32.

Landy, R., and Montgomery, D. T. (2012). *Theatre for Change: Education, Social Action and Therapy*. London: Macmillan International Higher Education.

Lucey, H., and Reay, D. (2000). Identities in transition: anxiety and excitement in the move to secondary school. *Oxf. Rev. Educ.* 26, 191–205. doi: 10.1080/713688522

Mavroudis, N., and Bournelli, P. (2016). The role of drama in education in counteracting bullying in schools. *Cogent Educ.* 3:1233843.

McGregor, L., Tate, M., and Robinson, K. (1977). *Learning Through Drama: Report of the Schools Council Drama Teaching Project (10-16), Goldsmiths' College, University of London*. Portsmouth: Heinemann Educational for the Schools Council.

McNaughton, M. J. (2008). *Imagined Worlds, Real Learning: Examining the Use of Drama in Sustainable Development Education*. Ph.D. Thesis, University of Strathclyde, Glasgow.

Menter, I., Elliot, D., Hulme, M., Lewin, J., and Lowden, K. (2011). *A Guide to Practitioner Research in Education*. London: Sage.

Miles, M., Huberman, A. M., and Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Thousand Oaks, CA: Sage.

Miller, K., Wakefield, J. R., and Sani, F. (2015). Identification with social groups is associated with mental health in adolescents: evidence from a Scottish community sample. *Psychiatry Res.* 228, 340–346. doi: 10.1016/j.psychres.2015.05.088

Munn, P., and Drever, E. (1990). Using questionnaires in small-scale research a teacher's guide. edinburgh: the scottish council for research in education. *Psychology* 1, 57–67.

Nansel, T. R., Haynie, D. L., and Simons-Morton, B. G. (2007). "The association of bullying and victimization with middle school adjustment," in *Bullying, Victimization, and Peer Harassment: A Handbook of Prevention and Intervention*, eds J. E. Zins, M. J. Elias, and C. A. Maher (Philadelphia: Haworth Press), 49–65.

Neelands, J. (1992). *Learning through Imagined Experience: The Role of Drama in the National Curriculum*. London: Hodder & Stoughton.

Neelands, J. (2007). Taming the political: the struggle over recognition in the politics of applied theatre. *Res. Drama Educ.* 12, 305–317. doi: 10.1080/13569780701560388

Neelands, J. (2009). The art of togetherness: reflections on some essential artistic and pedagogic qualities of drama curricula. *N. J. Drama Austral. J.* 33, 9–18. doi: 10.1080/14452294.2009.12089351

Neelands, J. (2012). *Beginning Drama 11-14*, 2nd Edn. Oxon: Routledge.

Neelands, J., and Goode, T. (2015). *Structuring Drama Work: A Handbook of Available Forms in Theatre and Drama*, 3rd Edn. Cambridge: Cambridge University Press.

New, R. S. (1998). "Theory and praxis in Reggio Emilia: they know what they are," in *The Hundred Languages of Children: The Reggio Emilia Approach—Advanced Reflections*, eds L. Gandini, C. P. Edwards, and G. E. Forman (Norwood, NJ: Ablex Publishing Corporation), 261–284.

Ng-Knight, T., Shelton, K. H., Riglin, L., McManus, I. C., Frederickson, N., and Rice, F. (2016). A longitudinal study of self-control at the transition to secondary school: considering the role of pubertal status and parenting. *J. Adolesc.* 50, 44–55. doi: 10.1016/j.adolescence.2016.04.006

Nimmo, J. (1998). "The child in community: constraints from the early childhood lore," in *The Hundred Languages of Children*, eds C. Edwards, L. Gandini, and G. Forman (Greenwich, CT: Ablex), 295–312.

Nisbet, J., and Watt, J. (1984). "Case study," in *Conducting Small-Scale Investigations in Educational Management*, eds J. Bell, T. Bush, A. Fox, J. Goodey, and S. Goulding (London: Harper and row), 79–92.

Olweus, D. (2013). School bullying: development and some important challenges. *Annu. Rev. Clin. Psychol.* 9, 751–780. doi: 10.1146/annurev-clinpsy-050212-185516

O'Neill, C. (1995). *Drama Worlds: A Framework for Process Drama*. Portsmouth: Heinemann Drama.

O'Toole, J., and Dunn, J. (2002). *Pretending to Learn: Helping Children Learn Through Drama*. Harlow: Longman.

Özbek, G. (2014). Drama in education: key conceptual features. *Sodobna Pedagogika* 65:46.

Pellegrini, A. D., and Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *Br. J. Dev. Psychol.* 20, 259–280. doi: 10.1348/026151002166442

Prendiville, F., and Toye, N. (2007). *Speaking and Listening Through Drama*. London: Paul Chapman Publishing, 7–11.

Rice, F., Frederickson, N., and Seymour, J. (2011). Assessing pupil concerns about transition to secondary school. *Br. J. Educ. Psychol.* 81, 244–263. doi: 10.1348/000709910x519333

Richardson, L., and St Pierre, E. A. (2005). "Writing: a method of inquiry," in *Handbook of Qualitative Research*, eds N. K. Denzin and Y. S. Lincoln (Thousand Oaks, CA: Sage Publications Ltd), 959–978.

Rigby, K. (1996). Peer victimisation and the structure of primary and secondary schooling. *Primary Focus* 10, 4–5.

Robinson, C., and Fielding, M. (2007). *Children and Their Primary Schools: Pupils' Voices. (Primary Review Research Briefing 5/3)*. Cambridge, MA: University of Cambridge/Esmee Fairbairn Foundation.

Ross, G., and Nelson, R. (2014). Using theatre and drama interventions to reduce bullying in school-aged children. *Ther. Recreat. J.* 48, 334–336.

Rousseau, C., Benoit, M., Gauthier, M. F., Lacroix, L., Alain, N., Viger Rojas, M., et al. (2007). Classroom drama therapy program for immigrant and refugee adolescents: a pilot study. *Clin. Child Psychol. Psychiatry* 12, 451–465. doi: 10.1177/1359104507078477

Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am. Psychol.* 55, 68–78. doi: 10.1037/0003-066x.55.1.68

Scottish Executive (2007). *Transitions Evaluation. Insight 36*. Edinburgh: Scottish Executive Education Department.

Seaton, M., Marsh, H. W., and Craven, R. G. (2009). Earning its place as a pan-human theory: universality of the big-fish-little-pond effect across 41 culturally and economically diverse countries. *J. Educ. Psychol.* 101:403. doi: 10.1037/a0013838

Shaughnessy, J. J., Zechmeister, E. B., and Zechmeister, J. S. (2003). *Research Methods in Psychology*, 6th Edn. New York, NY: McGraw-Hill.

Symonds, J. (2015). *Understanding School Transition: What Happens to Children and How to Help Them*. London: Routledge.

Symonds, J. E. (2009). *Constructing Stage-Environment Fit: Early Adolescents' Psychological Development and Their Attitudes to School in English Middle and Secondary School Environments*. Doctoral Thesis, University of Cambridge, Cambridge, MA.

Taylor, P. (1998). *Redcoats and Patriots reflective practice in Drama and Social Studies*. Portsmouth, NH: Heinemann.

Toma, M., Morris, J., Kelly, C., and Jindal-Snape, D. (2014). *The Impact of Art Attendance and Participation on Health and Wellbeing: Systematic Literature Review*. Glasgow: Glasgow Centre for Population Health.

Vygotsky, L. S. (1994). "The problem of the environment," in *The Vygotsky Reader*, eds R. Van Der Veer and J. Valsiner (Cambridge, MA: Blackwell), 338–354.

Vygotsky, L. (1974). "Play and its role in the development of the child," in *Play: Its role in Development and Evolution*, eds J. S. Bruner, A. Jolly, and K. Sylva (London: Penguin).

Wagner, B. J. (1976). *Dorothy Heathcote: Drama as a Learning Medium*. London: Hutchinson.

Walsh-Bowers, R. T. (1992). A creative drama prevention program for easing early adolescents' adjustment to school transitions. *J. Prim. Prevent.* 13, 131–147. doi: 10.1007/bf01325071

Waters, S. K., Lester, L., and Cross, D. (2014). Transition to secondary school: expectation versus experience. *Austral. J. Educ.* 58, 153–166. doi: 10.1177/0004944114523371

Weller, S. (2007). 'Sticking with your mates?' Children's friendship trajectories during the transition from primary to secondary school. *Child. Soc.* 21, 339–351.

Whitebread, D., and Basilio, M. (2013). *Play, Culture and Creativity. Cultures of Creativity*. Billund: The LEGO Foundation.

Winston, J. (2004). *Drama and English at the Heart of the Curriculum: Primary and Middle Years*. London: David Fulton Publishers.

Winston, J. (2006). "Researching through case study," in *Research Methodologies for Drama Education*, ed. J. Ackroyd (Stroke on Trent: Trentham Books), 41–62.

Winston, J., and Tandy, M. (2009). *Beginning Drama 4-11. 3rd ed. London and*. New York: Routledge Taylor & Francis group.

Woolland, B. (2014). *The Teaching of Drama in the Primary School*. London: Longman.

Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., and Lindsay, K. (2003). Negotiating the transition from primary to secondary school: perceptions of pupils, parents and teachers. *Sch. Psychol. Int.* 24, 67–79. doi: 10.1177/0143034303024001010

Conflict of Interest: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The handling Editor declared a past co-authorship with the author.

frontiers in Education

ORIGINAL RESEARCH
published: 29 January 2021
doi: 10.3389/feduc.2020.600778

On the Margins, Getting By, Persevering, or Flying High? The Intersection of Wellbeing, Attainment, and Transitions in a Scottish Longitudinal Study

*Aline-Wendy Dunlop**

School of Education, University of Strathclyde, Glasgow, United Kingdom

This paper draws on a Scottish longitudinal study. It focuses on the variability of a sample of focal children's wellbeing and attainment trajectories on the journey through education from the age of 3 to school leaving at 16–18 years old in one Scottish Council area, in order to respond to the question *What aspects of the intersection of wellbeing, attainment, and school transitions help to explain school leaving outcomes?* The relationships between wellbeing and attainment either side of primary and secondary school start are explored and the ways these may link to transition experiences and educational outcomes at school leaving are raised. A new interpretation of Bronfenbrenner's "mature" bioecological system model which considers person, processes and educational contexts over time frames the methodology, methods and findings of a data rich exploratory-interpretive longitudinal study and discusses their relationship to current dilemmas surrounding educational outcomes in Scotland at the present time. The role of wellbeing and attainment measures as proxies for school success is considered and found to be too narrow a concept in the form experienced by the focal group of study participants. While wellbeing needs to be much more clearly defined and fostered, concepts of attainment predicated only on maths and literacy (and on some measures, science) are found to be insufficient in that they may discriminate against too many. Attention to the opportunities offered and risks inherent in periods of educational transition allow identification of, and reflection upon the qualities of a good educational transition from both early childhood education to school start, and subsequently in the move to secondary education. It is found that a "good transition" though it exists, is not available to all children: consequently more equitable approaches are advocated, and alternatives for practical and policy action are proposed. Study of educational transitions dates back fifty years: is it not time for systems themselves to change?

Keywords: longitudinal, educational transitions 3–18, wellbeing, attainment, school success

OPEN ACCESS

Edited by:
Divya Jindal-Snape,
University of Dundee, United Kingdom

Reviewed by:
Rachel George,
University of Greenwich,
United Kingdom
Kathryn Holmes,
Western Sydney University, Australia

***Correspondence:**
Aline-Wendy Dunlop
a.w.a.dunlop@strath.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *31 August 2020*
Accepted: *11 December 2020*
Published: *29 January 2021*

Citation:
Dunlop A-W (2021) On the Margins, Getting By, Persevering, or Flying High? The Intersection of Wellbeing, Attainment, and Transitions in a Scottish Longitudinal Study. Front. Educ. 5:600778. doi: 10.3389/feduc.2020.600778

INTRODUCTION

Transitions occur throughout life, individually, in the family, in society, and as we journey from early childhood, through early education, primary, and secondary schooling and on into adult life. The value of early childhood experience, and of early education, is increasingly understood as a "good", but a gap exists in understanding how benefits may be sustained by transitions processes as children move from early childhood to primary schooling and later from primary to secondary education. Few studies have focused specifically on possible relationships between transitions experiences and school outcomes with a single cohort of participants over time. An argument is developed for the potential relationship between a good transition and later school success as understood through the dual lens of wellbeing and attainment over time.

Numbers of early longitudinal studies discuss the impact that school entry may have upon later school performance (e.g., Pollard and Filer, 1999; Entwisle et al., 2005): suggesting that the nature of early transitions may influence longer-term outcomes. To understand the impact of early experience on later outcomes we need to know those outcomes: consequently numeracy and literacy are frequently used as proxies for attainment and what is often referred to as "school success". Others emphasise the importance of wellbeing and belonging as influential.

A consideration of child wellbeing raises a number of principles for transition. Lippman et al. (2009) suggest the importance of examining positive wellbeing and argue for the development of constructs for positive wellbeing for both children and youth, rather than presenting problem behaviours and situations. A focus on positive wellbeing means acknowledging strengths, rather than focusing on difficulties. Thriving, notwithstanding social or family circumstances, means focusing on human and social capital. Similarly Ungar et al. (2019) in making a positive case for fostering resilience as part of wellbeing, also focus on strengths. They emphasise positive wellbeing, finding common ground in measures and embracing self-report. Mashford-Scott et al. (2012) acknowledge the importance of children's wellbeing in relation to learning and development and the need to know how children experience wellbeing: they also argue the importance of the voice of the child accessed through self-report. Lippman et al. (2009) find a fragmentation and overlap of constructs in wellbeing measures and a need for reliability and validity for diverse groups. They find Bronfenbrenner's ecological approach "a useful time-space structure for integrating the several theories and concepts that explain positive child development" (p. 9): a hybridisation of the "mature" version of Bronfenbrenner's ecological approach supports the conceptual framing, design and analysis of the current study (Dunlop, 2021, forthcoming).

Lester and Cross (2015) established strong school climate predictors and factors protective of emotional and mental wellbeing, through multi-level modelling of data generated in their repeated self-completion questionnaire with 1,800 11–14 year olds. Peer support in the last year of primary school was predictive of wellbeing, feeling safe in the first year of secondary school was protective of wellbeing, and in the following year for mental wellbeing. Feeling connected to school, support from peers and feeling safe in school protected emotional wellbeing. Further the role of school belonging links to wellbeing and learning processes (Allen et al., 2018). Self-esteem has long been understood as a precursor to subjective wellbeing (Du et al., 2017), however Miller and Parker (2006) had found evidence of discrepancies between teacher assessment of children's self-esteem and children's own views. For wellbeing it matters for children to "have a say" (Graham and Fitzgerald, 2011) about all that affects them, given there are doubts about teachers' capacity to judge subjective wellbeing (Urhahne and Zhu, 2015). These ideas clarify roles for education in fostering wellbeing as an outcome of education (Spratt, 2016) and in the present study influenced the choice of research materials appropriate firstly to young children and subsequently to ensure the voice of young people in transition to secondary is heard through self-report.

Laevers' work shows a child's sense of emotional wellbeing and levels of involvement as linked aspects in engagement in early childhood experiences. He argues that these elements initiate effective interactions with others: he proposes 10 action points, one of which is "the way in which the adult supports the ongoing activities with stimulating interventions (Action Point 5)" (Laevers, 2000, p. 26). In later work the ways in which adults interact with children assumed greater emphasis (Laevers, 2015). Frydenberg and Lewis' (1993, 2000) work links the concept of coping with change to resilience, finding gendered differences in coping, and focusing (Frydenberg, 2017) on the ways in which coping as a process, in a range of situations, offers up an outcome of resilience. This leads to identifying the need to look at agency in transitions, understanding resilience as a process, building understanding of resilience in family, school and community, raising individual awareness of wellbeing and linking these concepts to social capital and vulnerability at times of transition.

Attainment is commonly used to describe end-point outcomes, whereas achievement is more to do with how well you have done in relation to previous personal attainment or personal effort. Attainment is understood to be cumulative (Magnuson et al., 2016) involving both academic and social skills and implicating engagement in the educational process. Most studies focus on middle childhood onwards, and either exclusively on the earliest years (McDermott et al., 2013) or not focusing on the earliest years at all, despite some earlier evidence of links between the nature of school entry, the thorny issue of school readiness and later achievement (Duncan et al., 2007). The effects of secondary school experience on academic outcomes are better documented, and numbers of researchers have found relationships between attainment and secondary school transitions (Langenkamp, 2011; Langenkamp and Carbonaro, 2018) including disruption of social ties (Grigg, 2012) and lack of engagement (Gasper et al., 2012). McLeod et al. (2018) focused on ECE attendance and the relationship with longer term outcomes and Taggart et al. (2015) linked the quality of preschool education and the home learning environment to outcomes throughout education until 16+. These studies reinforce the approaches used in the present study which led,

e.g., to considering "transitions readiness" rather than school readiness, as well as focusing upon parental engagement and participation, children's social worlds at times of transition and their home learning environments (Dunlop, 2020a).

Others claim "a robust body of evidence suggesting that children's early educational experiences can have cascading effects on school and later life outcomes" (Little et al., 2016, p. 1). Such claims emphasise the potential importance of the first educational transitions and the need for clarification about what is understood by "transition". Here both Bronfenbrenner's (2005, p.53) statement that the "developmental importance of ecological transitions derives from the fact that they almost invariably involve a change in role" (Bronfenbrenner, 2005, p.53), and Cowan's "We view transitions as occurring when there are qualitative shifts in the individual's self-concept and world view, major life roles, and central relationships." (Cowan, 1991) link to the focus on changes in role, status and identity in the present study. Sameroff's model of development (Sameroff, 2009) captures the mutual and transactional influence of child and environment. Times of transition expose children and those who engage with them in new developmental trajectories, as his work illustrates. Bronfenbrenner, in later iterations of his model addresses both contextualism and relational development (Tudge et al., 2016).

Further a review of three decades of transitions research found that early intervention may fade out without successful transitions (Kagan and Neuman, 1998) but there are few attempts to study the impact of transitions' claims over a pupil career with a single cohort of students, rather than extracting such data from large cohort studies. Primary-secondary transition studies have generated some evidence about transition to secondary which links to later wellbeing and attainment (Riglin et al., 2013). The coincidence of secondary transition with early adolescence, and linked risk and protective factors are also well-documented (Evans et al., 2018; Jindal-Snape et al., 2019), factors such as identity, sense of self as a learner, coper and friend became central to the primary-secondary phase of this study.

Turning to the Scottish context, education policy is determined as a devolved matter. There are features of Scottish policy that influence transitions, attainment, and wellbeing during the journey through education from 3 to 18. Scottish policy has for some time focused on improving the wellbeing and life course trajectories of children and young people (Scottish Government, 2018a). On the "Getting it right for every child" model, embedded in Scottish policy and practice and later formalised through The Children and Young People Act (Scotland) (2014), wellbeing is defined through eight indicators which embrace different facets of a child's life: children should be supported to be safe, healthy, active, nurtured, achieving, respected, responsible, and included.

Commissioned research into the resilience of pupils in transition to secondary school (Newman and Blackburn, 2002) and published self-evaluation guidance (HMIe, 2006) reinforced the importance of children's wellbeing at times of transition but emphasised the need for full attention to be given to learning, teaching, and curriculum issues. Recent Scottish Government publications illustrate a continuing focus on Scottish children's wellbeing (Scottish Government, 2018a) and attainment profiles (Scottish Government, 2018b). Closing the poverty related attainment gap has become a core aspiration of the Scottish Government today. In 2019 the principles of the curriculum were re-visited and a "curriculum refresh" was undertaken putting learners at the center of education and emphasising the original messages of Curriculum for Excellence while setting them in today's context through five key contributions: "understanding the learners," "knowing the big ideas," "being clear on practical approaches," "using meaningful learning networks," and "knowing your own learning and support needs" (The Scottish Government, 2019a). In the academic session 2019–2020 a new Health and Wellbeing Census (Scottish Government, 2020a) was due to be launched in Scotland before Covid-19 related school closures intervened. Among the aims of this census, which will now be introduced when the timing is right, is "to develop better understanding on some of the factors which influence pupil attainment and achievement."

The Scottish Attainment Challenge intends to improve the lives of young people as they go through their school education. A priority is "Building leadership capacity within schools in order to improve the learner journey, particularly at key transitions stages such as the transition from primary to secondary education" (Scottish Government, 2018c, p. 8). The National Improvement Framework and Improvement Plan (Scottish Government, 2018c) has included a focus on transitions which aims to develop specialisms in transitions between primary and secondary school, support families, improve curriculum collaboration between sectors of education and incorporate the results of a commissioned literature review of primary-secondary transitions (Jindal-Snape et al., 2019) into the National Improvement Framework. Most recently new practice guidance for the early years in Scotland emphasises once again the importance of transitions in the early years, calling for greater consistency in practice to ensure continuity through the transition to school (Scottish Government, 2020b). This guidance includes a strong section on why transitions matter, providing helpful support especially now as countries begin to emerge from the 2020 and 2021 Covid-19 pandemic lockdowns to bring children back into early years and school settings.

Social disadvantage continues to compromise school attainment and wellbeing, and child poverty has increased—currently in Scotland a quarter (24%) of all children now live in relative poverty (after housing costs) (The Scottish Government, 2019b), and is predicted to rise substantially by 2020–2021 (Congreve and McCormick, 2018). Pertinent in the Scottish context of a 3–18 curriculum, there remains a need to know whether curriculum reform has achieved an aspired-for continuum of learning and development in practice, and to ensure that present policy and curriculum frameworks provide a coherent approach to wellbeing and attainment from early childhood into school and from primary to secondary education to the benefit of children and young people.

Whether navigating a first transition successfully helps children and young people to cope well with later transitions remains largely unexplored. Ideas of "positive" or "successful" transition remain contested and there is a lack of evidence of the influence of a "good" transition, if it exists, upon subsequent transitions and later school outcomes and coping strategies. To

understand the role that transitions may play in securing or undermining lasting benefits, it is necessary to study transitions over time with the same cohort of children.

The study aimed to identify factors that may serve to explain, relationally rather than causally, what makes for a good first transition to school by studying children's learning and development in the everyday contexts of early childhood and primary school and linked on a systems approach to home experiences and self and other perceptions of children and young people as learners, copers and friends at two periods of major educational transition. Therefore, the driving question for the informing longitudinal study (Dunlop, 2020a) was "What explanatory factors link individual experiences of school transitions and later outcomes?"

Reflections on the literature lead to six sub questions (SQ) as follows:

S.Q.1. What is the role of personal attributes, wellbeing and attainment, perceptions of self in educational transitions?
S.Q.2. What kinds of educational and wellbeing trajectories can be identified for the focal children over time?
S.Q.3. What is the day-to-day experience of children in education environments either side of the two major transitions?
S.Q.4. What are the perspectives of different stakeholders during transitions?
S.Q.5. How do attainment and wellbeing trajectories relate to each other at the two major transitions?
S.Q.6. In what ways does the nature of each child's transition experience relate to their educational outcomes at school leaving?

Notwithstanding the broader focus indicated in these main study questions, this particular research paper presents wellbeing, attainment, and case study data from a longitudinal study of one cohort's journey through school from the age of three until school leaving between 16–18 years old, in order to focus on "*What aspects of the intersection of wellbeing, attainment, and school transitions help to explain school leaving outcomes?*"

MATERIALS AND METHODS

A Longitudinal Study of Educational Transitions

The 22 focal children at the heart of this study of educational transitions each had quite different educational attainments as they left school education. This section will present their wellbeing and attainment storey, over their school career, from their pre-school year until school leaving. Four groups emerge: those on the margins, those who get by, those who persevere against the odds, and those who fly high.

The intention of presenting these wellbeing and attainment journeys is to know what the group of focal children in this study had achieved in their journey through education, how they fared in relation to their peers and to then be able to unravel the reasons for their varied wellbeing and attainment in relation to the two main transitions in education and school outcomes through the use of four illustrative case studies.

Framing the Study Design

In any study the researcher's ontological and epistemological perspectives determine the approach taken to the procedures and logic they should follow (Waring, 2017). My own position is one of recognising the creativity and competence of children and the complexities they are faced with as they journey through education. A theoretical framework, based on a hybridised socio-bio-ecological model (Dunlop, 2020a) informed the framing of the Navigating Educational Transitions study, data collection and anaylsis. This innovative framework was based on the interaction of person, process and context over time and allowed comparison of the two macrosystems of early childhood transitions and primary-secondary transitions, a reflection of Bronfenbrenner's original proposition 1 (Bronfenbrenner, 1989, [p. 231]). Wellbeing and attainment were identified as significant developmental outcomes: understanding of these two developmental processes was developed in context with an eye to relationships, individual attributes and participation in the educational experiences available.

Following published criteria for the inclusion of studies claiming to be informed by Bronfenbrenner's work (Tudge et al., 2009), the research design was based on what they call "the mature" version of Bronfenbrenner's theory (p. 202) and as explained includes each element of his Person-Process-Context -Time (PPCT) model.

Study Design

Applying this framework to study design, data sources therefore aimed to provide insight into individual attributes; educational experiences at home and school; the perspectives of family, teachers and the children themselves, and to focus on the two identified developmental outcomes: wellbeing and attainment. Observation, video recordings, classroom discourse, child group conversations, stakeholder perspectives through questionnaire and interview, environmental ratings, video tours, self-report, wellbeing and coping ratings, assessment and attainment protocols and case study were each included. In the PPCT framework each data source was designed to draw out data either side of the two major educational transitions: from early years settings into school and between primary and secondary education.

The whole study design evolved over time: primarily qualitative, some decisions were made to gather quantitative data. The data collected over the lifetime of the study is tabulated in **Figure 1**.

Data was gathered over two periods of 3 years in the contexts of nursery, home, schools, local authority, and university venues. Selected data from the study allowed the development of both wellbeing and attainment trajectories over time for a focal group of children: these are used to answer the question posed in this paper on the intersection of wellbeing, attainment and school transitions and the way they may help to explain school leaving outcomes. Wellbeing data was gathered over both transition phases until early secondary school, the home wellbeing data is not included in the school based trajectories. Attainment data was gathered over the full period of the study from school year 1996–1997 to the school year 2009–2010. The years of my retirement from full-time work have afforded the opportunity to work

	Person	Process	Context	Time	
Secondary	Destination	S6 questionnaire UTPS* at school leaving	School leaving	Wellbeing Attainment 10	Secondary
	Reflections Subject choices	National exams and assessments	School senior phase	Attainment 9	
	Personal qualities-self & other Card tasks-Sorting tasks Adolescent Coping Scale 2	S1 Standardised Tests Group discussion & contribution Workshops, Film making	Secondary School University setting	Attainment 8 Well-being 8	
Primary-Secondary	Self-perceptions: as a learner, as a coper, as a friend.	Transitions Journals Parent interviews	Summer holidays. Primary-Secondary Home Visits	Children's perspectives 4 Parent perspectives 3	Primary-Secondary
	Induction visits Familiarisation	Sample classes Timetables	Secondary Induction	Making the transition 2	
	Meeting pupils going on to same secondary	Peer contacts Wider community	Outdoor Centre Visits	Making the transition 2	
	Adolescent Coping Scale Card tasks- Sorting tasks	What matters at Transition? Shared tasks – DVD	LA Board Room Activities	Wellbeing and engagement 7	
	P7 Questionnaire Self descriptions- learner, friend, coper Favourite subjects-good at, difficult	P7 Video Tours Teacher interviews P7 Primary/secondary descriptions	Primary 7	Attainment 7 Educator perspectives 4 Wellbeing and engagement 6**	
Primary Years	Getting to know you	Influencing research decisions	Summer P6 Meet-ups - each others' schools	Children's perspectives 3	Primary Years
	Engagement in Standardised Tests	Test administration & scores	Primary 5	Attainment 6	
	Engagement in Standardised Tests	Test administration & scores	Primary 3	Attainment 5	
	Contribution to classroom discourse (engagement) Relationships with teacher(s)	Teacher observation, record keeping, assessment & reports	Primary 1	Attainment 4	
	Participation: Who to work with? Who to play with? Who to avoid? Working with others: group, peer paired tasks, solitary tasks, dispositions	Video primary classroom discourse Joint creation of meaning Observation field notes Dimensions of continuity	P1 child group interviews (FC) Video observation Observation field notes	Educator perspectives 3 Children's perspectives 2	
Nursery to Primary	Holistic: constructs of emotional & social well-being and involvement Personal dimensions of transition	Teacher Interview Teacher perception-Parent perception of child as a learner	Embedded observations Leuven Scale	Educator perspectives 2 Parent perspectives 2 Wellbeing and engagement 5	Nursery to Primary
	ECERS – provision of opportunities Video-play episodes – child agency, reflection & collaboration (ARC)	Classroom climate and organisation for learning: ECERS domains: language-reasoning; program structure; activities; interaction	ECERS- P.1 Class floorplans P.1 Video observation Observation field notes	Environment 3 Play 3	
	Strategies, interactions engagement, independence Play with others – role, identity, group and peer paired tasks, solitary tasks	Curriculum Work on paper Interactive roles in learning Agency, role, identity	Observation of first weeks at school Embedded observations	Making the transition 1 Wellbeing and engagement 4	
	Social interactions Participation Playful work discussion	Home learning environment Parent interviews	Summer Home Visits	Environment 2 Parent perspectives 1 Play 3	
	Self as a learner Engagement & wellbeing	Child assessment interview (FC) – Photo discussion, storying, embedded literacy & numeracy	Summer Home Visits Child assessment interview (FC)	Children's perspectives 1 Attainment 3 ** Wellbeing and engagement 3 **	
Nursery	Day-to-day experiences and opportunities	Educator Summative Reports Feedback to parents Educator interviews	Embedded observations Video observation	Attainment 2 Wellbeing and engagement 2 Educator perspectives 1	Nursery
	ECERS – provision of opportunities Video-play episodes – child agency, reflection & collaboration (ARC)	Classroom climate and organisation for learning: ECERS domains: language-reasoning; program structure; activities; interaction	ECERS - Nursery Class floorplans - Nursery Video observation Observation field notes	Environments 1 Play 2	
	Playing and working with others: group, self-chosen and adult organized opportunities	Use of resources, room and working with others People and relationships	Embedded observations	Play 1	
	Funds of knowledge, dispositions, engagement, coping friendships, interactions.	Opportunities for language, literacy, numeracy. Social & emotional wellbeing	Embedded observations Leuven Scale	Attainment 1 Wellbeing and engagement 1	

FIGURE 1 | Person-Process-Context-Time Model of Data Collected. *UTPS, Universal Tariff Points Score; ECERS, Early Childhood Environment Rating Scale; *Timepoints not included in trajectories.

with the volume of data generated in comprehensive way, and importantly to link this to the present time. A multi-layered and mixed method approach (Lincoln, 2010) was taken to gathering data over time in pedagogically relevant ways in which researcher presence respects the complexity of educational contexts and the learning, teaching, interactions and relationships within them (Nind et al., 2016; Blaisdell et al., 2019) so that research approaches and pedagogy are closely aligned.

Participants

Four primary schools in four different areas representative of the local authority demographic were selected by the local authority for inclusion in a study which originally set out to understand continuity and discontinuity in the transition from early childhood settings to primary school, and would later consider the transition to secondary education for the last year of primary education and the first 2 years of secondary school. In the overall study the same six class cohort ($n = 150$) was followed through two major educational transitions from the age of three to secondary school leaving. The experiences of the cohort as a whole form a backdrop for the more intensive study of the focal children.

In the January parents enrolled 150 children in the four selected primary schools to start school in August of the same year. Enrolment details for each child normally included gender, date of birth, home address, resident parents and siblings, parental employment, first language and ethnicity. Using these data, stratified purposive sampling identified one fifth of the children ($n = 30$) as a focal group who would be studied more intensively. This group reflected the profile of the 150 children as a whole in that 10% lived with a single parent, 10% of families were unemployed, 10% were from an ethnic minority, there were an almost equal number of boys and girls with fewer of the children in the older 6 months ($n = 68$) on entry to school and more who had not turned five upon school entry, in the younger 6 months ($n = 82$). Almost one third of the children ($n = 45$) were in the youngest 3 months of eligibility and therefore started school before they were 5 years old.

Of the 30 originally identified focal children, two with additional support needs were excluded from the study by the host authority and one requested a different school placement. Of the 27 children at the outset of the study, the family of one child relocated to another part of the country, while four moved to out of area schools within 3 years of school start: leaving a total of 22 participating focal children over time.

A particular focus is given to ethics of longitudinal research. Two types of consent were sought—parental consent on an opt-out basis to observe and record the early learning and school experiences of the 150 children in their nursery settings for 6 months prior to school start and for the first year of their primary education, and parental consent on an opt-in basis for the sample of focal children. The final study report (Dunlop, 2020a) focuses on experiences of the 150, bringing further detail from the focal group of 22 individuals. In any study of day-to day experience the reciprocal relationship between research and practice needs to be addressed: ethical considerations are relevant throughout the research process and issues may change over time in long-longitudinal work.

Ethical approval was therefore sought and received at four different time points for this study. Firstly at the outset of the study through parental consent and with child assent (Dockett et al., 2013; Phelan and Kinsella, 2013) for home-based assessments and for observation and discussion in the first 2 years of school. Secondly when the children were in their last year at Primary School, through class-based discussion before questionnaire completion, and in small groups of the focal children in each class where rights, risks and benefits of taking part in longitudinal research were debated. A home visit was arranged to create an opportunity to discuss the study further, to understand the data already collected in earlier years and to ensure individuals and their families had all the information needed in order to make an informed decision to continue in the study, to allow continuing use of data already collected or to withdraw.

Thereafter all 22 participants and their families gave continuing permission for their data to be used in the study. One participant decided in P7 to discontinue active participation in the study and the parents of another preferred their child to avoid involvement outside of school. Twenty focal children therefore remained active during the transition to S1 of whom 12 continued their active participation for the first 3 years of secondary education. Researcher engagement continued with the host local authority leading to application for ethical approval for the Transitions Continuation Study for S4 and S5 and finally for the Transitions Sixth Year follow up. In each iteration of ethical approval consent to academic publication, while protecting participants' identity, was included. A further follow-up study is under consideration at the present time, with the aim of gaining insight into the cohort's young adult lives.

Materials

Wellbeing and Coping and Engagement Over Time

The tools used were the Leuven Involvement Scale for Young Children (LIS-YC) (Laevers, 1994) and The Adolescent Coping Scale (Frydenberg and Lewis, 1993): both carry their own protocols for completion and analysis. Wellbeing and involvement measures gathered at four early years timepoints (Nursery, P1 Christmas, P1 Summer and P2) were standardised across the 22 focal children to provide each with an individual standardised score to produce trajectories of wellbeing over the nursery-primary transition. At the primary-secondary transition wellbeing and coping materialised as an issue and led to a search for a structured means of investigating this. The Leuven scale uses Leavers' wellbeing and involvement observational methods (**Table 1**) which were easily integrated into the overall observational approach. The intention in using both wellbeing and involvement measures was to establish an understanding of wellbeing in the nursery and school classrooms and to gauge the levels of involvement (engagement) of children in areas of the curriculum in nursery and early primary.

TABLE 1 | Wellbeing and involvement indicators.

Wellbeing signals	Involvement signals
When assessing the level of wellbeing, you can allow yourself to be guided by a number of characteristics in the child's behaviour. Not all of these signals need to be present at the same time and in their complete form to speak of wellbeing.	When assessing involvement, you can allow yourself to be led by a number of characteristics or signals in the child's behaviour. Obviously, not all signals have to be present at the same time in order to indicate involvement (child's age and level of development too).
Openness and receptivity	Concentration
Flexibility	Energy
Self-confidence and self-esteem	Complexity and creativity
Being able to defend oneself, assertiveness	Facial expression and composure
Vitality	Persistence
Relaxation and inner peace	Precision
Enjoyment without restraints	Reaction time
Being in touch with oneself	Verbal expression
	Satisfaction

(Laevers et al., 1997, p. 16–21).

Two raters coded a sample of material following the Child Monitoring System protocols. Both raters had attended a 3 days intensive training programme in which practical workshops watching and coding video episodes had been a feature. Their intra-rater consistency was well-established with this system. Following the inter-rater exercise wellbeing and involvement observations were rated on the same model for each of the Focal Children in both nursery and primary.

The Frydenberg and Lewis Adolescent Coping Scale (ACS) self-report approach provided a means to consider wellbeing at the primary-secondary transition. They find the concept of coping with change is linked to resilience. The Short Form of the Frydenberg and Lewis (1993) Adolescent Coping Scale (ACS) was used as the best known protocol available at the time to judge student coping as the focal group transitioned to secondary school. Coping was understood to be a useful proxy for wellbeing, it was then possible to compute Nursery to P7 wellbeing trajectories by using the two sets of standardise scores. Similarly for the 12 for whom full data is held wellbeing trajectories could be computed across both transitions, over seven timepoints.

The short version of the ACS has two forms for participants to complete—the general short form and the specific short form. In completion of the general form participants are asked to think of a situation which they find challenging and indicate how they

would cope. They are offered 18 possible ways of responding and use a Likert Scale of five response options ranging from "not used" to "used a great deal." In the specific form the strategies are considered in relation to the specific issue chosen: in this study the specific issue was transition to secondary school. Definition and examples of the conceptual areas of coping (Huxley et al., 2004) based on the Adolescent Coping Scale (Frydenberg and Lewis, 1993) use the following approaches: seek social support, focus on solving the problem, work hard and achieve, worry, invest in close friends, seek to belong, wishful thinking, not cope, tension reduction, social action, ignore the problem, self-blame, keep to self, seek spiritual support, focus on the positive, seek professional help, seek relaxing diversions, and physical recreation. The protocol clusters these ways of coping under the three over-arching categories of productive coping/problem solving, reference to others and non-productive coping. From their responses it is possible to establish what dimensions of coping young people use most frequently.

The responses the focal children gave before and after the Primary-Secondary transition allowed wellbeing trajectories to be plotted for the 12 who completed the scale twice, by computing individual standardised scores from Nursery to Senior Year 1 (S1). For the remaining ten focal children who completed in Primary School but not in Secondary, their individual standardised scores were added to their early years wellbeing profiles to give a Nursery-Primary Year 7 (P7) trajectory.

Attainment Over Time

Data on the focal children and young people's school attainment was gathered over a 12–14 years period, depending on individual dates of school leaving. Attainment data over the whole educational journey is available for all 22 focal children. The forms of data are varied and present a challenge to creating learning trajectories for the each pupil's school career. In summary the range includes observation, teacher report, pupil profiles based on observational data and teacher judgment, a specifically designed pre-school assessment generating numerical scores for each item, externally designed assessments standardised for the Local Authority, and the National Assessments and Examinations of the time. The timing of data gathered is visible in **Figure 1** which shows the full data gathering process for the complete study.

Educational Journeys Over Time

In longitudinal study it is not uncommon to find case studies as the main focus in qualitative work (e.g., Pollard and Filer, 1999; Warin and Muldoon, 2009), and less frequently as illustrative examples in quantitative work/mixed-method design (Siraj-Blatchford, 2010): the case may be as large as a school or a sector of the education system, but may also be framed at an individual level.

Where the case is identified at an individual level, while it focuses on the individual child's experience, at home, in nursery and at school, such experience is rarely seen in isolation, given the person, process, context, and time (PPCT) factors at work. With a number of focal children in the same class, case studies can elaborate the researcher's understanding of the class as a whole.

Procedure

The procedures used to form wellbeing and attainment trajectories and to create the narrative case studies are addressed in this section.

Generating Wellbeing Trajectories

The data from six of the seven wellbeing time-points and at each of nine attainment time-points generated individual standardised scores for wellbeing and attainment. The same formula of subtracting the mean score (for all 22, 18, or 12 children according to data gathered) from the individual raw score, then calculating the standard deviation to generate an individual standardised score, was used for all wellbeing and attainment results. This allowed integration of the different forms of data. In these ways a range of trajectories were developed allowing the presentation of attainment and wellbeing over time, as well as creating the potential to explore individual and group patterns within and across the major transitions, as exemplified through four case studies in the presentation of results.

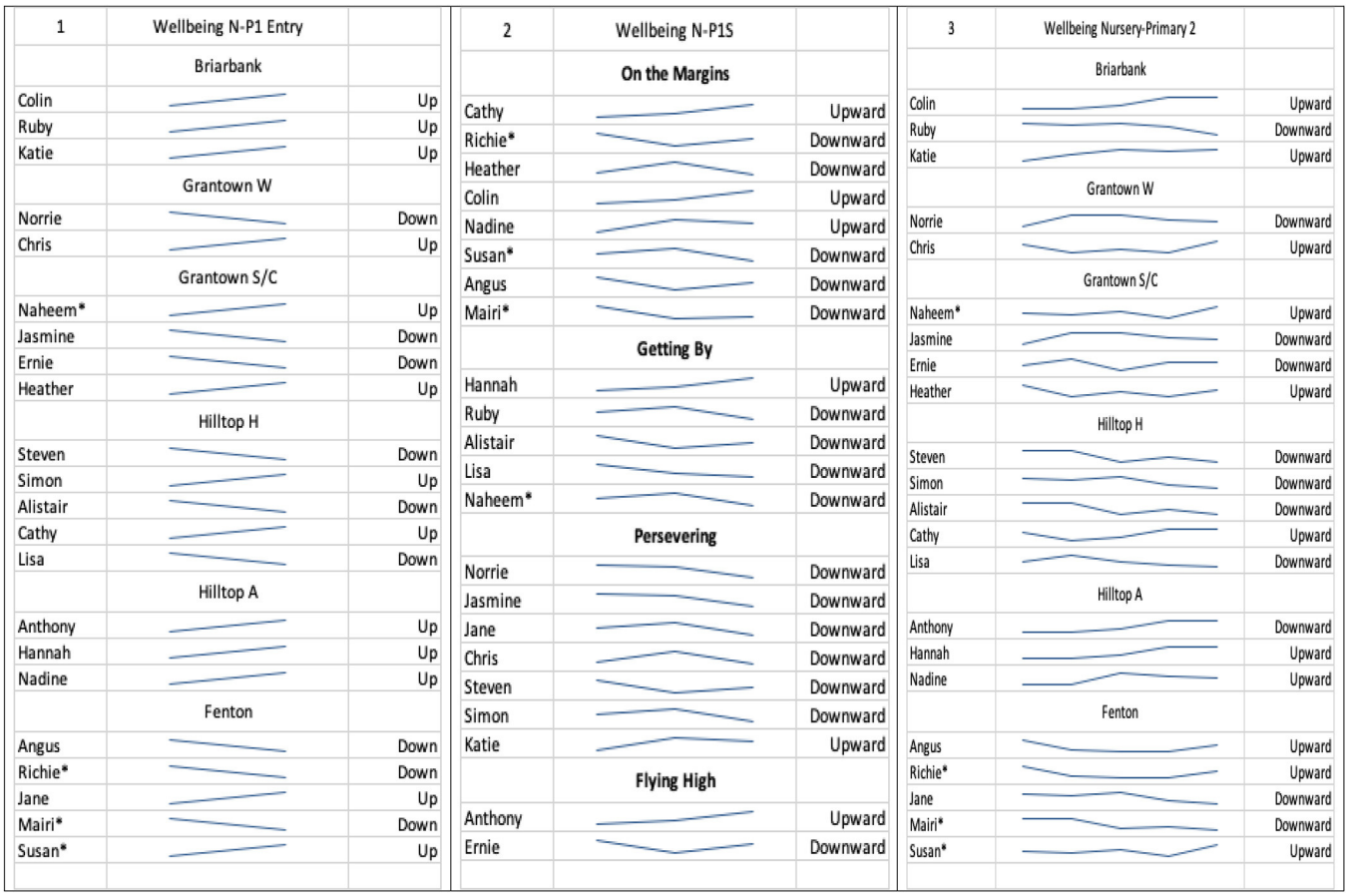
Generating Attainment Trajectories

By standardising scores from the variety of assessments, it is possible to combine these scores to generate a single scale which allows pupils' attainment over time to be understood continuously. Individual comparative performance across the two selected curricular (developmental) areas over time may also be understood. In this way it is also possible to plot group outcomes over time to see who is improving, declining, or maintaining performance relative to their starting points and to the group.

Ten time-points came into strong view the first four clustered around the transition to school: in the summer term of nursery education, at home over the holiday period before school start (not included in the trajectories presented here), at the end of the first term in school and at the end of the first year in school. The next time-points of summer of the second and third years in school, each drew on teacher report in Primary(P)2 and in P3 upon the standardised testing introduced by the Local Authority in P3. A lighter touch at P5 in that no other contributing data was gathered at this time-point, was followed by a second more intense focus on the children's experience during the P7 year before transition to secondary education in S1 the year following that change. A final time-point, which serves to understand the full educational journey from 3 to 18 (or 16 for some leavers), draws together national assessments and examination results in S4, S5, and S6: the Senior Phase of secondary education. Given that there are different grading systems for different types of assessment, it was decided at first to use the Universities and Colleges Admissions Service (UCAS) tariff points to convert the national Higher and Advanced Higher exam results from A, B, C... into numbers. There is no such tariff for the other results that represent pupils' highest level of achievement in years S4 and S5, e.g., Access 2 and 3 or Intermediate Certificates that had replaced Standard Grades and were the precursor of the current National 4 and 5 awards.

A different solution was sought, resulting in the use of The Unified Points Score Scale (UPS) which is an extended version

TABLE 2 | Sparkline wellbeing trajectories: Nursery-P1 entry; Nursery to P1-summer by later attainment groups; Nursery -P2 summer.



1	Wellbeing N-P1 Entry	
	Briarbank	
Colin		Up
Ruby		Up
Katie		Up
	Grantown W	
Norrie		Down
Chris		Up
	Grantown S/C	
Naheem*		Up
Jasmine		Down
Ernie		Down
Heather		Up
	Hilltop H	
Steven		Down
Simon		Up
Alistair		Down
Cathy		Up
Lisa		Down
	Hilltop A	
Anthony		Up
Hannah		Up
Nadine		Up
	Fenton	
Angus		Down
Richie*		Down
Jane		Up
Mairi*		Down
Susan*		Up

2	Wellbeing N-P1S	
	On the Margins	
Cathy		Upward
Richie*		Downward
Heather		Downward
Colin		Upward
Nadine		Upward
Susan*		Downward
Angus		Downward
Mairi*		Downward
	Getting By	
Hannah		Upward
Ruby		Downward
Alistair		Downward
Lisa		Downward
Naheem*		Downward
	Persevering	
Norrie		Downward
Jasmine		Downward
Jane		Downward
Chris		Downward
Steven		Downward
Simon		Downward
Katie		Upward
	Flying High	
Anthony		Upward
Ernie		Downward

3	Wellbeing Nursery-Primary 2	
	Briarbank	
Colin		Upward
Ruby		Downward
Katie		Upward
	Grantown W	
Norrie		Downward
Chris		Upward
	Grantown S/C	
Naheem*		Upward
Jasmine		Downward
Ernie		Downward
Heather		Upward
	Hilltop H	
Steven		Downward
Simon		Downward
Alistair		Downward
Cathy		Upward
Lisa		Downward
	Hilltop A	
Anthony		Downward
Hannah		Upward
Nadine		Upward
	Fenton	
Angus		Upward
Richie*		Upward
Jane		Downward
Mairi*		Downward
Susan*		Upward

of the UCAS Scottish Tariff points system (Scottish Government, 2009, 2011; The Scottish Government, 2010). The different forms of Literacy/English and Numeracy/Maths attainment data collected during this long-longitudinal study were used to develop standardised scores and to plot individual attainment trajectories over a school career. A final score looks across all subjects by standardising the points gained cumulatively from all other subjects taken by each individual from Access level through to Advanced Higher. Alongside these attainment data, a range of explanatory factors including environments, individual attributes and the children's sense of themselves as learners, copers and friends, were considered for all of the children (Dunlop, 2020a), and are exemplified through four case study examples.

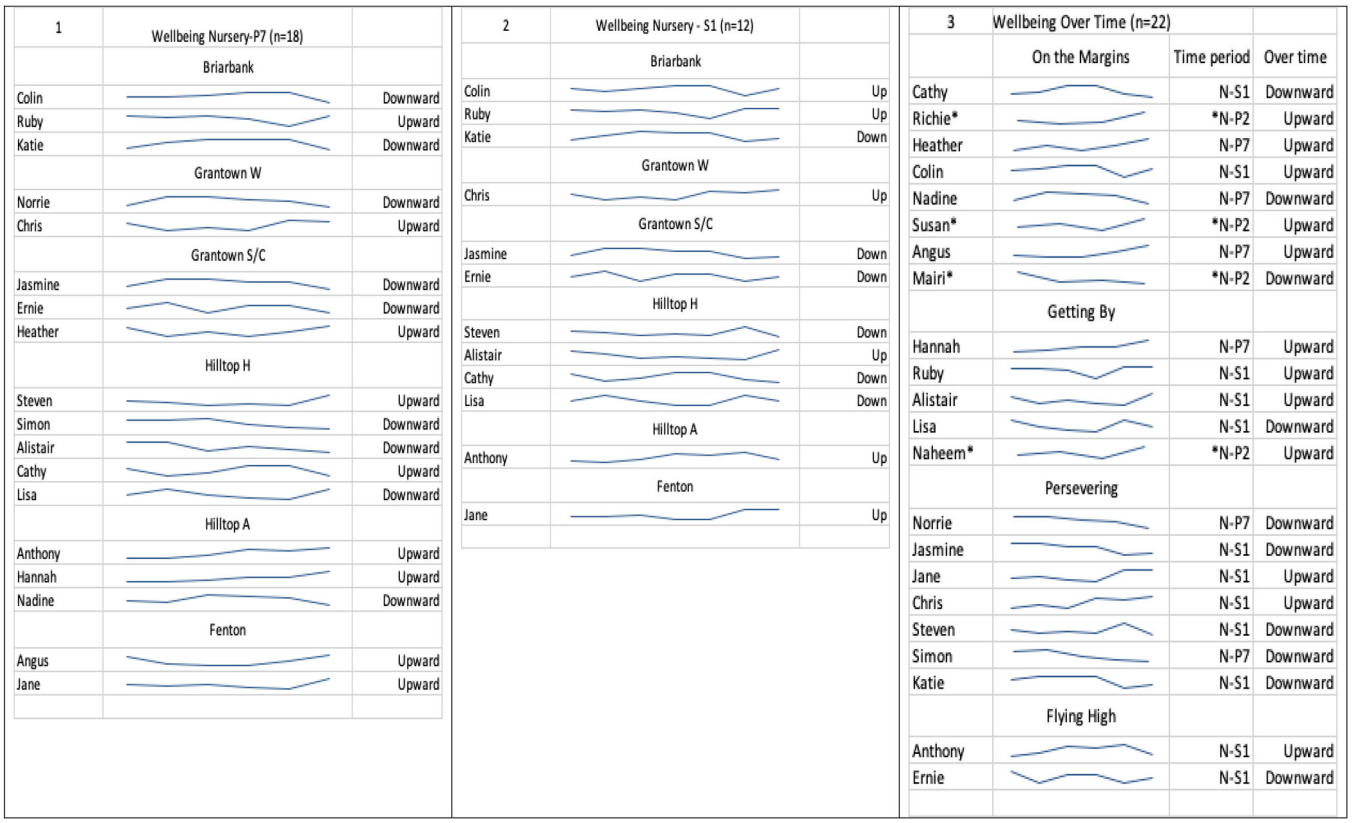
Generating Nested Case Studies of Educational Journeys: Over Time

Both qualitative and quantitative data contributed to the case studies developed for the 22 focal children, in which the approach is akin to the Mosaic Approach (Clark, 2004), where a picture or pattern is built up through the adding of segments—the segments of the planned case studies at both nursery-primary and primary-secondary transition include environments, interactions, individual attributes, wellbeing, and attainment. Case study data was generated through observations and interviews, consideration of the quality of learning environments, attainment and wellbeing measures, self-report, parent, teacher, and individual perspectives and group activities. In the case studies presented these different elements are drawn upon.

RESULTS

This section presents patterns across the wellbeing and attainment trajectories of the 22 focal children who attended early childhood, primary and secondary school in the particular Local Authority. How these journeys through education align or not at the two major transitions in education allows discussion of the intersection of wellbeing, attainment and transitions to emerge. By relating these experiences to attainment outcomes in core subjects at school leaving and then across all subjects studied, the question of the validity of using outcomes in Literacy/English and Numeracy/Maths as proxies for school success is opened up. A brief indication of the wider explanatory factors considered (Dunlop, 2021, forthcoming) is included. Finally four case studies are used to illustrate emerging patterns in individual educational journeys.

TABLE 3 | (1) Wellbeing across time nursery to P7 ($n = 18$); (2) Wellbeing nursery to S1 ($n = 12$); (3) Available wellbeing over time ($n = 22$).



1	Wellbeing Nursery-P7 (n=18)	
	Briarbank	
Colin		Downward
Ruby		Upward
Katie		Downward
	Grantown W	
Norrie		Downward
Chris		Upward
	Grantown S/C	
Jasmine		Downward
Ernie		Downward
Heather		Upward
	Hilltop H	
Steven		Upward
Simon		Downward
Alistair		Downward
Cathy		Upward
Lisa		Downward
	Hilltop A	
Anthony		Upward
Hannah		Upward
Nadine		Downward
	Fenton	
Angus		Upward
Jane		Upward

2	Wellbeing Nursery - S1 (n=12)	
	Briarbank	
Colin		Up
Ruby		Up
Katie		Down
	Grantown W	
Chris		Up
	Grantown S/C	
Jasmine		Down
Ernie		Down
	Hilltop H	
Steven		Down
Alistair		Up
Cathy		Down
Lisa		Down
	Hilltop A	
Anthony		Up
	Fenton	
Jane		Up

3	Wellbeing Over Time (n=22)		
	On the Margins	Time period	Over time
Cathy		N-S1	Downward
Richie*		*N-P2	Upward
Heather		N-P7	Upward
Colin		N-S1	Upward
Nadine		N-P7	Downward
Susan*		*N-P2	Upward
Angus		N-P7	Upward
Mairi*		*N-P2	Downward
	Getting By		
Hannah		N-P7	Upward
Ruby		N-S1	Upward
Alistair		N-S1	Upward
Lisa		N-S1	Downward
Naheem*		*N-P2	Upward
	Persevering		
Norrie		N-P7	Downward
Jasmine		N-S1	Downward
Jane		N-S1	Upward
Chris		N-S1	Upward
Steven		N-S1	Downward
Simon		N-P7	Downward
Katie		N-S1	Downward
	Flying High		
Anthony		N-S1	Upward
Ernie		N-S1	Downward

Wellbeing Trajectories Over Time

In this study children's wellbeing was explored through whole class screening to gauge the ambient atmosphere in nursery and early primary classes either side of the transition. Focused observations of the 22 focal children using the Laevers (1994) phenomenological approach to wellbeing and involvement in nursery and primary1 (**Table 1**) generated wellbeing scores either side of transition to school ($n = 22$). Sparklines **Table 2.1** shows that for 13 children their overall wellbeing as observed in nursery and the first term in school had an upward trajectory on entry to school, for the remaining nine wellbeing dropped in the early months of school. For six children this upward wellbeing profile continued through to the end of their first year in school, but for 16 children their overall wellbeing dropped between their last nursery term and their last P1 term (**Table 2.2**). This downward trend occurred for all children attending three (Grantown W, Grantown S/C, and Fenton) out of the six P1 classes, in one class the three focal children all sustained an upwards trajectory and in the other two there was a mix of a fall and a rise in wellbeing among the different children. The extent to which these trends link to individual attributes and experiences, or seem to be explained more generally for groups of children, emerges when the nature of classroom interactions, dominant pedagogy, classroom environments, and teacher wellbeing is considered.

The desire to know how long it took any particular child to feel well in school meant a further set of observations were undertaken in the last term of the first year in school, **Table 2.2** applies the later attainment groupings to illustrate the relationship between early wellbeing and later school outcomes. Taking account of teacher assessments of personal, social and emotional development, wellbeing scores were also generated for P2, allowing a picture to emerge of how long any particular child may take to adjust and feel content in school. When children moved on to P2 their wellbeing profiles change again, and the group is evenly split (**Table 2.3**) with 11 children now experiencing an upward trajectory and 11 a downwards one.

For the second major transition, from the end of primary school through to the first year in secondary education, a self-report protocol was used. By P7 when 18 children took part in the first round of the ACS self-report, again the focal group was equally divided between upward and downward wellbeing as shown by class attended in **Table 3.1**.

For the second round of ACS in their first year of school 12 participating children (**Table 3.2**) completed the self-report. Six reported positively about the transition to secondary, while six felt their wellbeing and capacity to cope was on a downward trend. **Table 3.3** illustrates the available wellbeing data for all focal children. Ten trajectories are downward in nature, but looking at this overall data 12 sustained upwards trajectories in the longer term.

How these data align with attainment data over time is addressed in the section "Reflections on the Results Presented".

TABLE 4 | Attainment sparklines: (1) Nursery leaving to P1 entry; (2) Nursery leaving to P1 summer; (3) Nursery leaving to P2 summer.

1	Nursery leaving to P1 entry		2	Nursery leaving to P1 Summer		3	Nursery leaving to P2 Summer	
	Briarbank			Briarbank			Briarbank	
Colin		Down	Colin		Downwards	Colin		Downwards
Ruby		Down	Ruby		Upwards	Ruby		Upwards
Katie		Up	Katie		Upwards	Katie		Upwards
	Grantown W			Grantown W			Grantown W	
Norrie		Down	Norrie		Downwards	Norrie		Downwards
Chris		Up	Chris		Upwards	Chris		Upwards
Naheem		Down	Naheem		Downwards	Naheem		Upwards
	Grantown S/C			Grantown S/C			Grantown S/C	
Jasmine		Down	Jasmine		Downwards	Jasmine		Downwards
Ernie		Up	Ernie		Upwards	Ernie		Upwards
Heather		Down	Heather		Downwards	Heather		Upwards
	Hilltop H			Hilltop H			Hilltop H	
Steven		Down	Steven		Downwards	Steven		Downwards
Simon		Down	Simon		Downwards	Simon		Downwards
Alistair		Up	Alistair		Upwards	Alistair		Upwards
Cathy		Up	Cathy		Upwards	Cathy		Downwards
Lisa		Up	Lisa		Upwards	Lisa		Downwards
	Hilltop A			Hilltop A			Hilltop A	
Anthony		Up	Anthony		Upwards	Anthony		Upwards
Hannah		Down	Hannah		Downwards	Hannah		Downwards
Nadine		Down	Nadine		Downwards	Nadine		Downwards
	Fenton			Fenton			Fenton	
Angus		Up	Angus		Downwards	Angus		Downwards
Richie		Down	Richie		Upwards	Richie		Upwards
Jane		Down	Jane		Downwards	Jane		Downwards
Mairi		Down	Mairi		Downwards	Mairi		Downwards
Susan		Up	Susan		Upwards	Susan		Upwards

Attainment Trajectories Over Time

The challenge of working with different forms of data in terms of analysis over time is recognised. The data was collected over the three phases of the longitudinal study at 10 time periods, nine of which are presented here (excluding home-based assessment in the summer before school start) and is an analysis of the qualitative and quantitative data held that is relevant to profiling attainment, including school leaving data from the Senior Phase—time-period 10 up until each individual's school leaving date. An example of each type of trajectory is included in each of the following case studies. Two tables present the attainment trajectories by class attended. In **Table 4.1** the direction of attainment from nursery leaving to P1 entry shows that 13 of the focal children dipped in numeracy and literacy attainment in their first school term, while for nine attainment rose. By the end of their first year in school (**Table 4.2**) 19 children sustain their initial trajectories of dips and upwards trends, dip continues, while two of the youngest, Ruby and Richie, recover from the dip, and Angus' initial positive trajectory drops. By the summer of their second year in school (**Table 4.3**) nine children continue this downward attainment trend, six sustain an upward trend and the other seven have more fluctuating profiles. In the Case Study Section some explanatory factors for consistency and change are considered.

In **Table 5** the four columns show attainment trends in the first (5.1) and second (5.2) major educational transition. Columns 5.3 and 5.4 show the direction attainment took from nursery to P7 and from Nursery to S1. A number of studies refer to the secondary school dip: it is well-understood that there is a dip in confidence, wellbeing, and attainment for many children in the transition to secondary education (Galton et al., 1999, 2003; McLellan and Galton, 2015), with a need for more professional focus on the academic as well as the social side of transitions. In the present study for the focal children more than half ($n = 12$) experienced such a dip in attainment, however 10 did indeed experience such a dip.

The attainment trends in literacy (English) and numeracy (Maths) over the 22 focal children's nursery to school leaving career are linked to their total Universal Tariff Points Scores in **Table 6**, showing that in three of the four attainment quartiles there is a mix of upward and downward attainment profiles. For 12 of the 22 focal children their attainment dropped overall from nursery until school leaving, while for 10 attainment rose over time. In both the "On the Margins" group and the "High Fliers" there is considerable consistency in the direction of attainment, with only Richie showing an upward trend over time despite his overall scores being well-below the mean. This raises questions about what "doing well" may mean, with those in the "Getting

TABLE 5 | Attainment: (1) Nursery to school entry; (2) Primary 7-senior 1; (3) Nursery leaving to P7; (4) Nursery leaving to S1.

1	Nursery leaving to P1 entry		2	P7-S1		3	Nursery leaving to P7		4	Nursery leaving to S1	
	Briarbank			Briarbank			Briarbank			Briarbank	
Colin		Down	Colin		Up	Colin		Downwards	Colin		Downwards
Ruby		Down	Ruby		Down	Ruby		Upwards	Ruby		Upwards
Katie		Up	Katie		Down	Katie		Upwards	Katie		Downwards
	Grantown W			Grantown W			Grantown W			Grantown W	
Norrie		Down	Norrie		Down	Norrie		Downwards	Norrie		Downwards
Chris		Up	Chris		Up	Chris		Upwards	Chris		Upwards
Naheem		Down	Naheem		Down	Naheem		Upwards	Naheem		Downwards
	Grantown S/C			Grantown S/C			Grantown S/C			Grantown S/C	
Jasmine		Down	Jasmine		Down	Jasmine		Downwards	Jasmine		Downwards
Ernie		Up	Ernie		Down	Ernie		Upwards	Ernie		Upwards
Heather		Down	Heather		Down	Heather		Upwards	Heather		Upwards
	Hilltop H			Hilltop H			Hilltop H			Hilltop H	
Steven		Down	Steven		Down	Steven		Downwards	Steven		Downwards
Simon		Down	Simon		Up	Simon		Downwards	Simon		Upwards
Alistair		Up	Alistair		Up	Alistair		Upwards	Alistair		Upwards
Cathy		Up	Cathy		Down	Cathy		Upwards	Cathy		Downwards
Lisa		Up	Lisa		Up	Lisa		Upwards	Lisa		Upwards
	Hilltop A			Hilltop A			Hilltop A			Hilltop A	
Anthony		Up	Anthony		Up	Anthony		Upwards	Anthony		Upwards
Hannah		Down	Hannah		Up	Hannah		Downwards	Hannah		Downwards
Nadine		Down	Nadine		Up	Nadine		Downwards	Nadine		Downwards
	Fenton			Fenton			Fenton			Fenton	
Angus		Up	Angus		Up	Angus		Downwards	Angus		Downwards
Richie		Down	Richie		Up	Richie		Downwards	Richie		Upwards
Jane		Down	Jane		Up	Jane		Downwards	Jane		Downwards
Mairi		Down	Mairi		Down	Mairi		Downwards	Mairi		Downwards
Susan		Up	Susan		Up	Susan		Downwards	Susan		Upwards

By" and "Persevering" quartiles achieving both because of, and against the odds.

The total Universal Tariff Points (T-UPS) each of the focal children had accumulated by school leaving are shown in **Figure 2**, given in detail in **Table 6**. Of the 22 children whose attainment data is reported here, six * left school at the end of S4, aged 16; 2 ** left a year later at S5 and 14 continued in school until the end of S6: the last year of schooling in Scotland.

These data may be compared with the Scottish average tariff points scored in each relevant year in **Figure 3**, with the significance of such positioning shown in the four case studies that follow.

For S4 leavers in the study the national average of Scottish school leavers was 341 T-UPS; for S5 leavers it was 356 and for S6 leavers it was 372. Of the six focal children who left school in S4, only Susan (140 T-UPS) had more than 80 tariff points and all were considerably below the Scottish average for school leavers. Two of these six moved to new schools: Cathy (Case Study), 37 T-UPS, and Heather with 88 T-UPS points; one was recorded as unemployed and three went on to college to complete further study. Lisa (461) and Hannah (328) who left in S5 fell each side of the national average in their year of 356 T-UPS, while 12 of the 14 who stayed on to 6th year achieved above average T-UPS and two had lower than average scores but fall into the group of school leavers who accumulate more tariff points the longer they stay in school, and therefore do better than expected. For those who left in sixth year the variation in points achieved was 836 T-UPS, with Mairi achieving 207 points and Ernie (Case Study) achieving 1,043. When all 22 focal children's school leaving outcomes are considered this gap between tariff points widens to 1,006 T-UPS. The following case studies profile Ernie and Cathy: children who lie at the extremes of this range, and positions Ruby in the "getting by" group, while Steven is in the "persevering" group.

Consideration of attainment through a school career, how it accumulates in school leaving attainment and the future impact of academic outcomes on individual lives each raise many issues. Trajectories are rarely evenly upward or downward: to understand what affects not only the end point differences, but the fluctuations in the journey through education, the intersection of wellbeing and attainment with major educational transitions is presented by plotting their alignment.

Aligning Wellbeing and Attainment Over Time

Turning to what extent wellbeing and attainment align over time, and particularly at transition, two ways of looking at this are important as shown in the model in **Figure 4**: firstly is there alignment of wellbeing and attainment within each transition and secondly are the early patterns sustained across transitions? Direction of travel in pedagogical wellbeing (Pyhältö et al., 2010) is also visible in these trajectories through the upward and

TABLE 6 | Direction of attainment over time ($n = 22$) leading to four attainment groups.

Overall Upward Attainment		
Ruby		Getting By
Katie		Persevering
Norrie		Persevering
Chris		Persevering
Naheem		Getting By
Ernie		Flying High
Steven		Persevering
Alistair		Getting By
Anthony		Flying High
Richie		On the Margins
Overall Downward Attainment		
Colin		On the Margins
Jasmine		Persevering
Heather		On the Margins
Simon		Persevering
Cathy		On the Margins
Lisa		Getting By
Hannah		Getting By
Nadine		On the Margins
Angus		On the Margins
Jane		Persevering
Mairi		On the Margins
Susan		On the Margins

Total UPS	On the Margins	Trajectory
Cathy (37)		Downward
Richie (56)		Upward
Heather (64)		Downward
Colin (72)		Downward
Nadine (76)		Downward
Susan (140)		Downward
Angus (165)		Downward
Mairi (207)		Downward
	Getting By	
Hannah (328)		Downward
Ruby (393)		Upward
Alistair (447)		Upward
Lisa (461)		Downward
Naheem (462)		Upward
	Persevering	
Norrie (524)		Upward
Jasmine (594)		Downward
Jane (594)		Downward
Chris (641)		Upward
Steven (642)		Upward
Simon (661)		Downward
Katie (724)		Upward
	Flying High	
Anthony (815)		Upward
Ernie (1043)		Upward

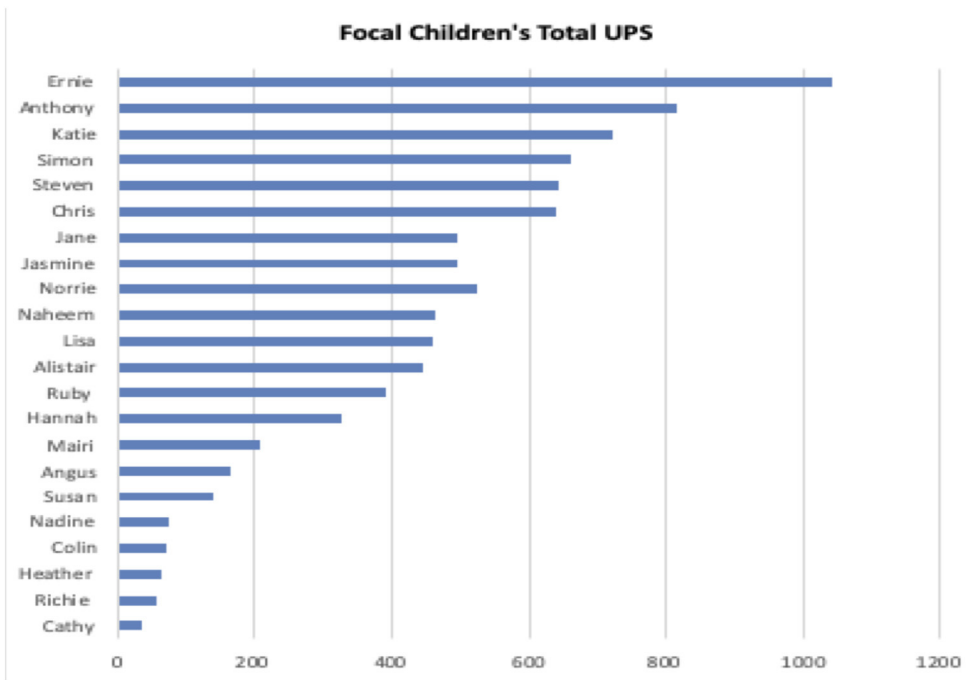


FIGURE 2 | Focal children's SQA national assessment in S4, S5, and S6 showing total scores accumulated in English and Maths and in all other subjects taken.

A Average Tariff Score of Scottish School Leavers (Adapted Table 1, Scottish Government, 2011, p.5)

Table 1. Average tariff score of school leavers, by highest SCQF level at which one or more passes were achieved, 2007/08 to 2009/10.
(Average tariff Score, Column Percent (percentages may not total 100 due to rounding)

SCQF Level	2007-2008 (i)		2008-2009 (ii)		2009-2010 (iii)	
	Average Tariff Score	Percentage of Leavers	Average Tariff Score	Percentage of Leavers	Average Tariff Score	Percentage of Leavers
No passes at SCQF 3 or better	0	3.4	0	3.0	0	2.6
Standard Grade Foundation/ Access 3 (SCQF 3)	24	2.8	24	3.1	24	2.8
Standard Grade General/ Intermediate 1 (SCQF 4)	99	20.7	98	19.7	98	17.4
Standard Grade Credit/ Intermediate 2 (SCQF 5)	209	27.3	211	26.3	215	26.8
Higher (SCQF 6)	487	32.2	494	32.4	497	34.1
Advanced Higher (SCQF 7)	780	13.7	779	15.5	782	16.2
All leavers	341	56,534	356	53,412	372	54,011

i) 2,310 leavers were excluded on the basis that a robust match to the Pupil Census was not made.
ii) 120 leavers were excluded on the basis that a robust match to the Pupil Census was not made.
iii) 86 leavers were excluded on the basis that a robust match to the Pupil Census was not made.

B Focal Children: Distribution of Universal Tariff Points by Subject Group

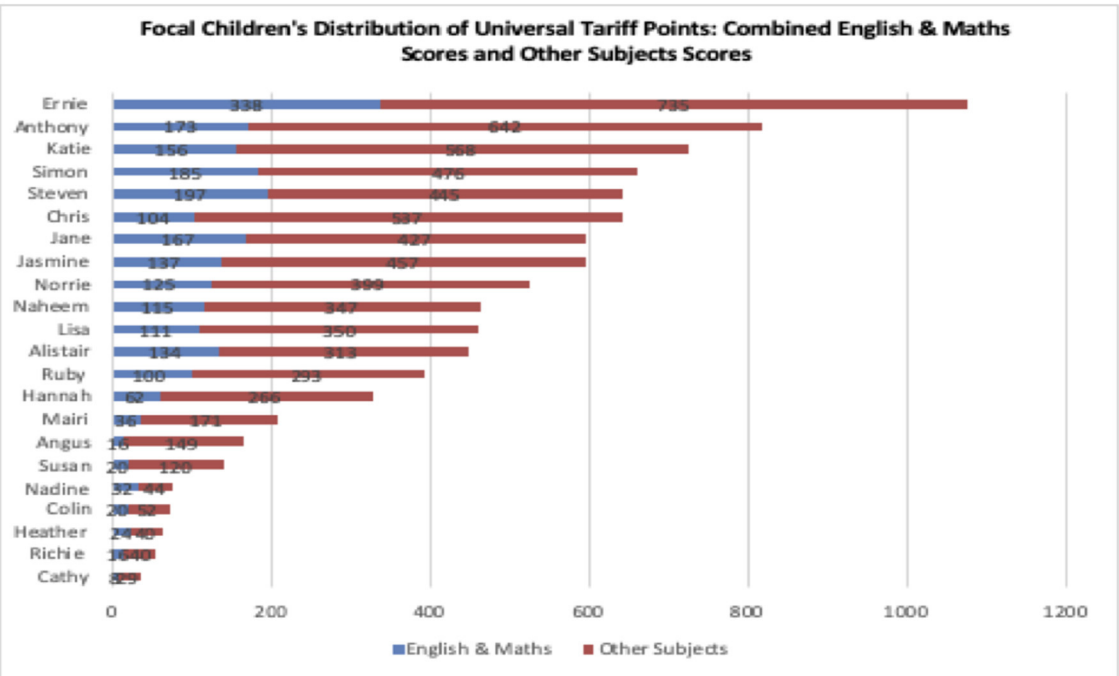


FIGURE 3 | Tariff scores-scottish school leavers and case study group.

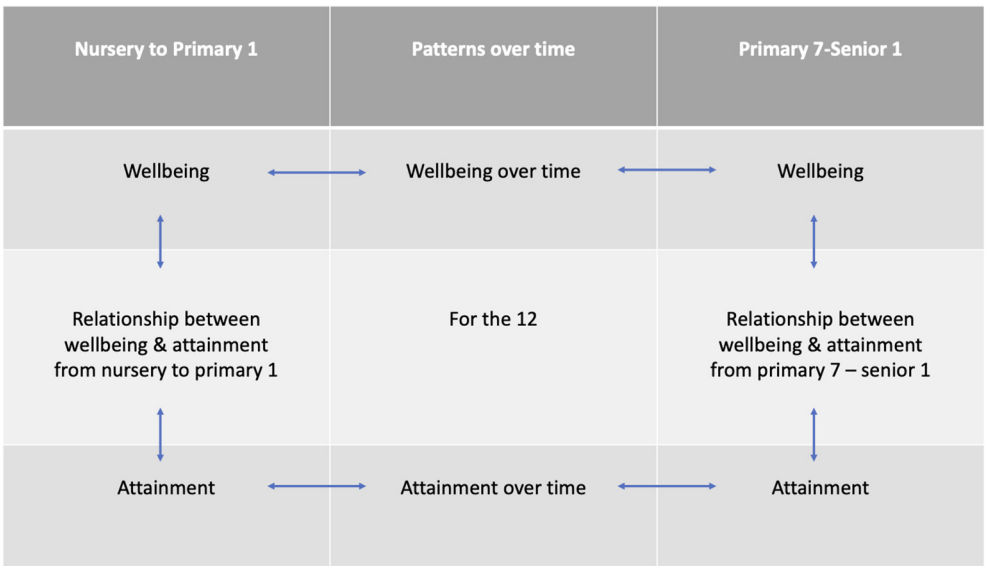


FIGURE 4 | Model of wellbeing and attainment patterns over time.

downward alignments and the more divergent or convergent pathways as addressed in the following discussion.

At the Nursery to Primary 1 transition (**Table 7.1**) 10 of the focal children's trajectories in wellbeing and attainment were aligned: in five of these both wellbeing and attainment improved over the transition whereas five children's wellbeing and attainment both dropped. For a further eight focal children attainment and wellbeing diverges in the move from nursery to Primary 1 and for the remaining four wellbeing and attainment converge: coming closer together over time. In many ways such alignments are the more expected outcome: the literature suggests a relationships between positive wellbeing, engagement and attainment (Upadyaya and Salmela-Aro, 2013; Cadime et al., 2016; Mowat, 2019) and conversely a drop in engagement and wellbeing may herald a drop in attainment. The extent to which this sample of children reflects the peer group, variability is to be expected in attainment and wellbeing at times of transition. Patterns of wellbeing and attainment within and across transitions is shown through sparklines of available evidence in **Table 7**—alignment of wellbeing and attainment within and across Transitions.

At Primary to Secondary transition seven of the 18 children for whom both wellbeing and attainment data are held show consistent patterns across transitions; for five wellbeing and attainment align by primary secondary transition with upward trajectories; for the other six children patterns vary across the two transitions (for six of these children* wellbeing data is round one ACS only). Looking at wellbeing and attainment across transitions it is possible to identify four children whose wellbeing and attainment aligns at both transitions—two downwards (Norrie and Steven), one upwards (Chris) and the fourth (Cathy) mixed. For two (Ruby and Heather) the divergence between wellbeing and attainment is maintained as a pattern through both transitions, while Lisa experiences greater convergence between wellbeing and attainment as a pattern through both transitions. The wellbeing data are incomplete for four children**, however the nature of their attainment is replicated in both transitions, with Naheem and Mairi showing falling attainment and Richie and Susan showing rising attainment over both transitions. For the remaining 12 children there is a mix of divergent to aligned (Colin, Hannah, Jane); aligned to divergent (Katie, Jasmine); divergent to convergent (Simon, Nadine); and convergent to divergent (Ernie) trajectories over the two major transitions. By considering their wellbeing and attainment, separately and together, this sample of children's experience can be embedded in the wider picture of school-learning and accountability of the time as presented in **Figure 3**—Average Tariff Score of School Leavers and Focal Group Tariffs. Finally columns three and four in **Table 7** group the focal children in terms of their attainment quartile. Again alignments are very mixed, suggesting that wellbeing and attainment are but two factors intersecting with transitions in education.

Reflections on the Results Presented

The results presented confirm that homogeneity should never be expected in any group of school pupils or school leavers. Overall this longitudinal study suggested that a "push for sameness" exists in our education systems, perhaps as a way to manage the reality of diversity. This negates the very real differences that exist between children and which merit differentiated approaches if each is to do as well as possible while maintaining their self-respect and sense of belonging (Allen, 2018a,b) in school. Consequently grouping children by characteristics is inevitably going to be a fluid and changing process. In reality individual learning is rarely linear, though in education we have worked hard to present logical sequences of learning and what is to be taught in hierarchies of difficulty. With younger children particularly, this means taking account of an increasing

TABLE 7 | Alignment of wellbeing and attainment: (1) N-P1 by class; (2) N-P1 by attainment groups; (3) P7-S1 by class; (4) P7_S1 by attainment groups.

1)	Briarbank	N-P1
Colin		Wellbeing
Divergent		Attainment
Ruby		Wellbeing
Divergent		Attainment
Katie		Wellbeing
Aligned +ve		Attainment
	Grantown W	
Norrie		Wellbeing
Aligned -ve		Attainment
Chris		Wellbeing
Aligned +ve		Attainment
	Grantown S/C	
Naheem		Wellbeing
Divergent		Attainment
Jasmine		Wellbeing
Aligned -ve		Attainment
Ernie		Wellbeing
Convergent		Attainment
Heather		Wellbeing
Divergent		Attainment
	Hilltop H	
Steven		Wellbeing
Aligned -ve		Attainment
Simon		Wellbeing
Divergent		Attainment
Alisdair		Wellbeing
Convergent		Attainment
Cathy		Wellbeing
Aligned +ve		Attainment
Lisa		Wellbeing
Convergent		Attainment
	Hilltop A	
Anthony		Wellbeing
Aligned +ve		Attainment
Hannah		Wellbeing
Divergent		Attainment
Nadine		Wellbeing
Divergent		Attainment
	Fenton	
Angus		Wellbeing
Convergent		Attainment
Richie		Wellbeing
Aligned -ve		Attainment
Jane		Wellbeing
Divergent		Attainment
Mairi		Wellbeing
Aligned -ve		Attainment
Susan		Wellbeing
Aligned +ve		Attainment

2)	Briarbank	P7-S1
Colin		Wellbeing
Aligned +ve		Attainment
Ruby		Wellbeing
Divergent		Attainment
Katie		Wellbeing
Divergent		Attainment
	Grantown W	
*Norrie	Down	Wellbeing
Aligned -ve		Attainment
Chris		Wellbeing
Aligned +ve		Attainment
	Grantown S/C	
**Naheem	n/a	Wellbeing
		Attainment
Jasmine		Wellbeing
Divergent		Attainment
Ernie		Wellbeing
Divergent		Attainment
*Heather	Up	Wellbeing
Divergent		Attainment
	Hilltop H	
Steven		Wellbeing
Aligned -ve		Attainment
*Simon	Down	Wellbeing
Convergent		Attainment
Alistair		Wellbeing
Aligned +ve		Attainment
Cathy		Wellbeing
Aligned -ve		Attainment
Lisa		Wellbeing
Convergent		Attainment
	Hilltop A	
Anthony		Wellbeing
Convergent		Attainment
*Hannah	Up	Wellbeing
Aligned +ve		Attainment
*Nadine	Down	Wellbeing
Convergent		Attainment
	Fenton	
*Angus	Up	Wellbeing
Aligned +ve		Attainment
**Richie	n/a	Wellbeing
		Attainment
Jane		Wellbeing
Aligned +ve		Attainment
**Mairi	n/a	Wellbeing
		Attainment
**Susan	n/a	Wellbeing
		Attainment

3)	On the Margins	N-P1
Cathy		Wellbeing
Aligned +ve		Attainment
Richie		Wellbeing
Aligned -ve		Attainment
Heather		Wellbeing
Divergent		Attainment
Colin		Wellbeing
Divergent		Attainment
Nadine		Wellbeing
Divergent		Attainment
Susan		Wellbeing
Aligned +ve		Attainment
Angus		Wellbeing
Convergent		Attainment
Mairi		Wellbeing
Aligned -ve		Attainment
	Getting By	
Hannah		Wellbeing
Divergent		Attainment
Ruby		Wellbeing
Divergent		Attainment
Alistair		Wellbeing
Convergent		Attainment
Lisa		Wellbeing
Convergent		Attainment
Naheem		Wellbeing
Divergent		Attainment
	Persevering	
Norrie		Wellbeing
Aligned -ve		Attainment
Jasmine		Wellbeing
Aligned -ve		Attainment
Jane		Wellbeing
Divergent		Attainment
Chris		Wellbeing
Aligned +ve		Attainment
Steven		Wellbeing
Aligned -ve		Attainment
Simon		Wellbeing
Divergent		Attainment
Katie		Wellbeing
Aligned +ve		Attainment
	Flying High	
Anthony		Wellbeing
Aligned +ve		Attainment
Ernie		Wellbeing
Convergent		Attainment

4)	On the Margins	P7-S1
Cathy		Wellbeing
Aligned -ve		Attainment
Richie*	n/a	Wellbeing
up		Attainment
Heather	Up	Wellbeing
Divergent		Attainment
Colin		Wellbeing
Aligned +ve		Attainment
Nadine	Down	Wellbeing
Convergent		Attainment
Susan*	n/a	Wellbeing
up		Attainment
Angus	Up	Wellbeing
Aligned +ve		Attainment
Mairi*	n/a	Wellbeing
up		Attainment
	Getting By	
Hannah		Wellbeing
Aligned +ve		Attainment
Ruby		Wellbeing
Divergent		Attainment
Alisdair		Wellbeing
Aligned +ve		Attainment
Lisa		Wellbeing
Convergent		Attainment
Naheem*	n/a	Wellbeing
down		Attainment
	Persevering	
Norrie	Down	Wellbeing
Aligned -ve		Attainment
Jasmine		Wellbeing
Divergent		Attainment
Jane		Wellbeing
Aligned +ve		Attainment
Chris		Wellbeing
Aligned +ve		Attainment
Steven		Wellbeing
Aligned -ve		Attainment
Simon	Down	Wellbeing
Convergent		Attainment
Katie		Wellbeing
Divergent		Attainment
	Flying High	
Anthony		Wellbeing
Convergent		Attainment
Ernie		Wellbeing
Divergent		Attainment

abstraction in thinking to establish foundations in learning and to continue to build on these throughout school education. To some extent this accounts for the focus on literacy and numeracy as tool subjects through which other learning is made much more accessible. Many variables exist to knock this planning sideways, for example: changes of teacher, changes in pedagogy, grouping on a basis of ability, results, or indeed socially. Consequently in longitudinal study different ways to bunch children together are likely to emerge. One of the ways is presented here, through the following case studies.

Four Case Studies: On the Margins, Getting By, Persevering, and Flying High

For the representative sample of 22 focal children in this study, attainment over their school career, as previously explained, varied by 1006 UPS Tariff points. Grouping on a basis of UPS tariff points quartiles (Q) results in four groups of uneven size—Q1 = eight lower achieving children, Q2 = five low middling; Q3 = seven high middling, and Q4 = two high flyer. Of course attainment is not the only characteristic of these 22 children, nor the only way to group them. A focus on any characteristic, for example wellbeing, post-school destinations, socio-economic status, family social capital, resilience during transition or indeed humour, appearance and gender would all result in different groupings. Grouping by attainment places some children on the lower margins of their year group, some who get by, others who persevere against different odds and some who are high fliers: but these groups only have an academic consistency. As soon as wellbeing, personal dispositions, individual strengths and circumstances and classroom and school contexts are taken into account then diversity becomes apparent in all its glorious differences. One case study from each of these academic quartiles is presented here. The wellbeing and attainment trajectories generated and what they may mean are exemplified through the following case studies which draw on a range of explanatory factors.

Case Study 1—On the Margins

Case Study Trajectories (CST) Diagram 1—"On the Margins"

Cathy attended Nursery School in the mornings and a private nursery in the afternoons, coping with two quite different settings, and the lunchtime commute between them with her grandparents while her parents were at work. Cathy enjoyed her morning nursery more when her friend Laurie was there with her, settling in to a wide range of activities and chatting with other children but nudging Laurie to reply if adults spoke with them. Knowing Laurie was going on to a different school staff were aware this represented a bit of a challenge. Only with her

Case Study Trajectories (CST) Diagram 1: 'On the Margins'
[*Author's note- Vertical axis = standard deviation*]

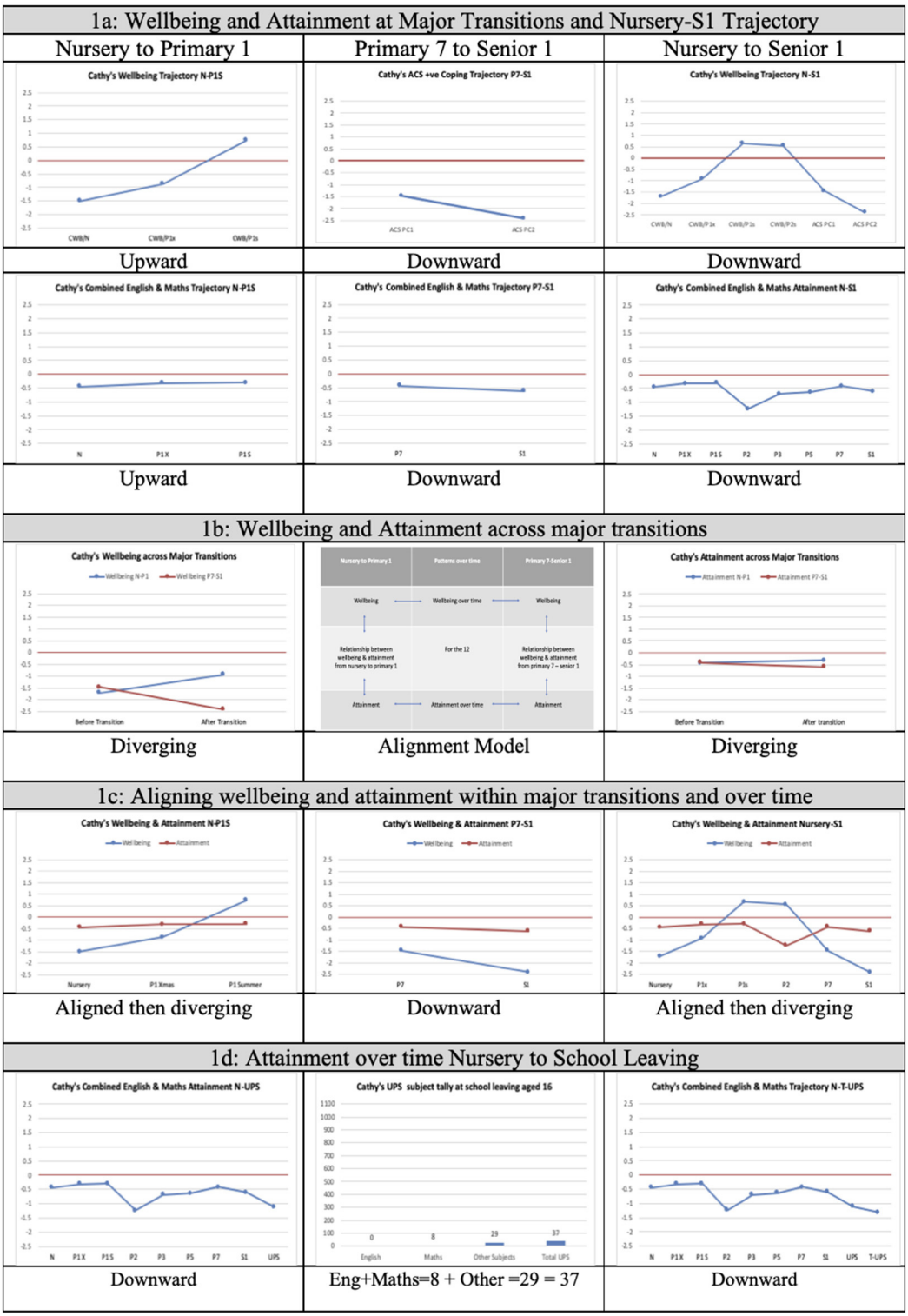


DIAGRAM 1 | Case Study Trajectories (CST) Diagram 1 – 'On the Margins'.

teacher, Mrs. French, was Cathy more forthcoming: with her she participated in storeys and discussion.

With others from her morning nursery which had an overall Early Childhood Environment Rating Scale (ECERS) (Harms et al., 1980, 1998, 2005) score of 6.4, Cathy moved at just over 4 ½ to Hilltop Primary School P1 which was less tuned to younger children (ECERS score 4.3). As in nursery Cathy formed a good relationship with her teacher, finding some security in the increased formality and predictability of a teacher-led approach where child choice was quite limited. Her wellbeing moves from 1.5 standard deviations below the mean in nursery (she herself says later she was happier in her other nursery) to 0.75 above at the end of Primary 1 and then plateaus.

Cathy's self-report ACS score in P7 is little above her wellbeing score in nursery days, and drops further during the transition to secondary when at 11 years 7 months (Case Study Trajectories- CST Ia). She goes to Fernbank Secondary School with the majority of her class, and her capacity to cope becomes non-productive (ACS Round 2). Similarly her slightly upwards attainment trajectory in the move to primary school changes to a downward trajectory in the move to secondary and overall from nursery to S1 (CST1a) (**Diagram 1**). Cathy's Primary 7 teacher talks warmly about her—"*Cathy has a fine sense of humour- she enjoys my jokes. She is very friendly and outgoing but not pushy—she's not a high flier, but is quite confident socially. She will be fine in High School—I can't see her getting in with a bad crowd*." (TI). Cathy's father took on the P7 parental interview: he believed that Cathy would transfer well to secondary, was very positive about her nursery and primary experience, having three ambitions for her secondary education: that Cathy would do well, that she will get on well with others and would hopefully have good teachers. His one concern for secondary was bullying. Cathy attended all of the primary-secondary transitions research group sessions from P7-S2, contributing in a lively way and enjoying the company of others in the group.

Cathy's wellbeing and attainment profiles diverge (CST1b) across both major transitions. An initial upward alignment within the first transition (CST1c) becomes a downward alignment of wellbeing and attainment from P7-S1 as reflected in the full nursery-S1 trajectory. On leaving Secondary school at the end of S4 at 15½, her future destination was recorded as "transfer to another High School?" She leaves Fernbank with no UPS points in English, only 8 UPS points in Maths and 29 in other subjects (CST1d) with an overall UPS score of 37 points. Cathy's own attainment trajectory remains below the mean throughout a 12 years educational journey. For Cathy this is not the end of the school storey, later in S6 she responded by letter and questionnaire that she had been very unhappy in her original secondary school, had been badly bullied, and had left to go to a different school in the neighbouring council area. She concludes "*Going into a new secondary is a big step but when you get there it is fun and easy. I cope with new experiences very well now because of everything that has happened. In the end I did better in my exams than I thought I would. I'm worried about growing up, but at the same time I can't wait. I've applied for a bank job and some college courses: mainly administration. Also I may go to University.*" [Transitions continuation study: S6].

For much of her educational journey and particularly at times of transition, Cathy is quietly at the margins of the school experience. She found relationships with particular teachers supportive and encouraging (nursery, P. 1 and P. 7) and over time became visibly more confident with her peer group, however this proved not to be an easy path until at 15½ she moved to a different secondary school and reported being transformed by the experience.

Case Study 2—Getting By

Case Study Trajectories (CST) Diagram 2—"Getting By"

Ruby lived with her parents nearby Briarbank Nursery: starting there at 3 years 7 months. She was the first of two (later three) children, her father was working, while her mother was at home with the two children. With her nursery classmates Ruby benefited from a well-developed environment, with particular strengths in language and reasoning (7.0), adult-child interaction (6.4), and programme structure (7.0) with an overall ECERS score of 6.0. When Ruby moved to Briarbank Primary at 4 years 7 months, the collaborating nursery and primary 1 teachers saw the value of starting school with a friend (Ladd, 1990) and she was placed beside her slightly older nurturing friend Katie from nursery. Ruby was a novice in the school classroom, although she apprenticed herself to Katie (Rogoff, 1990) as had happened in nursery and Katie continued to scaffold Ruby's learning. Ruby took some time to understand and play the role of a school child, in contrast to Katie who was firmly school child from the start.

Every morning in Briarbank P.1 began with a "morning workshop" —a time when children could choose how to spend their time. The ECERS score was, like the nursery, an overall 6.0, with a continuity of quality across the same three dimensions of language and reasoning (7.0), adult-child interaction (7.0), and programme structure (7.0). The nursery teacher and her primary colleague had visited each other's classrooms, taken time to get to know each other and had shared information about the incoming children.

By Primary 7 Ruby was still friendly with Katie, she had developed a great sense of humour and together they undertook the school video tour (ST.1) element of the study. Her P.7 teacher wasn't worried about Ruby's move to secondary (TI.1), she found her a "*very bright, cheerful little girl.*" In school work, her strengths were her language work, with good spelling and a good imagination for storey writing. Ruby's general knowledge was noted to be very good (T1.2), and although capable in Maths, she lacked a bit of confidence and was reported as "*tending to sit back and not push herself.*" Similarly there had been letters home about the importance of getting homework done: her teacher reported that "*she can, but doesn't: sometimes homework is incomplete.*" At 11 years 7 months she started with a number of her classmates at the very big Briarfield Secondary School. When completing the Adolescent Coping Scale either side of transitions to school Ruby rates herself in general terms as a productive coper, solving issues herself or in reference to others.

At each transition Ruby's wellbeing initially improved (CST 2a) (**Diagram 2**) though in early primary it had dropped by the end of the school year, whereas her attainment dropped on school start and rose by the school year end. Despite such fluctuations

Case Study Trajectories Diagram 2 - 'Getting By'

[*Author's note- Vertical axis = standard deviation*]

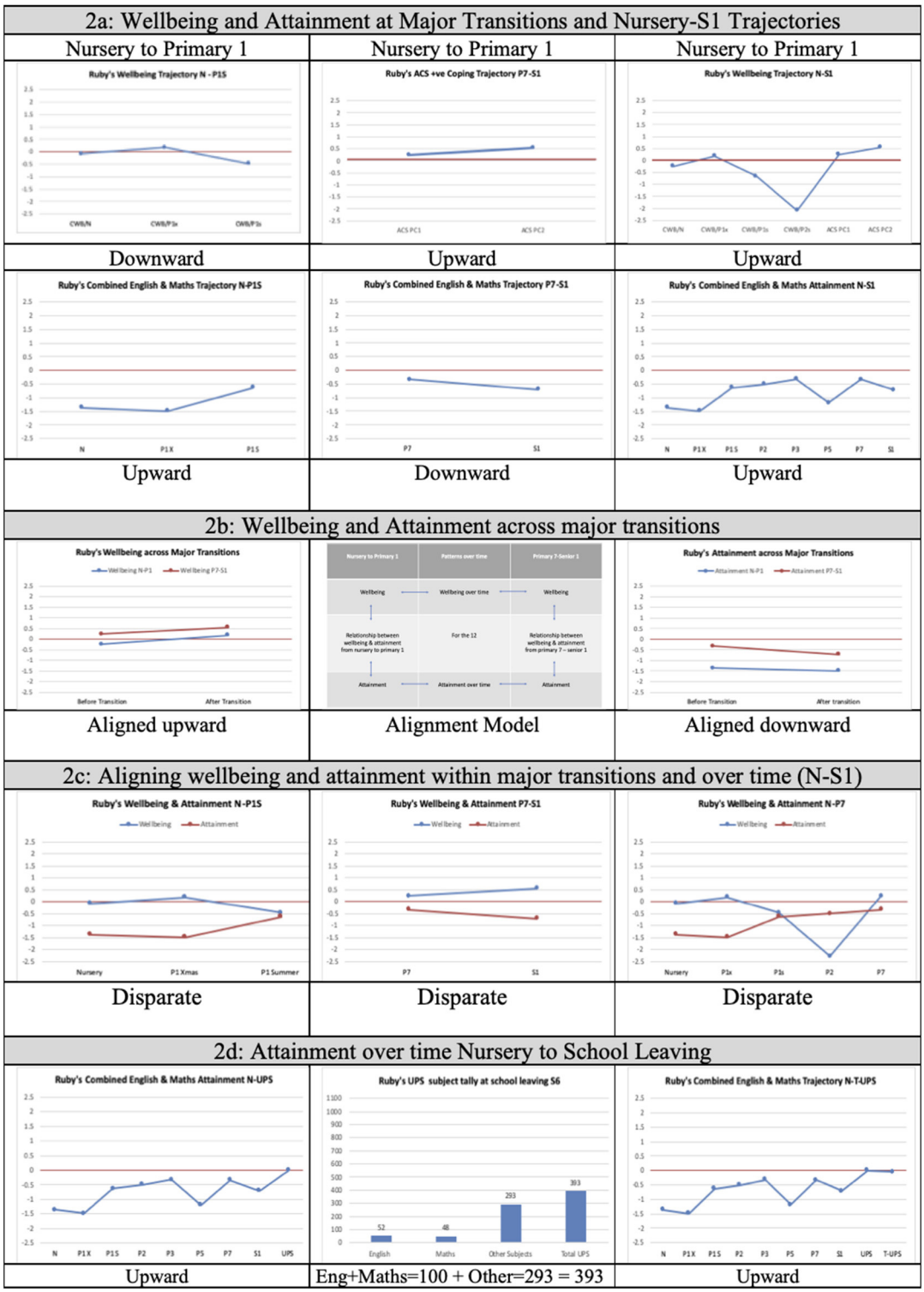


DIAGRAM 2 | Case Study Trajectories (CST) Diagram 2 – 'Getting By'.

wellbeing and attainment went upwards overall in the years from nursery to senior 1 with wellbeing (upward) and attainment (downward) consistently across the two major transitions (CST 2b), but quite disparate when considered within major transitions (CST 2c). Overall she achieved an upward attainment trajectory in her 14 years educational journey (CST 2d). Her overall attainment in relation to the rest of the focal group is low (2nd attainment quartile) but it is a personal upwards trajectory which at 393 T-UPS is slightly above the national average for her year (**Table 5**). Ruby stayed on all through school, leaving at the end of S6. One third ($n = 45$) of the cohort ($n = 150$) were in the youngest quartile on starting school—Ruby was among the very youngest of this group and there is evidence in her trajectory through school that, although she "grew into herself" as a warm, funny and engaging person, school was always a bit of an effort: her attainment and wellbeing trajectories place her in the "getting by" quartile.

Post school she worked, but planned to go back to study with the intention of improving her grades. Her case raises many questions about the timing of school start which are addressed in the discussion, she maintained her sunny personality throughout and this outlook helped her to "get by" —it is worth reflecting on whether she might have had a different educational journey had she started school the following year. Ruby's combined English and Maths attainment trajectory shows progress over time. She had a certain happy-go-lucky approach to life and to school: "Getting By" characterises her approach accurately.

Case Study 3—Persevering

Case Study Trajectories (CST) Diagram 3—"Persevering"

Steven had a happy year at Greenbank Nursery School. He was 4½ at school start when he moved on to Hilltop Primary School with numbers of others from his nursery, and later with most of the class group to Fernbank Secondary at 11½, continuing on until S6. He was the first of two children, his mother was at home with the baby and his father worked fulltime. A cheery wee boy, Steven had been a very premature baby and was currently going to speech and language therapy. Although Steven's comprehension was good and he was imaginative in his play, in nursery he struggled to have people understand what he was trying to say, but this didn't seem in any way to intrude on his relationships with others where he engaged easily and was particularly keen on block play, creating circuits and obstacle courses with other boys in their self-formed groups often outside. His parents were vexed about what would be right for Steven and considered whether he would be well-served by his entitlement to a further year in nursery and how he might cope in primary school. They took the decision for Steven to start school with his nursery group, though he was just 4½, feeling the nursery supported and prompted their decision.

The tremendous nursery choice, range of experiences and freedom of movement was not replicated in primary school: apart from lunchtime the P1 children only left the classroom to go to the gym, the toilet or out at playtime. In P1 a sedentary uniformity was built into the day and yet because of their different starting points, the inexperience of their teacher in P1 and the children's dispositions, each experienced it differently. At Greenbank the staff were strong on interaction (6.0), language and reasoning (7.0) (ECERS overall 6.4) and this supported Steven well. In Hilltop P1 interaction (4.8) and language and reasoning (4.0) (ECERS overall 4.3) was much less engaging. Steven's poor articulation remained a concern and it was thought it might be symptomatic of other issues so it became important to explore his engagement with print and capacity to interpret meaning. The potential for early identification was taken seriously in Hilltop Primary and turned out to be a lasting benefit to Steven who was diagnosed by a specialist learning support teacher as dyslexic.

During both the transition to primary school and the subsequent transition to secondary school Steven's wellbeing and attainment dropped (CST3a) (**Diagram 3**). His initial dip in wellbeing on starting primary began to climb by the end of the school year, but Steven stayed below the focal group mean until P7 when his coping score rose to 1.25 standard deviations above the mean before dropping by 2.75 standard deviations on transition to secondary, dipping 1.5 standard deviations below the focal group mean. Although in P7 he reports a loss of confidence and worries about whether he will be able to keep up in secondary school, he is a productive coper. Steven's teacher (T1) described him as a quiet diligent boy who was well-behaved and polite. Finding he tries, she did not see him as a high flyer.

During self-completion of the Adolescent Coping scale he focuses on being dyslexic and what this means for transition to secondary: as a problem solver Steven's main strategy is to make sure people know. Across the two major transitions his wellbeing and attainment both drop (CST3b) but for attainment this is a very slight drop as he moves from Nursery to P1. Aligning wellbeing and attainment in relation to each other (CST3c) within each transition at P1 Steven's combined trajectory in English and Maths diverge, but move closer together once transition has passed, while at P7-S1 both wellbeing and attainment fall.

Steven's persevering disposition and warm personality serve him well and by school leaving in S6 his combined attainment in English and Maths had moved from being a consistently below average profile to just over one standard deviation above the mean for the focal group. When all other subjects are factored in, in relation to the group he maintains a score one standard deviation above the mean (CST3d): his combined English and Maths score sits at 197 UPS, he earns 445 UPS for his other subjects resulting in a total UPS score of 642, above the national average tariff score of 497 for those leaving with Highers and resulting in an offer for university: his perseverance pays off.

Case Study 4—Flying High

Case Study Trajectories (CST) Diagram 4—"Flying High"

Ernie was the older of two children, at the time his mother was at home caring for the baby and father was working full time. He was 5 years 1 month starting school, after a year of part-time nursery at Valley Nursery School where he involved himself in all available learning opportunities. Ernie particularly enjoyed being part of the small group with his key member of staff and contributed well at storey times and in group and self-chosen activities. In the weeks before nursery ended he spent some time every day making a Mr. Men book, he played orally with words

Case Study Trajectories Diagram 3 - 'Persevering'

[*Author's note- Vertical axis = standard deviation*]

DIAGRAM 3 | Case Study Trajectories (CST) Diagram 3 – 'Persevering'.

Case Study Trajectories Diagram 4 - 'Doing Well'
[*Author's note- Vertical axis = standard deviation*]

DIAGRAM 4 | Case Study Trajectories (CST) Diagram 4 – 'Flying High'.

and numbers, and had a special relationship with Mollie who was his best friend. Mollie was younger, but an active learner, and she often challenged Ernie's ideas as they enjoyed playing together and negotiating what they would do next. Ernie was a particularly numerate child, evidenced by a skill and speed in addition and subtraction, his knowledge of number word sequences and his capacity to play with number ideas and pose questions (home based assessment interview). On the ECERS profile Ernie's nursery had a higher average score in June (6.3) than his new primary class did in September (4.7).

He and Mollie were the only children from Valley Nursery School going to Grantown Primary School but unlike Ruby in Case Study 1, he was separated from Mollie who was placed in the parallel P1 class on a basis of age. For a while he looked lost and displaced and sought reassurance: constantly checking everything he was asked to do, and although this was recorded in his Christmas time summary, it was not addressed in any obvious way by his teachers. He brought this mathematical know-how to school but this was not picked up and he simply conformed and completed the Maths workbooks of the time with great ease and without question. In P1 group meetings with the researcher at the end of his first year in school, faced with a choice about what to do, Ernie said "Well I'd really like to draw a train going through a tunnel, but it's a bit hard, so I'll just do sums instead." He proceeded to write challenging numerical problems, talk about them and solve them, going on to achieve his drawing challenge as well. Ernie moved school in P4 as the family had a house move. He continued in the study and at the primary-secondary transition he completed holiday diaries and a Transitions Journal that provided a detailed account of the summer before school, recording that he was excited, anxious and curious about what Secondary School would be like, in discussing the move with friends he confided that his friends said "*It'll be fun and they can't wait. They don't say what they are worried about.*" Thinking about himself as a learner Ernie says "*I think I am a good learner and I learn quickly. When I am learning something new I am curious about it and look forward to it*." He continued with the study for the lifetime of the primary-secondary transitions group.

Ernie's early learning in nursery went at a gentle pace, he developed relationships but lacked confidence despite a continuously upward attainment trajectory. There are visible dips and recorded anxieties around transitions, as shown in the two rounds of the ACS gauging coping strategies: in round one at the end of P7 he comes out as a coper who problem solves and refers to others as and when needed. By the time he has navigated the transition to school, he has withdrawn from seeking so much help from others, still problem solves but is inclining to a less productive approach.

Throughout his educational journey Ernie's wellbeing fluctuates, rising in both early primary and early secondary once transition is accomplished (CST 4a) (**Diagram 4**), while his attainment drops at each major transition although remaining above the mean (CST 4a). The plotted wellbeing and attainment trajectories across major transitions (CST4b) are disparate and when considered together at major transitions do not align (CST4c) with wellbeing downwards overall in the move from nursery to primary 1, disparate during the primary-secondary transition and fluctuating over the six timepoints assessed from Nursery to Senior 1. Despite these odds Ernie's combined attainment (CST4d) in Literacy/English and Numeracy/Maths from nursery until school leaving starts at the mean and apart from the dips in attainment recorded in both the P1 and S1 assessments, rises 2.5 points above the mean. Ernie's Universal Points Scores in English and Maths (338), other subjects taken (735), and overall total (1,043) are each the highest among the focal group children, and are 25% above Scottish national averages of the time for those leaving with Advanced Higher. In comparison to his recorded starting point in nursery he flew high by the end of his school career, exceeding expectations. His destination notes record a place at University.

DISCUSSION

On the Margins, Persevering, Getting By, or Flying High?

By considering both quantitative and qualitative data it has been possible to present the focal children's educational journeys through standardised trajectories of attainment and wellbeing illustrated by four case studies. While the four examples given are representative of four attainment groupings, it is the variability of their profiles and common ground between them that raises questions about the relationships between wellbeing, attainment, and transitions. Individual person characteristics such as reticence, humour, diligence, and anxiety contribute to how individuals experience their world. Bronfenbrenner categorises person characteristics into demand (e.g., age or gender), resource (e.g., past experiences, ability, and material resources such as family's economic situation), and force characteristics (e.g., temperament, dispositions) (Bronfenbrenner and Morris, 1998). Such characteristics also influence the interactions between individuals, including the proximal processes involved in the social practices of learning and teaching in classroom contexts. Such characteristics may be predictive or indeed protective. Could Cathy's quiet disposition, ways of coping and need for affirmation through teachers and friends have been predictive of the bullying which in her view pushed her further to the margins than she could tolerate? Might a later school start (Graue et al., 2003; Dee and Sievertsen, 2015) have been helpful for each of Cathy, Ruby and Steven who were equally young starting school? Ruby gets by through humour, positive connections between school environments, sustained peer scaffolding through friendship, teachers who took time to know her well and the resulting personal agency. For Steven, his diligence and perseverance in the face of learning challenges and the self-awareness that brought, combined with steady friendships and the school "know-how" he acquired, to help him succeed against the odds. For Ernie, he seems to succeed despite school: a highly numerate child with capacities that put him in a small percentage of children who are developing the skills he was by age six (Bobis et al., 2005), yet this was not recognised by his teachers. For Ernie the anxiety of not being recognised as a learner early on changed over time and by transition to secondary his knowledge of himself as a learner sustains and supports him as a high achiever.

Variability in Outcomes Influenced by Person, Processes, and Educational Contexts Over Time

The nature of each person's journey through school may vary considerably from her/his peers: this variation may be interpreted through other factors, e.g., relationships, school environment, individual choice, individual characteristics, family dynamics and their relationship with education, age, gender, ethnicity, and how each informs a sense of self and identity as a learner. Given such variation it is reasonable to think that the ways in which children make the transition from early childhood into full-time schooling is likely to have long lasting importance, and may be mirrored in their next major vertical transition: from primary to secondary schooling. Drawing from the literature, in particular from longitudinal studies, such factors indicate four major explanatory themes have a role to play in the study and understanding of transitions: overall attainment, individual characteristics, environment, and relationships. The nature of classroom environments (Allen, 2018c, part 3), school climate (Rudashill et al., 2018) and pedagogical wellbeing (Pyhältö et al., 2010) during these critical educational transitions also emerge as influential over time.

School Transitions—Explanatory Factors

It is likely there are many variables that can affect an individual's journey through education and their attainment up to the point of school leaving: these may include, for example, family aspiration, age of school start, teacher expectation, individual capacity, the quality of pre-school education and its capacity to offer the best possible start, the quality of primary and secondary education, the home learning environment, the ways in which relationships support learning, friendships, engagement in school life, adaptation to the different culture of the school, the learning environments, public policy, curriculum reform and its enactment in school, transitions processes, and significant others. The assertion in the literature of the time when the informing study began, was that a good first transition set children up for later school success and positive outcomes (Rimm-Kaufman and Pianta, 2000; Pianta and Kraft-Sayre, 2003). This raises the question of what is understood by positive outcomes. These attainment and wellbeing findings have therefore been complemented by a biographical approach to school experiences and outcome expectations through surfacing the focal children's early learning trajectories, their assessment profiles throughout the 14 years of study, their wellbeing profiles from nursery through to secondary education and their later biographical accounts, in the identification of key explanatory themes in the transitions journey.

> "Without studying the journey, we cannot identify the barriers, the hazards thrown across the route, the signposts, sure or faulty, clear or misleading, and the baggage that has been carried from early in the trip or acquired along the way. Policy-makers are expected to make a difference. That means understanding the processes that make a difference. And that requires a video, not a snapshot."
>
> (OECD, 2007, *Quality and Equity of Schooling in Scotland* p. 155).

The Role of Wellbeing and Attainment Measures as Proxies for School Success: Too Narrow a Concept?

Collecting data on children's academic progress along this journey provides one way of showing, through attainment over time, if there are specific times or situations or personal circumstances that influence this attainment. The core subjects of Literacy/English and Numeracy/Maths, which are normally studied by all children in some form throughout their mandatory school experience, serve as a way of establishing the nature of this journey and eventual academic outcomes upon school leaving. The Literacy/English and Numeracy/Maths attainment data presented in this paper are therefore justified as the consistent academic threads for most children all the way through the school system. It has been argued that to fully understand the significance of such outcomes and the different contributions to them, the children's attainment trajectories over time need to be understood in terms of the varied journeys toward such outcomes and in the wider context of systems, achievements and experiences. The range of school outcomes among the focal children parallel the range of outcomes nationally at the time of the study (**Figure 3**, Average Tariff Score of School Leavers, adapted from Table 1, p. 5, Scottish Government, 2011, p. 5).

Although English and Maths are a core element of every child's school experience in Scotland, and are arguably the tools required to unlock all learning, for many these are not the preferred subjects. Even where individuals have limited success in these subjects (**Figure 2**) they may shine in other areas of interest (e.g., Hannah in art and Chris in music). English and Maths are proxies for school success, but are too narrow a proxy.

Study Limitations

Longitudinal study design most often involves teams of funded researchers with the resource to embrace elements of study design such as repeat measures at pre-determined periods of time. That the present study is more organic in nature could be understood as both a limitation or a strength. Further the volume of data collected over time may generate too complex a data set, demanding some process of data reduction or synthesis or meta-analysis. It has been argued (Dunlop, 2020a) that a mixed method approach informed by a bio-socio-ecological model suits well for longitudinal research into educational transitions. A strength of the present study is that the same group of participants is involved at both the major transitions studied, and longitudinally through education, however as the cohort is small, then it is less easy or appropriate to draw inferences (Allen and Teacher Workload Advisory Group, 2018) despite the use of stratified sampling. Another challenge was to bring together disparate forms of data and to argue the complementarity of approaches: for example to record children's attainment over time a balance of teacher assessment and standardised test scores was used, while for wellbeing over time, an instrument focusing on wellbeing in early childhood was complemented by an instrument focusing on

coping mechanisms, not directly matched but argued to be a good and age appropriate proxy for wellbeing in adolescence.

Finally the intimate knowledge held of a group of children, by a single researcher, could be seen as highly subjective. This has been acknowledged, and in the main study robust attempts to balance the potential of researcher subjectivity by the perspectives of children, parents and educators stands to strengthen the reliability of the study design, while embracing the insights from intersubjective work and addressing issues of trustworthiness, generally understood in terms of credibility, transferability, confirmability and dependability (Shenton, 2004).

The Impossibility of Separating Transitions Experience From Wellbeing and Attainment

Presentation of data and findings from other aspects of the study (Dunlop, 2020a), evidenced in the sample case studies included here, combine with these attainment data to show the role of changes at times of transition and whether transitions are implicated in later school success. Attempts to close gaps in attainment must stretch far wider than notions of academic success tied to improving English and Maths scores. Politicians across the UK have invested in for example Pupil Equity Funding (Scotland), Pupils Premiums (England), bravely hoping to close the attainment gap, but such approaches can fall short of taking individual difference, cultural context, relationships and life experience into account, failing to engage with and diverting from what Becky Allen calls "things that might work somewhat better" (Allen, 2018). The present study shows the individual variability of the educational experience despite the common affordances of education. In asking what constitutes a good transition in education and whether it exists, the potential of a focus on wellbeing and attainment during transitions aims to help understand that variability of experience and its positive or negative contribution. In readying children for transitions an opportunity is opened up to create supportive networks and relationships founded on trusting partnerships between school sectors and with children and families, with the aim of bridging children's transitions through education in ways that enhance wellbeing and consequently have the potential to impact on attainment (Dunlop, 2020b).

> "Vital to all of what we aspire to as a nation is our commitment—my personal commitment—to raise the bar and close the gap in education. All children and young people, whatever their background or circumstances, deserve the same chance to reach their full potential."

(Foreword by the First Minister: Scottish Government, 2017, p. 4).

This must translate into the refreshed curriculum narrative in Scotland of "understanding the learners," "knowing the big ideas," "being clear on practical approaches," "using meaningful learning networks," and "knowing your own learning and support needs" (The Scottish Government, 2019a).

This paper has highlighted the gaps experienced by children as they move sectors in education, revealing highs and dips in wellbeing and attainment, the value of friendships, the emphasis made in practice on continuity and the similarities between first and subsequent educational transitions, as sites for change. As such, this article makes an important contribution toward understanding whether the nature of a child's early educational transitions has any bearing on subsequent transitions, wellbeing, attainment and school leaving outcomes.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by School of Education Ethics Committee University of Strathclyde. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

AUTHOR'S NOTE

Confidentiality

All names used in this article are fictitious. There are no direct or indirect identifiers of individuals, teachers or schools and no locations are given. Permission for academic publication (e.g., reports, journal articles, book chapters) was included in institutional ethical approval and parental and participant informed consents undertaken at four time points as described in this article.

Key to Case Study Abbreviations

CST = Case Study Trajectories.
TI = Teacher Interview.
ST = School Tour.

The Scottish Education System

In Scotland all children are now entitled to 2 years of free Early Learning and Childcare before school (1 year at the time of this study), 7 years of Primary (P) Education and 6 years of Secondary (S) Education. Each of the Primary School Years is labelled as "P" and in secondary school as "S." P1 is the first class of Primary School, P7 denotes the final year in Primary School. S1 is the first year of Secondary Education. The 11 years from P1 to S4 are compulsory.

AUTHOR CONTRIBUTIONS

A-WD was the sole author of this paper and conducted the longitudinal study informing this article.

ACKNOWLEDGEMENTS

The author wishes to warmly acknowledge the young people who as nursery, primary, and secondary school children participated in this study. In thanking them for making this study possible, thanks are also extended to their families and educators.

REFERENCES

Allen, B. (2018a). *The Pupil Premium is Not Working (Part I): Do Not Measure Attainment Gaps*. Available online at: https://rebeccaallen.co.uk/2018/09/10/the-pupil-premium-is-not-working/

Allen, B. (2018b). *The Pupil Premium is Not Working (Part II): Reporting Requirements Drive Short-Term, Interventionist Behavior*. Available online at: https://rebeccaallen.co.uk/2018/09/11/the-pupil-premium-is-not-working-part-ii/

Allen, B. (2018c). *The Pupil Premium is Not Working (Part III): Can Within-Classroom Inequalities Ever be Closed?* Available online at: https://rebeccaallen.co.uk/2018/09/13/the-pupil-premium-is-not-working-part-iii/

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., and Waters,. L. (2018). What schools need to know about fostering school belonging: a meta-analysis. *Educ. Psychol. Rev.* 30, 1–34. doi: 10.1007/s10648-016-9389-8

Allen, R. (2018). *Pupil Premium Blog*. Available online at: https://rebeccaallen.co.uk

Allen, R., and Teacher Workload Advisory Group (2018). *Making Data Work*. Report of the Teacher Workload Advisory Group. London: Department for Education.

Blaisdell, C., Arnott, L., and Wall, K. (2019). Look who's talking: using creative, playful arts-based methods in research with young children. *J. Early Childh. Res.* 17, 14–31. doi: 10.1177/1476718X18808816

Bobis, J., Clarke, B., Clarke, D., Thomas, G., Wright, B., Young-Loveridge, J., et al. (2005). Supporting teachers in the development of young children's mathematical thinking: three large case studies. *Math. Educ. Res. J.* 16, 27–57. doi: 10.1007/BF03217400

Bronfenbrenner, U. (1989). Ecological systems theory. *Ann. Child Dev.* 6, 187–249. Republished in Vasta. R. (ed.). (1992). *Six Theories of Child Development: Revised Formulations and Current Issues*. London: Jessica Kingsley.

Bronfenbrenner, U. (2005). *Making Human Beings Human: Bioecological Perspectives on Human Development*. London: Sage Publications Ltd.

Bronfenbrenner, U., and Morris, P. A. (1998). "The ecology of developmental processes," in *Handbook of Child Psychology, Vol. 1: Theoretical Models of Human Development, 5th Edn*, eds W. Damon and R. M. Lerner (New York, NY: Wiley), 993–1023.

Cadime, I., Marques Pinto, A., Lima, S., Rego, S., Pereira, J., and Ribeiro, I. (2016). Wellbeing and academic achievement in secondary school pupils: the unique effects of burnout and engagement. *J. Adolesc.* 53, 169–179. doi: 10.1016/j.adolescence.2016.10.003

Clark, A. (2004). "The mosaic approach and research with young children," *in The Reality of Research with Children and Young People, eds V. Lewis, M. Kellet, C. Robinson, S. Fraser, and S. Ding (London, UK: Sage),* 142–161.

Congreve, E., and McCormick, J. (2018). *Poverty in Scotland 2018*. Available online at: https://www.jrf.org.uk/report/poverty-scotland-2018 (accessed June 2019).

Cowan, P. A. (1991). *The Family Context of Parenting in Children's Adaptation to Elementary School*. Manwah, NJ; London: Lawrence Erlbaum.

Dee, T. S., and Sievertsen, H. H. (2015). *The Gift of Time: Starting School Age and Mental Health*. Working Paper 21610. Cambridge: MASS: National Bureau of Economic Research. Available online at: http://www.nber.org/papers/w21610

Dockett, S., Perry, B., and Kearney, E. (2013). Promoting children's informed assent in research participation. *Int. J. Qualit. Stud. Educ.* 26, 802–828. doi: 10.1080/09518398.2012.666289

Du, H., King, R. B., and Chi, P. (2017). Self-esteem and subjective wellbeing revisited: the roles of personal, relational, and collective self-esteem. *PLoS ONE* 12:e0183958. doi: 10.1371/journal.pone.0183958

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., et al. (2007). School readiness and later achievement. *Dev. Psychol.* 43, 1428–1446. doi: 10.1037/0012-1649.43.6.1428

Dunlop, A.-W. (2020a). *Navigating Educational* Journeys: *Scottish Educational Transitions Over Time*. Unpublished Report. University of Strathclyde.

Dunlop, A.-W. (2020b). "Creating transition networks to enhance children's wellbeing and attainment during key educational transitions: reconceptualising transitions as tools for change [conference paper accepted following peer review] Educational Research (Re)connecting Communities," in *ECER 2020 Conference* (Glasgow, Scotland).

Dunlop, A.-W. (2021). "Narratives of transition over time: a long-longitudinal qualitative study," in *The Bloomsbury Handbook of Early Childhood Transitions Research*, eds A. W. Dunlop, S. A. Peters, and S. L. Kagan (London, UK: Bloomsbury).

Entwisle, D. R., Alexander, K. L., and Steffel Olson, L. (2005). First grade and educational attainment by age 22: a new story. *Am. J. Sociol.* 110, 1458–1502. doi: 10.1086/428444

Evans, D., Boriello, G. A., and Field, A. P. (2018). A review of the academic and psychological impact of the transitions to secondary education. *Front. Psychol.* 9:1482. doi: 10.3389/fpsyg.2018.01482

Frydenberg, E. (2017). *Coping and the Challenge of Resilience*. London, UK: Palgrave Macmillan. doi: 10.1057/978-1-137-56924-0

Frydenberg, E., and Lewis', R. (1993). *The Adolescent Coping Scale: Administrator's Manual*. Melbourne: Australian Council for Educational Research.

Frydenberg, E., and Lewis', R. (2000). Teaching coping to adolescents: when and to whom? *Am. Educ. Res. J.* 37, 727–745. doi: 10.3102/00028312037003727

Galton, M., Gray, J., and Rudduck, J. (1999). *The Impact of School Transitions and Transfers on Pupil Progress and Attainment*. London, UK: Department for Education and Employment.

Galton, M., Gray, J., and Rudduck, J. (2003). *Transfers and Transitions in the Middle Years of Schooling (7-14): Continuities and Discontinuities in Learning*. DfES Research Report No 443. Available online at: http://dera.ioe.ac.uk/5256/1/RR443.pdf

Gasper, J., DeLuca, S., and Estacion, A. (2012). Switching schools revisiting the relationship between school mobility and high school dropout. *Am. Educ. Res. J.* 49, 487–519. doi: 10.3102/0002831211415250

Graham, A., and Fitzgerald, R. (2011). Supporting children's social and emotional wellbeing: does 'Having a Say' matter? *Children Soc.* 25, 447–457. doi: 10.1111/j.1099-0860.2010.00295.x

Graue, M. E., Kroeger, J., and Brown., C. (2003). The gift of time: enactments of developmental thought in early childhood practice. *Early Childh. Res. Pract.* 5. Available online at: http://ecrp.uiuc.edu/v5n1/graue.html

Grigg, J. (2012). School enrollment changes and student achievement growth: a case study in educational disruption and continuity. *Sociol. Educ.* 85, 388–404. doi: 10.1177/0038040712441374

Harms, T., Clifford, R. M., and Cryer, D. (1980). *Early Childhood Environment Rating Scale*. New York, NY: Teachers College Press.

Harms, T., Clifford, R. M., and Cryer, D. (1998). *Early Childhood Environment Rating Scale*. Revised Edition. New York, NY: Teachers College Press.

Harms, T., Clifford, R. M., and Cryer, D. (2005). *Early Childhood Environment Rating Scale – Revised Edition*. New York, NY: Teachers College Press.

HMIe (2006). *Ensuring Effective Transitions.* Livingston: Her Majesty's Inspectorate of Education (HMIe) Guide.

Huxley, L., Freeman, E., and Frydenberg, E. (2004). "Teaching coping skills: implications for practice," in *A paper presented at AARE Conference (Melbourne, Australia).*

Jindal-Snape, D., Cantali, D., MacGillivray, S., and Hannah, E. (2019). *Primary-Secondary Transitions: A Systematic Literature Review*. Edinburgh: Scottish Government Social Research.

Kagan, S. L., and Neuman, M. (1998). Lessons from three decades of transitions research. *Element. School J.* 98, 365–379. doi: 10.1086/461902

Ladd, G. W. (1990). Having Friends, keeping friends, making friends, and being liked by peers in the classroom: predictors of children's early school adjustment. *Child Dev.* 61, 1081–1100. doi: 10.2307/1130877

Laevers, F. (1994). *Leuven Involvement Scale for Young Children (LIS-YC)*. Leuven: EXE Project.

Laevers, F. (2000). Forward to basics! *deep-level-learning and the experiential approach early years. Int. J. Res. Dev.* 20, 20–29. doi: 10.1080/0957514000200203

Laevers, F. (2015). *Making Care and Education More Effective Through Wellbeing and Involvement*. An introduction to Experiential Education. University of Leuven: Research Centre for Experiential Education.

Laevers, F., Vandenbussche, E., Kog, M., and Depondt, L. (1997). *A Process-Oriented Child Monitoring System for Young Children*. Experiential Education Series, no.2. Leuven: Centre for Experiential Education.

Langenkamp, A. G. (2011). Effects of educational transitions on students' academic trajectory: a life course perspective. *Sociol. Perspect.* 54, 497–520. doi: 10.1525/sop.2011.54.4.497

Langenkamp, A. G., and Carbonaro, W. (2018). How school socioeconomic status affects achievement growth across school transitions in early educational careers. *Sociol. Educ.* 91, 358–378. doi: 10.1177/0038040718802257

Lester, L., and Cross, D. (2015). The relationship between school climate and mental and emotional wellbeing over the transition from primary to secondary school. *Psychol. Wellbeing* 5:9. doi: 10.1186/s13612-015-0037-8

Lincoln, Y. S. (2010). "What a Long, Strange Trip It's Been...": twenty-five years of qualitative and new paradigm research. *Qual. Inq.* 16, 3–9. doi: 10.1177/1077800409349754

Lippman, L. H., Anderson Moore, K., and McIntosh, H. (2009). *Positive Indicators of Child wellbeing: A Conceptual Framework, Measures and Methodological Issues*. Innocenti Working Paper No. 2009-21. Florence: UNICEF Innocenti Research Centre.

Little, M. H., Cohen-Vogel, L., and Curran, F. C. (2016). *Facilitating the Transition to Kindergarten: What ECLS-K Date Tell Us about School Practices Then and Now*. AERA Open. doi: 10.1177/2332858416655766

Magnuson, K., Duncan, G. J., Lee, K. T. H., and Metzger, M. W. (2016). Early school adjustment and educational attainment. *Am. Educ. Res. J.* 53, 1198–1228. doi: 10.3102/0002831216634658

Mashford-Scott, A., Church, A., and Tayler, C. (2012). Seeking children's perspectives on their wellbeing in early childhood settings. *Int. J. Early Childh.* 44, 231–247. doi: 10.1007/s13158-012-0069-7

McDermott, P. A., Watkins, M. W., Rovine, M. J., and Rikoon, S. H. (2013). Assessing changes in socioemotional adjustment across early school transitions – new National scales for children at risk. *J. School Psychology* 51, 97–115. doi: 10.1016/j.jsp.2012.10.002

McLellan, R., and Galton, M. (2015). *The Impact of Primary-Secondary Transition on Students' Wellbeing*. Cambridge: University of Cambridge.

McLeod, G. F. H., Horwood, L. J., Boden, J. M., and Fergusson, D. M. (2018). Early childhood education and later attainment and socioeconomic wellbeing outcomes to age 30. *N. Z. J. Educ. Stud.* 53, 257–273. doi: 10.1007/s40841-018-0106-7

Miller, D., and Parker, D. (2006). 'I think it's low self-esteem'. teachers' judgements: a cautionary tale. *Education 34,* 19–25. doi: 10.1080/03004270500507545

Mowat, J. G. (2019). Exploring the impact of social inequality and poverty on the mental health and wellbeing and attainment of children and young people in Scotland. *Improv. Schools* 22, 204–223. doi: 10.1177/1365480219835323

Newman, T., and Blackburn, S. (2002). *Transitions in the Lives of Children and Young People: Resilience Factors*. Edinburgh: Scottish Executive Education Department. Available online at: https://www2.gov.scot/resource/doc/46997/0024004.pdf (accessed August 16, 2019).

Nind, M., Curtin, A., and Hall, K. (2016). *Research Methods for Pedagogy*. London, UK: Bloomsbury Academic.

OECD (2007). *OECD Reviews of National Policies for Education: Quality and Equity of Schooling in Scotland*. Paris: Organisation for Economic Cooperation and Development.

Phelan, S. K., and Kinsella, E. A. (2013). Picture this. *safety, dignity, and voice - ethical research with children: practical considerations for the reflexive researcher. Qualit. Inq.* 19, 81–90. doi: 10.1177/1077800412462987

Pianta, R. C., and Kraft-Sayre, M. (2003). *Successful kindergarten Transition*. Baltimore: Brookes.

Pollard, A., and Filer, A. (1999). *The Social World of Pupil Career: Strategic Biographies through Primary School*. London, UK: Cassell.

Pyhältö, K., Soini, T., and Pietarinen, J. (2010). Pupils' pedagogical wellbeing in comprehensive school – significant positive and negative school experiences of Finnish ninth graders. *Eur. J. Psychol. Educ.* 25, 207–221. doi: 10.1007/s10212-010-0013-x

Riglin, L., Frederickson, N., Shelton, K. H., and Rice, F. (2013). A longitudinal study of psychological functioning and academic attainment at the transition to secondary school. *J. Adolesc.* 36, 507–517. doi: 10.1016/j.adolescence.2013.03.002

Rimm-Kaufman, S. E., and Pianta, R. C. (2000). An ecological perspective on the transition to kindergarten: a theoretical framework to guide empirical research. *J. Appl. Dev. Psychol.* 21, 491–511. doi: 10.1016/S0193-3973(00)00051-4

Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in Social Context*. Oxford: Oxford University Press.

Rudashill, K. M., Snyder, K. E., Levinson, H., and Adelson, J. L. (2018). Systems view of school climate: a theoretical framework for research. *Educ. Psychol. Rev.* 30, 35–60. doi: 10.1007/s10648-017-9401-y

Sameroff, A. (ed.). (2009). *The Transactional Model of Development: How Children and Contexts Shape Each Other*. Washington, DC: American Psychological Association.

Scottish Government (2009). *SQA Attainment and School Leaver Qualifications in Scotland: 2007/08*; 10 March 2009. A Scottish Government National Statistics Publication. Edinburgh: Scottish Government.

Scottish Government (2011). *Summary Statistics for Attainment, Leaver Destinations and School Meals, No. 1: 2011 Edition*. Edinburgh: The Scottish Government.

Scottish Government (2017). *A Nation with Ambition. The Government's Programme for Scotland 2017-2018*. Edinburgh: The Scottish Government.

Scottish Government (2018a). *Child and Adolescent Health and Wellbeing in Scotland – Evidence Review*. Children and Families Analysis. Edinburgh: The Scottish Government.

Scottish Government (2018b). *Summary Statistics for Attainment, Leaver Destinations and Healthy Living, No.8: 2018 Edition*. Edinburgh: The Scottish Government.

Scottish Government (2018c). *2019 National Improvement Framework and Improvement Plan: Achieving Excellence and Equity*. Edinburgh: The Scottish Government.

Scottish Government (2020a). *Health and Wellbeing Census Publication Factsheet*. Available online at: https://www.gov.scot/publications/health-and-wellbeing-census-2/

Scottish Government (2020b). *Realising the Ambition: Being Me*. National practice guidance for early years in Scotland. Livingston: Education Scotland.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Edu. Inform.* 22, 63–75. doi: 10.3233/EFI-2004-22201

Siraj-Blatchford, I. (2010.). Learning in the home and at school: how working class children 'succeed against the odds'. *Br. Educ. Res. J.* 36, 463–482. doi: 10.1080/01411920902989201

Spratt, J. (2016). Childhood wellbeing: what role for education? *Br. Educ. Res. J.* 42, 223–239. doi: 10.1002/berj.3211

Taggart, B., Sylva, K., Melhuish, E., Sammons, P., and Siraj, I. (2015). *How Pre-School Influences Children and Young People's Attainment and Developmental Outcomes over Time*. Effective pre-school, primary and secondary education project (EPPSE 3-16+). London, UK: Department of Education.

The Children and Young People Act (Scotland) (2014). Available online at: https://www.legislation.gov.uk/asp/2014/8/contents/enacted

The Scottish Government (2010). *SQA Attainment and School Leaver Qualifications in Scotland: Scottish National Statistics Publication Notice, Annex 1: Unified Points Score Scale: 2007/2008 (p.10); 2008/2009 (p.10); 2009/2010 (p.20)*. Edinburgh: Scottish Government.

The Scottish Government (2019a). *Refreshed Narrative for the Curriculum for Excellence*. Available online at: https://scotlandscurriculum.scot (accessed October 2020).

The Scottish Government (2019b). *Poverty and Income Inequality in Scotland 2015-2018*. Available online at: https://www.gov.scot/publications/poverty-income-inequality-scotland-2015-18/ (accessed June 2019).

Tudge, J. R. H., Mokrova, I., Hatfield, B. E., and Karnik., R. B. (2009). Uses and misuses of bronfenbrenner's bioecological theory of human development. *J. Fam. Theory Rev.* 1, 198–210. doi: 10.1111/j.1756-2589.2009.00026.x

Tudge, J. R. H., Payir, A., Merc?on-Vargas, E., Cao, H., Liang, Y., Li, J., et al. (2016). Still misused after all these years? A reevaluation of the uses of bronfenbrenner's bioecological theory of human development. *J. Fam. Theor. Rev.* 8, 427–445. doi: 10.1111/jftr.12165

Ungar, M., Connelly, G., Liebenberg, L., and Theron, L. (2019). How schools enhance the development of young people's resilience. *Soc. Indic. Res.* 145, 615-627. doi: 10.1007/s11205-017-1728-8

Upadyaya, K., and Salmela-Aro, K. (2013). Development of school engagement in association with academic success and wellbeing in varying social contexts: a review of empirical research. *Eur. Psychol.* 18, 136–147. doi: 10.1027/1016-9040/a000143

Urhahne, D., and Zhu, M. (2015). Accuracy of teachers' judgments of students' subjective wellbeing. *Learn. Individ. Differ.* 43, 226–232. doi: 10.1016/j.lindif.2015.08.007

Warin, J., and Muldoon, J. (2009). Wanting to be 'known': redefining self-awareness through an understanding of self-narration processes in educational transitions. *Br. Educ. Res. J.* 35, 289–303. doi: 10.1080/01411920802043000

Waring, M. (2017). "Finding your theoretical position," in *Research Methods and Methodologies in Education*, *2nd Edn*, eds R. Coe, M. Waring, L.V. Hedges, and J. Arthur (London, UK: Sage). 15–20.

Conflict of Interest: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Psychology

ORIGINAL RESEARCH
published: 24 February 2021
doi: 10.3389/fpsyg.2021.577388

Entering Higher Professional Education: Unveiling First-Year Students' Key Academic Experiences and Their Occurrence Over Time

Jonas Willems[1], Liesje Coertjens[2] and Vincent Donche[1]*

[1] Department of Training and Education Sciences, Faculty of Social Sciences, University of Antwerp, Antwerp, Belgium,
[2] Psychological Sciences Research Institute, Université catholique de Louvain, Louvain-la-Neuve, Belgium

To date, little understanding exists of how first-year students in professionally oriented higher-education (HE) programs (i.e., those that provide vocational education to prepare students for a particular occupation) experience their academic transition process. In the present study, we first argued how the constructs of academic adjustment and academic integration can provide complementary perspectives on the academic transition of first-year students in (professional) HE. Next, we examined what first-year students in professional HE contexts perceive to be the most important experiences associated with their academic transition process in the first semester of their first year of higher education (FYHE). To this end, we adopted the fundamentals of the critical incident technique and asked 104 students in a Flemish (Dutch-speaking part of Belgium) university college (which offers professional HE programs, such as nursing) to complete "reflective logs" with open questions at the start of the second semester of their FYHE, wherein they reflected on three critical academic experiences during their first semester. An inductive, cross-case content analysis of the collected narratives showed that students reported on nine themes of academic experiences, which relate to five adjustment themes (dealing with the organization of the study program, organizing study work, committing to the study, following class and taking notes, and processing learning content outside class) and four integration themes (feeling competent, feeling stressed, feeling prepared, and feeling supported). Further analyses showed that although some of the nine themes of academic experiences appear to be more important at different times in the first semester, they all seem to be meaningful throughout the whole semester.

Keywords: transition to higher education, professional higher education, academic adjustment, academic integration, critical incidents, first-year experience

OPEN ACCESS

Edited by:
Elizabeth Fraser Selkirk Hannah, University of Dundee, United Kingdom

Reviewed by:
Virginia Lien Cairns, University of Tennessee at Chattanooga, United States
Stephen Rutherford, Cardiff University, United Kingdom

****Correspondence:***
Jonas Willems
jonas.willems@uantwerpen.be

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Psychology

Received: *29 June 2020*
Accepted: *21 January 2021*
Published: *24 February 2021*

Citation:
Willems J, Coertjens L and Donche V (2021) Entering Higher Professional Education: Unveiling First-Year Students' Key Academic Experiences and Their Occurrence Over Time. Front. Psychol. 12:577388. doi: 10.3389/fpsyg.2021.577388

INTRODUCTION

In the last decades, the transition of students from high school to their first year of higher education (FYHE) has received extensive research attention, as it is generally recognized that the first-year student experience impacts important student outcomes, such as academic success and well-being (Bowman, 2010; Gale and Parker, 2014). This transition for many students is challenging, not in the

least because students are confronted with an array of new academic requirements to which they must adapt (Credé and Niehorster, 2012). Previous research has shown that a successful transition necessitates effectively navigating academic challenges, such as managing a high workload or developing new academic skills (e.g., Trautwein and Bosse, 2017).

In this light, an increasing number of higher-education (HE) institutions have developed guidance and support initiatives to facilitate the first-year academic transition and enhance subsequent student outcomes (Coertjens et al., 2017; Harackiewicz and Priniski, 2018). Such interventions focus on various aspects of the first-year student academic experience, such as approaches to learning and perceptions of the teaching–learning environment (Ruohoniemi et al., 2017), personal development and well-being in the learning process (e.g., fear of failure and self-doubt; du Preez and McGhie, 2015), or student engagement (Hulleman et al., 2017). For the development of such guidance and support initiatives, HE institution administrators rely on guidelines based on empirical research.

However, the body of research on the first-year student academic experience has focused on academically oriented HE contexts (universities offering theoretical and scientific education) and used predominantly quantitative research designs (e.g., Baker and Siryk, 1984; Sheehan and Iarocci, 2019; Schaeper, 2020). Up till today, there has been little discussion about the academic transition of students in professionally oriented HE contexts (offering vocational education that prepares students for a specific occupation). Nevertheless, students in this latter context doubtlessly also encounter transition problems and perhaps more so, considering the higher diversity in backgrounds of students enrolling in professional HE compared with academic HE contexts (Glorieux et al., 2014). Moreover, it is clear that institutional differences might influence the academic adjustment process of first-year students (e.g., Kember and Leung, 2005; Torenbeek et al., 2013). One should thus not assume that theoretical frameworks and instruments developed in academic contexts can naturally be embedded in professional HE institutions. This lack of research in professional HE contexts is especially surprising because a significant number of adolescents worldwide participates in professional HE (OECD, 2009). For example, in Flanders (Dutch-speaking part of Belgium), 54.4% of HE students attend a professional bachelor program (Flemish Government, 2019).

Although the exact understanding and organization of academic and professional programs might vary across countries, academic programs are generally research-focused with a clear emphasis on abstract, academic-related knowledge and its development. Professional programs, on the other hand, have an emphasis on work-based education with a strong focus on the practical application of the study, adopting a curriculum that emphasizes practical aspects and elements for the development of skills and competence and includes extended phases of practical experiences in the form of internships or work experiences (Camilleri et al., 2014; OECD, 2019). Flanders, where this study was carried out, like many other HE systems, such as Germany, the Netherlands, Finland, Denmark, and Portugal, has a dual HE system, wherein academic and professional HE programs are offered at separate institutions. Flemish professional HE is offered by university colleges, which organize programs that are generally designed for learners to acquire more tailored knowledge, skills, and competencies specific to a particular occupation. Professional bachelor programs offer direct access to the labor market and coincide with the Bologna first-cycle programs (one cycle of 3 years; The Bologna Declaration, 1999). In these vocationally oriented programs, theory and practice are combined in educational practices, such as simulations, working with real-life materials, and workplace learning settings (e.g., long-term internships, machinery to repair, assignments for translators, samples to analyze; Camilleri et al., 2014).

More vocationally oriented programs in professional HE differ from academically oriented HE programs, which are offered by universities. These latter programs provide theoretical and scientific education, entailing subject matter that is more abstract and often less practical than in professional education. Also, the teaching speed is faster and more independent learning is expected from students (van Rooij et al., 2017). Academic bachelor programs typically prepare students for a master's program and correspond with the Bologna two-cycle programs (bachelor and master's, encompassing a total of 4 or 5 years).

The present study sets out to empirically explore how first-year students in professionally oriented programs experience their academic transition. The conceptual grounding of this study is based on former research on the first-year students' academic experience (albeit carried out in academic HE contexts) and more in particular research on two intertwined umbrella concepts central in the transition literature and which need further investigation.

THE FIRST-YEAR ACADEMIC EXPERIENCE IN ACADEMIC HE CONTEXTS

In the transition literature, two "umbrella" constructs are often adopted to describe and examine the nature of the first-year academic experience, namely academic adjustment and academic integration. Although these constructs are often used interchangeably and have been described to be strongly related (e.g., Richardson et al., 2012; Rienties et al., 2012; van Rooij et al., 2017; Fematt et al., 2019; Larose et al., 2019; Veldman et al., 2019), they stem from two different, rich research traditions, which are outlined in the following paragraphs. We will explore how both the academic adjustment and integration constructs—within their respective (quantitatively oriented) traditions—describe various aspects of the academic experience and how they overlap, and we will argue how these constructs can provide complementary perspectives on the academic transition.

Academic Adjustment: The Student Adaptation to College Model

The academic adjustment construct can be traced back to the long-established "Student Adaptation to College" (SAC) model of Baker and Siryk (1984, 1986), which was based on

a review of the literature considering adjustment to college. The model postulates that the college experience is multifaceted and comprises various "demands" that require a variety of "adjustments" or "coping responses" from the individual (Baker and Siryk, 1986, p. 32). According to Baker and Siryk, one such set of demands occurs in the academic sphere of the HE institution. It is then posited that academic adjustment is the extent to which students adapt to these academic demands of the college as reflected in four subdimensions: (1) motivation for being in college and for doing academic work, (2) their engagement with academic work, (3) the effectiveness of their studying and academic efforts (e.g., trouble with concentration), and (4) the satisfaction with the academic environment (Baker and Siryk, 1986; Credé and Niehorster, 2012).

Today, the SAC framework is still widely adopted to examine freshmen's academic adjustment to HE (e.g., van Rooij et al., 2018; Larose et al., 2019; Sheehan and Iarocci, 2019) and has proven its utility in, for instance, predicting to some extent students' study success (e.g., review study by Credé and Niehorster, 2012). Nevertheless, the SAC framework has also received severe criticism for its lack of a strong theoretical grounding based on the paucity of information provided by the authors thereupon (see Taylor and Pastor, 2007). Indeed, the work of Baker and Siryk (1984, 1986) does not make explicit which theories they relied on for their model. It remains unclear, for instance, from where the four abovementioned subdimensions of the academic adjustment construct originate.

Another observation is that the strong quantitative (cross-sectional) focus in the SAC research tradition has generally led to a neglection of the temporal and dynamic nature of adjustment (Roland et al., 2016; De Clercq et al., 2018). Indeed, although it was not explicitly described as such in the original works of Baker and Siryk (1984, 1986), several scholars point out that adjustment should be regarded as a process in which students attempt to cope with the demands of the new environment (e.g., Anderson et al., 2016; Coertjens et al., 2017; De Clercq et al., 2018; Larose et al., 2019). In the present study, we explicitly acknowledge this process-like character of academic adjustment.

Academic Integration: Student Attrition Framework

The academic integration construct is conceptually rooted in Tinto's (1975) Student Attrition Framework, which was developed deductively based on Durkheim's (1950) theory of suicide and Van Gennep's (1960) theory of rites of passage. Tinto's model stipulates that a freshmen's decision to drop out or persist in his study is fundamentally based on his perceived level of social and academic integration. Over the years, the academic integration construct has acquired a central position within the research on student retention (Braxton and Hirschy, 2005), while the construct has also been adopted in other fields of transition literature, such as studies on the college experience of international students (e.g., Jean-Francois, 2019; Spencer-Oatey and Dauber, 2019).

Nevertheless, it has been pointed out that the original works of Tinto (1975, 1993) did not provide scholars with a clear definition of academic integration (Hurtado and Carter, 1997; Braxton, 2000; Brunsden et al., 2000). According to Hurtado and Carter (1997), this lack of theoretical clarity has led to a variety of operational definitions of academic integration, which reflect researchers' various interpretations of the construct: the effort or time spent in activities; students' perceptions, reported behaviors, and participation in specific activities; students' satisfaction with aspects of the academic environment; objective performance criteria; or a combination of these measures (p. 326). Furthermore, together with other researchers (Davidson and Wilson, 2013; Lee et al., 2018; Tarazona and Rosenbusch, 2019), we observed that this conceptual disorientation regarding the construct of academic integration is still present in contemporary research, as recent studies consider different subfacets when operationalizing academic integration.

For instance, Schaeper (2020) conceptualized academic integration as encompassing four dimensions: (1) a structural dimension, which refers to the individual's self-perception of meeting the standards of the HE institution; (2) a normative dimension, which concerns the individual's identification with the normative structure of the academic system; (3) a social academic dimension, which pertains to intracurricular interactions between the individual and faculty; and (4) a motivational academic dimension, which reflects the identification of the individual with the major and their enjoyment of studying. Another recent example is the work of Ishitani (2016), who conceptualized academic integration by including how often students (1) meet with faculty, (2) meet with an academic advisor, (3) participate in study groups, and (4) talk with faculty about academic issues outside of class. Interestingly, these facets seem to partially overlap with the social academic integration dimension in the framework of Schaeper (2020). However, where Schaeper (2020) focused on the quality of the student–faculty interaction (item example: "*I feel accepted by the instructors*"), Ishitani (2016) focused on the number of such interactions (how often they occur). As a last illustration, the study by Veldman et al. (2019) takes a completely different approach to conceptualizing academic integration, comprising (1) knowing where to find and how to access university and academic support services, (2) knowing how to prepare for classes and exams, and (3) understanding and making use of the university's academic infrastructure.

This range of multidimensional conceptualizations and operationalizations of academic integration has led scholars to label academic integration as an "umbrella" term for exploring the interrelation of the individual student with the academic system of the HE institution (Clinciu and Cazan, 2014, p. 654; Bosse et al., 2019, p. 1). Similarly, Davidson and Wilson (2013) formulated "*the terms academic and social integration have almost become . . . categories by which to differentiate certain predictor variables* [of student retention]" (p. 339).

Academic Adjustment and Integration: Two Complementary Perspectives

The scant initial definitions of academic adjustment and integration, the vague theoretical groundings, and the multitude

of interpretations of academic integration have obscured the overlap of the "academic integration" and "academic adjustment" constructs (see **Table 1** for an overview of conceptualizations of academic adjustment and integration as described in the above-referenced studies), which are—as stated above—often used interchangeably. However, in a study that interviewed several experts in the field of transition research (Wolf-Wendel et al., 2009), Tinto clarified that the concept of academic integration should be regarded as an individual's "*sense of belonging*" during its transition to HE and that it is a "*state of being*" based on the students' perceptions of fit with their campus (Wolf-Wendel et al., 2009). A sense of belonging, in the transition literature can be understood as the psychological sense that one is a valued member of the HE institution community (Hausmann et al., 2007) and encompasses feelings of fitting in, acceptance, and support from a group (Strayhorn, 2012). This follows the earlier notion in the important work of Braxton (2000) that "*social and academic integration can be viewed as the psychological consequence of interactions with the institutions' systems*" (p. 63).

This leads us to the theoretical distinction we make between academic adjustment and academic integration. Recognizing the theoretical guidance of several scholars (e.g., Anderson et al., 2016; De Clercq et al., 2018; Larose et al., 2019), but remaining close to the initial theory of Baker and Siryk (1984), we consider academic adjustment as a process of adaptation of behavior and attitudes that may or may not enable a student to effectively meet the various academic demands encountered in the first semester of their FYHE. In accordance with Tinto (as cited by Wolf-Wendel et al., 2009) and Braxton (2000), academic integration is considered as the psychological outcome of the academic adjustment process at a certain point in time. This state of being is based on students' perceptions of experiences within the academic sphere, reflecting their perceived fit with the new HE environment and comprising components, such as feeling supported, competent, prepared, or related to the chosen study.

In this view, academic adjustment and integration provide two complementary perspectives on the first-year academic experience: one that describes the active adaptation of behavior and attitudes as demanded by the HE environment (adjustment) and one that focuses on the psychological state of being that results from an individual's perception of fit with the new HE environment (integration).

TABLE 1 | Summary of conceptualizations of academic adjustment and integration quoted in this study.

Academic adjustment	
Baker and Siryk, 1984, 1986	- Motivation
	- Engagement/effort
	- Effectiveness of studying and academic efforts
	- Satisfaction with academic environment
Academic integration	
Review by Hurtado and Carter, 1997	- Effort or time spent in activities
	- Students' perceptions, reported behaviors, and participation in specific activities
	- Students' satisfaction with aspects of the academic environment
	- Objective performance
	- Combination of the above
Schaeper, 2020	- Self-perceptions of meeting the standards of the HE
	- Identification with the normative structure of the academic system
	- Quality of the student–faculty interaction
	- Identification of the individual with the major and enjoyment of studying
Ishitani, 2016	- Quantity of student–faculty interaction
Veldman et al., 2019	- Knowing where to find and how to access university and academic support services
	- Knowing how to prepare for classes and exams
	- Understanding and making use of the university's academic infrastructure

Reconsidering the First-Year Academic Experience From the Students' Perspective

Notably, conceptualizations and operationalizations of academic adjustment and integration in the abovementioned two research traditions seem to have become disconnected from the actual student experiences as reported by first-year students. Firstly, the SAC model was developed based on a literature study of SAC. It is, however, unclear how the framework offers a comprehensive picture of the first-year academic experience, as the authors do not detail where the discerned subfacets stem from or on what basis they were created. Secondly, in the last decades, scholars have given various interpretations of academic integration, focusing on different aspects of the academic experience when conceptualizing the construct (see **Table 1** for illustrations). This raises the question of which experiences are *most* important according to students themselves in the process of adapting to FYHE and, therefore, essential when conceptualizing adjustment and integration.

Recently, several studies have again given voice to the first-year university student by qualitatively examining which student experiences they perceive to be at play during the transition period and, in doing so, identifying important facets and subfacets of the adaptation process. Trautwein and Bosse (2017), for instance, explored the first-year student experience by examining challenges (adjustments) that university students perceive as critical for a successful transition to HE. Their interviews with 25 students revealed 946 text segments that referred to critical incidents reported by the students. These narratives were categorized into 32 different critical student experiences, which the authors subsequently clustered into four dimensions: content-related, personal, organizational, and social requirements. Trautwein and Bosse (2017) suggested that the content-related, personal, and organizational dimensions were subdimensions of a higher-order academic integration

dimension, which we will further describe here. The *content-related dimension* refers to experiences such as meeting curricular demand and pace, developing academic skills, and identifying performance and assessment standards. The *personal dimension* comprehends requirements such as scheduling learning activities, finding a mode of learning, or managing the workload. The *organizational dimension* encompasses, for instance, coping with the quality of teaching and learning, dealing with assessment conditions, or coping with formal regulations.

De Clercq et al. (2018) used semistructured interviews conducted in two steps with 17 freshmen from a university science department to unveil the constructs relevant to the student's adjustment process and examine the dynamic interplay over time. The researchers identified four student themes important in the adjustment process (readiness, reaching personal goals, fighting an overwhelming program, and becoming a self-regulated learner), which they rooted in Nicholson's (1990) Transition Cycle model. The first theme, *readiness*, concerns student experiences related to their perceived preparation regarding the necessary information, knowledge, and skills when entering HE. The *reaching personal goals* theme incorporates central constructs in the adjustment process that are essential for student's success. It includes students' feelings of competence (feeling confident in their abilities to succeed) and feelings of relatedness to their study (seeing value/relevance of or being passionate about the courses). The third theme includes student experiences regarding the heavy workload, the fast work pace, and the difficulty of course content and describes the central role of behavioral engagement in the adjustment process. Finally, the theme of *becoming a self-regulated learner* reflects the necessity of adopting a highly effective strategic management of their study program, which entails students being selective as to which courses to allocate their effort and adopting a flexible and selective way of learning. Furthermore, De Clercq et al. (2018) pointed out that complex relations exist between these uncovered constructs. For instance, they revealed that in this specific context and to succeed, a student both needs to carry out a certain quantity of work (behavioral engagement) in combination with good quality of that work (cognitive engagement).

These recent qualitative in-depth studies highlight the importance of various constructs in the first-year student academic experience, which can be related to several prevailing theories in transition literature. The results of the qualitative studies show, for instance, that first-year students report experiences related to their behavioral engagement (Fredricks et al., 2004; Christenson et al., 2012), self-regulation (e.g., Schunk and Zimmerman, 2012; Schunk and Greene, 2017), cognitive processing (Asikainen and Gijbels, 2017; Vermunt et al., 2017), and self-beliefs (e.g., Schunk, 1991; Bong and Skaalvik, 2003).

THE PRESENT STUDY: THE UNIVERSITY COLLEGE STUDENTS' PERSPECTIVE

The qualitative research summarized above was carried out in academic university contexts. A similar examination of students' perceptions of the first-year academic experience in professional HE contexts, however, has not been conducted. Nevertheless, it is conceivable that university college students' perceived realities of the academic transition are dissimilar from those of students in academic HE contexts. Firstly, in professional HE, the influx of students is more heterogenic than in academic HE. Indeed, students entering professional HE programs more often have technical or vocational prior education backgrounds and more often have encountered a study delay (Glorieux et al., 2014). Secondly, several lines of research have suggested that differences in learning environments might impact the freshmen's academic adaptation process. For instance, it has been found that more activating learning environments result in higher levels of student engagement and learning (Umbach and Wawrzynski, 2005) and facilitate the development of good teacher–student relationships (Kember and Leung, 2005). Other research has demonstrated that the organization of the curriculum might also influence the first-year academic experience. In this light, Torenbeek et al. (2013), for example, found that a larger number of scheduled lectures in a study program led to lower class attendance and time spent on self-study. As detailed in the section "Introduction," the learning environment in professional HE contexts differs from that in academic contexts. Both contexts have different aims and expectations of students and oftentimes differ in their institutional organization. Therefore, we believe an examination of the first-year student academic experience in professional HE programs is warranted.

In this study, we examine which academic experiences students in professional HE perceive to be the *most* important in the first semester of HE. We thus do not aim to make a clear-cut comparison of the academic transition between academic and professional HE contexts; rather, we give voice to the large group of first-year university college students by investigating their perceptions of the first-year student academic experience. Furthermore, we explicitly acknowledge the dynamic and temporal character of the transition process (e.g., Coertjens et al., 2017; Larose et al., 2019) by examining how these experiences occur over time. Hence, we have discerned the following research questions:

RQ1: What do first-year students in professional HE contexts perceive to be the most important experiences in their academic transition process during the first semester of their FYHE?

RQ2: How do the unveiled key academic experiences (RQ1) occur over different periods in the first semester of the FYHE?

MATERIALS AND METHODS

Participants and Procedure

In this study, first-year students from 14 different study disciplines, such as nursing and social work, from a large ($N > 12{,}000$) Flemish university college participated. In order to pursue maximum variation in our qualitative data collection, we adopted a specific purposive sampling procedure (Cohen et al., 2011). In a first step, in November 2017, all students from the Dutch study disciplines in the HE institution ($N = 3{,}225$) completed questionnaires mapping out several aspects of

their transition experience: self-efficacy, self-concept, emotion regulation, and social and academic adjustment. A considerable amount of literature has substantiated the relevance of these constructs in the prediction of important student outcomes, such as study success and well-being (e.g., Gratz and Roemer, 2004; Richardson et al., 2012; Buriæ et al., 2016). Based on the mean scores of the five variables, we explored whether we could identify distinctive student profiles using a latent profile analysis (Magidson and Vermunt, 2004). For this analysis, we only examined data from students who indicated that they had no previous experience with HE and who gave their informed consent (N = 2,168). As seen in **Supplementary Appendix A**, we were able to discern two moderate-sized groups [high (n = 727) and low (n = 346)] and one large middle group (n = 1,095). The low group represented students who reported particularly low scores regarding the five aspects of transition during their FYHE, while the high group reported high levels on these measures.

Respondents from these latter two distinct profiles (individuals of whom we could expect more outstanding transition experiences) who indicated that they wanted to participate in follow-up research (n = 939; high transition profile: n = 642; low transition profile: n = 297) were invited to take part in the qualitative data collection. Eventually, 104 students completed a reflective log at the start of the second semester of their FYHE (February 2018) in which they reflected on their experiences in the first semester. The sample consisted of 89 (86%) female and 15 (14%) male students. Furthermore, 81 (78%) respondents showed a high transition profile, while 23 (22%) students from the sample were classified as in the low transition profile group. The mean age of the respondents was 18.3 years.

Data Collection

Inspired by the work of Trautwein and Bosse (2017), we adopted the fundamentals of the critical incident technique (CIT) for our data collection. The CIT, developed as an interview method (Chell, 2004), is recognized as an effective exploratory tool to collect self-reported experiences of essential real-life events (Butterfield et al., 2005). According to Flanagan (1954), a critical incident is a crucial event that makes a significant contribution—positively or negatively—to a certain phenomenon. In the present study, the basics of CIT were used to explore events that students perceived to be essential for their lived first-year academic experience during the first semester of their FYHE.

With the aim of eliciting critical incidents from a large number of students, we developed a paper-and-pencil reflective log (**Supplementary Appendix B**), which the respondents completed at the beginning of the second semester. In this log, we asked students to reflect upon the first semester and describe three experiences that they perceived for themselves to be critical regarding their academic adjustment to the new learning environment using open questions. These instances could be positive or negative but must have had an impact on the student. To map out experiences over a longer period—and in doing so acknowledging the process character of academic adjustment—a timeline was incorporated into the logs, which covered the complete first semester (September 2017 to January 2018). This timeline was divided into three time frames (**Supplementary Appendix B**), and students were requested to write down one critical incident for each period (thus, three critical incidents in total). According to Chell (2004), using such a timeline in CIT can be a "*visual aid serving several purposes*: *it focuses attention, enables the interviewee to relax, jogs the memory and enables the researcher to get a sense of the nature and chronology of any critical events*" (p. 48).

To ensure that students from all study disciplines would have the opportunity to participate in the data gathering, six time slots were organized at the institution at well-chosen time points in the first week of the second semester. Respondents watched a detailed 10-min instruction video before completing the log, which provided all participants with standardized instructions. Furthermore, the log was also accompanied by written instructions. Informed consent was obtained from all respondents and participating students had a chance to win a 100 EUR coupon.

Analysis

NVivo software (v. 12.0 and 12.5) was used to code the data from the digitalized reflective logs. To classify the reported text segments into relevant themes (RQ1), a cross-case content analysis was undertaken (Krippendorff, 2004). In the first phase of this analysis, conforming to the CIT literature, we adopted an inductive open-coding approach to make a first abstraction of the critical incidents (Flanagan, 1954; Chell, 2004). For each of the reported critical incidents, the entire text segment was allocated to one or more pertaining codes, which resulted in a transparent overview of the data. This task was carried out by the first author. Subsequently, the emergent codes *and corresponding text segments* were thoroughly discussed with the second and third authors, and the need for redefinition and the development of additional (sub)categories in the coding scheme were identified. In this step, the concordance of our coding scheme with several prevailing theories in transition literature was extensively deliberated. However, the categorization of the reported experiences primarily relied on the commonalities between experiences we uncovered in the data and the focus the participants articulated in their text segments. In the second phase of the analysis, the first author modified the initial, tentative (sub)codes in the coding scheme, after which a second pass through the original data occurred. This second round of classification was again followed up by a discussion between the three authors. This iterative process of adaptation, inductive coding, and discussion was repeated two more times before the three authors reached a consensus on the allocation of text segments to codes.

To examine the trustworthiness of the resulting main themes, an independent coder recoded 15% of the reflective logs (16 of 104 logs; 48 of 312 narratives) in isolation, after which intercoder reliability was calculated using Cohen's Kappa (Landis and Koch, 1977; Campbell et al., 2013). For all main themes, Cohen's Kappa's ranged from 0.866 to 0.998, indicating high to nearly perfect intercoder reliability (Landis and Koch, 1977). In a *post hoc* discussion, the independent coder had no suggestions for any additional adjustments to the coding scheme.

Finally, the cross-case approach was extended to investigate how the key academic experiences occurred over the three (see section "Data Collection") discerned periods in the first semester (RQ2). Hereto, we created a frequency table at the level of the reported critical incidents, wherein references regarding key academic experiences were presented per theme per time frame.

RESULTS

Themes of Critical Academic Experiences

The content analysis, which was based on the commonalities in the individual students' narratives, resulted in the identification of nine main themes of experiences that students perceive to be critical in their academic transition process, and which can be placed under the umbrella terms academic adjustment and academic integration—as delineated in the theoretical framework. Regarding academic adjustment, or the active adaptation of behavior and attitudes as demanded by the HE environment, we unveiled five main themes of experiences: *(1) dealing with the organization of the study program*; *(2) organizing study work*; *(3) committing to the study*; *(4) following class and taking notes*; and *(5) processing learning content outside class.* The academic integration umbrella (i.e., the psychological state of being that results from an individual's perception of fit with the new HE environment) comprehends four main themes of experiences: *(6) feeling competent*; *(7) feeling stressed*; *(8) feeling prepared*; and *(9) feeling supported*. In what follows, the nine main themes and their underlying subthemes are discussed (an overview of themes, subthemes, and the number of respondents referring to these pertaining themes is presented in **Supplementary Appendix C**).

Dealing With the Organization of the Study Program (n = 68)[1]

The first main theme under the academic adjustment umbrella includes experiences related to students coping with the way their HE study program is organized. It describes characteristics of the HE learning environment for which respondents do not hold themselves accountable, as they are inherently linked to the university college system with its specific conditions, planning, and expectations. These characteristics, however, provide situations and difficulties to which students must adapt. While some respondents provided a brief narrative of adapting to the characteristics below, others elaborated on how such characteristics affected their functioning or how they tried to overcome the difficulties (e.g., putting in extra effort or better self-regulating).

A first characteristic of the HE learning environment, on which 30 of the 104 students reported, was dealing with the mounting *quantity of work* in their new learning environment. The following student, for instance, described how she experienced a heavy workload and struggled to efficiently self-regulate ("*Organizing Study Work*," see next paragraph):

> *The group assignments and tasks piled up quickly! I had to take interviews, attend events, and do an internship. The pressure rises and you are continuously working for school. Soon I lost track of time and made misjudgments in my planning, but fortunately I made all my deadlines.* (45,F,H,T2)[2]

Furthermore, students needed to adjust to the *general planning* of the semester (n = 29). In this light, several students reported adjusting to the modular system (and its high pace), class schedules (e.g., long days, long free periods), numerous deadlines close to each other, lengthiness of the examination period, organization of the examination period (multiple exams planned in 1 day), the large number of practical exercises (which take away study time), and unexpected changes in the planning of the semester.

> *In the beginning, I had difficulties with the long course days. Following classes until 7:30 pm or sometimes even 9:30 pm had a great influence on my daily routines, such as eating and sleeping. Consequently, fatigue was a big problem for me.* (82,F,L,T1)[3]

Regarding dealing with the organization of the study program, students also emphasized coping with the *expectations of teachers and the new system of evaluation* (n = 25). Indeed, several respondents wrote that it was hard to determine what was expected of them regarding the required level of knowledge and skills. Others explicitly reported that they did not experience any difficulties with this aspect of adjustment. Also, it was difficult for some students to foresee what questions on the examinations would look like and what was expected of them in more practical learning tasks. In other words, students had to make sense of expectations in the new learning environment.

> *I found the first exams stressful. I had no clue of what the questions in higher education would be like since I didn't get any intermediate tests in my study program.* (54,F,H,T3)[4]

Next to the aforementioned three facets, our analysis also uncovered two less significant themes of critical experiences related to the first main theme. Firstly, several students (n = 9) stated they experienced difficulties in *working with the online student platform*. Finally, some students were challenged by the *difficulty of certain learning tasks* (n = 6).

Organizing Study Work (n = 65)

According to the respondents, the first-year transition also demands adjustments regarding their self-regulation. This second main theme includes student experiences on dealing with executing three specific regulative tasks (i.e., planning, following planning, and evaluating the learning process), but also includes narratives that refer to cognitive self-regulation on a more abstract level. The regulative task mostly mentioned (n = 42) in the reflective logs was *making a planning*. In this subfacet, experiences are included wherein students explicitly report to (not) have made a planning. These narratives showed that many students experienced difficulties with this.

[1] This theme was reported by 68 of the 104 respondents.

[2] 45,F,H,T2 = respondent 45, female, high social and academic integration profile, period 2 (end of October to beginning of December).

[3] T1 = September to October.

[4] T3 = beginning of December to January.

The first weeks I had difficulties with planning assignments. A calendar with a weekly schedule didn't work for me since we have lots of assignments and many of them are long term. I quickly lost sight of these assignments. Gradually I experienced the downside of my calendar. To keep an overview, I now work with a large whiteboard. This way, I continually see what needs to be done. It took me a few weeks to optimize this system. (80,M,H,T1)

One such difficulty often reported by respondents (n = 17) was that they found it difficult to estimate how much time they would have to spend on a task, for instance, how much time it takes to process all the learning content for a specific exam. Other students (n = 14) reported that, although they had made a planning, this did not necessarily make them adhere to it. We, therefore, considered the subfacet *following the planning* as a second important regulative task.

During the preparation period for the exams and the exam period itself, I experienced problems with planning. I found it hard to estimate what I was going to do when. I made a planning, but barely stuck to it. (24,F,H,T3)

A third regulative task noted in the data was *evaluating the learning process*. Some students (n = 4) explicitly reported that, during the first semester, they reflected upon their achievement and their learning strategies (studying, planning) and altered their methods based upon these reflections.

During this period, the exams of three courses [courses anonymized] started. The results weren't great. I failed two of the three courses. Did I put too much time into my preparations? Did I memorize TOO hard and too detailed? I thought so, and I lost hope for a while... I needed to find a new study method. (76,F,H,T2)

While the aforementioned subfacets comprise experiences on the level of specific regulative tasks, several respondents (n = 20) also referred to self-regulation on a more abstract level. The subfacet *organizing oneself* concerns whether students were able to organize their learning without explicitly referring to a specific regulative task. An illustration is provided by the following respondent who described difficulties in "organizing himself" and concerning "keeping an overview":

At the end of November, I again experienced many difficulties organizing myself and keeping an overview of my assignments and tests. I experienced an overflow of communication from the instructors regarding the exams, tests, and assignments that were approaching. I had difficulties processing it all. (96,M,L,T2)

Students also detailed *dealing with subject matter efficiently* (n = 9), as they described how they made optimal use of their time to perform well and *making deadlines* (n = 6), which could be considered an outcome of (un)successfully organizing oneself.

Finally, students described experiences of *keeping up with their (study) work*. In total, 35 students reported (not) keeping up with their studies, detailing how they started on time with study tasks, daily repeated learning content, worked sufficiently during the semester, or rather procrastinated. It was clear from the data, however, that this latter category bears both an aspect of the students' ability to self-regulate as well as an aspect of students committing to their studies (see the following section). Acknowledging this, we divided the narratives from these 35 students into the overarching themes *organizing study work* and *committing to the study* based on what respondents focused on in their quotes (self-regulation vs. behavioral engagement). In this light, narratives from a smaller group (n = 6) on "keeping up" were coded under "organizing study work." For instance, the following quote shows that this student's "inability to keep up with her work" principally centered around her inability to self-regulate her learning:

In October and the beginning of November, I disregarded my theory because the exams still seemed so far away. On intermediate exams or tests, I didn't score that well. Only later, I figured that in this period I didn't have a good method to plan, keep up with my work, and prepare. (83,F,L,T2)

Committing to the Study (n = 63)

The third main theme comprises experiences regarding students' commitment to their studies. It generally represents students' behavioral engagement (effort) and motivation regarding a variety of required tasks related to their study—or the lack thereof. The first subfacet of this third main theme was already mentioned in the main theme outlined above: *keeping up with the (study) work*. Interestingly, the majority of students who addressed keeping up in their narratives (29 from a total of 35) focused on the behavioral engagement facet rather than on the self-regulative facet, as illustrated by the following quote:

I had very long school days, which made that, once at home, I didn't feel like, and didn't have the energy to keep up with my study work and rehearse the learning contents. (93,F,H,T2)

This quote also further demonstrates the interrelatedness of the nine unveiled main themes of first-year student experiences. Indeed, it delineates how the organization of the study program (first main theme, i.e., longer school day) influenced this student's commitment to her study.

A second facet of the commitment theme describes whether students are *motivated* to, for instance, study or go to class (n = 23). The quote of the following respondent exemplifies that she was generally motivated to start her HE career:

I was very motivated to start. I knew I was going to have to work for it, but that didn't hold me back to want to go in full for it. (59,F,H,T1)

Another subfacet that emerged from students' logs (n = 23) pertains to the extent to which students generally *make an effort to succeed or get good grades*. Of course, one could argue that students who keep up with their work (the first category of this main theme) also make an effort for their study. This latter category, however, comprises student reports that refer to effort on a more general level or in a specific period. Indeed, students who did not keep up with their work during the semester can still make an effort to succeed.

During the preparation for my exams, I realized I was far behind in my studies. My achievements up till now weren't great (however sufficient), and I didn't master the learning content at all for the

exams. The preparation period for my exams quickly became a series of days in the library, working from 8 am to 8 pm. (79,F,L,T3)

In the context of committing to their study, students also reported on *whether they conscientiously went to* (n = 15) and/or *prepared for* (n = 11) *class*, as illustrated by the following quote of a motivated student who kept up her work and attended every class:

In the beginning of the semester, I was very motivated. Several times a week, I went to the library to rehearse the learning content. I went to every class and made clear notes during the classes. (4,F,H,T1)

Following Class and Taking Notes (n = 57)

Students *following class and taking notes* was a fourth major theme of critical experiences associated with academic adjustment. Several students (n = 15) described that they struggled with the *fast pace* of classes, wherein a lot of information is transferred, or specifically reported on adjusting to the *large class sizes* (n = 6). Other respondents (n = 12) wrote they experienced difficulties *concentrating* during classes (longer classes, new distractions).

The lectures always take 3 h. For me, this was a big adjustment to concentrate for such a long time. At the beginning of the class, I was able to follow, but after about 50 min, I lost concentration. Especially because, all of a sudden, laptops and smartphones are allowed, I was distracted all of the time. After a short break, I was able to concentrate for a while, but this concentration was gone again after about 15 min. (100,F,L,T1)

Interestingly, many students (n = 41) specifically described experiences related to *taking notes in class*. Most of these students seemed to struggle with several aspects of note-taking, such as not knowing what was important to note (n = 10) or not being able to keep up during note-taking (n = 14). Several students noticed afterward that the quality of their notes was not sufficient (n = 13). Finally, eight respondents described having switched from taking paper-and-pencil notes to taking digital notes on their laptop.

At the beginning of the academic year, I had trouble with how to best make notes. For the course [course anonymized], in the first lessons I made paper and pencil notes, but this became one big chaos. After this, I switched to digital notes on my laptop, which enabled me to work more efficiently and clear. (12,F,H,T1)

Processing Learning Content Outside Class (n = 43)

From the student perspective, studying the learning content in HE involved adjustment as well. Firstly, several students (n = 31) described experiences related to *processing the learning content on a more general level*. Most of these students reported that they struggled with studying or finding the right study method.

For me, it generally was difficult to process the learning content of the lectures. I spent too much time summarizing the learning content, but I didn't or barely got anything out of that. (84,M,L,T1)

Next to the general difficulty with studying, students (n = 22) also specifically referred to particular *learning tasks* during their cognitive processing. In this light, students reported experiences related to making schemes, structuring/ordering the learning content, memorizing, and selecting important issues in the learning content.

I found it difficult to select which issues were important and which were rather side issues. Because of this, my summaries were very wide-ranging. (57,F,H,T1)

Feeling Competent (n = 39)

This first main theme incorporated under the integration umbrella incorporates experiences of students appraising their capabilities and performances. Several students (n = 30) referred to *feelings of confidence about whether they could handle their studies in general*. They described wondering they were doing well in their program or were in the right place. Such feelings were, for instance, repeatedly associated with how respondents dealt with failure or with feelings of lagging.

For the course [course anonymized], we had to write a summary. Something that I never did before in high school. I worked hard on this assignment and hoped for the best, but it came out that the result wasn't good at all. I was disappointed and had the feeling that I wasn't good enough for university college. (58,F,H,T2)

Other respondents (n = 12) described *more specific feelings of self-confidence related to successfully finishing particular courses or learning tasks*. For instance, the following respondent described that she feared being unable to process the information of an extensive study book:

In the beginning, I was very afraid of the course [course anonymized] . . . They said that the PowerPoint slides weren't sufficient. I didn't know how to organize myself and select the most important elements out of the study book. The book counted 600 pages and I was really stressed out about that. (19,F,H,T1)

Feeling Stressed (n = 28)

Feelings of stress also emerged from the above excerpt (19,F,H,T1) related to the respondent's fear of not being able to process the information. This provides another illustration of the complex entanglement of themes of reported experiences. Indeed, we noticed that many reported occurrences of stress were strongly interrelated with how students felt they functioned as an HE learner. For instance, the following student further illustrated this association between stress and feeling competent by expressing that he had "no stress" while he had "a good feeling" concerning the upcoming exams, as he kept up with his study work:

At the start of the exams, I had no stress and a good feeling because I had rehearsed the learning content of most courses earlier on. This led me to get good grades. (28,M,H,T3)

Feeling Prepared (n = 20)

Several students described whether they felt prepared for their new learning environment in HE by their prior education. Firstly, students (n = 11) reported their secondary education provided them with the *necessary skills to function well in HE*. These skills enabled them to successfully make schemes, learn large amounts of material, make a planning, or follow the class and take notes:

I received good preparation in high school. This helped me find a proper attitude during classes (take notes) and at home (summarizing, flipping the classroom). (66,F,H,T1)

Secondly, students (n = 11) also described *whether they acquired important knowledge in secondary education*, as described by the following quote:

> *On the first day of school when I met my peers, it became very clear to me that no one with my prior secondary education track would be in my class and that everyone was somewhat more intelligent than me. I noticed this especially in the first language classes where there were a lot of references to learning content from past years that I had not had.* (1,F,L,T1)

Feeling Supported (n = 14)

A final theme we discerned in the data related to students' feeling supported when they experienced difficulties during their transition in the first semester of their FYHE. As stated in the student reports, this support might originate from staff (n = 10); externals, such as family (n = 3); and peers (n = 2).

> *In the middle of November, I had found my feet. There were courses that were very difficult for me at first, but thanks to the help of the instructors, everything went well. During the first semester, I received a lot of help from my teachers, who guided me well.* (27,M,H,T2)

Occurrence of Key Academic Experiences Over Time

In accordance with RQ2, we considered how the references regarding different main themes of experiences were distributed across the three periods distinguished in the reflective logs by creating a frequency table at the level of the reported critical incidents (**Table 2**).

Table 2 shows that, for most main themes, references were not evenly distributed across the three periods. However, themes were also not exclusively related to a certain period. Firstly, experiences concerning "following class and taking notes," "feeling prepared," and "feeling supported" were mostly reported upon at the beginning of the first semester (period 1: September to October) and showed a decline in reporting toward the end of the semester (period 2: end of October to the beginning of December; and subsequently period 3: the beginning of December to January). Secondly, the opposite trend can be observed for the themes "processing learning content outside class," "feelings of competence," and "feelings of stress," which seem especially critical at the end of the first semester when students prepare for and take their exams. Finally, a constant trend was apparent for the remaining three themes: "dealing with the organization of the study program," "organizing study work," and "committing to the study," as experiences were more evenly distributed. In sum, these observed trends in our data provided first indication that the importance of the themes seems to shift during the first semester, but for some themes more than for others.

TABLE 2 | References per theme per time frame.

Theme	Period 1	Period 2	Period 3	*Total*
Academic adjustment				
Dealing with organization of the study program	30	37	33	*100*
Organizing study work	20	31	35	*86*
Committing to the study	27	30	34	*91*
Following class and taking notes	48	11	4	*63*
Processing learning content outside class	13	17	27	*57*
Academic integration				
Feelings of competence	11	20	25	*56*
Feelings of stress	5	10	16	*31*
Feeling prepared	10	8	5	*23*
Feeling supported	8	5	3	*16*
Total	*172*	*169*	*182*	*523*

DISCUSSION AND CONCLUSION

Given that an understanding of how first-year students in professionally oriented HE programs experience their academic transition process is lacking, the present study set out to give voice on this matter from a large group of students. Our results, based on 104 reflective logs that were completed by purposively selected students from 14 different study disciplines, reflect two main findings.

Nine Main Themes of Critical Academic Experiences

Firstly, we unveiled nine main themes of academic experiences that university college students perceived to be critical and which can be regarded as central constructs that are at play in the multifaceted academic transition process in professional HE contexts: (1) dealing with the organization of the study program, (2) organizing study work, (3) committing to the study, (4) following class and taking notes, (5) processing learning content outside class, (6) feeling competent, (7) feeling stressed, (8) feeling prepared, and (9) feeling supported. Although for the formulation of the main and subthemes we inductively adhered to the contents respondents focused on in their logs, several of these themes resonate with existing concepts in the transition literature, such as self-regulation (e.g., Schunk and Zimmerman, 2012; Schunk and Greene, 2017), behavioral and motivational engagement (Pekrun and Linnenbrink-Garcia, 2012), cognitive processing (Asikainen and Gijbels, 2017; Vermunt et al., 2017), self-beliefs (self-concept and self-efficacy; e.g., Schunk, 1991; Bong and Skaalvik, 2003), stress (Robotham and Julian, 2006; Friedlander et al., 2007), feeling prepared by secondary education (Torenbeek et al., 2010; Noyens et al., 2020), or feeling supported (Tao et al., 2000). Our study thus corroborates the importance of this specific set of constructs in the first-year academic experience in professional HE contexts and provides rich descriptions of how university college students perceive these concepts.

On a higher level, the academic experiences incorporated in the nine main themes could be categorized as two types of experiences. Firstly, the first five themes cover experiences regarding the active adaptation of behavior and attitudes as demanded by the HE environment (Baker and Siryk, 1984; Larose et al., 2019), which—according to our broad operational definitions outlined in the theoretical framework—fall under the adjustment umbrella. Secondly, the last four themes refer to a psychological state of being that results from an individual's perception of fit with the new HE environment (Hausmann et al., 2007; Wolf-Wendel et al., 2009; Strayhorn, 2012), thus belonging under the integration umbrella.

Interestingly, most of the main and subthemes we described were also mentioned in the qualitative studies by Trautwein and Bosse (2017) and/or De Clercq et al. (2018), which described the academic transition in academic contexts. Although it is difficult to make an exact comparison of the significance of our themes relative to the academic HE context due to the differences in study designs and reporting, some noticeable similarities and differences with the findings of these studies merit highlighting. For instance, in both academic and professional contexts, many students experience difficulties adjusting to a heavier workload. Trautwein and Bosse (2017), however, also emphasized the fact that many students were challenged by the difficulty of their subjects, while in our study, only a few university college students reported struggling with this. Another striking aspect of our findings in comparison with research in academic contexts concerns the high number of students reporting on following class and taking notes. Although this was touched upon by respondents in Trautwein and Bosse's (2017) study, our results suggest that this theme is more important for university college students.

Importance of the Main Themes Seems to Shift Over Time

A second main finding of this study is that reports on the nine uncovered main themes are not evenly distributed over the three discerned periods in the reflective logs although every theme is mentioned in every period. More precisely, three overall trends were discerned in the data: (1) a declining trend in reporting toward the end of the semester for "following class and taking notes," "feeling prepared," and "feeling supported"; (2) an upward trend in reporting toward the end of the semester for "processing learning content outside class," "feelings of competence," and "feelings of stress"; and (3) a constant trend in reporting across the three discerned periods for "dealing with the organization of the study program," "organizing study work," and "committing to the study." These results highlight the importance of considering the dynamic character of academic transition (e.g., Roland et al., 2016; Coertjens et al., 2017; De Clercq et al., 2018). We would like to emphasize that our qualitative data do not allow for inference to a larger population, as the sample is too limited. The observed trends should, therefore, be interpreted with caution. Nevertheless, our results do provide first indications that although the different themes of academic experiences, in general, seem to be more important at different times in the first semester, they all appear to be meaningful throughout the whole semester.

Reflecting on a Complex Entanglement Between Constructs

An interesting reflection we made during the analysis is that the different themes and subthemes of academic experiences (i.e., constructs at play during the academic transition to professional HE) are strongly interrelated. In the "Results" section, three such relationships were highlighted: (1) how the high quantity of work in the study program was associated with a student's ability to effectively self-regulate her study work (45,F,H,T2; p. 10); (2) how one student's commitment toward his study was negatively influenced by the long, exhausting school days (93,F,H,T2; p. 12); and (3) how a student's self-perceptions might influence feelings of stress (19,F,H,T1; p. 14). Several such detailed examples of how university college students encounter specific and complex entanglements of themes of academic experiences could be provided here. This observed entanglement emphasizes that our classification of first-year academic experiences should not mask the fact that students encounter a complex web of challenges and experiences during their transition to HE (Trautwein and Bosse, 2017; De Clercq et al., 2018), and further corroborates the statement of Tinto (2012) that transition is "*a very complex, quite fluid situation that need not be experienced in the same fashion by every student*" (p. 94). However, although our research design proved to be valuable for its main purpose (identifying key constructs in first-year students' academic transition), we found it to be less suited to further explore the entanglement of constructs, as we did not specifically ask students to reflect hereupon; consequently, students did not report on this consistently. Indeed, examining the relationships between each pair of uncovered themes (and subthemes) merits its own research question and was beyond the scope of the present study.

Future Perspectives and Limitations

Our study brings to the fore nine constructs central in the academic transition process in professional HE as perceived by university college students. However, the observed entanglement of themes, as mentioned above, corroborates the conception of the transition process as an aggregation of specific microprocesses—revolving around the nine central constructs—that differ between individuals in their respective situations (De Clercq et al., 2018). This reflection challenges the idea that variable-centered quantitative study designs can accurately capture the specific student experiences occurring during the academic transition and thus, advocate for the use of in-depth qualitative research methods when further grasping the first-year students' academic experience. Nevertheless, for quantitative future research that aims to explore trends on a larger scale in professional higher education, we endorse the statement of De Clercq et al. (2018) that the student academic adaptation process "*cannot be seen as the sum of adaptive factors but should rather be seen as a complex recipe where each ingredient needs to be taken into account and accurately measured*" (p. 84).

In this light, our review of the literature demonstrated that scholars adopt a variety of subfacets when interpreting the academic adjustment and integration constructs and that these terms are often used interchangeably (see **Table 1** for illustrations). Moreover, oftentimes, it is not explicitly clarified on which theoretical basis the choice of a specific set of subfacets rests. Firstly, our study provides theoretical clarity on what we understand under integration and adjustment (see section 'Academic Adjustment and Integration: Two Complementary Perspectives'). Secondly, it provides a foundation for scholars when conceptualizing and operationalizing the first-year student academic transition in terms of (1) the active adaptation of behavior and attitudes as demanded by the HE environment and (2) the psychological state of being that results from an individual's perception of fit with the new HE. We argue that such interpretations (covered subfacets) should, at least, incorporate the respective constructs that were unveiled in the present study, as they are perceived to be critical by first-year university college students.

Another perspective for future research builds on the results of this study that provide first indications that university college students' perceived realities of the academic transition might be different compared with those of students in academic settings. Indeed, although the same constructs are at play in both contexts, the perceived importance of these concepts seems to differ—as was mentioned above. Future research should further focus on contrasting both HE contexts by using designs specifically developed for this purpose. Such a design might, for instance, take the form of the simultaneous deployment of the reflective logs used in the present study in large samples of students in both academic and professional HE contexts and subsequent comparison of the data between these two groups.

When interpreting the findings of the present study, some limitations need to be considered. Firstly, the data used in the present study was self-reported and retrospective. Respondents thus needed to rely on their memory to reconstruct earlier processes, which might lead to a certain level of bias in the results (e.g., Nisbett and Wilson, 1977; Pekrun, 2020). Future research that adopts an online approach, where students are longitudinally tracked throughout the first semester, might provide more valid and reliable data and conclusions. It should, however, be mentioned here that an important advantage of using the critical incidents technique is that, even if collected accounts are retrospective, respondents usually have a good recall of these events since they are "critical" (Chell, 2004).

This study is also limited by the fact that it only considers academic experiences in the first semester of FYHE, as it is acknowledged that the first-year students' academic transition process is not finished after the first semester (e.g., Gale and Parker, 2014; Coertjens et al., 2017). Thus, although many scholars agree that first-year students are confronted with academic challenges especially in the first semester of FYHE (e.g., Clinciu, 2013; Martens and Metzger, 2017; Bowman et al., 2019), it seems worthwhile to also consider students' academic experiences in professional contexts during the second semester and into subsequent years. Finally, it should be pointed out that students from the low transition profile and male students are underrepresented in the present study. Indeed, in the HE institution's first-year student population, 32% of the students were classified as in the low transition profile group and 35% were male, while these proportions in our sample were—as mentioned in the section "Materials and Methods"—only 22 and 14%, respectively.

Despite these limitations, the present study provides administrators in professional HE contexts with some clear handles and guidelines for the development of guidance and support initiatives. We recommend that the design of such initiatives should minimally comprise the nine main themes of academic experiences described in this study, which are perceived to be critical by first-year university college students. Furthermore, HE administrators should also consider the temporal aspect of the academic transition. More precisely, they should determine which specific first-year students' challenges should be focused on at which moment in the first semester. In this light, our results indicate that a guidance trajectory should ideally start by focusing *especially* on students' challenges regarding "following class and taking notes," "feeling prepared," and "feeling supported," while the themes "processing learning content outside class," "feelings of competence," and "feelings of stress" might be covered somewhat later in the semester. "Dealing with the organization of the study program," "organizing study work," and "committing to the study," on the other hand, should be nourished throughout the whole semester.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Ethics Committee for the Social Sciences and Humanities (EA SHW), University of Antwerp. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

JW conducted the study. LC and VD contributed to the design of the study, discussed the coding, and participated in the writing of the manuscript. All the authors contributed to the article and approved the submitted version.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpsyg.2021.577388/full#supplementary-material

REFERENCES

Akaike, H. (1987). Factor analysis and AIC. *Psychometrika* 52, 317–332. doi: 10.1007/bf02294359

Asparouhov, T., and Muthén, B. (2012). *Using Mplus TECH11 and TECH14 to Test the Number of Latent Classes*. Available online at: http://statmodel.com/examples/webnotes/webnote14.pdf (accessed on 2 July 2019)

Anderson, J. R., Guan, Y., and Koc, Y. (2016). The academic adjustment scale: measuring the adjustment of permanent resident or sojourner students. *Int. J. Intercult. Relat.* 54, 68–76. doi: 10.1016/j.ijintrel.2016.07.006

Asikainen, H., and Gijbels, D. (2017). Do students develop towards more deep approaches to learning during studies? A systematic review on the development of students' deep and surface approaches to learning in higher education. *Educ. Psychol. Rev.* 29, 205–234. doi: 10.1007/s10648-017-9406-6

Baker, R. W., and Siryk, B. (1984). Measuring adjustment to college. *J. Counsel. Psychol.* 31, 179–189. doi: 10.1037/0022-0167.31.2.179

Baker, R. W., and Siryk, B. (1986). Exploratory intervention with a scale measuring adjustment to college. *J. Counsel. Psychol.* 33, 31–38. doi: 10.1037/0022-0167.33.1.31

Beyers, W., and Goossens, L. (2002). Concurrent and predictive validity of the student adaptation to college questionnaire in a sample of European freshmen students. *Educ. Psychol. Meas.* 62, 527–538. doi: 10.1177/0016440206200300 9

Bong, M., and Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: how different are they really? *Educ. Psychol. Rev.* 15, 1–40.

Bosse, E., Bohndick, C., and Jänsch, V. (2019). "Examining social integration in the first year of higher education: a mixed-method approach," *Paper Presented at the 18th Biennial EARLI Conference*, Aachen.

Bowman, N. A. (2010). The development of psychological well-being among first-year college students. *J. Coll. Stud. Dev.* 51, 180–200. doi: 10.1353/csd.0.0118

Bowman, N. A., Jang, N., Jarratt, L., and Bono, T. (2019). The process of college adjustment: weekly changes and racial differences. *J. Stud. Affairs Res. Pract.* 56, 423–437. doi: 10.1080/19496591.2019.1614935

Braxton, J. M. (ed.) (2000). *Reworking the Student Departure Puzzle*. Nashville: Vanderbilt University Press.

Braxton, J. M., and Hirschy, A. S. (2005). "Theoretical developments in the study of college student departure," in *College Student Retention. Formula for Student Success*, ed. A. Seidman (Westport: Praeger Publishers), 61–87.

Brunsden, V., Davies, M., Shevlin, M., and Bracken, M. (2000). Why do HE students drop out? A test of Tinto's model. *J. Further High. Educ.* 24, 301–310. doi: 10.1080/030987700750022244

Buriæ, I., Soriæ, I., and Peneziæ, Z. (2016). Emotion regulation in academic domain: development and validation of the academic emotion regulation questionnaire (AERQ). *Pers. Indiv. Differ.* 96, 138–147. doi: 10.1016/j.paid.2016.02.074

Butterfield, L. D., Borgen, W. A., Amundson, N. E., and Maglio, A. S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qual. Res.* 5, 475–497. doi: 10.1177/1468794105056924

Camilleri, A. F., Delplace, S., Frankowicz, M., Hudak, R., and Tannhäuser, A. C. (2014). *Professional Higher Education in Europe. Characteristics, Practice Examples and National Differences*. Malta: Knowledge Innovation Centre.

Campbell, J. L., Quincy, C., Osserman, J., and Pedersen, O. K. (2013). Coding in-depth semistructured interviews: problems of unitization and intercoder reliability and agreement. *Sociol. Methods Res.* 42, 294–320. doi: 10.1177/0049124113500475

Celeux, G., and Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *J. Class.* 13, 195–212. doi: 10.1007/bf01246098

Chell, E. (2004). "Critical incident technique," in *Essential Guide to Qualitative Methods in Organizational Research*, eds C. Cassell and G. Symon (Thousand Oaks, CA: Sage), 45–60.

Christenson, S. L., Reschly, A. L., and Wylie, C. (eds) (2012). *Handbook of Research on Student Engagement*. New York, NY: Springer.

Clinciu, A. I. (2013). Adaptation and stress for the first year university students. *Proc. Soc. Behav. Sci.* 78, 718–722. doi: 10.1016/j.sbspro.2013.04.382

Clinciu, A. I., and Cazan, A. M. (2014). Academic adjustment questionnaire for the university students. *Proc. Soc. Behav. Sci.* 127, 655–660. doi: 10.1016/j.sbspro.2014.03.330

Coertjens, L., Brahm, T., Trautwein, C., and Lindblom-Ylänne, S. (2017). Students' transition into higher education from an international perspective. *High. Educ.* 73, 357–369. doi: 10.1007/s10734-016-0092-y

Cohen, L., Manion, L., and Morrison, K. (2011). *Research Methods in Education*, 6th Edn. London: Routledge.

Credé, M., and Niehorster, S. (2012). Adjustment to college as measured by the student adaptation to college questionnaire: a quantitative review of its structure and relationships with correlates and consequences. *Educ. Psychol. Rev.* 24, 133–165. doi: 10.1007/s10648-011-9184-5

Davidson, C., and Wilson, K. (2013). Reassessing Tinto's concepts of social and academic integration in student retention. *J. Coll. Stud. Retent. Res. Theory Pract.* 15, 329–346. doi: 10.2190/cs.15.3.b

De Clercq, M., Roland, N., Brunelle, M., Galand, B., and Frenay, M. (2018). The delicate balance to adjustment: a qualitative approach of student's transition to the first year at university. *Psychol. Belgica* 58, 67–90. doi: 10.5334/pb.409

Donche, V., and Van Petegem, P. (2008). "The validity and reliability of the short inventory of learning patterns," in *Style and Cultural Differences: How can Organisations, Regions and Countries Take Advantage of Style Differences*, eds E. Cools, H. Van den Broeck, C. Evans, and T. Redmond (Ghent: Vlerick Leuven Gent Management School), 49–59.

du Preez, M., and McGhie, V. M. V. (2015). Addressing the learning needs of at-risk students at a South African university. *South Afric. J. High. Educ.* 29, 164–180.

Durkheim, E. (1950). *Suicide: A Study in Sociology*. New York, NY: Free Press.

Fematt, V. L., Grimm, R. P., Nylund-Gibson, K., Gerber, M. M., Brenner, M. B., and Solórzano, D. (2019). Identifying transfer student subgroups by academic and social adjustment: a latent class analysis. *Commun. Coll. J. Res. Pract.* 45, 1–17. doi: 10.1080/10668926.2019.1657516

Flanagan, J. C. (1954). The critical incident technique. *Psychol. Bull.* 51, 327–358.

Flemish Government (2019). *Hoger Onderwijs in Cijfers [Higher Education in Numbers]*. Brussels: Flemish Government.

Fredricks, J. A., Blumenfeld, P. C., and Paris, A. H. (2004). School engagement: potential of the concept, state of the evidence. *Rev. Educ. Res.* 74, 59–109. doi: 10.3102/00346543074001059

Friedlander, L. J., Reid, G. J., Shupak, N., and Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *J. Coll. Stud. Dev.* 48, 259–274. doi: 10.1353/csd.2007.0024

Fryer, L. K. (2017). (Latent) transitions to learning at university: a latent profile transition analysis of first-year Japanese students. *High. Educ.* 73, 519–537. doi: 10.1007/s10734-016-0094-9

Gale, T., and Parker, S. (2014). Navigating change: a typology of student transition in higher education. *Stud. High. Educ.* 39, 734–753. doi: 10.1080/03075079.2012.721351

Glorieux, I., Laurijssen, I., and Sobczyk, O. (2014). *De Instroom in Het Hoger Onderwijs van Vlaanderen: Een Beschrijving van de Huidige Instroompopulatie en een Analyse van de Overgang van Secundair Onderwijs Naar Hoger Onderwijs. [The Inflow into Higher Education in Flanders. A Description of the Current Enrolment Population and an Analysis of the Transition From Secondary Education to Higher Education]*. Leuven: Steunpunt Studie- en Schoolloopbanen - TOR.

Gratz, K. L., and Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: development, factor structure, and initial validation of the difficulties in emotion regulation scale. *J. Psychopathol. Behav. Assess.* 26, 41–54. doi: 10.1023/b:joba.0000007455.08539.94

Harackiewicz, J. M., and Priniski, S. J. (2018). Improving student outcomes in higher education: the science of targeted intervention. *Annu. Rev. Psychol.* 69, 409–435. doi: 10.1146/annurev-psych-122216-011725

Hausmann, L. R., Schofield, J. W., and Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Res. High. Educ.* 48, 803–839. doi: 10.1007/s11162-007-9052-9

Hulleman, C. S., Kosovich, J. J., Barron, K. E., and Daniel, D. B. (2017). Making connections: replicating and extending the utility value intervention in the classroom. *J. Educ. Psychol.* 109, 387–404. doi: 10.1037/edu0000146

Hurtado, S., and Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociol. Educ.* 70, 324–345. doi: 10.2307/2673270

Ishitani, T. T. (2016). Time-varying effects of academic and social integration on student persistence for first and second years in college: National data approach. *J. Coll. Stud. Retent. Res. Theory Pract.* 18, 263–286. doi: 10.1177/1521025115622781

Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Stud. High. Educ.* 44, 1069–1085. doi: 10.1080/03075079.2017.1416461

Kember, D., and Leung, D. Y. (2005). The influence of active learning experiences on the development of graduate capabilities. *Stud. High. Educ.* 30, 155–170. doi: 10.1080/03075070500043127

Krippendorff, K. (2004). *Content Analysis: An Introduction to its Methodology*, 2nd Edn. London: Sage Publications.

Landis, J. R., and Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics* 33, 159–174. doi: 10.2307/2529310

Larose, S., Duchesne, S., Litalien, D., Denault, A. S., and Boivin, M. (2019). Adjustment trajectories during the college transition: types, personal and family antecedents, and academic outcomes. *Res. High. Educ.* 60, 684–710. doi: 10.1007/s11162-018-9538-7

Lee, W. C., Godwin, A., and Nave, A. L. H. (2018). Development of the engineering student integration instrument: rethinking measures of integration. *J. Eng. Educ.* 107, 30–55. doi: 10.1002/jee.20184

Lo, Y., Mendell, N. R., and Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika* 88, 767–778. doi: 10.1093/biomet/88.3.767

Magidson, J., and Vermunt, J. K. (2004). "Latent class models," in *The Sage Handbook of Quantitative Methodology for the Social Sciences*, ed. D. Kaplan (Thousand Oaks, CA: Sage), 175–198.

Martens, T., and Metzger, C. (2017). "Different transitions towards learning at university: exploring the heterogeneity of motivational processes," in *Higher Education Transitions: Theory and Research*, eds E. Kyndt, V. Donche, K. Trigwell, and S. Lindblom-Ylänne (New York, NY: Routledge).

Muthén, L. K., and Muthén, B. O. (2012). *Mplus User's Guide*, 7th Edn. Los Angeles, CA: Muthén and Muthén.

Nicholson, N. (1990). "The transition cycle: causes, outcomes, processes and forms," in *On the Move: The Psychology of Change and Transition*, eds S. Fisher and C. Cooper (Uunited Kingdom: John Wiley & Sons), 83–108.

Nisbett, R. E., and Wilson, T. D. (1977). Telling more than we know: verbal reports on mental processes. *Psychol. Rev.* 84, 231–259. doi: 10.1037/0033-295x.84.3.231

Noyens, D., van Daal, T., Coertjens, L., Van Petegem, P., and Donche, V. (2020). Assessing students' perceptions of fit between secondary and higher education: a validation study of the SPFQ. *High. Educ. Res. Dev.* 39, 273–287. doi: 10.1080/07294360.2019.1662377

Nylund-Gibson, K., Grimm, R., Quirk, M., and Furlong, M. (2014). A latent transition mixture model using the three-step specification. *Struct. Equ. Model. Multidiscipl. J.* 21, 439–454. doi: 10.1080/10705511.2014.915375

OECD (2009). *Education at a Glance 2009: OECD Indicators*. Paris: OECD publishing.

OECD (2019). *Benchmarking Higher Education System Performance*. Paris: OECD Publishing.

Pekrun, R. (2020). Self-report is indispensable to assess students' learning. *Front. Learn. Res.* 8:185–193. doi: 10.14786/flr.v8i3.637

Pekrun, R., and Linnenbrink-Garcia, L. (2012). "Academic emotions and student engagement," in *Handbook of Research on Student Engagement*, eds S. L. Christenson, A. L. Reschly, and C. Wylie (New York, NY: Springer), 259–282. doi: 10.1007/978-1-4614-2018-7_12

Richardson, M., Abraham, C., and Bond, R. (2012). Psychological correlates of university students' academic performance: a systematic review and meta-analysis. *Psychol. Bull.* 138, 353–387. doi: 10.1037/a0026838

Rienties, B., Beausaert, S., Grohnert, T., Niemantsverdriet, S., and Kommers, P. (2012). Understanding academic performance of international students: the role of ethnicity, academic and social integration. *High. Educ.* 63, 685–700. doi: 10.1007/s10734-011-9468-1

Robotham, D., and Julian, C. (2006). Stress and the higher education student: a critical review of the literature. *J. Further High. Educ.* 30, 107–117. doi: 10.1080/03098770600617513

Roland, N., Frenay, M., and Boudrenghien, G. (2016). Towards a better understanding of academic persistence among fresh-men: a qualitative approach. *J. Educ. Train. Stud.* 4, 175–188.

Ruohoniemi, M., Forni, M., Mikkonen, J., and Parpala, A. (2017). Enhancing quality with a research-based student feedback instrument: a comparison of veterinary students' learning experiences in two culturally different European universities. *Qual. High. Educ.* 23, 249–263. doi: 10.1080/13538322.2017.1407401

Schaeper, H. (2020). The first year in higher education: the role of individual factors and the learning environment for academic integration. *High. Educ.* 79, 95–110. doi: 10.1007/s10734-019-00398-0

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educ. Psychol.* 26, 207–231. doi: 10.1207/s15326985ep2603%264_2

Schunk, D. H., and Greene, J. A. (2017). *Handbook of Self-Regulation of Learning and Performance*. New York, NY: Routledge.

Schunk, D. H., and Zimmerman, B. J. (2012). *Motivation and Self-Regulated Learning: Theory, Research, and Applications*. New York, NY: Routledge.

Schwarz, G. (1978). Estimating the dimension of a model. *Ann. Stat.* 6, 461–464. doi: 10.1214/aos/1176344136

Sclove, S. L. (1987). Application of model-selection criteria to some problems in multivariate analysis. *Psychometrika* 52, 333–343. doi: 10.1007/bf02294360

Sheehan, W. A., and Iarocci, G. (2019). Executive functioning predicts academic but not social adjustment to university. *J. Atten. Disord.* 23, 1792–1800. doi: 10.1177/1087054715612258

Spencer-Oatey, H., and Dauber, D. (2019). Internationalisation and student diversity: how far are the opportunity benefits being perceived and exploited? *High. Educ.* 78, 1035–1058. doi: 10.1007/s10734-019-00386-4

Strayhorn, T. L. (2012). *College Students' Sense of Belonging: A Key to Educational Success for All Students*. London: Routledge.

Tao, S., Dong, Q., Pratt, M. W., Hunsberger, B., and Pancer, S. M. (2000). Social support: relations to coping and adjustment during the transition to university in the People's Republic of China. *J. Adoles. Res.* 15, 123–144. doi: 10.1177/0743558400151007

Tarazona, M., and Rosenbusch, C. (2019). Refining measurements of social and academic integration: lessons from a German University of Applied Sciences. *Tertiary Educ. Manag.* 25, 239–253. doi: 10.1007/s11233-019-09025-0

Taylor, M. A., and Pastor, D. A. (2007). A confirmatory factor analysis of the student adaptation to college questionnaire. *Educ. Psychol. Meas.* 67, 1002–1018. doi: 10.1177/0013164406299125

The Bologna Declaration (1999). *Joint Declaration of the European Ministers of Education*. Bologna: The Bologna Declaration.

Tinto, V. (1975). Dropout from higher education: a theoretical synthesis of recent research. *Rev. Educ. Res.* 45, 89–125. doi: 10.3102/00346543045001089

Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd Edn. Chicago IL: University of Chicago Press.

Tinto, V. (2012). *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 4th Edn. Chicago, IL: University of Chicago Press.

Torenbeek, M., Jansen, E., and Hofman, A. (2010). The effect of the fit between secondary and university education on first-year student achievement. *Stud. High. Educ.* 35, 659–675. doi: 10.1080/03075070903222625

Torenbeek, M., Jansen, E., and Suhre, C. (2013). Predicting undergraduates' academic achievement: the role of the curriculum, time investment and self-regulated learning. *Stud. High. Educ.* 38, 1393–1406. doi: 10.1080/03075079.2011.640996

Trautwein, C., and Bosse, E. (2017). The first year in higher education—critical requirements from the student perspective. *High. Educ.* 73, 371–387. doi: 10.1007/s10734-016-0098-5

Umbach, P. D., and Wawrzynski, M. R. (2005). Faculty do matter: the role of college faculty in student learning and engagement. *Res. High. Educ.* 46, 153–184. doi: 10.1007/s11162-004-1598-1

Van Gennep, A. (1960). *The Rites of Passage*. London: Routledge.

van Rooij, E., Brouwer, J., Fokkens-Bruinsma, M., Jansen, E., Donche, V., and Noyens, D. (2017). A systematic review of factors related to first-year students' success in Dutch and Flemish higher education. *Pedagogische studiën* 94, 360–405.

van Rooij, E. C., Jansen, E. P., and van de Grift, W. J. (2018). First-year university students' academic success: the importance of academic adjustment. *Eur. J. Psychol. Educ.* 33, 749–767. doi: 10.1007/s10212-017-0347-8

Van Soom, C., and Donche, V. (2014). Profiling first-year students in STEM programs based on autonomous motivation and academic self-concept and relationship with academic achievement. *PLoS One* 9:e112489. doi: 10.1371/journal.pone.0112489

Veldman, J., Meeussen, L., and van Laar, C. (2019). A social identity perspective on the social-class achievement gap: academic and social adjustment in the transition to university. *Group Process. Intergroup Relat.* 22, 403–418. doi: 10.1177/1368430218813442

Vermunt, J. D., and Donche, V. (2017). A learning patterns perspective on student learning in higher education: state of the art and moving forward. *Educ. Psychol. Rev.* 29, 269–299. doi: 10.1007/s10648-017-9414-6

Vuong, Q. H. (1989). Likelihood ratio tests for model selection and non-nested hypotheses. *Econometr. J. Econometr. Soc.* 57, 307–333. doi: 10.2307/1912557

Wolf-Wendel, L., Ward, K., and Kinzie, J. (2009). A tangled web of terms: the overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *J. Coll. Stud. Dev.* 50, 407–428. doi: 10.1353/csd.0.0077

Wouters, S., Germeijs, V., Colpin, H., and Verschueren, K. (2011). Academic self-concept in high school: predictors and effects on adjustment in higher education. *Scand. J. Psychol.* 52, 586–594. doi: 10.1111/j.1467-9450.2011.00905.x

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Education

SYSTEMATIC REVIEW
published: 17 March 2021
doi: 10.3389/feduc.2021.540027

Conceptualising Primary-Secondary School Transitions: A Systematic Mapping Review of Worldviews, Theories and Frameworks

Divya Jindal-Snape[1]*, *Jennifer E. Symonds*[2], *Elizabeth F. S. Hannah*[1] *and William Barlow*[3]

[1]School of Education and Social Work, University of Dundee, Dundee, United Kingdom, [2]School of Education, University College Dublin, Dublin, Ireland, [3]School of Education, University of Aberdeen, Aberdeen, United Kingdom

There is continued interest internationally in primary-secondary school transitions. Fourteen literature reviews of primary-secondary transitions have been published over the last 20 years, however none of them have systematically analysed primary-secondary school transition ontology, i.e., researchers' worldviews, theories/models and frameworks. This is a major gap in these reviews and the papers published in this area; this is of concern as it is difficult to trust the robustness of a study if its foundation, such as researchers' conceptualisation of transitions, is not visible. Therefore, using the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) approach, we undertook a systematic mapping review, of empirical studies published internationally between 2008 and 2018. Our objectives were to explore researchers' and research participants' conceptualisation of transitions, the conceptual framework used by the researchers and their discourse about transitions. Of the 96 studies included in this systematic mapping review, most had not clearly defined transition, and even when conceptualisation was explicit, it did not underline the research design or frame the findings. Most researchers adopted previously used theoretical frameworks.These theoretical frameworks can be beneficial; however, as the researchers did not adapt or develop them in the context of transitions research, it limits a meta-theoretical understanding of transitions. Further, the majority did not report study participants'conceptualisation of transitions. Similarly, a large number of researchers adopted a negative discourse about primary-secondary school transitions, with some using a mixed discourse and only two papers had a primarily positive discourse. This systematic mapping review is original and significant as it is the first study to provide a review of school transitions ontology and offers unique insights into the conceptual and methodological gaps that international transitions researchers should address.

Keywords: primary-secondary school transitions, conceptualisation, theory, discourse, ontology, systematic mapping review

OPEN ACCESS

Edited by:
Sanna Ulmanen,
Tampere University, Finland

Reviewed by:
Taro Fujita,
University of Exeter, United Kingdom
Kathryn Holmes,
Western Sydney University, Australia

***Correspondence:**
Divya Jindal-Snape
d.jindalsnape@dundee.ac.uk

Specialty section:
This article was submitted to Educational Psychology, a section of the journal Frontiers in Education

Received: *03 March 2020*
Accepted: *08 February 2021*
Published: *17 March 2021*

Citation:
Jindal-Snape D, Symonds JE, Hannah EFS and Barlow W (2021) Conceptualising Primary-Secondary School Transitions: A Systematic Mapping Review of Worldviews, Theories and Frameworks. Front. Educ. 6:540027. doi: 10.3389/feduc.2021.540027

INTRODUCTION

Internationally there is continued and increasing interest by governments and researchers in how primary-secondary school transitions in late childhood or early adolescence, impact children's educational and wellbeing outcomes (Symonds and Galton, 2014; Jindal-Snape and Cantali, 2019; Jindal-Snape et al., 2020). The timing of this 'mid-schooling' transition (Youngman, 1986) differs depending on the education system: in two tier systems, such as in Scotland, children transfer once from primary to secondary school, whereas in three tier systems, such as in the United States, children transfer twice, from elementary to middle or junior high school and then to high school. Regardless of each country's tier system, in all cases, children transfer from primary education to secondary education (Eurydice, 2018). We used the terms primary and secondary in this review as well as the term mid-schooling transition, to create a definition that holds across education systems internationally.

In the past two decades there have been at least 14 reviews of empirical research on primary-secondary school transitions (Anderson et al., 2000; Benner, 2011; Topping, 2011; Hanewald, 2013; Hughes et al., 2013; Symonds and Galton, 2014; Cantali, 2017; Galton and McLellan, 2017; Pearson et al., 2017; Evans et al., 2018; van Rens et al., 2018; Jindal-Snape et al., 2020); and as books (Akos et al., 2005; Howe and Richards, 2011; Symonds, 2015). In principle, they provide a solid evidence base for researchers to build on. Only a handful of these are published within the period 2008–2018 (Hanewald, 2013; Hughes et al., 2013; Pearson et al., 2017 and meet Garrard (2016) criteria for systematic reviews as identified by Jindal-Snape et al. (2020). Although this map of the research skyline helps researchers build upwards empirically, the field's foundations have not yet been systematically examined. As such, this leaves researchers without a clear understanding of how primary-secondary school transitions have been conceptualised. The current study aims to address this gap by providing the first mapping review of primary-secondary school transitions ontology: defined as researchers' worldviews, theories/models and frameworks (Overton, 2015). This study makes an original and significant contribution to the field of primary-secondary transitions research internationally; this transition ontology will also be relevant to other educational transitions (e.g., transitions to primary school).

EMERGING CONCEPTUALISATIONS OF PRIMARY-SECONDARY SCHOOL TRANSITIONS

Primary-secondary school transitions research has existed since at least the 1960s (Symonds and Galton, 2014), and across the sixty-year period has remained focussed on children's outcomes, children's experiences of school organisation, and transition supports (Galton and McLellan, 2017; Jindal-Snape et al., 2020). Within the field, especially in England, the term transfer has also been used to describe moving from one school to another, whilst the term transition has been reserved to describe the more gradual process of moving between years within the same school (Galton et al., 2000). However, Jindal-Snape, (2016) has defined transitions as the ongoing psychological, social and educational adaptations due to moving between, and within, schools. In other cases, across the world, authors have used the term primary-secondary transitions without differentiating between these two conceptualisations.

As children experience their first term in the secondary school, they can report initial positive perceptions that are soon replaced by more negative accounts, and this is described by Hargreaves (1984) as 'the honeymoon period'. On the other hand, a longitudinal study carried out across three school years, found that children's positive expectations and 'reality' stayed the same during this move and negative experiences declined over time (Jindal-Snape and Cantali, 2019).

Another useful concept emerging from the research is that of environmental continuity and discontinuity, which refers to the elements of school culture and organisation that are similar or different (e.g., disrupted) across transition (Galton et al., 1999). This concept has been used in combination with Galton's 'Five Bridges' of school administration, pedagogy, curriculum, social organisation and children's self-management (Galton et al., 1999; Symonds, 2015), to identify, for example, discontinuities in pedagogical practices between primary-secondary schools in Scotland (Jindal-Snape and Foggie, 2008). It also examines curricular continuities created by primary and secondary schools working together to provide 'bridging units' in science subjects in England (Galton et al., 2003; Galton, 2010).

A higher-level concept regarding discontinuity is of primary-secondary school transition as a 'status passage' (Measor and Woods, 1984), where young people's behaviour is expected to alter in the new environment. Here, the young person graduates from one status to another as they pass through a passage of discontinuity. The use of this notion in school transition research originated from the status passage research of Glaser and Strauss (1971). With school transition typically occurring during the pubertal window of age 8–14 years, school transitions have been described as a Western status passage with overarching similarities to the adolescence initiation ceremonies practiced in some indigenous non-Western cultures (Symonds, 2015). These ceremonies typically involve segregation (e.g., a separating oneself from a social group), transition (the ritual, e.g., stomach binding), and incorporation (re-entering the community with a change in status, e.g., as an adolescent or adult) (Goldstein and Blumenkrantz, 2019). When young people change schools, they 'become' a different type of pupil (e.g., a 'secondary pupil' or a 'senior school pupil') (Symonds, 2015).

The continuity and discontinuity concept is also central to Eccles et al. (1993) Stage-Environment Fit theory that predicts changes in children's wellbeing (in particular motivation to learn) as a function of the fit or misfit between their current stage of psychological and social development, and the environmental discontinuity or continuity they experience in the secondary school. For example, early adolescents (age 10–14 years) typically desire more autonomy, but they rarely receive it when teachers are stricter in the transfer secondary school compared to the associated primary school (Eccles et al., 1993)

which is known as the 'transfer paradox' (Hallinan and Hallinan, 1992); although others have found this to be a misconception which changed when children moved to secondary school (Jindal-Snape and Cantali, 2019). Other concepts that tie in with continuities and discontinuities are Noye's (2006) notion of school transition acting as a prism to diffract children's experiences, and Symond's (2015) response that school transition also acts as a lens to focus children on aspects of themselves that are brought into the spotlight as they change schools.

School transitions have also been conceptualised as a distinct time period characterised by qualitatively different phases. Nicholson (1984) transitions cycle was originally designed for occupational psychology and has been repurposed for primary-secondary school transitions research by several researchers (Jindal-Snape, 2016; Symonds and Hargreaves, 2016; Galton and McLellan, 2017). The transitions cycle consists of four phases: preparation for transfer whilst in the feeder school, initial encounters made in the transfer school, adaptation to the transfer school and stabilisation of psychology and behaviour across time. Common to the first phase of preparation, children are found to experience 'eager anticipation' (Rudduck, 1996) about the transfer, which presents an interesting combination of the emotions of anxiety and happiness (Galton and McLellan, 2017).

Finally, the breadth and complexity of transitions is identified in Jindal-Snape's Multiple and Multi-dimensional Transitions (MMT) Theory which is based on research findings from participants and significant others across ages and educational and life stages (e.g., Jindal-Snape and Foggie, 2008; Jindal-Snape, 2016; Gordon et al., 2017; Jindal-Snape et al., 2019). MMT Theory emphasises that children experience multiple transitions at the same time, in multiple domains (e.g., social, academic) and multiple contexts (e.g., school, home). These multiple transitions impact each other and can trigger transitions for other people (e.g., friends, parents, teachers) and vice versa, meaning that transition overall is a multi-dimensional process (Jindal-Snape, 2016; Gordon et al., 2017). Using the Rubik's cube analogy, if each colour is one child's dynamic ecosystem, a slight change in one dimension will trigger changes in other dimensions. Further, it will trigger change and accompanying transitions for other children and their significant others. It acknowledges the complex and dynamic nature of transitions and does not see transitions as linear but as continuously evolving (Jindal-Snape, 2016; Jindal-Snape, 2018). It also highlights that these transitions are situated in, and interact with, ever-changing complex systems, e.g., policy, curriculum, or recently, the pandemic.

STUDYING CONCEPTUALISATIONS OF PRIMARY-SECONDARY SCHOOL TRANSITIONS

The different concepts that have emerged from research on primary-secondary school transitions have increased researchers' sensitivity to nuanced aspects of changing schools. However, except for primary-secondary school transitions being defined as the transfer from one school to another (Galton et al., 1999), or as an ongoing process of psychological, social and educational adaptation occurring due to changes in context, interpersonal relationships and identity, which can be simultaneously exciting and worrying for an individual and others in their lives, and which requires ongoing additional support (Jindal-Snape, 2018), none of these concepts make sense of transitions in absolute terms. What is school transition as a phenomenon? What are its defining features? Is school transition simply three phases of adaptation (encounter, preparation and adaptation) that happen sequentially as children change schools, or is it far more complex than that, as indicated by MMT Theory (Jindal-Snape, 2016)? Without clarity on what primary-secondary school transitions are there is less chance for the field to make systematic progress towards understanding its implications for children and significant others. In addition, this presents fewer opportunities to make a positive difference to children's transition experiences and educational and wellbeing outcomes.

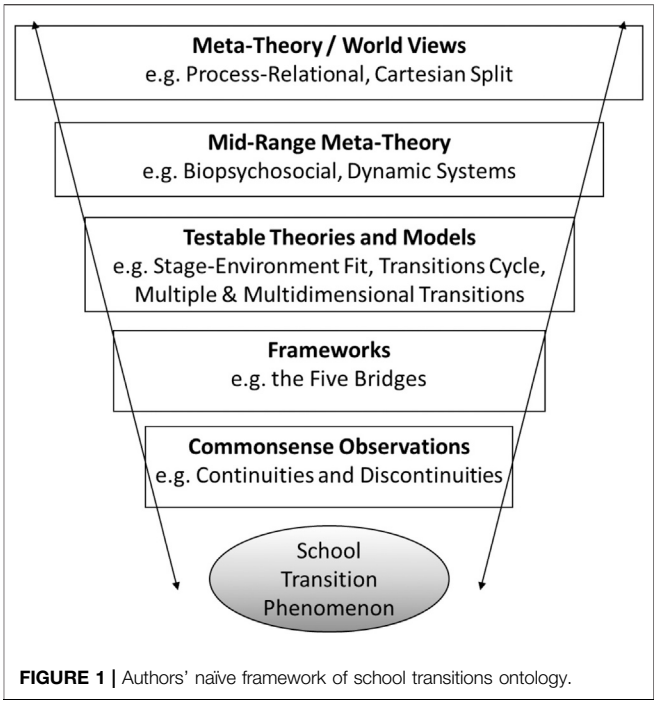


FIGURE 1 | Authors' naïve framework of school transitions ontology.

Therefore, it is crucial that we provide a framework of ontology to advance the field. Just as empirical studies often use conceptual frameworks to organise and understand their data, studies of theory can also use frameworks for mapping and understanding conceptualisations. Overton's (2015) multi-level framework of scientific paradigms indicates how a domain of inquiry (in this case, primary-secondary school transitions) can be conceptualised at different levels of formality and complexity. At the lowest level are common-sense observations, such as those a parent, teacher, child or even researcher might use to intuitively explain school transition and children's experiences. Above this are more formal models and theories that seek to explain processes. We have divided these into two types (**Figure 1**). Firstly, organisational frameworks such as the Five Bridges

(Galton et al., 1999) help to identify characteristics of a phenomenon, but do not predict or explain processes within it. Secondly, testable models and theories that seek to explain how a process operates, such as the MMT theory (Jindal-Snape, 2016). Above these are mid-range meta-theories that set out the broad conditions of a phenomenon, i.e., whether it is embodied, biopsychosocial, transactional or dialectic. At the highest level are ontological worldviews such as whether there can be testable relations between parts of a process (i.e., the mechanistic premise of Cartesian dualism) or whether a process is non-linear and irrevocably meshed as understood by process-relational theorists.

Importantly for the current study, Overton's (2015) framework enables us to systematically map different conceptualisations of school transition into a hierarchy of ontologies to identify strengths, gaps and potential for theoretical development. It allows for viewpoints from different people, including participants, practitioners and researchers, to be located at specific levels and assessed in terms of formality and complexity. **Figure 1** illustrates the school transition worldviews, theories/models and frameworks known to the four authors before conducting the systematic review (i.e., naïve structure) identifying where these are placed in a hierarchy of ontology, to illustrate the types of findings we might expect from the proposed systematic mapping review.

A further issue of interest is the discourse used by researchers when writing about school transitions. What types of discourse are used to frame primary-secondary school transitions and how might these be linked to the conceptualisations? Are transitions seen as more positive or negative for children, teachers, schools and families? Discourses used in research can be linked to a particular world view, for example the rejection of deficit models that seek to identify causes of weakness in favour of strengths-based perspectives that focus on identifying how people can function in optimal ways (Reeve, 2015). They can also be culturally relative, such as research that prioritises influences on the individual self (for example, Ecological Systems Theory), which can be in contrast to other indigenous psychological models where the self is conceptualised as an offshoot of the family or ancestors (Shute and Slee, 2015).

These considerations of transition conceptualisation and discourse led to four research questions that frame the current study, in the context of primary-secondary school transitions.

(1) How have primary-secondary school transitions been conceptualised by researchers in the literature? Here we seek to clarify the type and range of conceptualisations of school transition, locating these on Overton's (2015) framework to understand their level of formality.
(2) How have these transitions been conceptualised by participants in the research literature? Like the first question, the second question aims to uncover the type, range and formality of conceptualisations of transitions used by research participants. By investigating this we can identify similarities and differences between conceptualisations used by researchers and their participants.
(3) What theoretical frameworks are used within primary-secondary school transitions research? Following our review of the concepts emerging from the primary-secondary school transitions research, it is also of interest to map the different frameworks, models and theories that are used in conjunction with school transitions as a concept. These are not conceptualisations of transitions per se, but rather help explain different qualities and aspects of the transition experience, for example Stage-Environment Fit (Eccles et al., 1993) and Multiple and Multi-dimensional Transitions theories (Jindal-Snape, 2016; Jindal-Snape et al., 2019).
(4) What type of discourse about school transitions do researchers use? Finally, our interest in how conceptualisations are framed from cultural, historical and social perspectives leads us to investigate whether the researchers used a positive, neutral, mixed or negative discourse about school transitions.

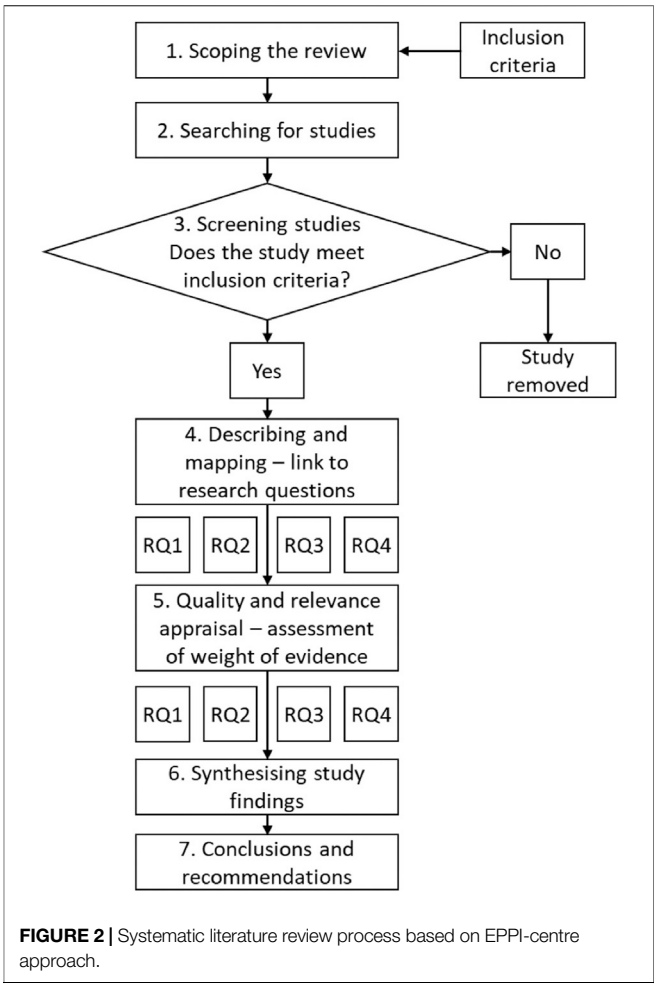


FIGURE 2 | Systematic literature review process based on EPPI-centre approach.

METHODOLOGY

To answer these questions, we drew on 96 papers retrieved for a commissioned systematic literature review which analysed empirical papers published between 2008 and 2018 that focussed on primary-secondary school transitions (Jindal-Snape

TABLE 1 | Criteria for Inclusion.

Aspect	Criteria
Relevance	Relates directly to the research questions
Search Terms	1) Transition*, 2) Transfer, 3) Mov* *in combination with* i) primary school, ii) elementary school, iii) Middle school *in combination with* a) secondary school b) high school c) post-primary
Recency	Between 2008 and 2018 to cover ten years
Age-range	10–14 (to cover international educational systems)
Geographical spread	International, with the country and educational context clearly stated
Research base	Empirical research (either qualitative, quantitative or mixed methods)
Transparency	Methodology of the research should be explicit (e.g., sample size, instruments, analysis)
Reliability/validity	As far as can be determined, the findings upon which the study is based must be valid and reliable, taking into account the type of study, such degree of synthesis and interpretation vs. descriptive for qualitative research, mitigating bias

et al., 2020). The rationale for utilising this time period was the existence of a relatively low number of literature reviews (n=9) and systematic literature reviews (n=3) focusing on primary-secondary transitions. Furthermore, it was difficult to reach conclusions given the different foci, inclusion/exclusion criteria and time periods of the reviews. The present paper uses different research questions from the original systematic review to analyse the retrieved papers. It employs a systematic mapping approach (Gough et al., 2019) where the focus is on conceptualisation and discourse surrounding transitions rather than study findings.

Systematic Literature Review Approach

We used the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre, 2010) approach to systematic literature reviews (**Figure 2**). The process outlined in Steps 1–3 and 5 was used for the Jindal-Snape et al. (2020) review. Step 4 describes the approach taken to analyse the 96 papers against the four research questions which form the focus of this paper; Steps 6–7 are also particular to this paper.

Scoping the Review

We started by developing explicit inclusion and exclusion criteria for specifying which literature to include in the review. These included relevance, recency, transparency and reliability/validity (See **Table 1**).

Searching for Studies

We searched multiple online databases and our search returned 4,635 records for screening (2,444 from three core databases in the Web of Science (WoS) - Science Citation Index Expanded, Social Sciences Citation Index, Arts and Humanities Citation Index; 679 from the Education Resources Information Center (ERIC); 662 from the British Education Index (BEI); 569 from PsycINFO; and 281 from Applied Social Sciences Index and Abstracts (ASSIA). We also found a further 17 records through searching of other sources, such as references in the papers and contacting known researchers in the area. This gave a total of 4,652 records for screening (see **Figure 2**). We also scanned the contents of key journals in the field, such as the British Educational Research Journal.

Screening Studies

Each paper was screened against the inclusion criteria developed when scoping the review (**Table 1**). By appraising each study against the same criteria and recording the results, the basis for the review's conclusions have been made transparent. Our screening process, comprising reading and cross-reading of abstracts by all authors was conducted according to our inclusion and exclusion criteria and resulted in 4,434 records being excluded for one of five main reasons: it was not a study that was focussed on transition between primary and secondary school; it did not report any empirical data; it was not published in full in the English language; it was a book or dissertation; or it was a report of a review, overview or discussion piece. This left 218 papers and their abstracts were reviewed by the authors; resulting in rejection of another 37 papers. A full read of all 181 papers led to further rejection due to the lack of meaningful fit with the research questions. This resulted in 96 studies for the review (see **Figure 3**).

Describing and Mapping the Studies

For the purposes of this mapping review, the 96 papers were randomly assigned to the four authors of this paper (24 each) by sorting them into a random order and assigning them in sequential blocks of 24. Papers written by any of the authors were assigned to one of the other authors. In line with the four research questions, we developed an initial coding scheme for categorising key elements of the papers. This included geographic location and theoretical perspective (if any) on primary-secondary school transitions that were tested for relevance by each author coding the first five studies. After discussion on the results of this initial coding, a final set of codes was developed that addressed the research questions more comprehensively. These were a) reference details b) journal impact factor c) journal focus (e.g., special educational needs), d) discipline of the researchers (e.g., developmental psychology), e) setting/school year (e.g., last year of primary school to first year of secondary school), f) paper topic (e.g., quality of life and school transition), g) transition conceptualisation (whether a definition of school transition was explicitly stated or implicitly suggested in the paper by the researcher/s and what that definition entailed), h) discourse tone (whether the discourse used to discuss transition by the researchers was positive, negative or neutral/mixed), i) theories/conceptual frameworks (e.g., Stage-Environment Fit), and j) participants' conceptualisation of school transition (whether reported or not, and what it was if reported).

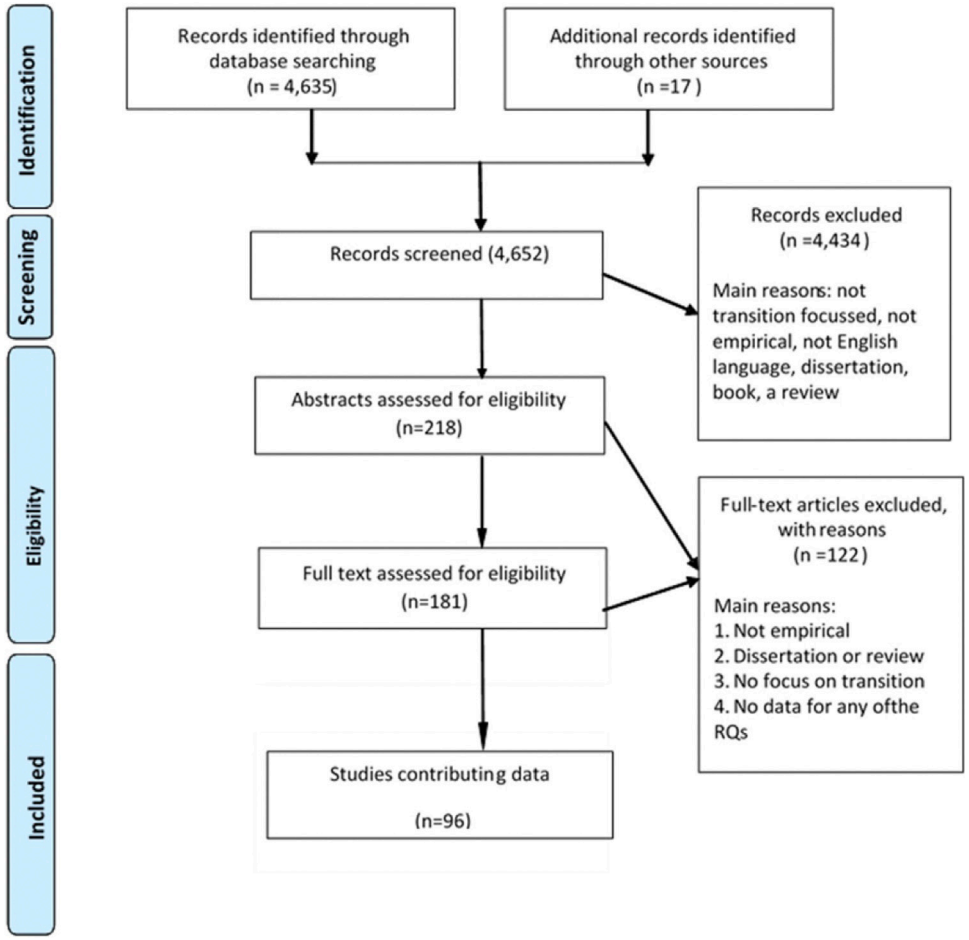


FIGURE 3 | PRISMA flow diagram of study selection.

The authors read each paper and coded them, using the system outlined above, into a Microsoft Excel spreadsheet and shared their analysis with one another. At this point, the authors, as a team, reviewed the results to identify where further classification systems would help answer the research questions. The results for g) transition conceptualisation were diverse, so a set of codes were inductively developed for these data by the authors, using key terms written in the publications as the basis for salient codes (e.g., transition as 'change'; transition as 'status/rite of passage'). Each author returned to their papers to check they fitted with these inductive codes for transition conceptualisation. The codes and their content are described in more detail in the results section. To provide further quality assurance of this analytic process, the final results were analysed numerically and qualitatively by the first author and checked by the second author for accuracy.

Quality and Evidence Appraisal

An adapted version of the EPPI-Centre Weight of Evidence (WoE) judgments were applied to each of the included studies, whereby the 'methodological relevance' referred to the study rather than to the research questions of the systematic review (note that this refers to the questions in Jindal-Snape et al., 2020). Three components were assessed in order to help derive an overall weighting of evidence score (see **Table 2**).

There was variability in the WoE ratings across the 96 papers. Thirty studies (31%) were found to be excellent across all three criteria of methodological quality, methodological relevance and topic relevance. Some studies had excellence ratings in more than one criterion and 85 (86%) studies were found to be excellent or good for topic relevance. In light of this, we included all 96 papers, especially as our focus for this paper was on conceptualisation and theoretical frameworks.

Synthesising Study Findings

A systematic mapping review was undertaken which aimed to provide a picture of the current state of knowledge, in relation to the four research questions, and thus enhance future primary-secondary transitions research (Gough et al., 2019). The results of this mapping exercise are presented numerically and as narrative below. Narrative Empirical Synthesis (EPPI-Centre, 2010) was used to bring together the results of the mapping exercise. This mapping provides an accessible combination of results from individual studies in a structured narrative.

TABLE 2 | Criteria for judging 'weight of evidence'.

Level/ criterion	Methodological quality	Methodological relevance	Topic relevance
1: Excellent	Excellent research design with clear justification of all decisions: e.g., sample, instruments, analysis. Clear evidence of measures taken to maximise internal and external validity and reliability and reduce sources of bias	Research questions (RQ) clearly stated. Methodology is highly relevant to their RQs and answers them in detail	Study is very closely aligned to one of the key review objectives and provides very strong evidence upon which to base future policy/ action
2: Good	Research design clearly stated with evidence of sensible decisions taken to provide valid and reliable findings	RQs are explicit or can be deduced from text. Findings address RQs	Study is broadly in line with one of the key review objectives and provides useful evidence
3: Satisfactory	Research design may be implicit but appears sensible and likely to yield useful data	RQs implicit but appear to be broadly matched by research design and findings	At least part of the study findings is relevant to one of the key review objectives
4: Inadequate	Research design not stated or contains flaws	RQs not stated or not matched by design	Study does not address any key research objective

Conclusions/Recommendations

The conclusions and recommendations focussed on explaining how the worldviews, theories, models and frameworks found in the systematic review mapped onto Overton's (2015) framework of ontology, to illustrate prevalence and coverage. This allowed the authors to identify gaps in school transition ontology and possible connections between conceptualisations, to drive the field forwards.

ETHICS

We followed our profession's code of practice (General Teaching Council for Scotland, Health and Care Professions Council) and were governed by our Universities' research ethics guidelines. The team are committed to ethical analysis of the literature and reporting.

RESULTS

Data from the 96 papers are presented here, although not all papers have been explicitly referred to. Results are presented under themes related to the research questions.

Conceptualisation of Primary-Secondary School Transitions by Researchers

Of the 96 papers, 86 paper author/s provided some insight into their conceptualisation of primary to secondary school transitions. In some cases, we needed to infer what the conceptualisation was based on the researchers' broader conceptual framework, research design and/or type of data presented. The lack of explicit conceptualisation and operationalisation of the key term could lead to misunderstandings for future researchers. As described in the methodology section, we conducted an inductive thematic analysis of the transition conceptualisations and found ten overarching themes. Please note that in some cases researchers were not clear about their own conceptualisation and referred to multiple conceptualisations and theories across their paper so the numbers do not add to 86 (see **Figure 4**).

Transition as change. Fifty four papers referred to transition as change; these were change in social relationships, pedagogical approaches (e.g., Mackenzie et al., 2012), change in academic demands (e.g., Kingdon et al., 2017), change in the environment (e.g., Waters et al., 2014a) and organisation (e.g., Arens et al., 2013), change related to developmental stages e.g., (Arens et al., 2013; Vasquez-Salgado and Chavira, 2014; Andreas and Jackson, 2015), and systemic changes (e.g., Strnadova et al., 2016).

Normative life transition. Forty one papers conceptualised primary-secondary school transitions as a normative life transition; 13 papers presented it as a normative life event e.g., (Neal et al., 2016).

Transition as a normative period in school career. Twenty papers conceptualised primary-secondary transitions as a normative period in a child's school career (e.g., Burchinal et al., 2008; Weiss and Baker-Smith, 2010; Brewin and Statham, 2011). This conceptualisation is perhaps not surprising as most of the authors of these papers came from an education or psychology (mainly developmental and educational) background apart from one statistician and one medic.

Multiple transitions. Author/s of eleven papers referred to multiple transitions, i.e., children/young people experiencing multiple changes at the same time, such as moving from one educational setting to another, differences in school culture and structure, significant biological, psychological and social changes, and change in teachers (e.g., Knesting et al., 2008; Serbin et al., 2013; Lofgran et al., 2015).

Transition as disruption/risk. Eight papers referred to transition as disruptive and highlighted the risk factors for children e.g., (Maher, 2010; Mackenzie et al., 2012; Keay et al., 2015).

Transition as discontinuity. Six papers referred to transition as a time of discontinuity, both curricular and relational (e.g., Rainer and Cropley, 2015; Makin et al., 2017). However, these could be seen to be similar to the first category of transition as change.

Life course perspective. Three papers used a life course conceptualisation taken from Elder's Theory (1998) (Benner and Wang, 2014; Fortuna, 2014; Witherspoon and Ennett, 2011).

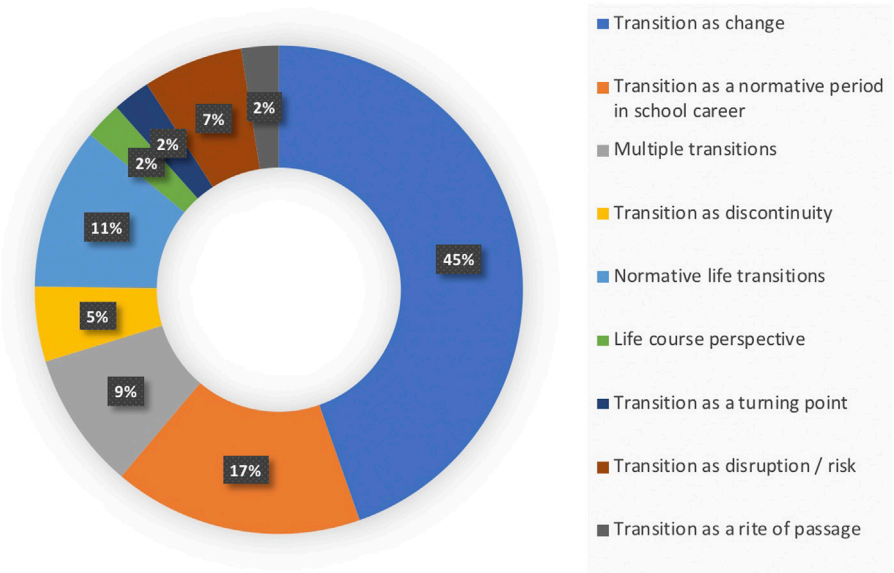


FIGURE 4 | Conceptualisation of transitions (in percentage).

Transition as a rite of passage. In three papers, transition was conceptualised as a rite of passage (Bailey and Baines, 2012; Rainer and Cropley, 2015; West et al., 2010).

Transition as a turning point. Three papers discussed transitions as turning points (Langenkamp, 2010; Andreas and Jackson, 2015; Scanlon et al., 2016).

Transfer as a paradox. One paper seemed to conceptualise it as the transfer paradox, although it does not name it as such (Rainer and Cropley, 2015).

Conceptualisation of Primary-Secondary School Transitions by Research Participants

It is not clear from any papers whether the researchers asked participants how they conceptualised transitions. However, one can start making assumptions about what participant/s might consider, and/or found, transition to be from 12 papers which presented qualitative data. Of these 12 papers, six were based on studies undertaken in the United Kingdom (Jindal-Snape and Foggie, 2008; Dismore and Bailey, 2010; Keay et al., 2015; Neal and Frederickson, 2016; Peters and Brooks, 2016; Makin et al., 2017), three in Australia (Maher, 2010; Mackenzie et al., 2012; Strnadova et al., 2016) and one each in South Africa (Mudaly and Sukhdeo, 2015), United States (Ellerbrock and Kiefer, 2013), and Ireland (Scanlon et al., 2016). Most of the studies were small scale, primarily focussing on interview data from a small group of children, parents and/or teachers, ranging from 6 to 23 participants (please note that the latter numbers include only four pupils and the rest are professionals in Ellerbrock and Kiefer, 2013).

Participants' conceptualisations included an understanding of transitions being a period of change, particularly systemic level and relationship changes, change in pedagogical approaches and curriculum, and the transfer paradox of being excited and concerned. For example, in Makin et al. (2017) study, children with an autism spectrum condition recognized difficulty adjusting to the new environment, a loss of social support and change in identity.

Similarly, Peters and Brooks (2016) reported that their participants, i.e., parents of children with Asperger and high functioning autism in England, discussed changes to routines, environment and relationships. Peters and Brook's (2016) conceptualise primary-secondary transition to be a milestone which includes substantial changes. However, it is interesting to consider the relationship between Peter and Brooks (2016) own conceptualisation and that of their participants, while also considering the potential for bias in questions asked.

Further, although most papers in this review collected data from pupils, parents and/or teachers, only these 12 papers have presented data in a way that an informed assumption about their conceptualisation was possible. It is not clear whether any of the 96 papers we reviewed directly ascertained participants' conceptualisation; a mismatch in conceptualisation might lead to incorrect interpretation of the data.

Theoretical Conceptual Frameworks Used in Primary-Secondary School Transitions Research

Thirty three papers used a theoretical framework that was not explicitly about transition as a phenomenon, to explain complex processes occurring during primary-secondary school transitions. Of these papers, 11 were from the United States, seven from Australia, seven from the United Kingdom (in England, Scotland and Wales but not Northern Ireland), two each from Canada and Israel, and one each from Finland,

Germany, Peru and South Africa. Not all 33 papers are cited here, for brevity.

One might assume that journals with high impact factor would insist that the papers include a clear theoretical framework of transitions. However, there was no support for this assumption as the 33 papers were published in journals with a range of impact factors. Seven were in journals that had no impact factor, three had impact factors below 1, eight were between 1.3 and 1.5, three had impact factors between 1.8 and 1.9, four were between 2.1 and 2.9, seven were between three and four and one had an impact factor of 4.1 (Waters et al., 2014b in *Journal of Adolescent Health*).

The theoretical frameworks used were mainly mentioned in the introduction sections; however this did not mean that they necessarily underpinned the studies. This could suggest that the authors mentioned a theory when writing a paper rather than the theoretical framework influencing the design of their study. The most prevalent theoretical frameworks were Stage-Environment Fit Theory (Eccles and Midgley, 1989) (n=10) which was used to provide reasons for young people not engaging with learning in secondary schools; Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1993) (n=8) which was used to explain the context of transitions, although Brewin and Statham (2011) also used it as a framework for data collection and analysis; Life Course Theory (Elder, 1998) (n=5) which was used to highlight that transitions are a normative life transition; and Self-determination Theory (Ryan and Deci, 2000) which was used to explore the role and development of participants' autonomy, relatedness and competence across transition. None of the papers have critiqued the theory/ies and/or their application in the context of primary-secondary school transitions. Below we discuss these most common theoretical frameworks in more detail to understand the extent to which they underpinned the research and the links with researchers' conceptualisation of transitions.

Stage-Environment Fit Theory. This theory was referred to in 10 studies across a decade and the timeline of this review, i.e., 2008 to 2018. The principal authors had a background in either developmental or educational psychology. These studies were conducted in the United States (n=6), United Kingdom (n=2), Germany (n=1) and Israel (n=1). Nine of the papers conceptualised transition as a normative life transition and therefore it is not surprising that they used Stage-Environment Fit Theory. Author(s) of five studies focussed on the negative aspects of primary-secondary transitions, whereas four concentrated on both negative and positive features, and one had a neutral discourse. This theory emphasises the mismatch between the adolescent's developmental stage and associated needs, compared to the demands of the secondary school environment (Benner and Graham, 2009). Although the theory was created to explain psychological development across the middle school transition, it does not explain school transition as a process per say. Rather it can be used to refer to any systemic change in environment and how this connects to change in a person's psychology, depending on the person's stage of development.

Interestingly, like other theories, Stage-Environment Fit Theory was only mentioned once in some papers in the introduction section to provide a background to the 'problem' (e.g., Benner and Graham, 2009; Kingery et al., 2011; Arens et al., 2013; Benner and Wang, 2014). Witherspoon and Ennett (2011) refer to the theory as part of their theoretical framework and then in the discussion. Knesting et al. (2008) did not refer to the theory but used Eccles and Midgley (1989) work to highlight the differences in the primary and secondary school environment. Madjar and Chohat (2017) used it as a framework to draw a hypothesis for their study; however they did not return to it in the results or discussion. On the other hand, Neal et al. (2016) referred to it at the start and then returned to it in the discussion to state that their findings were similar to the research behind the theory. Similarly, Ellerbrock and Kiefer (2013) use it as the theory underpinning their study in the case study approach they took. Symonds and Hargreaves (2016) and Zoller Booth and Gerard (2014) are the only two studies fully underpinned by this theory.

Brofenbrenner's Ecological Systems Theory. Brofenbrenner's Ecological Systems Theory (Brofenbrenner, 1989) was used in four papers in Australia (Waters et al., 2014a; Waters et al., 2014b; Strnadova and Cumming, 2014; Strnadova et al., 2016), three papers in the United Kingdom (Brewin and Statham, 2011; Hannah and Topping, 2013; Mandy et al., 2016a), and one in United States (Booth and Sheehan, 2008). As our review covered papers from 2008 to 2018, it is interesting to note that the year of publication was in a narrower time period; four papers are from 2014 (two from the same researchers), and one each from 2011 to 2013. Four (United Kingdom, n=3; Australia, n=1) of the papers focussed on young people with additional support needs.

Hannah and Topping (2013) used this theory to design their transition programme which they evaluated, rather than using it for research. As mentioned earlier, Brewin and Statham (2011) organised their findings around the ecosystems; they reported that it was a useful way of showing the factors, and their interaction, that had an impact on looked after children's transitions. Waters et al. (2014a) used the theory to explain the role of contexts in human development, with school being such a context; whereas in (Waters et al., 2014b) they use the Ecological Systems Theory to conceptualise the support systems of young people as they move to secondary school. Similarly, Strnadova and Cumming (2014), Strnadova et al. (2016), and Booth and Sheehan (2008) used the theory to understand transitions and relationships in the ecosystems of young people moving to secondary school. Four of the papers had a negative discourse, one both (Hannah and Topping, 2013) and one neutral (Strnadova and Cumming, 2014). It is interesting to note that although Booth and Sheehan (2008), and Strnadova and Cumming used the same theory, they used different discourses about transition.

Life Course Theory. The researchers who conceptualised primary-secondary transitions to be a normative life and/or school career transition used Elder's (1998) Life Course Theory to explain their conceptualisation (n=5). This is the only theory that includes transitions as one of its features. Two papers were based on research conducted in Canada, and three from the United States; two papers from the United States have the same primary author who has a background in

TABLE 3 | Type of discourse and setting of studies.

Type of discourse	United States	United States and United Kingdom	United Kingdom	Aus	Aus and Den	Ireland	Netherland	Canada	Finland	Germany	Italy	Norway	Peru	South Africa	Spain	Israel	Multiple sites in Europe	Total
Negative	20	0	18	8		3	2	1	1	1	1	1	1	1	1	0	1	60
Mixed or neutral	6	1	16	6	1	1	0	0	0	0	0	2	0	0	0	1	0	34
Positive	0	0	1	0		0	0	0	0	0	0	0	0	0	0	1	0	2

developmental psychology (Benner and Graham, 2009; Benner et al., 2017), another with background in clinical psychology (Kingdon et al., 2017), one primary author in education (Witherspoon and Ennett, 2011) and one in sociology (Felmlee et al., 2018). They published in the highest impact factor journals in the context of this literature review ranging from 1.304 to 3.8. Benner and colleagues conceptualised transitions as negative in the main and have focussed on the disruptions and challenges that primary-secondary transitions cause for children and young people, although they also mentioned some positives (Benner and Graham, 2009). Similarly, Felmlee et al. (2018) and Kingdon et al. (2017) have used a negative discourse; whereas Witherspoon and Ennett (2011) have focussed on both positive and negative aspects of transitions. None of these researchers have presented participants' voice.

Self-determination theory. Ryan and Deci's (2000) self-determination theory was used in four papers, one each from Australia, Finland, Peru and the United Kingdom, published in journals with an impact factor ranging from 0.3 to 3.2. These papers focussed on positive aspects of psychology including school connectedness, school belonging, school attendance, quality of life, wellbeing and autonomy. Despite their use of positive constructs, all papers used a negative discourse about primary-secondary school transitions. We review our findings on discourse in more detail below.

DISCOURSE USED BY RESEARCHERS

The discourse about transitions is very important as it can give messages, both spoken and unspoken, about what to expect when making a transition. The researchers' discourse also gives an insight into their beliefs about primary-secondary school transitions, which might influence their research questions, and questions asked of their participants. Therefore, we analysed the papers to understand the discourse by looking carefully at the introduction/framing of their study, results, discussion and conclusions. We found that the narrative was, in the main, more explicit in the introduction section of the papers rather than throughout.

Negative discourse about transition. Sixty papers (not all cited to aid brevity) highlighted negative aspects of transitions. The settings of these studies are detailed in **Table 3**. These included the premise and argument based on previous literature that transitions were disruptive, challenged children's psychological wellbeing (Poorthuis et al., 2014), led to a decline in science self-efficacy scores (Lofgran et al., 2015; no comparison was made with self-efficacy in other subjects) and in achievement (Serbin et al., 2013; Vasquez-Salgado and Chavira, 2014; Mudaly and Sukhdeo, 2015), led to high dropout rates (McIntosh et al., 2008), caused stress and anxiety (Peters and Brooks, 2016), and were especially challenging for children with ASD (Mandy et al., 2016b; Tso and Strnadova, 2017). There does not seem to be a pattern in terms of which countries the research was conducted in, as the countries with a larger number of papers using negative discourse about transition also had a larger number of published

studies overall. However, it can be said that in the case of countries with single papers 100% of papers had a negative (also Ireland, n=3, 100%) discourse seeking to address a problem during transitions as compared to 74% from the United States and 53% from Australia and the United Kingdom.

Mixed or neutral discourse about transition. Twenty-five papers made a reference to both negative and positive aspects of transitions; however, of these 15 highlighted more negative aspects than positives. Nine papers had a neutral discourse as they primarily focussed on other aspects such as the impact of school attachment and family involvement on negative behaviours (Frey et al., 2009), experience of children in PE (Rainer and Cropley, 2015), impact of school attachment and family involvement on negative behaviours during adolescence (Dann, 2011), and teachers' perceptions of transition practices for children with developmental disabilities moving from primary to secondary school (Strnadova and Cumming, 2014).

Positive discourse about transition. Two papers primarily focussed on the positive impact of transitions; one each from Israel and the United Kingdom. Madjar and Chohat (2017) investigated self-efficacy in school transitions and the impact of perception of teachers' mastery goals on transition self-efficacy. Data were collected two months after starting grade 6 (last year of primary school), two months prior to finishing sixth grade, and two months after starting seventh grade in Israel. They considered primary-secondary school transitions to be part of a normative school career and proposed the concept of *transition self-efficacy* and developed a scale to measure it, which they saw as aligning to Stage-Environment Fit Theory (Eccles et al., 1993). Neal and Frederickson (2016) cited previous literature that described transitions of children with ASD as being problematic. However, they themselves took a strength-based approach to understand the positive experiences of six children with ASD who had successful transitions in the United Kingdom. They highlighted that with appropriate support children with ASD could have successful transitions and positive experiences.

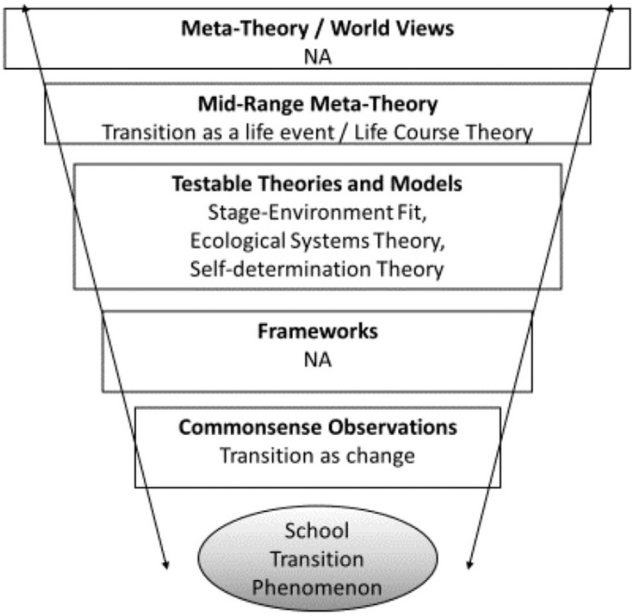


FIGURE 5 | Results mapped against Overton's (2015) framework

DISCUSSION

The way that researchers conceptualise school transitions has important implications for their research designs, study findings and implications used to inform future research, policy and practice. However, to date, school transition worldviews, theories/models and frameworks have not been studied systematically. The current study undertook a systematic mapping review of 96 papers published between 2008 and 2018 that were empirical studies of primary-secondary school transitions. The four authors, working collaboratively, analysed these papers using systematic methods of sorting, coding and synthesising to identify 1) researchers' conceptualisations of primary-secondary school transitions, 2) research participants' conceptualisations of school transitions, 3) theoretical frameworks used to explain processes during school transitions and 4) the discourse used by researchers to frame primary-secondary school transitions.

The results demonstrated a clear lack of conceptualisation of transition as a phenomenon either by researchers or participants. Rather than work their studies out of a complex theoretical perspective on transition as a phenomenon, researchers used popular conceptual frameworks to explain processes surrounding transition. These included Stage-Environment Fit Theory (Eccles et al., 1993), Ecological Systems Theory (Bronfenbrenner, 1979), Life Course Theory (Elder, 1998) and Self-determination Theory (Ryan and Deci, 2000). Finally, the discourse surrounding transitions was predominantly negative, with only two of the 96 papers focusing on positive aspects of transition.

Researchers' and Participants' Conceptualisations of Primary-Secondary School Transitions

The most common conceptualisation of transition by researchers and participants was of transition as simply 'change'. Researchers and participants also both mentioned the paradox of feeling excited and anxious during transition, identified in many other studies of transition (see Galton and McLellan (2017) for a summary). Other conceptualisations of transitions came from the researchers and fitted into two broad categories: more views of transition as change (including discontinuity, turning point, and disruption) and transition as a life-event (including transition as a normative period in school or life and transition as a rite of passage).

The conceptualisations of transitions as change were not specified with any degree of formality, and mainly reflected the literal meaning of the word transition. These are therefore best placed within the bottom level of the scientific paradigm framework described by Overton (2015), where people make common sense observations of an everyday phenomenon (**Figure 5**). The conceptualisations of primary-secondary

school transitions as a life event are more formalised, as these take their notion from somewhere other than the literal meaning of the word transition. The notion of transition as a life event comes originally from anthropology (e.g., transition as a rite of passage; Benedict, 1938) and then from sociological ethnographies of school transition (Measor and Woods, 1984) and from Life Course Theory (Elder, 1998). Given its broad application across specific models and frameworks, and positionality of transition as a passage during which the person transforms, transition as a life event can be seen as a mid-range meta-theory in Overton's (2015) framework (**Figure 5**). However, this leaves a gap as no specific frameworks of transition as a phenomenon were identified in the systematic mapping review to bridge the gap between the naive conceptualisation of transition as change and the higher-level conceptualisation of transition as a life event.

Theoretical Frameworks Used in Transitions Research

The main theoretical frameworks used to explain processes surrounding school transition could be located in the level of specific testable theories and models (Overton, 2015), between common sense observations and mid-range meta-theory (**Figure 5**). These were Stage-Environment Fit (Eccles et al., 1993), Self-determination Theory (Ryan and Deci, 2000) and Ecological Systems Theory (Bronfenbrenner, 1979). Each of the main theoretical frameworks outline how change can occur and were used to examine the adaptions in individual psychology across school transition; this was in relation to changes in person and the environment. Life Course Theory, being a broader perspective with no predictive qualities, was placed slightly above these in the level of mid-range meta-theory. Interestingly, there was no explicit link made by the researchers between any of the specific models/theories and Life Course theory, although it is quite possible that these could be combined to give a more detailed perspective on how processes occurring during transitions (e.g., through person-environment fit directed towards fulfilling basic psychological needs) might create the qualities of transition as ongoing impacting subsequent development in the life-course. None of these theories were explicitly transitions theories and had been borrowed from elsewhere. There was no attempt to critique the usability of these theories in transitions research. This might be due to the theories being mentioned in the introduction section without really underpinning the majority of studies.

Discourse Used to Frame Primary-Secondary School Transitions

The predominantly negative discourse about transition as being disruptive, a risk factor and promoting negative development appears to have no clear geographic origin in the reviewed papers nor links with any specific conceptualisation of transition or related conceptual framework. However, of the 96 studies, only four were from outside of Europe, North America and Australia. Of those within these latter countries, none were conducted with indigenous populations or by indigenous researchers (i.e., Aboriginal or Native American/First Nations). This means that nearly all the studies were from Western locales and perspectives. In non-Western cultures, but also historically in Western cultures, rites of passage are central to socially constructed notions of childhood and adulthood, marking a graduation from dependent child into fully functional member of society (Schlegel and Barry, 1991). After the person has gone through the rite of passage, they are given more responsibilities and in some cases more resources, that conceivably could mark the transition as a positive experience, and is a celebration of social, physical and psychological maturity.

However, although primary-secondary school transitions in Western cultures acts similarly as a rite of passage where children 'graduate' from primary to secondary schooling (Symonds, 2015), it is interesting to note that researchers mainly situate this in a negative discourse. Possibly this relates to repeated empirical findings of declining attitudes and attainment at transition (for reviews see Benner, 2011; Jindal-Snape et al., 2020; Symonds and Galton, 2014).

This could suggest that the repeated findings of negative trajectories mainly in the United Kingdom and United States might have something to do with the quality of lower-secondary education in those countries. On the other hand, the negative trajectories might be due to research designs that measured educational and wellbeing outcomes immediately before and after the move to secondary schools which did not capture the process of adaptation in the new environment. Further, it is not clear what type of questions participants were asked and their impact (see Jindal-Snape and Cantali, 2019, for an example of questions), or in the case of standardised scales, whether the timing of their administration was optimal. This belief is also supported by qualitative research reporting positive aspects of primary-secondary transitions that have been observed when studying holistic transitions (Jindal-Snape and Foggie, 2008), identity development (e.g., Measor and Woods, 1984; Symonds, 2015) and by meta-analyses of studies of friendship quality where children report having a greater number of better suited and supportive after moving to secondary school transition (Symonds and Galton, 2014). Overall, studies of positive aspects of primary-secondary school transitions are in the minority, a situation which is not helped by the continual use of negative discourses to frame transitions and research designs.

CONCLUSION

This is the first study that has attempted to understand the conceptualisations of primary-secondary school transitions through an analysis of previously published empirical studies. It has provided unique insights into (or lack of) researchers' and participants' conceptualisations of transitions theoretical frameworks and the discourses these might be situated in. This led to the identification of conceptual and methodological gaps in international literature. Firstly, most researchers, irrespective of the country of origin, did not clearly define what transitions meant in the specific context of their studies, and even when some

conceptualisation was explicit, especially the theoretical framework, it did not necessarily underline the research design or frame the findings. For a field of research that is at least 60 years old, this finding from research conducted between 2008 and 2018, is surprising. This study, therefore, is well-placed to make a significant contribution to future research in this area. Secondly, the majority of researchers had not indicated their study participants' conceptualisation of transitions. In the absence of these conceptualisations, it is difficult to determine the robustness of the findings and interpretation. Therefore, it is important that researchers make explicit their and their participants' conceptualisations of transitions. In addition, acknowledge how their understanding changes over time. Thirdly, using Overton (2015) framework, it is clear that most researchers have adopted previously used conceptualisations and theoretical frameworks of transitions; the empirical studies in 2008–2018 did not use some of the other previously available frameworks (e.g., Five Bridges, Galton et al., 1999, see **Figure 1**). Thus, we are no further forward in terms of a meta-theory/world view (See **Figure 5**). This has implications for international research in terms of clear theorisation of primary-secondary transitions prior to conducting a study; considering new/revised theories based on the findings; having a research design that is in line with the conceptualisation (making clear how and why) and theory; and exploring participants' conceptualisation of transitions. Further, it is important that as an international transitions research community, we work towards richer conceptualisations and understanding of transitions. This also includes a robust critique of theories that have been borrowed from elsewhere and a refining/development of theories relevant to primary-secondary school transitions.

The negative discourse in the majority of the papers was unexpected. It could be that most researchers focussed on transitions as a problematic issue to study and this in turn had an impact on the framing of the study, and potentially on the questions asked and results presented. Potentially, this could lead to a cycle of (negative) self-fulfilling prophecy. Therefore, future international research should shift the discourse, at least towards a more balanced view of transition experiences and their impact on a range of outcomes including educational and wellbeing outcomes.

Limitations

Although we undertook a systematic literature review and there was cross-checking by team members, it is possible that we have missed and/or rejected some crucial literature, including that written in other languages. Further, as this study focussed on a review of empirical studies, it is possible that we have missed a more nuanced conceptualisation of transitions in discursive literature. Therefore, it will be useful to conduct another literature review to explore conceptualisations and theories used in non-empirical literature.

AUTHOR CONTRIBUTIONS

DJ-S conceived and designed the systematic literature review and systematic mapping review. DJ-S and JS organised the dataset. All authors equally contributed to the review of papers, completed the grid which formed the basis of analysis, undertook analysis and undertook cross-checks throughout. DJS wrote the first draft of Methodology and Results. JS wrote the first draft of Introduction and Discussion. EH and WB edited the manuscript. All authors contributed to manuscript revision, read and approved the submitted version. DJ-S and JS are joint-first authors.

REFERENCES

Akos, P., Queen, J. A., and Lineberry, C. (2005). *Promoting a successful transition to middle school.* Larchmont, NY: Eye on Education.

Anderson, L. W., Jacobs, J., Schramm, S., and Splittgerber, F. (2000). School transitions: beginning of the end or a new beginning? *Int. J. Educ. Res.* 33 (4), 325–339. doi:10.1016/S0883-0355(00)00020-3

Andreas, J. B., and Jackson, K. M. (2015). Adolescent alcohol use before and after the high school transition. *Alcohol. Clin. Exp. Res.* 39 (6), 1034–1041. doi:10.1111/acer.12730

Arens, A. K., Yeung, A. S., Craven, R. G., Watermann, R., and Hasselhorn, M. (2013). Does the timing of transition matter? Comparison of German students' self-perceptions before and after transition to secondary school. *Int. J. Educ. Res.* 57, 1–11. doi:10.1016/j.ijer.2012.11.001

Bailey, S., and Baines, E. (2012). The impact of risk and resiliency factors on the adjustment of children after the transition from primary to secondary school. *Educ. Child Psychol.* 29 (1), 47–63.

Benedict, R. (1938). Continuities and discontinuities in cultural conditioning. *Psychiatry Interpersonal Biol. Process.* 1 (2), 161–167. doi:10.1080/00332747.1938.11022182

Benner, A. D., and Graham, S. (2009). The transition to high school as a developmental process among multiethnic urban youth. *Child Develop.* 80 (2), 356–376. doi:10.1111/j.1467-8624.2009.01265.x

Benner, A. D. (2011). The transition to high school: current knowledge, future directions. *Educ. Psychol. Rev.* 23 (3), 299. doi:10.1007/s10648-011-9152-0

Benner, A. D., and Wang, Y. (2014). Shifting attendance trajectories from middle to high school: influences of school transitions and changing school contexts. *Develop. Psychol.* 50 (4), 1288–1301. doi:10.1037/a0035366

Benner, A. D., Boyle, A. E., and Bakhtiari, F. (2017). Understanding students' transition to high school: Demographic variation and the role of supportive relationships. *J. Youth Adolesc.* 46 (10), 2129–2142. doi:10.1007/s10964-017-0716-2

Booth, M. Z., and Sheehan, H. C. (2008). Perceptions of people and place young adolescents' interpretation of their schools in the United States and the United Kingdom. *J. Adolesc. Res.* 23 (6), 722–744. doi:10.1117/0743558408322145

Brewin, M., and Statham, J. (2011). Supporting the transition from primary school to secondary school for children who are looked after. *Educ. Psychol. Pract.* 27 (4), 365–381. doi:10.1080/02667363.2011.624301

Bronfenbrenner, U. (1989). Ecological systems theory. *Ann. Child Develop.* 6, 187–249.

Bronfenbrenner, U. (1993). "The ecology of cognitive development: research models and fugitive findings," in *Development in context: acting and thinking in specific environments*. Editors R. Wonziak and K. Fischer (Hillsdale, NJ: Erlbaum), 3–44.

Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Cambridge, MA: Harvard University Press.

Burchinal, M. R., Roberts, J. E., Zeisel, S. A., and Rowley, S. J. (2008). Social risk and protective factors for African American children's academic achievement and adjustment during the transition to middle school. *Develop. Psychol.* 44 (1), 286–292. doi:10.1037/0012-1649.44.1.286

Cantali, D. (2017). "Primary to secondary school transitions for children with additional support needs: what the literature is telling us," in Promoting inclusion transforming Lives (PITL) international conference 2017, Dundee,

United Kingdom, June 14–16, 2017 (Dundee, United Kingdom: University of Dundee).

Dann, R. (2011). Secondary transition experiences for pupils with autistic spectrum conditions (ASCs). *Educ. Psychol. Pract. Theor. Res. Pract. Educ. Psychol.* 27 (3), 293–312. doi:10.1080/02667363.2011.603534

Dismore, H., and Bailey, R. (2010). It's been a bit of a rocky start': attitudes toward physical education following transition. *Phys. Edu. Sport Pedagogy* 15 (2), 175–191. doi:10.1080/17408980902813935

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., et al. (1993). Development during adolescence. The impact of stage-environment fit on young adolescents' experiences in schools and in families. *Am. Psychol.* 48, 90–101. doi:10.1037/0003-066X.48.2.90

Eccles, J. S., and Midgley, C. (1989). "Stage-environment fit: developmentally appropriate classrooms for early adolescents," in *Research on Motivation in education*. Editors R. Ames and C. Ames (New York, NY: Academic Press), 139–181.

Elder, G. H. J. (1998). The life course as developmental theory. *Child Devel* 69 (1), 1–12. doi:10.1111/j.1467-8624.1998.tb06128.x

Ellerbrock, C. R., and Kiefer, S. M. (2013). The interplay between adolescent needs and secondary school structures: fostering developmentally responsive middle and high school environments across the transition. *High Sch. J.* 96 (3), 170–194. doi:10.1353/hsj.2013.0007

EPPI-Centre (2010). *EPPI Centre methods for conducting systematic reviews*. London, United Kingdom: Social Science Research Unit, Institute of Education.

Eurydice (2018). Organisation of the education system and of its structure. Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-education-system-and-its-structure-115_en (Accessed May 06, 2019).

Evans, D., Borriello, G. A., and Field, A. P. (2018). A review of the academic and psychological impact of the transition to secondary education. *Front. Psychol.* 9, 1482. doi:10.3389/fpsyg.2018.01482

Felmlee, D., McMillan, C., Inara Rodis, P., and Osgood, D. W. (2018). Falling behind: lingering costs of the high school transition for youth friendships and grades. *Sociol. Edu.* 91 (2), 159–182. doi:10.1177/0038040718762136

Fortuna, R. (2014). The social and emotional functioning of students with an autistic spectrum disorder during the transition between primary and secondary schools. *Support Learn.* 29 (2), 177–191. doi:10.1111/1467-9604.12056

Frey, A., Ruchkin, V., Martin, A., and Schwab-Stone, M. (2009). Adolescents in transition: school and family characteristics in the development of violent behaviors entering high school. *Child Psychiatry Hum. Devel* 40 (1), 1–13. doi:10.1007/s10578-008-0105-x

Galton, M. (2010). "Moving to secondary school: what do pupils in England say about the experience?," in *Educational transitions: moving stories from around the world*. Editor D. Jindal-Snape (New York, NY: Routledge), 107–124.

Galton, M., Gray, J., and Ruddock, J. (1999). *The impact of school transitions and transfers on pupil progress and attainment*. London, United Kingdom: DfEE.

Galton, M., Gray, J., and Ruddock, J. (2003). Transfer and transition in the middle years of schooling (7–14): continuities and discontinuities in learning. Research Report RR443. Nottingham, United Kingdom: DfES Publications.

Galton, M., and McLellan, R. (2017). A transition Odyssey: pupils' experiences of transfer to secondary school across five decades. *Res. Pap. Edu.* 33, 1–23. doi:10.1080/02671522.2017.1302496

Galton, M., Morrison, I., and Pell, T. (2000). Transfer and transition in English schools: reviewing the evidence. *Int. J. Educ. Res.* 33, 340–363. doi:10.1016/S0883-0355(00)00021-5

Garrard, J. (2016). *Health sciences literature review made easy*. London, United Kingdom: Jones and Bartlett Learning.

Glaser, B. G., and Strauss, A. L. (1971). *Status passage*. Chicago, United States: Aldine Atherton Inc.

Goldstein, M. B., and Blumenkrantz, D. G. (2019). "Rites of passage: history, theory, and culture in adolescence transitions," in *The encyclopedia of child and adolescent development*. Editors S. Hupp and J. D. Jewell (Hoboken, NJ: John Wiley and Sons Inc.), 1–12. doi:10.1002/9781119171492.wecad323

Gordon, L., Jindal-Snape, D., Morrison, J., Muldoon, J., Needham, G., Siebert, S., et al. (2017). Multiple and multidimensional transitions from trainee to trained doctor: a qualitative longitudinal study in the UK. *BMJ Open* 7 (11), 1–12. doi:10.1136/bmjopen-2017-018583

Gough, D., Thomas, J., and Oliver, S. (2019). Clarifying differences between reviews within evidence ecosystems. *Syst. Rev.* 8, 170. doi:10.1186/s13643-019-1089-2

Hallinan, P., and Hallinan, P. (1992). Seven into eight will go: transition from primary to secondary school. *Aust. Educ. Develop. Psychol.* 9 (2), 30–38.

Hanewald, R. (2013). Transition between primary and secondary school: why it is important and how it can Be supported. *Aust. J. Teach. Edu.* 38 (1), 62–74. doi:10.14221/ajte.2013v38n1.7

Hannah, E. F., and Topping, K. J. (2013). The transition from primary to secondary school: perspectives of students with autism spectrum disorder and their parents. *Int. J. Spec. Edu.* 28 (1), 145–157.

Hargreaves, D. J. (1984). *Improving secondary schools*. London, United Kingdom: Inner London Education Authority.

A. Howe and V. Richards (Editors) (2011). *Bridging the transition from primary to secondary school*. London, United Kingdom: Routledge.

Hughes, L. A., Banks, P., and Terras, M. M. (2013). Secondary school transition for children with special educational needs: a literature review. *Support Learn.* 28 (1), 24–34. doi:10.1111/1467-9604.12012

Jindal-Snape, D. (2016). *A-Z of transitions*. Basingstoke, United Kingdom: Palgrave Macmillan.

Jindal-Snape, D., and Cantali, D. (2019). A four-stage longitudinal study exploring pupils' experiences, preparation and support systems during primary-secondary school transitions. *Br. Educ. Res. J.* 45 (6), 1255–1278. doi:10.1002/berj.3561

Jindal-Snape, D., and Foggie, J. (2008). A holistic approach to primary-secondary-transitions. *Improving Schools* 11, 5–18. doi:10.1177/1365480207086750

Jindal-Snape, D., Hannah, E., Cantali, D., Barlow, W., and MacGillivray, S. (2020). Systematic literature review of primary–secondary transitions: international research. *Rev. Educ.* 8, 526–566. doi:10.1002/rev3.3197

Jindal-Snape, D., Johnston, B., Pringle, J., Kelly, T., Scott, R., Gold, L., et al. (2019). Multiple and multidimensional life transitions in the context of life-limiting health conditions: longitudinal study focussing on perspectives of young adults, Families and Professionals. *BMC Palliat. Care* 18, 1–12. doi:10.1186/s12904-019-0414-9

Jindal-Snape, D. (2018). "Transitions from early years to primary and primary to secondary," in *Scottish education*. 5th Edn, Editors T. G. K. Bryce, W. M. Humes, D. Gillies, and A. Kennedy (Edinburgh, United Kingdom: Edinburgh University Press), 281–291.

Keay, A., Lang, J., and Frederickson, N. (2015). Comprehensive support for peer relationships at secondary transition. *Educ. Psychol. Pract.* 31 (3), 279–292. doi:10.1080/02667363.2015.1052046

Kingdon, D., Serbin, L. A., and Stack, D. M. (2017). Understanding the gender gap in school performance among low-income children: a developmental trajectory analysis. *Int. J. Behav. Devel* 41 (2), 265–274. doi:10.1177/0165025416631836

Kingery, J. N., Erdley, C. A., and Marshall, K. C. (2011). Peer acceptance and friendship as predictors of early adolescents' adjustment across the middle school transition. *Merrill-Palmer Quart. J. Develop. Psychol.* 57 (3), 215–243. doi:10.1353/mpq.2011.0012

Knesting, K., Hokanson, C., and Waldron, N. (2008). Settling in: facilitating the transition to an inclusive middle school for students with mild disabilities. *Int. J. Disabil. Develop. Educ.* 55 (3), 265–276. doi:10.1080/10349120802268644

Langenkamp, A. G. (2010). Academic vulnerability and resilience during the transition to high school: the role of social relationships and district context. *Sociol. Edu.* 83 (1), 1–19. doi:10.1177/0038040709356563

Lofgran, B. B., Smith, L. K., and Whiting, E. F. (2015). Science self-efficacy and school transitions: elementary school to middle school, middle school to high school. *Sch. Sci. Math.* 115 (7), 366–376. doi:10.1111/ssm.12139

Mackenzie, E., McMaugh, A., and O'Sullivan, K. (2012). Perceptions of primary to secondary school transitions: challenge or threat? *Issues Educ. Res.* 22 (3), 298–314.

Madjar, N., and Chohat, R. (2017). Will I succeed in middle school? A longitudinal analysis of self-efficacy in school transitions in relation to goal structures and engagement. *Educ. Psychol.* 37 (6), 680–694. doi:10.1080/01443410.2016.1179265

Maher, D. (2010). Supporting students' transition from primary school to high school using the internet as a communication tool. *Tech. Pedagogy Educ.* 19 (1), 17–30. doi:10.1080/14759390903579216

Makin, C., Hill, V., and Pellicano, E. (2017). The primary-to-secondary school transition for children on the autism spectrum: a multi-informant mixed-methods study. *Autism Develop. Lang. Impairments* 2, 1–18. doi:10.1177/2396941516684834

Mandy, W., Murin, M., Baykaner, O., Staunton, S., Hellriegel, J., Anderson, S., et al. (2016a). The transition from primary to secondary school in mainstream education for children with autism spectrum disorder. *Autism* 20 (1), 5–13. doi:10.1177/1362361314562616

Mandy, W., Murin, M., Baykaner, O., Staunton, S., Cobb, R., Hellriegel, J., et al. (2016b). 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. doi:10.1177/1362361315598892

McIntosh, K., Flannery, K. B., Sugai, G., Braun, D. H., and Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. *J. Positive Behav. Interventions* 10 (4), 243–255. doi:10.1177/1098300708318961

Measor, L., and Woods, P. (1984). *Changing schools*. Milton Keynes, United Kingdom: Open University Press.

Mudaly, V., and Sukhdeo, S. (2015). Mathematics learning in the midst of school transition from primary to secondary school. *Int. J. Educ. Sci.* 11 (3), 244–252. doi:10.1080/09751122.2015.11890395

Neal, S., and Frederickson, N. (2016). ASD transition to mainstream secondary: a positive experience? *Educ. Psychol. Pract.* 32 (4), 355–373. doi:10.1080/02667363.2016.1193478\

Neal, S., Rice, F., Ng-Knight, T., Riglin, L., and Frederickson, N. (2016). Exploring the longitudinal association between interventions to support the transition to secondary school and child anxiety. *J. Adolescence* 50, 31–43. doi:10.1016/j.adolescence.2016.04.003

Nicholson, N. (1984). A theory of work role transitions. *Admin. Sci. Q.* 29, 172–191.

Noyes, A. (2006). School transfer and the diffraction of learning trajectories. *Res. Pap. Edu.* 21 (1), 43–62. doi:10.1080/02671520500445441

Overton, W. F. (2015). "Process and relational developmental systems," in *Handbook of child psychology and developmental science*. 7th Edn, Editors R. M. Lerner, W. F. Overton, and P. C. M. Molenaar (Hoboken, NJ: Wiley), Vol. 1, 9–62.

Pearson, N., Haycraft, E., Johnston, J. P., and Atkin, A. J. (2017). Sedentary behaviour across the primary-secondary school transition: a systematic review. *Prev. Med.* 94, 40–47. doi:10.1016/j.ypmed.2016.11.010

Peters, R., and Brooks, R. (2016). Parental perspectives on the transition to secondary school for students with Asperger syndrome and high-functioning autism: a pilot survey study. *Br. J. Spec. Edu.* 43 (1), 75–91. doi:10.1111/1467-8578.12125

Poorthuis, A. M. G., Thomaes, S., Aken, M. A. G., Denissen, J. J. A., and de Castro, B. O. (2014). Dashed hopes, dashed selves? A sociometer perspective on self-esteem change across the transition to secondary school. *Soc. Develop.* 23 (4), 770–783. doi:10.1111/sode.12075

Rainer, P., and Cropley, B. (2015). Bridging the gap–but mind you don't fall. Primary physical education teachers' perceptions of the transition process to secondary school. *Education* 43 (5), 445–461. doi:10.1080/03004279.2013.819026

Reeve, J. (2015). "Growth motivation and positive psychology," in *Understanding motivation and emotion*. 6th Edn. (Hoboken, NJ: John Wiley and Sons, Inc.), 431–465.

Rudduck, J. (1996). Going to 'the big school': the turbulence of transition, in *School improvement: what can pupils tell us?* Editors J. Rudduck, R. Chaplain, and G. Wallace (London, United Kingdom: David Fulton Publishers), 19–28.

Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am. Psychol.* 55 (1), 68–78. doi:10.1037//0003-066x.55.1.68

Scanlon, G., Barnes-Holmes, Y., McEnteggart, C., Desmond, D., and Vahey, N. (2016). The experiences of pupils with SEN and their parents at the stage of pre-transition from primary to post-primary school. *Eur. J. Spec. Needs Educ.* 31 (1), 44–58. doi:10.1080/08856257.2015.1087128

Schlegel, A. A., and Barry, H. (1991). *Adolescence: an anthropological inquiry*. New York, NY: Free Press.

Serbin, L. A., Stack, D. M., and Kingdon, D. (2013). Academic success across the transition from primary to secondary schooling among lower-income adolescents: understanding the effects of family resources and gender. *J. Youth Adolescence* 42 (9), 1331–1347. doi:10.1007/s10964-013-9987-4

Shute, R. H., and Slee, P. T. (2015). *Child development: theories and critical perspectives*. London, United Kingdom: Routledge.

Strnadova, I., Cumming, T. M., and Danker, J. (2016). Transitions for students with intellectual disability and/or autism spectrum disorder: carer and teacher perspectives. *Aust. J. Spec. Edu.* 40 (2), 141–156. doi:10.1017/jse.2016.2

Strnadova, I., and Cumming, T. M. (2014). The importance of quality transition processes for students with disabilities across settings: learning from the current situation in New South Wales. *Aust. J. Edu.* 58 (3), 318–333. doi:10.1177/0004944114543603

Symonds, J., and Galton, M. (2014). Moving to the next school at age 10–14 years: an international review of psychological development at school transition. *Rev. Educ.* 2 (1), 1–27. doi:10.3389/fpsyg.2018.01482

Symonds, J., and Hargreaves, L. (2016). Emotional and motivational engagement at school transition: a qualitative stage-environment fit study. *J. Early Adolescence* 36 (1), 54–85. doi:10.1177/0272431614556348

Symonds, J. (2015). *Understanding school transition: what happens to children and how to help them*. London, United Kingdom: Routledge.

Topping, K. (2011). Primary–secondary transition: differences between teachers' and children's perceptions. *Improving Schools* 14 (3), 268–285. doi:10.1177/1365480211419587

Tso, M., and Strnadova, I. (2017). Students with autism transitioning from primary to secondary schools: parents' perspectives and experiences. *Int. J. Inclusive Edu.* 21 (4), 389–403. doi:10.1080/13603116.2016.1197324

van Rens, M., Haelermans, C., Groot, W., and van den Brink, H. M. (2018). Facilitating a successful transition to secondary school: (How) Does it work? A systematic literature review. *Adolesc. Res. Rev.* 3, 43–56. doi:10.1007/s40894-017-0063-2

Vasquez-Salgado, Y., and Chavira, G. (2014). The transition from middle school to high school as a developmental process among Latino youth. *Hispanic J. Behav. Sci.* 36 (1), 79–94. doi:10.1177/0739986313513718

Waters, S. K., Lester, L., and Cross, D. (2014a). Transition to secondary school: expectation versus experience. *Aust. J. Edu.* 58 (2), 153–166. doi:10.1177/0004944114523371

Waters, S., Lester, L., and Cross, D. (2014b). How does support from peers compare with support from adults as students transition to secondary school? *J. Adolesc. Health* 54 (5), 543–549. doi:10.1016/j.jadohealth.2013.10.012

Weiss, C. C., and Baker-Smith, E. (2010). Eighth-grade school form and resilience in the transition to high school: a comparison of middle schools and K-8 schools. *J. Res. Adolescence* 20 (4), 825–839. doi:10.1111/j.1532-7795.2010.00664.x

West, P., Sweeting, H., and Young, R. (2010). Transition matters: pupils' experiences of the primary-secondary school transition in the West of Scotland and consequences for well-being and attainment. *Res. Pap. Educ.* 25 (1), 21–50. doi:10.1080/02671520802308677

Witherspoon, D., and Ennett, S. (2011). Stability and change in rural youths' educational outcomes through the middle and high school years. *J. youth Adolescence* 40 (9), 1077–1090. doi:10.1007/s10964-010-9614-6

M. Youngman (Editor) (1986). *Mid-schooling transfer: Problems and proposals*. Windsor, CA: NFER–Nelson.

Zoller Booth, M., and Gerard, J. M. (2014). Adolescents' stage-environment fit in middle and high school: the relationship between students' perceptions of their school and themselves. *Youth Soc.* 46 (6), 735–755. doi:10.1177/0044118X12451276

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Advantages of publishing in Frontiers

OPEN ACCESS
Articles are free to read for greatest visibility and readership

FAST PUBLICATION
Around 90 days from submission to decision

HIGH QUALITY PEER-REVIEW
Rigorous, collaborative, and constructive peer-review

TRANSPARENT PEER-REVIEW
Editors and reviewers acknowledged by name on published articles

Frontiers
Avenue du Tribunal-Fédéral 34
1005 Lausanne | Switzerland

Visit us: www.frontiersin.org
Contact us: frontiersin.org/about/contact

REPRODUCIBILITY OF RESEARCH
Support open data and methods to enhance research reproducibility

DIGITAL PUBLISHING
Articles designed for optimal readership across devices

FOLLOW US
@frontiersin

IMPACT METRICS
Advanced article metrics track visibility across digital media

EXTENSIVE PROMOTION
Marketing and promotion of impactful research

LOOP RESEARCH NETWORK
Our network increases your article's readership