Educational & Child Psychology

dєcp

Volume 36 Number 2
June 2019

Special issue: School belonging

Editorial policy for Educational & Child Psychology

The Editorial Board seeks to publish papers that make significant and original contributions to the field of educational and child psychology. Approaches should be rigorous, firmly grounded within the discipline of psychology and intended to stimulate and deepen understanding of issues in educational and child psychology for an international audience of professional applied psychologists and others concerned for the education and development of children. Papers may be empirical, theoretical, conceptual, or present reviews.

Educational & Child Psychology is published four times a year. Each part of the publication consists of papers devoted to a theme of relevance for educational psychologists. The themes are announced in advance – generally as a 'Call for papers' issued in *The Psychologist* with a nominated member of the Editorial Board as a point of contact for that issue.

Special issue: School belonging

Contents

About the contributors

Kelly-Ann Allen is an educational and developmental psychologist, senior lecturer at Monash University and honorary fellow of the University of Melbourne.

Christopher Boyle is associate professor in Inclusive Education and Psychology at Exeter University.

Ming Ming Chiu is chair professor of Analytics & Diversity at the Education University of Hong Kong.

Tim Cockerill is a senior educational psychologist at Babcock Learning and Development Partnership, Exeter, Devon.

Brenda Dobia is senior lecturer in the School of Education and senior researcher in the Centre for Educational Research at Western Sydney University.

Zachary Elison is staff psychologist at the University of North Carolina-Charlotte.

Jonathan K. Ferguson is a graduate student, Counselling Psychology, University of Missouri-Columbia.

Annie Gowing is a lecturer in Student Wellbeing at the University of Melbourne.

Matt Leonard is a trainee educational psychologist placed with Wandsworth Council.

Tara Midgen is principal educational psychologist working for Wandsworth Council.

Kirsty Newbury is a Year 3 trainee educational psychologist placed with Wandsworth Council.

Roberto Parada is a senior lecturer in Adolescent Development, Wellbeing, Behaviour and Pedagogical Studies at Western Sydney University.

Sue Roffey is honorary associate professor at the University of Exeter, adjunct associate professor at Western Sydney University and director of Growing Great Schools Worldwide.

Chad Rose is associate professor, Special Education, University of Missouri-Columbia.

Christopher Slaten is assistant professor, Counselling Psychology at the University of Missouri-Columbia.

Madelaine Smith is an educational psychologist with Essex County Council.

Theodora Theodoratou is a senior educational psychologist working for Wandsworth Council.

Sarah Whiteway is an educational psychologist at Wandsworth Schools and Community Psychology Service.

Guest editorial

School belonging – Why are our students longing to belong to school?

Sue Roffey, Christopher Boyle & Kelly-Ann Allen

SCHOOL BELONGING is commonly defined as: *'the extent to which students feel personally accepted, respected, included and supported by others in the school social environment'* (Goodenow & Grady, 1993).

It has been found to be a predictor of a range of broad academic, psychological and physical health benefits in young people. A sense of school belonging can not only buffer the effects of student anxiety and depression but also boost academic engagement and motivation. It has been related to a myriad of further beneficial outcomes including resilience, gratitude, sleep, and self-esteem. School belonging has also been shown to decrease the incidence of factors that are not conducive to education, such as bullying, misconduct, school dropout and truancy. And it does not take much to increase a sense of belonging. There is a plethora of brief interventions that demonstrate that with very little cost and effort, the issue can be effectively addressed. (e.g. Booker, 2018; Craggs & Kelly, 2018; Diebel et al., 2016).

There are a range of factors that strongly predict connectedness, with teacher support and social and emotional competencies taking a strong lead in fostering this for young people (Allen et al., 2018). With all this evidence regarding the importance of school belonging, and the fact that even brief interventions have been shown to make a difference, why is it that international data suggests that one in four students do not feel a sense of connection to school (OECD, 2017)? This statistic transcends continents and has become an international concern. Why are so many of our students longing to belong to school?

Loneliness has been brought to the fore recently both in the UK and elsewhere, heralded as a burgeoning issue for both teenagers and the elderly that requires critical attention (Goossens, 2018). Given the compelling research demonstrating the moderating power of a sense of school belonging for loneliness (e.g. Benner et al., 2017; Cavanaugh & Buehler, 2016), should not schools and society at large be making a concerted and targeted reproach to address the loneliness epidemic in teenagers through school belonging interventions? After all, schools are often a constant feature for most people, perhaps fulfilling a similar function to places of worship in creating a catalyst for social bonds and community connections.

It seems that there is no one panacea for students who do not have a sense of belonging. Race, ethnicity, culture, individual psychological assets, the family context and other systems involved in fostering school belonging may all have a role. A sense of school belonging is an individual experience – for the student and for the school. Given that these multiple variables have a significant relationship with school belonging, our understanding of the concept can be unclear. It is for this reason that ongoing research into school belonging, with high utility for practitioners, has never been more important.

This issue of *Educational and Child Psychology* is notable, not just for the breadth of the articles on school belonging, but also the international scope of contributions. The importance of feeling connected to school is clearly an area of concern globally with authors not just from the UK but also across Australia, the United States and Hong Kong.

The issue begins with the voice of the child. Midgen et al. explored the views of pupils, aged 3 to 16 who had a range of special educational needs. They found four themes that contributed to school belonging: the quality of relationships, the provision of extra-curricular activities, the school environment and the curriculum. Cockerill also honours student experiences by asking pupils, whose education was split between a mainstream school and a special unit, what school belonging meant to them. Interestingly, the comparison of feeling more valued in the off-site setting than in mainstream led to poorer behaviour in the mainstream. Whiteway's research on the views of teenage fathers about feeling connected within education also unearthed some important findings; namely that primary school often compensated for a lack of security and belonging at home but this disappeared once pupils were in secondary school. Becoming a father had, for several of these young men, provided a role and a sense of belonging in a new family situation, somewhere where they could experience pride and feel valued.

Slaten and colleagues used an eco-systemic model to look at the various influences on school belonging and its impact on bullying behaviour. They discovered that home and school environment were more significant than peer relationships. This contrasts with the following paper that focuses on peer to peer connection. According to Gowing, relationships between students are the driver for school connectedness. This raises the issue of what happens for pupils who are isolated and have few other supports. Dobia and colleagues write about an intervention that specifically addresses this issue. Circle Solutions aims to build positive connections between students, handing over to them in a structured format, responsibility for the inclusiveness of the classroom. The qualitative element of this research indicated an increase in inclusive and considerate behaviour.

So far, papers have highlighted the impact of school connectedness for school climate, self-worth and behaviour but there is also evidence that students will be more engaged with learning where they feel welcomed, wanted and valued. The second paper by Slaten and colleagues makes links between school connectedness and learning, specifically a correlation between belonging, self-regulated learning and self-efficacy.

Many of the papers in this issue have used various surveys to measure school belonging and often found these wanting in some way. Parada has developed a new scale – the School Belonging Scale – introduced in this final paper where he explores the psychometric properties. His study shows this to be internally consistent and reliable and applicable to both genders, offering researchers a further resource in this ever growing and important field.

In essence school belonging is good educational practice and should be regarded as part of the wider inclusive approach to education (Anderson & Boyle, 2015). It is essential that all students feel a sense of belonging to their school. Many students at different stages require some level of support, whether it be minor or towards the other end of a continuum. This special issue highlights many of the approaches which highlights good practice as well as facilitating a new method of assessing the level of school belonging. There are many arguments for and against support in schools (Boyle, 2007) but the main issue remains that success is dependent on a positive school ethos which facilitates belonging for all students.

Guest Editors
Sue Roffey, Christopher Boyle
& Kelly-Ann Allen

References

Allen, K., Kern, M.L., Vella-Brodrick, D., Hattie, J. & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review, 30*(1), 1–34.

Anderson, J. & Boyle, C., (2015). Inclusive education in Australia: Rhetoric, reality, and the road ahead. *British Journal of Support for Learning, 30*(1), 4–22. doi: 10.1111/1467-9604.12074

Benner, A.D., Boyle, A.E. & Bakhtiari, F. (2017). Understanding students' transition to high school: demographic variation and the role of supportive relationships. *Journal of Youth and Adolescence, 46*(10), 2129–2142.

Booker, K. (2018). The high tide raises all ships: Middle grades teachers' perspectives on school belonging in early adolescence. *RMLE Online, 41*(8), 1–15.

Boyle, C.M. (2007). An analysis of the efficacy of a motor skills training programme for young people with moderate learning difficulties. *International Journal of Special Education, 22*(1), 11–24.

Cavanaugh, A.M. & Buehler, C. (2016). Adolescent loneliness and social anxiety: The role of multiple sources of support. *Journal of Social and Personal Relationships, 33*(2), 149–170.

Craggs, H. & Kelly, C. (2018). School belonging: Listening to the voices of secondary school students who have undergone managed moves. *School Psychology International, 39*(1), 56–73.

Diebel, T., Woodcock, C., Cooper, C. & Brignell, C. (2016). Establishing the effectiveness of a gratitude diary intervention on children's sense of school belonging. *Educational & Child Psychology, 33*(2), 117–129.

Goodenow, C. & Grady, K.E.(1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *The Journal of Experimental Education 62*(1), 60–71.

Goossens, L. (2018). Loneliness in adolescence: Insights from Cacioppo's Evolutionary Model. *Child Development Perspectives, 12*(4), 230–244. doi:10.1111/cdep.12291

OECD (2017). *PISA 2015 Results (Volume III).* Retrieved from https://read.oecd-ilibrary.org/education/pisa-2015-results-volume-iii_9789264273856-en#page121

'School for Everyone': An exploration of children and young people's perceptions of belonging

Tara Midgen, Theodora Theodoratou, Kirsty Newbury & Matt Leonard

The Aim: *Following the Children and Families Act (2014) Local Authorities must involve children and young people with Special Educational Needs and Disabilities (SEND) in reviewing the special educational provision in their area and planning future provision. As part of one council's review of its special educational provision, the views were sought of children and young people with a range of needs to explore the factors influencing their sense of belonging within their educational settings. Research suggests that children's sense of belonging has significant implications for schools, as it is likely to be positively associated with important outcomes such as engagement with learning, mental health and happiness.*

Method/Rationale: *A two phase project was delivered using exploratory and emancipatory mixed-methods with 84 children and young people, aged 3 to 16 with a range of SEND. Young people's sense of belonging was collected using the Belonging Scale and School Connectedness Scale, alongside individual or semi-structured group reflection sessions, which allowed for a detailed understanding of participant perspectives. Key themes were identified and quantitative data from the questionnaires was analysed.*

Findings: *Four key themes were identified as important in supporting children's sense of belonging in school: Relationships, School Environment, Teaching and Learning and Extra Curricular Activities. Children and young people also ranked the emerging themes to create a list of Top Ten tips for inclusion and belonging.*

Limitations: *Participants comprised a small number of children across a wide range of ages/needs from each setting limiting the possibility of any generalisability.*

Conclusions: *Results provided an understanding of how children and young people perceive and feel a sense of belonging in their schools. Perspectives will help influence the local authority's future educational provision and inclusion strategy.*

Keywords: *Belonging; inclusion, school, educational psychologist; Special Educational Needs and Disability.*

Introduction

THE CHILDREN and Families Act 2014 (HM Government, 2014) initiated a substantial programme of reforms for children with Special Educational Needs and Disabilities (SEND). A key aspect of the reforms was the increased emphasis on children and young people's involvement in decision-making, both specifically in relation to decisions affecting their own education, health and care, but also strategically in relation to wider decision-making, for example, about local provision.

One borough's review of provision for children with SEND highlighted the increasing number of children undergoing education, health and care needs assessments, the pressure on requests for specialist school placements and the higher number of children placed in specialist provision in comparison with statistical neighbours. These trends have significant resource implications both for services such as educational psychologists involved in undertaking assessments and for local authorities funding

Education Health and Care Plans (EHCP) and special school placements.

Following the review of provision, the council recognised the need to strengthen its strategy for including children in their local mainstream provision. As part of this strategy and the need to involve children in decision-making, the council's educational psychology service agreed to explore children and young people's understanding and thoughts regarding what helps them feel they belong in their schools, as there is a growing body of research suggesting that the concept of inclusion must embrace the feeling of belonging, since it has received strong support as a central characteristic of inclusion (Billingsley et al., 1996; Forest & Lusthaus, 1989; Frederickson et al., 2007). One hope was that the children's views would shape the development of an 'Inclusion Charter' for the borough that would strengthen school practices as well as identify future considerations for the successful inclusion of more children with SEND in their local mainstream settings. A charter has the potential to both influence school leaders' perceptions and highlight priority areas for local services to support and develop school confidence. Research suggests that children's sense of belonging has significant implications for schools, as it is likely to be positively associated with important outcomes such as engagement with learning, mental health and happiness, which could all provide insights into the effectiveness of inclusion in the borough (Prince & Hadwin, 2013).

Literature review

The foundations and impact of a sense of belonging in the school setting is a small but growing field within current literature (Dimitrellou, 2017; Prince & Hadwin, 2013), and while England continues to progress towards a more inclusive and child-centred education system (DoH/DfE, 2017; HM Government, 2014; Ofsted & CQC, 2016), it is likely that this field will continue to expand. The importance of this lies in the impact a sense of school belonging can have on children and young people, particu-larly in the realms of cognitive/academic achievement; behavioural/social development; and emotional development and behaviour (Prince & Hadwin, 2013). In relation to academic achievement, findings suggest a positive sense of school belonging has been associated with increased student motivation and engagement, as well as increased attendance, school completion and academic achievement (Moallem, 2013; Prince & Hadwin, 2013). In terms of behavioural development, studies have found associations between a positive sense of school belonging and lower levels of school aggression and bullying behaviours, as well as other disruptive behaviours including substance abuse and unsafe sexual practices (Bond et al., 2007; Duggins et al., 2016; Markham et al., 2010; Turner et al., 2014). Finally, studies relating to emotional development have found a positive sense of school belonging has been associated with positive mental health, hopefulness regarding the future, and reduced reports of suicidal thoughts (Kidger et al., 2012; Marraccini & Brier, 2017; Ryzin et al., 2009).

According to Smedley (2011) 'school belongingness was one of the stated aims of the Social and Emotional Aspects of Learning (SEAL) (DfES, 2007) and within education it is a useful tool to aid inclusion, community cohesion, and wellbeing of all in the community' (p.25). Frederickson et al. (2007) also advocated that exploring belongingness could 'allow for consideration of the most relevant and current conceptualisations of inclusion in the UK which focus on the importance of community and a feeling of belonging'. Thus, a sense of belonging could be the inherent factor to explore within the inclusion research due to its associations with the recommended Ofsted (2002) outcomes – academic achievement, self-esteem, and social relationships with peers. Belonging has also received strong support as a central characteristic of inclusion, particularly from advocates in the USA such as Billingsley et al. and Forest & Lusthaus (as cited in Frederickson et al., 2007). In the UK, Warnock

argued that: 'the concept of inclusion must embrace the feeling of belonging, since such a feeling appears to be necessary both for successful learning and for more general wellbeing' (as cited in Frederickson et al., 2007).

The inclusion of young people with SEN within mainstream education is suggested to bring with it academic, social and emotional benefits (Wiener & Tardif, 2004). For example, teachers with more positive attitudes towards inclusion have been reported by their students to lead classrooms with greater satisfaction among the student population (Monsen et al., 2014). However, findings from efficacy research are mixed (Lindsay, 2007), with school staff often feeling ill-resourced or not sufficiently trained to effectively support children with SEN, particularly those with Social, Emotional, Mental Health (SEMH) and behavioural difficulties (Avramidis & Norwich, 2002; Goodman & Burton, 2010). Feeling ill equipped and under supported by Local Authority (LA) services to address the variety of SEN in one's classroom has been found to have an impact on the positive attitude of teachers and school staff towards inclusion (Avramidis et al., 2000). Ellis et al. (1998) reported how young people in an alternative provision created a video for teachers detailing best practice for working with individuals with SEN, where a sense of belonging was a central feature of this video, and was felt to be directly related to incidents of problematic behaviour.

Alongside understanding the impact a positive sense of school belonging can have on a young person's development, it is also vital we understand how to support children and young people in developing this feeling within their setting. The inclusive ethos of a school has been reported to have a positive effect on both the social relationships and sense of belonging for students with SEN (Dimitrellou, 2017). On a smaller scale, the individual classroom climate has also been suggested to contribute a significant positive impact on belonging and peer relationships (Frederickson & Petrides, 2013). In particular, Smedley (2011) identified five key themes for the development of school belonging in young people with SEN: interpersonal relationships, physical illness, emotional equilibrium, teacher practices, and self-exclusion/disengagement. Of most significance in nurturing a sense of belonging was that of interpersonal relationships – including both those with peers and with staff. A higher sense of belonging was felt among those who had positive relationships with their peers and with their teachers, with ideas around reward/recognition and punitive actions, and equality featuring heavily in the dialogue around staff relationships.

There still remains little research into how children with SEN view belonging, what they feel their schools are doing to support them within school, and further research in this area – especially from educational psychologists – has long been called for (Smedley, 2011).

The Inclusion Project
Method
Design
The educational psychology service (EPS) chose to explore three specific questions in relation to children's belonging. Firstly, did children within the borough feel a sense of belonging in their schools? Secondly, what helped children feel that they belong? Finally, what else did children and young people think would improve their sense of school belonging within the Local Authority (LA)? In order to answer these, a two-phase, mixed-methods approach was adopted. Young people's sense of belonging was explored using the Belonging Scale (Frederickson et al., 2007) and the School Connectedness Scale (Resnick et al., 1997), alongside individual or semi-structured group reflection sessions. The use of mixed methods within educational research has been suggested as a useful way to ensure a more comprehensive understanding of this complex field is captured (Ponce & Pagan-Maldonado, 2015). By using this multi-dimensional approach, it was hoped

that a fuller understanding of the sense of belonging felt by a sample of children and young people in the LA could be explored. In the first phase, children were asked about their understanding of inclusion and belonging, and what they felt schools were doing to support them. The second phase took the themes identified in the first phase and explored these further, aiming to identify and rank the most important factors of belonging to children within the LA. Quantitative data from the scales was also analysed.

Ethics
Ethical considerations were guided by the British Psychological Society (BPS) Code of Human Research Ethics (BPS, 2014), alongside discussions with EPS members and liaison with a university academic tutor with a background in ethics. Consideration was given to the need to provide information to participants, to seek informed consent from parents and assent from children, to put pre-emptive mechanisms in place for supporting any children who disclosed a low sense of belonging, to debrief children following their involvement and to provide feedback to schools. All data collection was undertaken by educational psychologists and trainee educational psychologists who took care to ensure that all children felt comfortable, safe and willing to participate. General consent and willingness to participate in the project was initially sought from school Head-teachers, who held overall responsibility for the pupils in their care.

Participants
A total of 38 children aged three to sixteen participated in phase 1. The children were members of five schools; an autistic spectrum disorder (ASD) base in a nursery (*N*=5), two mainstream primary schools – including one with a hearing impairment unit (*N*=19), a mainstream secondary school (*N*=4) and a secondary special school (*N*=10).

Forty-six children aged seven to fifteen participated in phase 2, representing a further eight schools within the LA. These comprised five mainstream primary schools – including one with a language unit (*N*=30), one primary special school (*N*=3), one mainstream secondary school (*N*=9) and one residential secondary special school (*N*=4).

Biographical data including age, ethnicity, gender and SEN was collected for participants across both phases of the project (see Table 1). All children were on the SEN register and were selected for participation by their school Special Educational Needs Coordinator (SENCO). Across both phases of data collection there were children with a range of SEND both at SEN support and with an EHCP.

Procedure: Phase 1
Schools were invited to take part through letters sent from the EPS in conjunction with discussions with the school's named EP. For all participants, parental consent was obtained prior to commencement of the project, and verbal assent from participants was obtained at the start of each session. All sessions took place during school hours and were delivered by two of the authors and a member of school staff. Participants were reminded that they were free to withdraw from the study at any time prior to the write-up of data.

Focus groups of up to eight children and young people (CYP) were held in school settings. Children in nursery and Key Stage 1 attended a single session focus group, whilst those in Key Stage 2 and above attended two focus groups, held in consecutive weeks. Children and young people's understanding of belonging and inclusion was explored through group discussions. Where it was felt that CYP did not have a clear understanding of the terms, this was explored further using differentiated games and stories and assessed with related questions. The focus groups then explored sense of belonging using further group discussions, activities, and work stations where children could write or draw their answers to questions focusing on inclusion and belonging in school. They were reminded that there were no right or

Table 1: Description of gender, ethnicity, SEN, and school type by research phase

	Phase			Phase	
	Phase 1	Phase 2		Phase 1	Phase 2
Male	52.63%(20)	56.52%(26)	ASD	28.95%(11)	36.96%(17)
Female	47.36%(18)	43.48%(20)	CL SEMH	21.05% (8) 18.42% (7)	13.04% (6) 2.17% (1)
White British	18.42% (7)	43.48%(20)	HI	13.16% (5)	2.17% (1)
White Other	2.63% (1)	13.04% (6)	PD	2.63% (1)	10.87% (5)
Black Caribbean	5.26% (2)	6.52% (3)	SPaL	2.63% (1)	21.74%(10)
Black African		2.17% (1)	Other	2.63% (1)	13.04% (6)
Black Other		2.17% (1)	Not available	10.53% (4)	
Asian Indian		2.17% (1)			
Asian Pakistani	5.26% (2)	8.70% (4)	Nursery	13.16% (5)	
Asian Other		4.35% (2)	Primary	50.00%(19)	65.22%(30)
Other	2.63% (1)	13.04% (6)	Secondary	10.53% (4)	19.57% (9)
Not available	69.44%(25)		Special Residential	26.31%(10)	6.52% (3) 8.70% (4)

wrong answers, and that all responses would be kept anonymous. CYP aged eight and over (*N*=27) also completed standardised questionnaires to obtain a quantitative measure of their sense of belonging in school.

Two primary-aged children withdrew from the project during the sessions and their data was not included in later analysis.

Phase 2
The methodological approach to phase 2 followed the same protocol as in phase 1. All sessions were delivered during school hours and were led by the authors or members of the EP team trained in the approaches used.

CYP were shown quotes (short phrases) representing sub-themes identified from phase 1 of the research and told that these were ideas which other children in the LA felt help them belong in school. Symbols, sorting activities and open questions were used to ensure that the students had a good grasp of the key themes presented. CYP were then asked to identify and prioritise the

three most important themes to them and explain why they were important. Opportunities for adding further factors, which CYP felt promoted inclusion and belonging, were also provided. A structured procedure was developed for use with all participants to ensure consistency across schools and researchers. This activity was designed to not only validate the themes raised in phase 1, but also provide a further analysis of the most important aspects of belonging and inclusion.

CYP aged eight and over (*N*=36) also completed standardised questionnaires to obtain a quantitative measure of their sense of belonging in school. Three additional participants did not complete the standardised measures within the timeframe of the project. No individuals withdrew consent from the second phase of the research. All children were given either a letter or a certificate to thank them for their participation in the project.

Measures

Across both phases, quantitative measures of belonging were collected using the Belonging Scale (Frederickson et al., 2007) and School Connectedness Scale (Resnick et al., 1997). A single scale assessing school belonging for participants across all Key Stages was not identified by the authors, and instead due to the standardisation populations used within the scales, participants from Key Stages 2 and 3 completed the Belonging Scale, and participants in Key Stage 4 completed the School Connectedness Scale. No quantitative measure was identified for participants in Key Stage 1 and below.

Data analysis

Quantitative measures collected across both phases were collated to provide an overview of the sense of belonging and inclusion felt by participating children. Qualitative responses from focus groups and individual tasks were transcribed and analysed using peer-reviewed inductive thematic analysis (Braun & Clarke, 2006). Qualitative data from phase 1 was organised using codes resulting in the emergence of a range of sub-themes. The sub-themes were grouped into four overarching themes. Qualitative data from phase 2 (including all three preferences selected), was also organised using

codes resulting in the emergence of a range of sub-themes. These were then merged with the sub-themes identified in phase one where applicable, leading to the identification of the most commonly occurring sub-themes.

Results

On the Belonging Scale, scores above 2 are suggested to signify a sense of school belonging in respondents (Frederickson et al., 2007). Of the children who completed the Belonging Scale, 90.17 per cent (*N*=46) reported a sense of belonging (m=2.47) (see Figure 1).

The School Connectedness Scale does not have a distinct cut-off point for school connectedness, but has been separated into categories of low connectedness, mid-point connectedness and high connectedness (Ozer et al., 2008). Of the children who completed the School Connectedness Scale, 91.67 per cent (*N*=11) reported a sense of school connectedness at the mid-point or higher (see Figure 2).

The qualitative data collected during both phases provided a rich data set capturing the views of the children in the project. The thematic analysis of the qualitative data during phase 1 activities identified a range of sub-themes (see Table 2, p.16), some of which were ranked as relatively
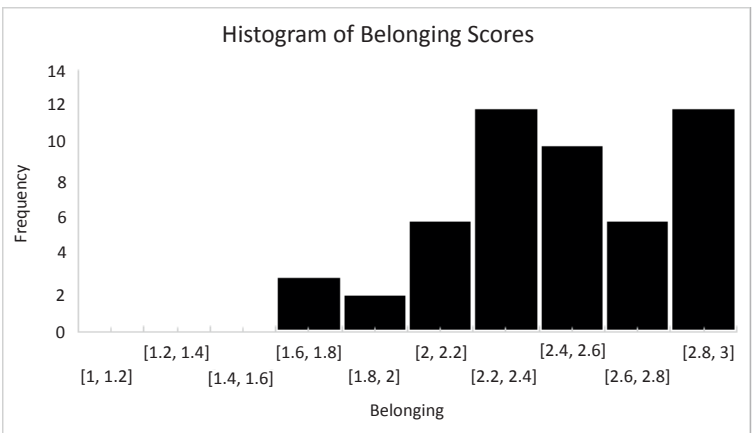
Figure 1: Histogram of Sense of Belonging Scale Scores

Histogram of School Connectedness Scores
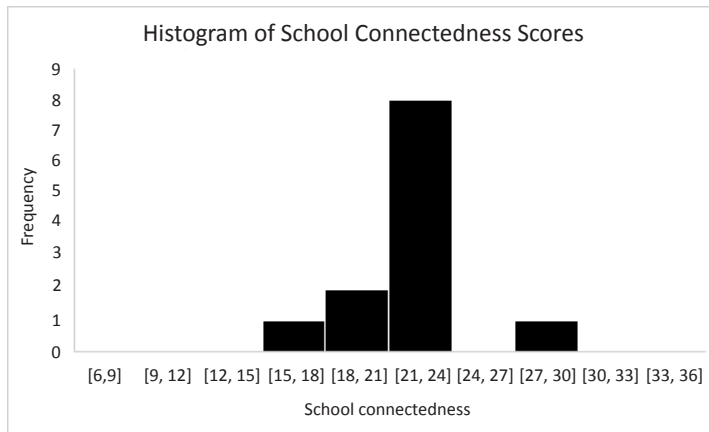
Figure 2: Histogram of School Connectedness Scale Scores

more important to participants, following the prioritisation activities completed in phase two. The sub-themes from phase 1 of data collection were grouped into four key themes, which were seen to be important in supporting children's sense of belonging in school: Relationships, School Environment, Teaching and Learning and Extra Curricular Activities. Figure 3 shows the percentage of responses from phase two which reflected each of these themes.

Top Ten Tips

Once the phase 2 qualitative data from the young people had been categorised by sub-theme, key sub-themes began to emerge as being relatively more important (as determined by their frequency) to CYP's sense of belonging in school. The four key themes identified in phase one remained following the data analysis in phase two with differences in the relative frequency and apparent importance of these remaining consistent across both phases.

Figure 3: Pie chart showing phase 2 responses by theme

Response by theme

Teaching and Learning 15.22%

Environment 15.94%

Extra-Curricular Activities 25.36%

Relationships 43.48%

Table 2: Themes/Sub-themes representing Children's Perceptions of School Belonging

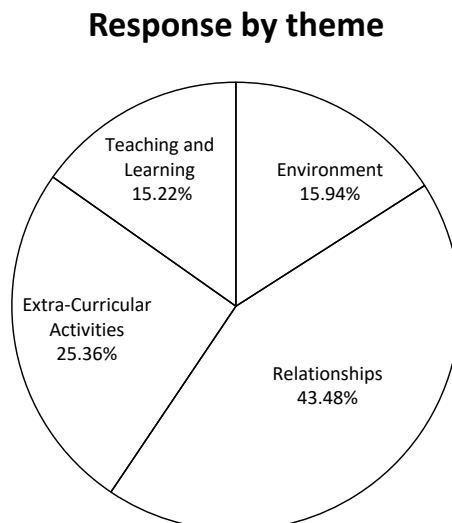| Relationships	
Sub-themes	**Examples of quotes**
Friendship *	'If you don't have friends you don't want to come to school. With your friends you can talk about the lessons and dreams about what you want to do when you get older. You need someone to talk to when things go wrong'.
Relationship with peers *	'Like for example, when something's too heavy, someone will help me. This could be anyone, even people I don't know. That's how I know I belong'.
Relationship with staff *	'If you get along with them you learn better, you can have a laugh and engage and learn more. You listen more and understand better'.
Community and Family *	'My parents. They can come in to school and help, if you need it'.
Acceptance *	'If not accepted you feel very down. It makes you feel happy to be accepted and you want to come to school'.
Extra-curricular activities	
Sport/ Clubs *	'I feel like achieving something for the school is a big part of being at school. I like sports and it's one of the places I mostly feel special'. 'Being a part of a club at school and meeting your friends and new people'.
School trips *	'When you get included in activities on fun days, you don't feel alone'.
Play	'We can play tag and hide and seek'.
Environment	
Physical environment	'Re-painting the school to make it multi-coloured. People would be happier and it would make a big difference'.
Familiarity	'You're always going there. Feels like home'.
Safety *	'In this school students threaten people and might be part of a gang. If you feel safe you would feel free to do and say what you want and voice my opinion'. (this was an example of an ethical concern and a case that was followed up with school)
School Identification	'Our school uniforms. We all wear the same thing, so we're part of a great big [school] family'.
Equipment	'They give children stuff, like glasses and a light magnifier so everything is clearer if they can't see'.
Teaching and Learning	
Tailored support *	'Help for reading – I find reading hard and I can't read it out loud. Adults help me, help me sound it out and I feel more like part of the school when I can read things'.
Group work *	'Working as part of a team – you're working together so you're never alone'.
Rules and routines	'Getting along with the school rules'. 'Teachers invite us into the classroom'.
Recognition/rewards	'When my teacher compliments me to my parents'.
Curriculum/teaching approach	'PSHE especially. We sit in a circle and group problem solve in small groups. Bigger groups can feel like madness'.

* These sub-themes represent those that children ranked as priorities in phase 2 of data collection (part of 'Top Ten Tips to Help us Feel we Belong')

The ten most important sub-themes and quotes from the CYP were used to create the Top Ten Tips for school belonging (see Table 3).

With the support of the graphic design team a poster was created to display the young people's key ideas adopting the title 'School for Everyone: Our Ten Top Tips to help us feel we belong.'

Discussion

The majority of the children who took part in the project scored positively on the Scales of Belonging and School Connectedness, whilst a small number did not. Five of the six CYP, who did not report a sense of belonging, had SEN needs that were described as ASD or SEMH. Although the proportion of children in the sample with different SEN needs was variable, it is interesting to note (based on other analysis completed by the LA) that a disproportionate number of the children attending specialist provision both in and out of the borough have ASD and/ or SEMH needs. This suggests that attention on supporting these groups of children is warranted with a focus on helping staff to understand how to promote children's connections and relationships with the adults and peers around them to increase their sense of school belonging. This might be undertaken alongside other strategies to support the inclusion of these specific vulnerable groups, for example, strengthening the interventions available to ASD CYP and their families following diagnosis.

Despite the overall positive measures and the comments about what helped, many of the children had suggestions for how schools could improve their sense of belonging, highlighting the relevance of seeking the children's opinions, feeding this back to school and other council decision makers and promoting and supporting changes where possible. During Phase 1, children had the time to explore the term belonging and their understanding of this concept. This enabled them to access the question 'What does it look like to belong?' more easily and children commented that even the opportunity to be involved in this kind of conversation helped to promote their sense of belonging. This might suggest that achieving a sense of belonging in any setting could be perceived as a process of ongoing exploration that is not static or with an end point and that the active participation of children and young people in strategic decision-making contributes significantly in feeling valued and included in their school community, particu-

Table 3: Top Ten Tips

Friendship	Help us all to make and keep friends.
Relationships with school staff	Get to know us. Be there for us when we need to talk to someone.
School Trips	Make sure we can all take part in school trips.
Community and Family	Invite and help our families to take part in school life.
Sports Activities and Clubs	Have lots of different sports activities and clubs. Make sure we can all take part.
Acceptance	Accept, respect and be kind to everyone.
Safety	Help us to feel safe at school; listen to us. Do something about what we tell you.
Group work	Let us learn and take part in groups.
Equipment	Give us equipment that helps us when we learn and play.
Tailored Support	When we need help think with us about special or different ways to help us.

larly as acceptance in community seems to be central in the definition of inclusion (Frederickson et al., 2007).

Most important to the children was the theme of *relationships* incorporating the sub-themes of friendship and relationships with school staff and other children. This links with the previous research findings of Smedley (2011). As secure attachments and connections with adults can be key to addressing the needs of children with SEMH difficulties, perhaps schools and LA support services focusing on building relationships would not only improve the children and young people's sense of belonging in the settings they presently attend, but also address some of the negative perceptions teachers hold in relation to including children with SEMH in mainstream classrooms (Avramidis et al., 2000).

The second most important theme to the CYP was that of extra-curricular activities incorporating both clubs and school trips. Whilst this was not an identified pre-cursor of school belonging in the literature reviewed, the current findings do support previous research, which has suggested a positive correlation between engagement in extra-curricular activities and school belonging (Allen et al., 2018; Martinez et al., 2016). Children seemed to appreciate these activities for a range of reasons, which included opportunities to be with their friends (again strengthening the perception of the importance of relationships to children), doing things they enjoyed or thought were fun, and the chance to experience something different. A small number of children who had experienced being excluded from trips expressed their sadness about this experience. CYP expressed the view that school trips and clubs should be accessible to all regardless of their needs, which they couldn't necessarily control. This consideration of social justice meant that children didn't want to miss opportunities open to their peers. For similar reasons, children appreciated the use of specialist equipment

that allowed them to access learning and tasks at the same level as their peers.

Another area of relative importance for young people's sense of belonging was safety. In one school, students suggested that school staff watched the CCTV cameras to get a real sense of what was going on in the school indicating various behaviours that made them feel unsafe, but that staff did not necessarily witness or act on. Research findings (Duggins et al., 2016; Turner et al., 2014) suggest that positive sense of school belonging is associated with reduced levels of aggression and bullying behaviours. Perhaps, schools should consider how to increase CYP's feelings of belonging (and increased safety) when targeting aggressive and unsafe behaviours rather than adopting the punitive approach i.e. behavioural sanctions and exclusions/zero tolerance policies that many young people face following such behaviours, making a case for Individual Belonging rather than Behaviour Plans (IBPs).

Although this project did not look specifically at the relationship between sense of belonging and pupil achievement, CYP referred to the themes of group work, positive relationships with teachers and safety (suggested precursors for belonging) as factors that supported their concentration and engagement with learning.

The key themes that emerged from this exploration seemed to span across all different types of provision (primary, secondary, mainstream and specialist). The commonality in what children and young people reported to support belonging (relationships, trips and clubs, group work etc.) could suggest that the Top Tips become starting blocks in considering how to improve the effectiveness of inclusion in the borough, as well as the chance for more children with SEND to remain in their local mainstream school. It was interesting to note that although tailored support was rated highly enough to be one of the ten top tips, it came tenth in order of importance. This could pose some interesting questions to mainstream schools who often, despite parental preference, empha-

sise a lack of teaching resources and specialist expertise when either they are struggling to meet the academic needs of children as they move up to KS2 or during their transition to secondary school. Children's positive sense of belonging might also provide alternative evidence to Ofsted inspectors especially for those children for whom academic progress is likely to be slow. Whilst there are key themes that appear to support children's sense of belonging, the project also found significant variation within the themes for individuals. This highlighted the importance of considering each child's sense of belonging individually when warranted and most importantly when considering the appropriateness of school placements regardless of whether a school is inclusive or rating themselves as strong in belonging.

Limitations

Participants comprised a small number of children across a wide range of ages and need from each setting limiting the possibility of any generalisability. Whilst the majority of CYP who took part in the project reported a positive sense of belonging or connectedness in their settings, it is difficult to rule out selection effects given the method used to identify children to participate. Limited time for SENCos to gain consent, competing SENCo priorities and some parents' concerns regarding their children missing learning activities, also prevented some children's participation. The project tasks still required certain levels of communication and understanding, and this prevented children with the most profound needs from being included in the project.

Given the clear deadlines to complete the data collection to present the findings to the council, there was limited time during phase 2 to ensure that all CYP fully understood the concept of belonging and some of the quotes chosen by the children when identifying which factors help them the most. It is therefore hard to be definitive as to whether children's choices were linked to their understanding of what promotes belonging

or were things they considered made them happy or were important to them. Regardless of this, children without SEND are likely to be better at seeking out and accessing these precursors to belonging for themselves and therefore explicit and purposeful attention should be given to providing these for children with SEND. The data appeared to suggest that where schools were providing targeted support to help children form positive relationships, the children's sense of belonging was positive.

More EPS team members were involved in phase 2. Despite planning meetings and efforts to standardise the process, it was not possible to ensure that the delivery of the interviews did not have an impact on the quality and quantity of responses received.

Recommendations for EP practice and future research

EPs are well placed to share with school leaders the importance and benefits to children and young people of feeling a sense of belonging within their school and how this can lead in turn to feelings of inclusion. They can encourage and reflect with schools about how they can promote the key ideas that children with SEND feel are important to their sense of belonging in school policies, ethos and culture. Individual sub-themes such as (perceptions of) children's friendship/opportunities to build relationships, school safety or family involvement can be discussed with school governors and staff, amongst school councils, with peer mentors or wellbeing ambassadors, and in school assemblies and citizenship lessons to identify possible areas for and strategies to support improvement of belonging and effectiveness of inclusion overall. EPs are also critically placed to help the LA to think about the impact (or the lack) of available support and how to appropriately equip staff with the right tools and level of training in order to feel confident that inclusion can work in practice as well as theory.

EPs can also support schools to take a holistic person centred approach to

exploring the views of CYP with SEND with regards to their sense of belonging and to explore this in their own work with children and families. Where CYP or those that know them well wish to increase their sense of belonging, this could be discussed and recorded in their reviews and linked to EHCP outcomes and provision where appropriate. EPs should also continue to encourage schools to ask all CYP with SEN for their views, take these seriously and support schools if need be on how to implement recommendations in relation to things that children report.

It may be of interest to EPs to consider those cases where the perception of the child and the perception of adults (staff, parents, professionals and council workers) do not match either because the child feels positively about their placement when others disagree or vice versa. EPs are trained and strategically placed to ask exploratory questions with the view to help children and those around them develop a clearer and more integrated narrative about the experience of the child in a school. This would be even more important in settings where staff work very hard to build an inclusive ethos, but for various reasons individual children do not experience this in the same way. Even when this in-depth exploration of a child's sense of belonging is not feasible due to time constraints, it would be an important area to consider during EHC assessments and outcome setting, as it has been demonstrated that increased sense of belonging can lead to better academic outcomes (Moallem, 2013; Prince & Hadwin, 2013). EPs have the skills to keep the voice of the child at the centre of those conversations.

EPs can also provide opportunities for teachers to reflect on and discuss their relationships using consultation or reflecting team approaches to manage personal feelings and overcome any emotional barriers to building personal connections with their students. EPs in collaboration with schools can support CYP with the most challenging behaviours and emotional needs to develop

relationships with peers and staff, as well as promote and facilitate access to the playground, school trips and clubs. Given that schools are required to make reasonable adjustments for children with SEND, EPs could play a vital role in supporting CYP, staff and families to think about how those extra-curricular activities could be accessed instead of witnessing children being excluded from aspects of the school life that build strong community links.

Future research could focus in more detail on larger samples within individual settings, similarities and differences between children of different ages including post-16 and gender, and children without SEND. Developing tools and processes to gather the views of those with the lowest language and cognitive profiles is an important next step and EPs could support this. As this project focused more on the sense of belonging within existing placements, it would be interesting to explore the views of children and young people in relation to what would help them belong in their local mainstream school. This could be compared with the views of teachers and parents in order to support local authorities to consider how best to support staff to feel more equipped and more positive towards the inclusion of children with SEND in mainstream schools.

Conclusions
The Inclusion Project provided an understanding of how children and young people perceive and feel a sense of inclusion and belonging in their schools. Four themes including Relationships, Extra-Curricular Activities, Environment and Teaching and Learning were identified as important factors to CYP's perceptions of school belonging with a range of sub-themes within these that have been developed into Top Ten Tips for School Belonging. Meetings are being held with key decision makers across the LA including councillors, headteachers, special needs co-ordinators, chairs of governors and SEN governors to share the Top Ten Tips, consider how these can be embedded into

school practice, and use them as precursors for influencing the local authority's inclusion strategy and future educational provision.

Acknowledgements

Address for correspondence
Tara Midgen,
Wandsworth Borough Council, Schools and Community Psychology Service, Wandsworth Town Hall Extension,
Wandsworth High Street,
SW18 2PU
Email: Tara.Midgen@richmondandwandsworth.gov.uk

References

Allen, K., Kern, M.L., Vella-Brodrick, D., Hattie, J. & Waters, L. (2018). *Educational Psychology Review, 30*, 1–34.

Avramadis, E., Bayliss, P. & Burden, B. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology, 20*(2), 191–211.

Avramadis, E. & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: a review of the Literature. *European Journal of Special Educational Needs, 17*(2), 129–147.

Bond, L., Butler, H., Thomas, L. et al. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health and academic outcomes. *Journal of Adolescent Health 40*, 357: e9–18.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

British Psychological Society (2014). *Code of human research ethics* (2nd edn). Leicester: Author.

Department of Education (2018). *A Review of School Exclusion: Terms of Reference.* London: DfE. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/

Department of Health & Department of Education (2017). *Transforming Children and Young People's Mental Health Provision: A Green Paper.* London: DfE. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664855/Transforming_children_and_young_people_s_mental_health_provision.pdf

Dimitrellou, E. (2017). *Does an inclusive ethos enhance the sense of school belonging and encourage the social relations of young adolescents identified as having social, emotional and mental health difficulties (SEMH) and moderate learning difficulties (MLD)?* Unpublished doctoral thesis. Institute of Education, University of London.

Duggins, S.D., Kupermic, G.P., Henrich, C.C., Smalls-Glover, C. & Perilla, J.L. (2016). Aggression among adolescent victims of school bullying: Protective roles of family and school connectedness. *Psychology of Violence, 6*(2), 205–212.

Ellis, J., Hart, S. & Small-McGinley, J. (1998). The perspectives of 'difficult' students on belonging and inclusion in the classroom. *Reclaiming Children and Youth, 7*(3), 142–6.

Frederickson, N. & Petrides, K.V. (2013). Precursors and outcomes of school belonging among primary-aged pupils. *BJEP Monograph Series II, Number 9 – Psychology and antisocial behaviour in school, 18*, 16–33.

Frederickson, N., Simmonds, E., Evans, L. & Soulsby, C. (2007). Accessing the social and affective outcomes of inclusion. *British Journal of Special Education, 34*(2), 105–115.

Goodman, R.L. & Burton, D.M. (2010). The inclusion of students with BESD in mainstream schools: Teachers' experiences of and recommendations for creating a successful inclusive environment. *Emotional and Behavioural Difficulties, 15*(3), 223–237.

HM Government. (2014). *Children and Families Act 2014.* London: HMSO.

Kidger, J., Araya, R., Donovan, J. & Gunnell, D. (2012). The effect of the school environment on the emotional health of adolescents: A systematic review. *Pediatrics, 129*(5), 925–949.

Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology, 77*(1), 1–24.

Markham, C.M., Lormand, D., Gloppen, K.M. et al. (2010). Connectedness as a predictor of sexual and reproductive health outcomes for youth. *Journal of Adolescent Health, 46* (Suppl.), S23–S41.

Marraccini, M.E & Brier, Z.M.F (2017). School connectedness and suicidal thoughts and behaviours: A systematic meta-analysis. *School Psychology Quarterly, 32*, 5–21.

Martinez, A., Coker, C., McMahon, S.D., Cohen, J. & Thapa, A. (2016). Involvement in extracurricular activities: Identifying differences in perceptions of school climate. *The Educational and Developmental Psychologist, 33*(1), 70–84.

Moallem, I. (2013). A meta-analysis of school belonging and academic success and persistence. *Dissertations, Paper 726.* http://ecommons.luc.edu/luc_diss/726

Monsen, J.J., Ewing, D.L. & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research, 17*(1), 113–126.

Ofsted & CQC (2016). *SEND Local area SEND inspection: Framework.* London: Ofsted Publications. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/521609/The_framework_for_the_inspection_of_local_areas_effectiveness_in_identifying_meeting_needs_children_who_have_special_educational_needs_andor_disabilities.pdf

Ozer, E.J., Wolf, J.P. & King, C. (2008). Sources of perceived school connection among ethnically diverse urban adolescents. *Journal of Adolescent Research, 23*(4), 438–470.

Ponce, O.A. & Pagán-Maldonado, N. (2015). Mixed methods research in education: Capturing the complexity of the profession. *International Journal of Educational Excellence, 1*(1), 111–135.

Prince, E.J. & Hadwin, J. (2013). The role of a sense of school belonging in understanding the effectiveness of inclusion of children with special educational needs. *International Journal of Inclusive Education, 17*(3), 238–262.

Resnick, M.D., Bearman, P.S., Blum, R.W. et al. (2007). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association, 278*(10), 823–832.

Ryzin, M., Gravely, A. & Roseth, C. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth Adolescence, 38*(1), 1–12.

Smedley, A. (2011). *The experience of school belonging: An interpretive phenomenological analysis.* Unpublished doctoral thesis. University of Sheffield.

Turner, I., Reynolds, K.J., Lee, E., Subasic, E. & Bromhead, D. (2014). Well-being, school climate, and the social identity process: A latent growth model study of bullying perpetration and peer victimization. *School Psychology Quarterly, 29*, 320–335.

Wiener, J. & Tardif, C. (2004). Social and emotional functioning of children with learning disabilities: Does special education placement make a difference? *Learning Disabilities Research and Practice, 19*(1), 20–32.

Pupils attending a shared placement between a school and alternative provision: Is a sense of school belonging the key to success?

Tim Cockerill

Aim: *The use of alternative provision for pupils identified as having challenging behaviour and social, emotional and mental health difficulties is widespread across the UK and the majority of these young people do not access a school whilst attending alternative provision. However, many pupils receive provision through a shared placement between a mainstream school and an alternative provider, which means they actively attend both settings on a regular basis. Although shared placements occur frequently across the UK, there has been very little research focusing on this area. This study explored the perceptions and experiences of staff and pupils in relation to shared placements, with a particular aim of analysing the nature and importance of sense of belonging.*
Methodology: *Adopting a realistic evaluation methodology (Pawson & Tilley, 1997), semi-structured interviews were used to identify the outcomes of the shared placement arrangement as well as the important contextual conditions linked to sense of belonging. In addition, each pupil completed the Psychological Sense of School Membership Scale (Goodenow, 1993) to examine their sense of belonging to educational provision.*
Findings: *The findings suggest that for some pupils, shared placements led to greater engagement with mainstream education and improvements in behaviour, whilst for others, a shared placement led to further disengagement from the mainstream education system. Sense of school belonging was highlighted as a strong predictor of positive outcomes and this was linked to various school attitudes and practices.*
Limitations: *This study has limitations in that it is relatively small-scale and additional research would be useful to confirm and extend these findings.*
Conclusion: *A strong sense of school belonging is a good predictor of positive outcomes for children receiving education through a shared placement. As sense of belonging appears to be closely linked to school attitudes and practices, supporting schools to promote a sense of belonging is likely to be useful for this population.*
Keywords: *School belonging; shared placements; sense of school belonging; alternative provision; SEMH.*

Introduction

THERE ARE many debates that surround the school placement of children with special educational needs (SEN). Some professionals define their vision of inclusion as all pupils attending their local mainstream school (e.g. Booth et al., 2000), whilst others construct inclusion as about '*including all children in the common educational enterprise of learning, wherever they learn best*' (Warnock, 2005, p.14). One of the central tensions in this area can be characterised by what has been called the *dilemma of difference* (Norwich, 1993), where there is a dilemma between treating children differently to meet their individual needs and treating them the same to maintain commonality and avoid segregation. Although it has been noted that the central dilemma has no easy solutions (Stringer, 2009), Norwich (2008) suggests that it is about finding a way to have it both ways as far as possible. One way in which a pupil may receive specialist provision

whilst maintaining access to the mainstream community is through a shared placement, an approach to provision that remains under explored (Nind et al., 2011).

The literature examining shared placements is very limited, particularly in relation to children and young people identified as having social, emotional and mental health (SEMH) difficulties. The Special Educational Needs Code of Practice (DfE, 2015) characterises SEMH difficulties as describing those children and young people who may become withdrawn or isolated, as well as those who display challenging, disruptive or disturbing behaviour. Although this group of young people often access alternative provision including a shared placement arrangement, the research has mainly focused on other groups. For example, some studies have explored shared placements for children with Down's syndrome and those with additional needs in the early years and it is clear that, for some, it may present *the best of both worlds* (Flewitt & Nind, 2007), where pupils can participate in the mainstream environment but still have access to specialist provision with additional resources. Whilst this would appear to be the goal of shared placements more generally, including for those children and young people identified as having behavioural and emotional difficulties, there are indications that there are aspects to a shared placement which can cause difficulties. For example, it is an interesting and repeated finding that children's behaviour is often reportedly better in their alternative provision (AP) than at the school (Ofsted, 2011) and there are a range of challenges when reintegrating students into school from an AP (Burton et al., 2009). Ofsted (2016) defines AP as something in which a young person participates as part of their regular timetable, away from the site of the school and not led by school staff. The most formal and widely used AP is the Pupil Referral Unit (PRU) although there are also other providers of AP that offer a wide range of options to suit various needs, including those that focus on personal development or

offer a therapeutic approach. Other placements offer work experience such as motor maintenance, hairdressing or construction and the majority involve accreditation (Ofsted, 2016). In 2008, the government estimated that 135,000 children received AP during the school year and it is regularly used for those who have been excluded or who are at risk of exclusion (DCSF, 2008).

Although no direct research has examined sense of school belonging for students receiving education through a shared placement, Flewitt and Nind (2007) raise concerns that shared placements may mean children ultimately belong nowhere, increasing the risk of negative outcomes.

The fundamental human need to belong has been identified as one of the most important human motivations and fulfilling this need can have major consequences for how people think and behave (Baumeister & Leary, 1995). In the Hierarchy of Needs, Maslow (1968) identified a sense of belonging as a fundamental pre-cursor to self-esteem, confidence and self-actualisation. Relating this to school pupils, Goodenhow (1993) defines belonging as the extent to which students feel personally accepted, respected, included and supported by others in the school environment. School belonging is positively related to psychological wellbeing (Jose et al., 2012) and academic performance (Sari, 2012) and low school belonging has been associated with disruptive behaviour and emotional distress (Allen et al., 2016). The Ofsted (2011) finding that AP was more effective when close links were maintained with the school supports the potential importance of considering belonging for students receiving education through shared placements. For this group, the complexities of belonging are increased and multifaceted and this has been a neglected area of study. The aim of this study is to examine the role that a sense of belonging has for students receiving education through a shared placement.

Methodology

Realistic evaluation provides a method-ological framework for exploring the impact of a social programme. The aim of realistic evaluation is to develop a theory of how a programme works, by understanding the causal mechanisms and the contextual conditions under which they are activated that lead to specific outcomes (Pawson & Tilley, 1997). As Pawson and Tilley (2004) note, the basic question is multifaceted, and asks 'what works for whom in what circumstances and in what respects, and how?' (p.2). During a realistic evaluation, there is a focus on iden-tifying the outcomes of the programme, the mechanisms that the programme creates and the contextual conditions that allow these mechanisms to lead to the outcome.

Participants

Data was collected from a range of schools and settings in three Local Authorities (LAs) in the South and South West of England. Across each LA, data was collected in both schools and alternative providers covering both primary and secondary age phases. Adult participants included classroom teachers, Special Educational Needs Coor-dinators (SENCos), teachers who were part of the senior management team (SMT) and senior leaders of APs. In total, 19 members of staff and 11 pupils were interviewed. Pupils ranged in age from 10 to 16 (mean 13.6, SD 2.2). Of these, nine were male and two were female. Seven pupils were currently accessing a shared placement and four pupils had been on a shared placement within the previous three months but were no longer on this. Full written consent was obtained for each participant and parental consent was also received for pupils. When identifying pupils for the study, it was important to use a consistent and clear definition of a shared placement and the following definition was used consistently during the study:

> *A shared placement is when a pupil receives their education at two or more place-ment locations on a weekly basis and this*

continues for a minimum of six weeks. One of these placements must be a mainstream school and the other an alternative provi-sion. Alternative provisions can include PRUs and a wide range of practical, creative or vocational programmes. This excludes a college placement and any provi-sion which is delivered 'on-site', even if this is a segregated unit. This also excludes outreach programmes.

Data gathering techniques
The semi-structured interview

The present study utilised the qualitative data collection tool of semi structured inter-views, with the purpose of identifying how mechanisms in certain contexts lead to specific outcomes. As Miles and Huberman (1994) have claimed, qualitative analysis is a powerful method for identifying mecha-nisms and assessing causality in a complex network of processes and events. Interview schedules were developed separately for pupils, school class teachers, school SMT/ SENCo and SMT at the alternative providers and these were recorded and transcribed. During the pupil interviews, a range of considerations were made that accounted for the age of the participant and for all inter-views, there was a large visual component which facilitated discussion and made the situation less formal.

The Psychological Sense of School Membership Scale

The Psychological Sense of School Member-ship (PSSM) scale (Goodenow, 1993) is a measure of pupils' sense of belonging to their school and has three sub-scales including caring relations, acceptance and rejection. In the original studies, Cron-bach's alphas were between .78 and .95 across primary and secondary aged pupils. Hagborg (1994) reports a high test-retest reliability of .78. In the current study, the Cronbach's alpha of the main scale was .93, indicating a very high internal consistency of the scale. The PSSM measure was used in a novel way in this study as pupil's completed the scale for their school and AP, rather

than just one setting. One scale was administered at the beginning of the interview for the mainstream school and a second scale was completed at the end to consider the alternative provision, minimising the risks of any adverse effects from pupils remembering what they had previously reported. This allowed for an insight into the pupils' perceptions of both settings. In total, nine pupils completed the PSSM scale, creating 18 responses.

Data analysis

The data was analysed following the thematic analysis approach as outlined by Braun and Clarke (2006). Thematic analysis is a flexible approach which allows the researcher to gain a rich and detailed account of the data. The PSSM Scale was scored as a whole and also on the three sub-scales as recommended by Shochet et al. (2011). Each score lies between one (lowest sense of school belonging) and five (highest sense of school belonging). Goodenow (1993) suggests that the number three represents a tipping point and those scoring below three are at risk of negative outcomes. For example, McMahon et al. (2008) found that high belonging scores on the PSSM were associated with high academic self-efficacy and school satisfaction and longitudinal research has found a predictive link between low PSSM scores and future mental health problems (Shochet et al., 2006).

Analyses were conducted for both sense of school belonging and sense of AP belonging separately. Following each pupil interview, the pupil was allocated into one of the three outcome groups which are detailed in the findings section below. This decision was made jointly with the young person, staff and the researcher and in all cases, it was agreed that the description of the outcome was accurate and fair. This allowed for direct comparisons between outcome groups in relation to PSSM scores and an independent Mann-Whitney U test was used for this.

Findings

The study highlighted that there were three broad outcomes of a shared placement:

1. The shared placement leads to an improvement in the pupil's behaviour and increased engagement at the mainstream school alongside positive engagement with the alternative provider. This was sometimes linked to successful re-integration and academic progress.
2. The shared placement leads to the pupil positively engaging with the alternative provision but behaviour deteriorates at their mainstream school and pupil remains disengaged.
3. The shared placement leads to the pupil disengaging from both the mainstream and alternative provision and this was associated with challenging behaviours in both settings as well as poor attendance.

It was agreed on an individual basis that all pupils involved in this study could be accurately described by either outcome one or outcome two. Therefore, no comprehensive data could be obtained for outcome three and the focus of this section will be to present the findings related to sense of belonging for outcomes one and two.

Staff and pupil perceptions of belonging

The importance of a positive sense of school belonging was highlighted in staff and pupil interviews as well as through the PSSM data. The findings suggest that outcome one (positive engagement in both settings) is associated with a higher sense of belonging to the mainstream school (mean = 4.19, SD = .31) than outcome two (mean 2.51, SD = .25). Analysis of the PSSM full scale indicates a significant difference between groups ($p<.05$) and subscale analysis indicates significant differences in caring relations ($p<.05$), feelings of acceptance ($p<.05$) and rejection ($p<.05$) (see Figure 1.).

Pupils also completed the PSSM as a way of measuring their sense of belonging to the AP and the findings indicate that there were no significant differences between outcome

Figure 1: Pupil's sense of belonging to the mainstream school for both outcome groups

Outcome	Mean and SD for School Scale			
	PSSM Score	Caring relations	Acceptance	Rejection
N=5 1: Positive engagement and behaviour in both settings	4.19 (.31)	4.45 (.45)	3.68 (.59)	4.60 (.28)
N=4 2: Deterioration in engagement at school	2.51 (.25)	2.89 (.72)	2.30 (.60)	2.00 (.47)

groups when exploring sense of belonging to the AP (p>.05). Figure 2 below demonstrates that sense of belonging to the alternative provider was high, irrespective of whether this had led to increased engagement at the mainstream setting.

The interview process also allowed all of the pupils and staff to discuss their feelings and thoughts in relation to belonging and acceptance. In line with the PSSM results, there was a strong theme that sense of belonging was greater at the AP than at school for those whose school engagement had not improved. The data suggests that outcomes were less good when there was a discrepancy in the students' sense of belonging between settings. In these cases, this meant a higher sense of belonging to

the AP than the school and children often felt rejected by the school and unsupported. Pupils in this group presented as unhappy with their time at school and felt feelings of failure, whilst their time at the AP was characterised as somewhere they could achieve and fit in. For example, one child said:

'I belong here definitely, it is well suited to me and I have fitted in well…prefer the hands-on approach rather than all the writing at school.' (Y11)

Another child described:

'I have a few friends here [at school]. I got lots of friends at [the AP] … most of them awesome… they are similar to me.' (Y6)

Figure 2: Pupil's sense of belonging to the AP for both outcome groups

Outcome	Mean and SD for AP Scale			
	PSSM Score	Caring relations	Acceptance	Rejection
N=5 1: Positive engagement and behaviour in both settings	4.12 (.89)	4.60 (.63)	3.88 (1.08)	3.93 (1.21)
N=4 2: Deterioration in engagement at school	4.36 (.69)	4.63 (.48)	4.20 (.85)	4.17 (.79)

Similarly, for staff, it was felt that pupils' sense of belonging was sometimes greater at the alternative provider than at the mainstream setting. For example, one manager of an AP reported:

> *'When they are in the school, they feel like the odd one out, they feel different and they have issues. When they come here in a small group, they find out that other children also have anger problems… They begin to feel part of a group and it is like a sense of belonging that they get here that they cannot find anywhere else.'*

Some schools recognised that the pupils' sense of belonging to the school was low, for example, one primary school SENCo outlined:

> *'A lot of the children who spend a lot of time out of the class do not feel like part of the class… I think if you asked our children where they belonged, most would say not in the class.'*

For those pupils where outcomes were more positive (group one), there was a strong theme from the pupils that their sense of belonging was high at the school. For one pupil, being accepted had been a significant part of why things were going well:

> *'Recently, I was told that a lot of them have been asking about how I am doing… I didn't think anyone actually cared. I was surprised that they wanted me to come back. They have seemed happy to see me and tell me I am doing well… yea, that made a big difference.'* (Y11)

Contextual factors influencing belonging

The findings suggest that contextual factors and practices were fundamental to sense of belonging. For those young people who had made good progress in both settings, the high sense of belonging was influenced by a range of attitudes and practices and these are outlined in Figure 3. Figure 4 provides the contextual factors that led to a strong

sense of belonging at the AP but a low sense of belonging to the school.

Figure 3: Contextual factors linked to a strong sense of belonging

Contextual factors linked to a strong sense of belonging
Setting Attitudes • School has a willingness to include pupils with complex needs and challenging behaviour linked to emotional difficulties. • School perceives that the AP can offer specialist support and this is viewed as an extension to provision, not separate. • Holistic view of child's challenges with a nurturing approach that included empathy for the pupil. **Setting Practices** • Adults promote and have strong relationships with pupils, both at the school and at the AP. • Pupil voice is valued and at the centre of decisions. • Development of peer relationships is prioritised and monitored. • Effective transition arrangements in place. • AP has a focus on self-belief and achievement. • School systems are flexible and there is consistency of approaches between settings. • Strong partnership working including excellent communication between settings and school staff visiting the pupil. • Positive collaboration with parents with shared understanding of needs.

Willingness to include pupils with complex and demanding needs

At the AP, there was a greater and stronger willingness to work with young people identified as having emotional difficulties. The attitude from school staff was much more varied, with some expressing very strong desires to include and support these children. For example, a primary school SENCo stated:

> *'If the child was finding it hard to attend both settings, we would stop the AP immediately and focus on additional support here in school. I see the AP as being supportive for us, but I wouldn't ever want to say that that takes responsibility away from us…'*

Figure 4: Contextual factors linked to a low sense of school belonging

Contextual factors linked to a low sense of belonging
Setting Attitudes • School perceives the AP as not being able to make a positive impact on behaviour or engagement and this is linked to a 'within-child' view of difficulties. • Shared placements seen as path to full time specialist provision. • Reluctance to include students with challenging behaviour linked to emotional needs and an inflexible curriculum. • Diminished sense of responsibility for the student following shared placement. **Setting Practices** • School perception that AP should focus on emotional and behavioural development and that school provision should focus on academic development, leading to limited support at school, particularly for emotional and social development. • Pupil has strong relationships with adults at the AP but relationships with staff at school are less positive. • School and the AP have no clear plan of support, intended outcomes or ways of monitoring progress and success of the placement. • Settings are very different with varying rules and expectations and limited support for transition between settings. • School staff do not invest time into forming links with the AP, leading to weak partnership working and staff being unaware of what the student does at AP.

This quote also highlights the related attitude that the AP is an extension of provision and not separate. This was a particularly strong theme in relation to outcomes and meant that schools retained ownership of the pupils even when they were off site.

Alternatively, the attitude of some individuals in school was that children with complex needs were often not suitable for a mainstream education. In these institutions, the AP was usually seen as a very separate placement, the school did not retain full ownership and there was a sense of diminished responsibility towards the pupil. For example, one primary school SENCo reported:

> *'A lot of these kids need the specialist support full time and shouldn't have to deal with this environment. It doesn't work for everyone… they usually need more [AP], not just a little bit.'*

Similarly, some schools were only interested in the shared placement arrangement when they were seeking full time AP. This was outlined by one senior member of a secondary school who stated that:

> *'My honest answer… what you have to do is prove the need and go through a process to do that… previously, the LA has recognised the needs and they are now in specialist placements.'*

A senior member of staff at an AP also highlighted inclusive attitudes as an importance factor:

> *'It's about inclusion, and the school's attitude has a big impact on whether a shared placement is successful. Schools can have a perception that it is not their role to be dealing with the extreme cases.'*

Partnership working

Where pupils perceived that there was good communication and partnership working between settings, their attitude was more positive towards the school. The greater perception that pupils had of settings as connected was also related to a greater sense of school belonging:

> *'My mentor came out to see me and we had meetings… yea, was good they made the effort.'* (Y10)

> *'Just done my options form… [school teacher] said I need to choose the whole lot cus I should be going back.'* (Y9)

When pupils felt that their provisions were very separate and communication was not good, they indicated a low sense of belonging to the school.

> *'They wanted me out, especially [the head teacher]. That's why I come here… no, nobody from school has been here.'* (Y10)

Relationships

Pupils' relationships were a very strong theme throughout the interviews. All pupils highlighted that their relationships with staff were very positive at the AP. When this was discussed further, it was apparent that for the majority of the pupils, these relationships were stronger than at the school. For example, when asked what the best thing about the AP was, one pupil outlined that:

> *'There are lovely people there… they are just kind. Sometimes when you are not nice to them they are still kind to me…'* (Y5)

As well as highlighting staff qualities and positive relationships, there was also a good deal of evidence that the relationship was a very different type to the ones they had at school:

> *'Teachers wouldn't let me be myself at school. Here I can [be myself].'* (Y10)

> *'[at the AP], they are more of a friend, and we are equal. I like that. Everyone is equal here, but at school it's all about authority.'* (Y11)

> *'I think there's a different relationship between teachers and the children here. There is definitely a feeling that teachers are higher in school, but here there is equality. It's different… more relaxed, not as formal.'* (Y11)

All pupils discussed staff relations at the AP as positive, irrespective of whether their shared placement had been successful. This suggests that although pupils enjoyed the style of relationship with the AP staff, this was not responsible for increasing their engagement in the school context. This finding is supported further by the results reported above regarding the PSSM scores. The results of the PSSM analysis support the qualitative findings that all pupils felt a high sense of belonging to the AP and so this was not related to outcome group. The analysis also suggests that for pupils who are positively engaged in school, the sense of belonging is not different between settings. However, for those pupils who further disengaged from school, their sense of belonging at the AP is significantly higher than their sense of belonging at the school. This highlights that the relationships between pupils and AP staff does not seem to be a factor in explaining the differences between outcomes one and two, but the relationship between pupils and school staff is an important factor. The findings suggest that AP does not compensate for poor relationships at school and if an outcome of increased engagement within the mainstream school is the aim, positive relationships and a strong sense of belonging to the school appear to be fundamental to this success. This was captured in data from pupils who were successfully engaging in both settings and for these students, there was a strong theme that there were members of staff at the school that they could get on with. Some pupils in this group also talked about their adult relationships becoming more positive over time. For example:

> *'My teachers wanted me out at first. Some didn't think I deserved to be getting out and they told me that… I didn't get on with them. But once they could see that I was achieving things and behaving they were better… yea, we understand each other better.'* (Y11)

Discussion

This study indicates that although the aim of a shared placement with an alternative provider is often to re-engage students with school, it is clear that this is often not

successful. For those students where their engagement levels at school do not improve or deteriorate, they have characterised their challenging behaviour at school as a way of rejecting an environment that they feel little sense of belonging to. The findings of the current study suggest that these feelings of rejection and not 'fitting in' are enhanced by accessing an alternative provision that evokes the very opposite feelings in pupils and it does this by meeting the childrens' need for relatedness and belonging.

Although previous research on the topic has been minimal, a previous study found that the more flexible environment of APs can exacerbate difficulties when a child goes back to school (Burton et al., 2009). Whilst this was also a finding in this study, a more complex picture was indicated, for example by highlighting that this difficulty was lessened when the student experienced a high sense of belonging at both settings. The importance of the student having positive relationships with AP staff was clear in the current research study and reflects previous findings (Harriss et al., 2008). This study also indicates that when pupils develop positive relationships at an alternative provider, but fail to have this at the school, this reduces their sense of belonging to the school and consequently has a significant and negative impact on their motivation to engage with the school context. A shared placement cannot re-engage pupils by attempting to compensate for poor relationships at the school. This is an important implication for schools, as often there can be a perception that the AP should meet the emotional and social needs and the school continue with the learning focus. This approach only serves to increase a sense of difference from the pupils' perspective and ultimately does not support the development of a sense of belonging within the school environment.

This study has identified a range of contextual conditions that facilitate successful shared placements through promoting a sense of belonging. School attitudes are fundamental, as success is often linked to schools retaining ownership of the

student and viewing the AP as an extention to provision. When this happens, school staff take an interest in the student's time at the AP, complete visits, ensure a joined up curriculum and have reintegration as the aim, which decreases feelings of rejection.

This study has limitations in that it is relatively small-scale and additional research would be useful to confirm and extend these findings. It should also be recognised that a significant amount of the data collected has been largely directed by the semi-structured interview schedule. Although there were a variety of open questions that gave participants the opportunity to express their general views of shared placement, some questions were more specific to factors that the researcher considered important. This is a difficulty as it may have meant that responses were not varied enough or that potentially important factors were missed. Another limitation is that although the participants included pupils and staff, the perspective of parents was not part of the study. Parents would have offered an additional viewpoint and allowed for a richer account of the contextual factors influencing outcomes.

Implications

This study has implications for schools, APs, Local Authorities and Educational Psychologists (EPs). EPs are well placed to apply an evidence-informed understanding to what constitutes suitable provision for students where alternative provision and/or a shared placement is being considered. This study emphasises the importance of school belonging in this process and EPs are well-placed to raise the profile of belonging at strategic levels, for example, through contribution to LA guidance and within school protocols linked to the use of alternative provision. It is however also important to consider the potential early-intervention function of whole-school development in relation to belonging. From this perspective, EPs can utilise their skills to promote practices and attitudes that facilitate a strong sense of belonging, for example through

providing training, supervision and strategic support. At a more targeted level, this study indicates that EPs also have a role in shaping the school systems that surround students who display challenging behaviour linked to social, emotional and mental health difficulties. For example, EPs can make a valuable contribution to the development of whole-school behaviour management policies and promote the use of practices that facilitate and maintain positive relationships such as relational and restorative approaches within a needs-led understanding of challenging behaviour. EPs are uniquely placed to apply psychological knowledge within school systems and supporting schools in becoming more aware of the importance of belonging and how to cultivate it in all students would be highly valuable. EPs can also draw on their research capabilities to extend the evidence base surrounding school belonging and contribute to a deeper understanding in this important area.

Address for correspondence
Dr Tim Cockerill, Milford House, Pynes Hill, Exeter, EX2 5GF
Email: t.cockerill@hotmail.co.uk

References

Allen, K., Kern, M.L., Vella-Brodrick, D., Hattie, J. & Waters, L. (2016). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review, 30,* 1–34.

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–511.

Booth, T., Ainscow, M., Black-Hawkins, K., Vaughan, M. & Shaw, L. (2000). *Index for inclusion: Developing learning and participation in schools.* Centre for Studies on Inclusive Education: Retrieved from http://www.eenet.org.uk/resources

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77–101.

Burton, D., Bartlett, S. & De Cuevas, R.A. (2009). Are the contradictions and tensions that have characterised educational provision for young people with behavioural, emotional and social difficulties a persistent feature of current policy? *Emotional and Behavioural Difficulties, 14*(2), 141–155.

DfE (2015). *Special educational needs and disability code of practice: 0 to 25 years.* London: Department for Education.

Flewitt, R. & Nind, M. (2007). Parents choosing to combine special and inclusive early years settings: The best of both worlds? *European Journal of Special Needs Education, 22*(4), 425–441.

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*(1), 79–90.

Hagborg, W.J. (1994). An exploration of school membership among middle and high-school students. *Journal of Psycho-educational Assessment, 12,* 312–323.

Harriss, L., Barlow, J. & Moli, P. (2008). Specialist residential education for children with severe emotional and behavioural difficulties: Pupil, parent, and staff perspectives. *Emotional and Behavioural Difficulties, 13*(1), 31–47.

Jose, P.E., Ryan, N. & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time? *Journal of Research on Adolescence, 22*(2), 235–251.

Maslow, A.H. (1968). *Toward a psychology of being.* Van Nostrand Reinhold: New York.

McMahon, S.D., Parnes, A.L., Keys, C.B. & Viola, J. (2008). School belonging among low income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools, 45,* 387–401.

Miles, M.B. & Huberman, A.M. (1994). *An expanded sourcebook: Qualitative data analysis.* Second Edition. London: Sage.

Nind, M., Flewitt, R. & Payler, J. (2011). Social constructions of young children in 'special', 'inclusive'and home environments. *Children & Society, 25*(5), 359–370.

Norwich, B. (1993). Ideological dilemmas in special needs education: practitioners' views. *Oxford Review of Education, 19*(4), 527–546.

Norwich, B. (2008). *Dilemmas of difference, inclusion and disability: international perspectives and future directions.* London: Psychology Press.

Ofsted (2011). *Alternative provision.* London: Stationery Office.

Ofsted (2016). *Alternative provision: The findings from Ofsted's three-year survey of schools' use of off-site alternative provision.* London: Stationery Office.

Pawson, R. & Tilley, N. (1997). *Realistic evaluation.* London: Sage Publications.

Pawson, R. & Tilley, N. (2004). Realist evaluation: The magenta book guidance notes. London: Cabinet Office. retrieved from www.communitymatters.com.au

Sari, M. (2012). Sense of school belonging among elementary school students. *Çukurova University Faculty of Education Journal, 41*(1), 1–11.

Shochet, I.M., Dadds, M.R., Ham, D. & Montague, R. (2006). School connectedness is an under-emphasized parameter in adolescent mental health: Results of a community school belonging and negative affect prediction study. *Journal of Clinical Child and Adolescent Psychology, 35*(2), 170–179.

Shochet, I., Smith, C., Furlong, M. & Homel, R. (2011). A prospective study investigating the impact of school belonging factors on negative affect in adolescents. *Journal of Clinical Child & Adolescent Psychology, 40*(4), 586–595.

Stringer, P. (2009). Dynamic assessment for inclusive learning. In P. Hick, R. Kershner & P. Farrell (Eds.) *Psychology for inclusive education: New directions in theory and practice.* London: Taylor & Francis.

Warnock, M. (2005). *Special educational needs: A new look.* London: Philosophy of Education Society of Great Britain. Impact Pamphlet.

A narrative exploration of the impact of belonging on the educational experiences of teenage fathers

Sarah Whiteway

Aim: *This study was an exploration into the experiences and perspectives of teenage fathers regarding their education. It aimed to unpick the role belonging played in their time in school.*

Method: *Six men who had fathered a child before they were twenty years old participated in a narrative interview, during which they were encouraged to speak about their life history and experiences of education. Interviews were analysed using a combination of: 'rough verse'; key narratives; canons; and personal narratives.*

Findings: *The findings suggest that these young fathers initially had positive experiences of school, but a lack of belonging was a crucial factor in determining their success in education. Primary schools were presented as containing places, counteracting a lack of belonging at home. In contrast, the fathers' experiences at secondary school often mirrored the sense of isolation and social exclusion that they felt within their families. Some fathers experienced fatherhood as a positive turning point in their lives and found a sense of belonging in their new families.*

Limitations: *The narrative nature of the study meant that findings cannot be extrapolated from the small number of participants and that some avenues of interest were left unexplored.*

Conclusion: *A profound lack of belonging was present in many aspects of the fathers' lives and could be considered to have impacted on their educational outcomes.*

Keywords: *Teenage fathers; belonging; narrative; educational outcomes; social exclusion.*

Introduction

TEENAGE PREGNANCY has reduced over the past ten years from 26 births per 1,000 females aged 15 to 19 in 2005 to 13.9 births per 1,000 in 2017 (UNICEF, 2017). The proportion of teenage births involving teenage fathers is undocumented, however, Scott et al. (2012) estimate that six to nine percent of young men become fathers before their twentieth birthday. Despite reducing numbers, teenage pregnancy is still predominantly constructed as a 'problem' owing to the associated negative outcomes for the baby, mother and father (Department for Children, Schools and Families alongside the Department of Health, 2008).

Studies have historically found teenage fathers have a lack of belonging in society

and within their family. Kiselica (1995) described the social narrative of teenagers as 'misfits' who were trying to find their place in society. Jaffee et al. (2001) posited that the media characterisation of teenage fathers as reckless youths with few social connections has led to a self-fulfilling prophecy whereby many teenage fathers live out these narratives of isolation and experience little sense of belonging.

Research has documented the lack of belonging as described by such fathers. In a number of studies, young fathers describe a feeling of exclusion, which initiated before the conception of their child. Osborn (2007) used semi-structured interviews to explore the experiences of young fathers in rural

England. Fathers described repeated experiences of exclusion and often felt that this had impacted on their relationships and ability to interact with others. Fathers spoke about a lack of belonging, particularly within their own families. This included: having distant or absent members of their family who they could not connect to; feeling different to their family; having an unhappy and lonely childhood; and being rejected by their own parents (Speak et al., 1997; Wiggins et al., 2005).

Very little is documented about such fathers' sense of belonging within a peer group (as opposed to their families), although Cordes et al. (2009) found fathers to have some reliance and strong association within a peer group prior to fatherhood which was often subsequently lost when they became a father. Interestingly, research into teenage mothers found more evidence that these young women experienced high levels of isolation with their peers pre-pregnancy (Vincent, 2012). This discrepancy may be due to a genuine difference in the sense of belonging of teen mothers and fathers or a lack of investigation into this phenomenon among teenage fathers.

Some studies indicate the significance of belonging in relation to the experience of teenage fatherhood by highlighting the importance of interventions which address this. For example, Tyrer et al. (2005) found that strategies which first and foremost addressed social isolation and built-up a trusting network of teenage parents were more effective at addressing other negative outcomes (such as poor emotional wellbeing).

There is some disagreement as to whether the arrival of the baby exaggerates teenage fathers' lack of belonging or ameliorates this. Quinton et al. (2002) completed a large number of semi-structured interviews up to nine months following the birth of the child. Their findings suggested that fatherhood helped young men who were at high risk of social exclusion to find a role and sense of belonging within a new family dyad. This positive change often revolved around the relationship with the mother who offered feelings of connectedness and a relationship within which the father has a role. Other studies replicated these findings, suggesting that having a child reinforced this new found sense of belonging (Reeves, 2006; Ross et al., 2010). One study has gone so far as to say that teen parents were actively and consciously seeking out a sense of belonging which was lacking in their own family. However, caution is needed in interpreting this data and applying it to the UK as it was collected in Mexico City (Samano et al., 2017).

In contrast, research has also shown that in some contexts becoming a teenage father increases the likelihood of exclusion and magnifies the lack of belonging the fathers had previously experienced (Sheldrake, 2010; Bunting & McAuley, 2004; Quinton et al., 2002). These studies highlighted a variety of different factors that influenced the extent of exclusion, the most common being: preoccupation with how society would perceive and judge them; financial reasons; conflict with family and peers; and difficulties with the mother of their child. All of these factors resulted in social withdrawal and, consequently, fathers felt a lack of association or belonging with any of the groups around them.

Teenage fathers, education and belonging
Considering that education is a significant part of the teenage experience we know very little about the experiences of teenage fathers in education. It has been documented that such fathers have largely negative educational outcomes following the start of fatherhood, including disengagement from the education system, frequent absenteeism and lower levels of engagement in comparison to non-parent teens (e.g. Arai, 2009; Quinlivan & Condon, 2005; Sigle-Rushton, 2005). There is some evidence that certain educational factors are the strongest predictors of becoming a teenage father: low educational attainment, dislike of school, poor attendance, together with non-educational factors such as being known to the police and having

poor mental health (Department for Children Schools and Families, 2010). Despite this there is scant research focusing on the educational experiences of teenage fathers. Futris et al. (2012) found a number of factors which were associated with teenage fathers who stayed in school, including some related to belonging (such as better affiliation with peers). This suggests belonging may play some role in early educational cessation. Considering the documented link, firstly between a lack of belonging and teenage fatherhood and, secondly between education and teenage fatherhood, it is logical to question the extent to which a sense of belonging impacts on the educational experiences of teenage fathers.

Theories of school belonging suggest that this arises from experiencing feelings of being personally accepted, respected, included and supported by others in the school environment (Goodenow, 1993; Anderman & Freeman, 2004). Research suggests that care and attention from teachers can be an important factor but that belonging also required a sense of fitting in amongst one's peers (Juvonen, 2006; Ye & Wallace, 2014). Osterman (2000) drew on the fundamental need to belong (Baumeister & Leary, 1995) and applied this to school experiences, suggesting that those who do not experience care and concern from those around them reach a state of psychological discomfort which affects behaviour, progress and attendance. Further Goodenow and Grady (1993) found that a strong sense of belonging at school will be positively associated with academic success. None of these ideas of belonging have been explored in relation to teenage fathers.

The purpose of the current study is, therefore, to explore the belonging of teenage fathers at school and how this impacts on their educational outcomes.

Method
Participants
Participants were six young men who had fathered a child when they were 19 years old or younger. Due to the documented difficulties in recruiting teenager fathers for academic research the current study took an opportunistic sampling method by engaging with a variety of potential recruitment paths: the social care division of the Local Authority, Children's Centre, schools and colleges within the Local Authority, the Family Nursing Partnerships and a men's charity. Ultimately, participants were recruited only from the men's charity (three participants) and the Children's Centres (three participants). Table 1 outlines the basic demographic information of the participants.

Pseudonyms were chosen by the participants. Ethnicity and educational qualification are recorded verbatim.

Procedure
Hearing the voice of participants was a key consideration in the study and, therefore, using a method which allowed the participants to tell their stories with as much freedom as possible was paramount. Narrative approaches rely on the telling of stories, although no explicit definition exists (Reissman, 2008). However, narratives have the function of capturing the voice of participants without imposing one's own interpretation and expectations upon them. Using this approach in the current study meant that fathers were not directed by questions which may have been constructed on social discourses. This helped to redress the power differential that participants may otherwise have felt. The opening interview script is presented in Appendix A.

If participants had difficulty telling their story a 'life-history' grid was used (example given in Appendix B). Life-history grids are explored in previous research (for example, Atkinson, 1998; Elliott, 2005; Warham, 2012). This was introduced by asking participants to consider their experiences as a book or television series and to break their memories down into specific chapters that would be given a name and include key information about this 'chapter'.

Table 1: Demographic information of participants

Pen name	Age at which first child was born	Current age	Number of children	Ethnicity	Educational history	Highest educational qualification	Relationship status
Joe	19	22	2	Asian Bangladeshi	Left school at 17	GCSEs	Married. With mother of his children.
George	19	21	1	British Bengali	Currently at university	A Levels	Married. With mother of his child.
Jonny	16	17	1	Black African	Left school at 16	GCSEs and BTECs	Not cohabiting. With mother of his child.
Owen	19	22	1	Black British Caribbean with some Indian	Currently studying	City and Guild qualifications	Not cohabiting. With partner who is not the mother of his child.
Majeed	18	21	2	Trinidadian	Left school at 18	BTECs	Married. With mother of his children.
Jason	19	21	2	Black Caribbean	Left school at 16	7 GCSEs	Cohabiting. With mother of his children.

Data analysis

The narrative interviews were transcribed by the interviewer and then analysed using a five-step method, which employed a hybrid of different narrative techniques (this strategy is supported by Reissman, 2008). Table 2 lays out the five stages of analysis.

All stages of the analysis were then reviewed by colleagues to allow reflection and interrogation of the researcher's own interpretations.

A narrative approach aims for the stories of the participants to present the results rather than attributing meaning to them through a heavily structured process of analysis (such as thematic analysis). Therefore, vignettes from each father's own narratives will be presented in this paper to elucidate their key narratives and present ideas for discussion.

Results and analysis

Analysis of the data found four key narratives that related to belonging. These were belonging: (1) within their family of origin; (2) at primary school; (3) at secondary school; and (4) within the family of their child. This section will present examples of personal narratives within each key narrative as a way of letting the fathers tell their own stories.

Belonging within their family of origin

The fathers' stories were littered with narratives that described their lack of belonging within their own families, which replicated findings from prior research. With only one

Table 2: Stages of narrative analysis used in the current study

Stage	Process	Overview
1	'Rough verse'	Transcripts were transformed into 'rough verse' to provide an overview of each participant, these were shared with participants (in written form).
2	Re-reading and the hermeneutic circle	Transcripts were read multiple times with consideration given to issues raised in the literature review.
3	Identifying key narratives	Small stories within the narrative were highlighted. The small stories were then collated and repeated themes or meanings were noted as key narratives.
4	Identifying the canons and personal narratives	Each small story and its associated key narrative was then considered in terms of the canon[1] and the personal narrative that was expressed within it.
5	Paying attention to the co-construction	Small stories story were then considered in terms of the co-construction and how it was being told, specifically how this had affected the narrative or interpretation of the narrative.

[1] Defined as an accepted principle, rule, standard or norm in society. For example, a canon about fathers may be that they provide for their children.

exception, key narratives for all the fathers represented themes of abandonment and loneliness at home:

'My family was never there.' (Jonny)

'I had no one to talk to at home.' (Majeed)

'I never fitted in with my family.' (Owen)

'I hated home life… I was lonely most of my teenage years.' (George)

'I never saw much of my dad. I'd say I didn't really know myself at the time, 'cos I didn't care…I just wanted to be like everyone else 'cos I never had anyone…I wanted to be with my dad…or just to be with someone.' (Jason)

The fathers in the study drew on the canonical expectations that fathers support their children and positioned themselves as someone who had missed out on this:

'Dad's should be there, they should care about what their kids doing…I saw dad's playing with their kids in the park

and always thought, why don't I have that, I didn't get any of that.' (Joe)

The fathers said they felt they had not had somewhere where they were valued and supported:

'No one knew me, where I was, what I was doing…no one cared what I did.' (Jonny)

'My dad never spoke to me about anything, I just did it all off my own back, I don't think he'd know now, if you asked him.' (George)

'the only thing I did, I fell with, was attendance towards the end and that's because… like I said, my dad was never around, the woman I was living with she wasn't my mum, she'd hardly tell me to go to school anyway. So…I just kind of took the piss because I knew I could. They didn't care so I didn't know what to do with myself, I didn't know where to belong.' (Jason)

As Jason presents, the lack of support, the loneliness and in many cases the lack of someone who they felt filled the 'father'

figure led to a direct lack of belonging at home or a more subconscious sense of not fitting in at home.

Belonging in primary school

The key narratives described by the fathers in schools can be separated quite distinctly into experiences at primary school (which were predominantly positive) and those at secondary school where the fathers began to lose a sense of belonging. Primary school, in fact, provided belonging where home had not.

'I genuinely loved school at that time. [S: mhmm] …from primary school up until about 13, 14 years old I loved school [S: mhmm] I loved it, like it was just my gateway out from the responsibility that at home.' (George)

'I had friends at school, people liked me… I fitted in.' (Jason)

Many of the stories told about primary school evoked positive emotions which in some cases arose from acceptance within a peer group.

'I had fun with my friends, we'd just muck around, japes and stuff [S: laughing] we had a laugh… it was easy, chilled.' (Joe)

'we was all laughing at first and then the teacher was like alright you guys are laughing I'm gonna call your parents and then like everyone just started crying [laughing] and it was just so funny everyone just went from laughing just went to crying and it was just funny [laughing].' (Jonny)

Other narratives presented primary school as a place of security and a haven where they could be themselves:

'I got primary school, it made sense to me and I just did it… no fuss, just be myself and stay out of trouble.' (Joe)

'going to school with someone. Being able to go to the park after, they introduced me to their friends… they made me like feel safe*, I didn't feel* **alone** *there not knowing no one. That's it. Primary school was – when I got settled in – it was kind of* fun*…all them times to do football cards, Pokémon cards, [S: (laughing) yeah] play days. So it was kind of fun, got to wear your own clothes and I remember the primary school dinners were nice. Yeah, stuff like that.'* (Jason)

Finally there were those stories of being successful, reaching their potential and being noticed for this.

'this one teacher she didn't give up on me and just went she was, she was, she was just one *teacher that I, even when I was in college, I used to contact… her, if they couldn't get through to me they'd go back to her and she would,* somehow, *she would always get through to me, even to this day. I don't know how she did it but she somehow managed to get through to me.'* (Owen)

'[primary] school was **perfect** *[S: OK] I wasn't the smartest [S: yeah] but I* **darn** *well worked hard for what I wanted [S: yeah] I would sit there working and I didn't get myself in no trouble with anyone [S: mhmm] I had good friends that supported me. It was just good. [S: yeah].'* (Majeed)

Largely positive personal narratives run through the key narrative of primary school as a place of safety, of having a peer group and being successful and acknowledged. These stories begin to change at secondary school.

Belonging in secondary school

The stories told about secondary school focus on a lack of someone who cared about the fathers, feeling different to their peers and feeling uncomfortable at school which,

taken together, can be considered to represent a sense of belonging.

These stories highlight the lack of concern for some of the fathers.

*'I never did my homework, no one would care… I remember sleeping sometimes past 10 o'clock and **no one** would say **nothing** to me… I don't know why, but yeah. So I kinda had to make up my own 'cos I thought if no one's telling me to go to school I ain't killing myself going for that. Teacher's **they're** not noticing, the school's not noticing nothing. I mean one time I didn't even go to school, I went to school at 2 o'clock and only did my last lesson…**no** teacher said **nothing** to me, **nothing.**'* (Jason)

*'I was just **"screw everyone"** if you want to open your mouth to me and fighting, I'll fight you I don't care, teacher, student. A lot of my teachers…gave up on me. I gave up on **myself.**'* (Owen)

Stories similar to this were told by all the fathers, documenting a variety of behaviours associated with poor school belonging.

Firstly, dropping attendance:

'Yeah at secondary school it just dipped, I just stopped going and, yeah, it sucked… so I just didn't go.' (Joe)

*'my attendance was poor like I told you… I never really **cared** about going in, I'd go in like once a week and stuff like that, it was just stupid and when I did go in I'd probably be sent home by lunch time there was just no point in being there.'* (Jonny)

'I just, I kind of bunked a lot of school [S: OK] only went in to a few lessons. [S: yeah] Erm… only lessons that I enjoyed like I'd go to maths.' (George)

Secondly, poor grades:

'yeah, when I took my GCSEs I never took it that seriously. [S: mhmm] I never took it that seriously I never- I don't think I'd spent more than two hours revising. [S: ok] Basically I don't think I… I just- I don't know it's really bad but I just thought I'll wing it.' (George)

*''cos I don't have the work to show I can do higher [GCSE paper] 'cos I never used to do the work, but that's what just got to me more 'cos if you know I can do higher why would you put me on foundation…foundation is for stupid people, hearing that it didn't help at all, it didn't help 'cos I was just like why am I doing foundation [S: yeah] I was just **really** upset and angry I had a lot of tantrums in school 'cos of it.'* (Jonny)

Thirdly, poor behaviour:

'thinking it was cool to get rude to teachers for no absolute reason at all, just getting rude to teachers [S: yeah] thinking it would make everyone laugh like and just like not really doing a lot of work.' (Owen)

*'I just started to mess-up really, started getting rude to teachers [S: yeah] and 'cos I had a bit of an anger problem as well, like, that started to get worse as I, I dunno like that started to get worse 'cos like I'd like try to get rude to teachers but obviously teachers are gonna try and tell me off for getting rude to them but **then** I'd just start getting angrier at teachers like I dunno it was **stupid** I dunno what was wrong with me in them times, [S: yeah] but it was just like just tryna make friends really and tryna impress everyone.'* (Jonny)

'I got in fights and I probably had to get told off a couple of times when I was hanging around school' (Jason)

Finally, a lack of effort:

'there were certain things that in lessons I couldn't get to terms I couldn't get to grips with [S: mhmm] so I literally started- so like I'd just come in and do whatever I wanted really.' (Owen)

The fathers did not mention any specific teachers in secondary school which is in contrast to their stories from primary school. This highlights a lack of connectedness to the people who they expected to support them through their secondary education.

The fathers' personal narratives also presented ways in which the fathers sought to belong within school. Protective groups of peers began to evaporate at secondary school.

*'starting a new school, having to make new friends, this is like a whole experience… it felt like everyone has already got their friend group, everyone has already got their friends and their friendship circles and when you come it's like you have to just **fit into** it and it's a lot more effort than just making friends with everyone.'* (Jonny)

'at primary school I had loads of friends but at secondary I got in fights… I guess less people wanted to know me.' (Jason)

*'Secondary school I just had **bare** ups and downs, like a lot of ups and downs, especially with friends [S: OK]. Like, in secondary school that's when you find out who's real and who's just there to say they are there and who wants to know your business just to know, just 'cos they're bored and they want to hear someone gossip to go and gossip it to someone else [S: yeah]. You find out who to fit in with, I had to go through some **pretty** hard situations to find that out [S: mhmm]. I just had a lot of fallings out with people that I'd thought, like, were my **proper** close friends [S: yeah] it's confusing [laughing] 'cos I think I have a really good judge of character, but it's like it just all*

went out the window. I didn't know where I fitted in.' (Jonny)

The collective difficulty that the fathers describe in terms of finding and fitting-in with a peer group in school (and their families at home) led to some fathers seeking out alternative forms of belonging. For example, Joe describes how 'free' and comfortable he felt when he was with a particular group of peers from school. In this group of friends Joe appeared to feel that he belonged. However, later he talks about how he had to return to a group of Bengali friends for protection (after being attacked) and lost his former relationships.

*'So I had, like, I had an Indian friend, I had a Vietnamese friend, I had a Sikh friend, a white friend, everyone has to have a white friend [S: laughing], and a black friend. So what happened was all of us there was at least six of us and, yeah, we were pretty cool from then on. I kinda like that feeling that I've always wanted to be around that kind of group and, yeah, it kind of just felt like it was **pretty right** and not even that I wasn't fighting much.'* (Joe)

'I went back to hang around with all the Bengali lot who were a lot more streetwise who'd have my back if anything happened, y'know what I mean.' (Joe)

*'when I got stabbed we were all drinking we were all smoking that night, like, literally I tell everyone heat, sunlight, alcohol and groups of boys never mixes; **always** leads to a fight with someone. Either it's between them or it's between them and someone else, it always leads to a fight, that was just the crew I hung out with.'* (Owen)

'first time I ever got arrested was when I was about 12 and that was with my friend. I shouldn't even call him my friend and he's in prison now for murder yeah [laughing] [S: wow, OK] and yeah

when I was like 12. He was walking around and I was out in my estate and I just seen him randomly and he must have been like what's your name and just started talking to me and like from there like yeah just started chilling with him.' (Jonny)

Taken together the key narratives about secondary school highlight poor attendance, worsening grades, difficult behaviour and a lack of care about education. This couples with an absence of people taking care of the fathers, losing peers and seeking belonging amongst new peer groups outside of school who were often a negative influence.

Belonging within the family of their child
The final key narrative told by the fathers in terms of belonging related to their new family, although this was present in only four of the six fathers. For two of the fathers the contact with their new families was infrequent, but they still referred to the responsibility they felt for their new child.

For George, throughout his narrative he describes the loneliness that he felt growing up. This enabled him to describe his simple hope for a happy family in which he can truly feel he belongs.

> *'Not growing up in a nuclear family, I've always longed for that…my main objective in life was to be a father, a husband.'* (George)

When this key narrative is considered in contrast to the belonging that was missing from their childhoods and their school lives, we are able to see the power and joy of having their own family in which to belong. This is summed-up completely in a personal narrative from Majeed who describes the sense of belonging he feels from the unconditional love of his son.

> '*he just **sat** on my chest, didn't want to see his mum, not calling for his mum crying, he just stayed on me not crying he just*

> ***stayed*** *with me [S: mmm]. For **all** those months never wanted his mum, just me, just wanted me, and **all** those months I just felt that bond build stronger and stronger [S: yeah] and it's just I don't want to let that go [S: mhmm]. It's **so** special, I find it so special [S: yeah], it's really nice, it's like being in love, but unconditionally. And I just felt like I belonged, like I'd found something I was **meant** to do.'* (Majeed)

The stories highlight how the fathers have, eventually, found someone to care for, and in this sense may have found a sense of belonging they had been searching for their whole life.

> *'I wanna do something positive…right now all I think about is what positive thing I can do so I can…at least when I **die**, yeah, my name will live on for doing something positive [S: yeah] …so my kids can have something to be proud of their dad for 'cos they don't have nothing right now.'* (Jason)

> *'I was being the best dad I could be [S: mhmm] to my son and then shortly after when A was just about turning 2, I think, my daughter was born. That was another one we didn't expect, but we were ready for it together… if you met my son, if you speak to him… it doesn't make sense how blessed we've been with **such an amazing son.**'* (Joe)

> *'I should be out there just in case my son needs me [S: mmm] in the cell I have **no** contact with him, I have **no** contact with his mum, his mum can't tell me nothing if anything was to happen… there's **nothing** I can do, I can't run out the police station and just run to her house, it's like there nothing I can do [S: yeah]. If something were to go wrong I wouldn't forgive myself especially if something was to go wrong and I was in the cells and I could have been out there being more help, I need to look after my son.'* (Jonny)

*'I want him to be able to want for nothing if he says "I want this", [S: yeah] go and get it. I want him to have. I want him to live better. I want him to have a **better** life than I did.'* (Owen)

Discussion

Although the participants were not led to talk about belonging specifically this idea permeated the key narratives of the fathers. Baumeister & Leary (1995) described two ways in which the need to belong can be satisfied: firstly, frequent, pleasant interactions with a few people; and secondly, a context of enduring and stable concern. Noting this definition it is interesting that fathers described the absence of interactions with their family of origin. For example, they were left to their own devices or they were lonely at home. The young men also described their families not caring about what they were doing or not taking a role in promoting positive engagement with school. This echoes previous research which suggests fathers felt a pervasive lack of belonging throughout their lives at home and that this cycle of exclusion may well be a contributor to the negative outcomes associated with teenage fatherhood. It brings into question whether teenage parenting *per se* is the issue or whether the other contextual factors which surround teenage parents are the issues that need to be addressed. Indeed, taking a more holistic view might relieve some of the stigma and consequential isolation experienced by fathers and, in that way, address the lack of belonging they experience.

Considering school belonging as the experience of being accepted, respected and supported by peers and teachers (Goodenow, 1993; Anderman & Freeman, 2004; Juvon-even, 2006) we can reflect on the fathers' sense of belonging in school. The majority of fathers told stories of positive interactions with both staff and peers at primary school. For example, specific individuals making a difference in their life or being looked after, supported and encouraged by staff and feeling included within a group of friends.

These narratives starkly contrasted with those about home and highlight the sense of care and inclusion necessary to feel they belonged at primary school. However, the descriptions of adolescence and secondary school told a different story. Relationships became more fraught with narratives told of broken friendships. A powerful motif throughout this key narrative is a lack of care and concern from members of school staff. For example, not being followed up for dropping attendance and poor results or teachers having very low expectations for their success. This leads us to conclude that many fathers lacked the support from staff and inclusion from peers necessary to build a sense of belonging in secondary school. The stories also show that this lack of belonging was strongly associated with a decline in attendance, poor behaviour and limited academic success as predicated by Osterman (2000).

In contrast to their experiences at secondary school, the fathers' stories describe contexts in which they found belonging outside of school. For some fathers this was within gangs where they felt a sense of connectedness to the others in a gang. Other fathers describe finding belonging within their new families, where they felt supported and accepted by their new partners or they felt they had a role and a connection to their new child. These alternative experiences of belonging may very likely have been a results of searching for belonging elsewhere when it was lacking at school. Although some fathers describe finding this sense of belonging as something they have been looking for their 'whole life', they do not describe the search for belonging as a conscious process or make this explicit. This idea highlights an important consideration when reflecting on the narratives of the fathers: what is absent but implicit.

In analysing the stories that the fathers have told us it is also important to consider what they haven't said and what this may communicate. An example of this may be the influence of ethnicity and culture on the fathers' sense of belonging. Although

the fathers interviewed were from a broad range of backgrounds, they all represented an ethnic minority. As school belonging is associated with a sense of acceptance and inclusion, being part of an ethnic minority may have played some part in this feeling. Indeed, Faircloth (2011) highlighted how culture and identity affected a sense of belonging as we search for people with similar experiences. Other research has also suggested some association between school belonging and ethnic identity (Gummadam et al., 2016). This study suggested that in the absence of school belonging ethnic identity predicted a person's sense of self-worth. This may provide some explanation for some fathers seeking friends from similar ethnic identities as they lacked a sense of belonging at school.

Another absent but implicit idea in the narratives is the fathers' motivation to either correct or replicate experiences from their family of origin. Some fathers discussed wanting their children to have a different experience to themselves, suggesting a drive to correct the lack of belonging they had experienced as a child. They did not explicitly reference belonging as an important factor in their relationships with their children, however, they describe having a role to care for and support their child which fits with the definition of belonging provided by Baumeister and Leary (1995). These absent but implicit narratives suggest that, although belonging is playing a significant role in the lives of these young fathers, it is not something they are consciously acting upon.

Implications for practice

Although teenage fathers make up a very small population in the UK, the current study highlights the need for belonging and how this can act to drive vulnerable people into dangerous groups (such as gangs) in the search for somewhere to belong. It highlights how school can be a place of belonging. Further, it demonstrates the need to build positive relationships, even for young people that we may perceive as being detached or resistant to help (perhaps even more so in these cases). Educational Psychologists (EPs) have a role to promote the importance of belonging which might protect against negative future outcomes, such as teenage pregnancy and poor educational outcomes, as well as those in a wider context such as law breaking and mental health. The contrast between belonging in primary and secondary schools has been highlighted in the current study and EPs have an ongoing responsibility to support the transition from primary to secondary. Further, there is a need to heighten the awareness of belonging amongst school staff as an important feature of a young person's experience at secondary schools.

For young fathers, the current study shows how having a family can be a point of positive transition. For all professionals working with these families it is crucial to consider how a sense of role, responsibility and, therefore, belonging can be instilled within young fathers in order to address many of the negative outcomes associated with teenage parenthood, including those linked to education.

This study also advocates for open discussions about belonging so that the influence this has on a young person's life can be explored. The absent but implicit narratives of the fathers in this study suggest belonging is a powerful incentive without it being consciously so. Therefore, discussions with EPs that heighten awareness of belonging are likely to also support young people to make positive choices that improve their sense of belonging.

Finally, this study advocates for the use of narrative techniques in capturing the voice of young people, but perhaps most powerfully those of vulnerable groups. It highlights how letting a child or young person tell their own story and letting the story build an understanding of the person is both empowering for the young person and insightful for professionals. In a world where we are increasingly given news and facts through

secondary means the purism of narrative is especially refreshing.

Limitations and future research

The nature of narrative is such that having too much data can impact on the power of the stories that are told. However, findings from six participants cannot be extrapolated to the whole population. From the current study we are able to understand the experiences and the patterns of belonging experienced by these six men, but cannot assume that these hold true for the majority of the population of young fathers. The nature of narrative interviewing is at one time a strength and a limitation of the study. Where participants were free to tell their stories undoctored there were avenues of questioning which the researcher was unable to explore. This suggests further research using a more structured exploration of certain areas may prove interesting alongside a narrative approach. For example, investigating the experience at transition from primary to secondary school or how belonging with the fathers' new families changed over time.

As suggested earlier, it appears that work on belonging with the new families of the fathers could be impactful. However, research would be needed to explore exactly how this could be done and whether it was found to be useful by the fathers. It is also suggested that a lack of belonging in secondary school may have driven young fathers to associate with different and more dangerous groups of people, this association and the processes

behind this would be another interesting avenue to explore as well as understanding why belonging fell away in secondary school.

Conclusion

Teenage fathers have long reported a lack of belonging within their families and this has been found to be exaggerated or ameliorated by the construction of their own family. The current study highlights how primary school can become a protective place of belonging for these young people. However, this sense of belonging disappears for the fathers during adolescence. Factors such as breakdowns in relationships with peers and a lack of enduring concern from those around them were key to the fathers' reduced sense of belonging. This belonging was linked to withdrawal from school and, therefore, linked to poorer educational outcomes.

We are now able to see how belonging drives many of the narratives for these young fathers and is, therefore, an extremely powerful theme within their lives. The voices of the young fathers are full of powerful and important messages and we gain a lot by hearing them unburdened by interpretation.

Address for correspondence
Sarah Whiteway
Schools and Community Psychology Service, Wandsworth Council, Town Hall, Wandsworth High Street, Wandsworth, London, SW18 2PU
Email: sarah.whiteway@richmondandwandsworth.gov.uk

References

Anderman, L.H. & Freeman, T. (2004). Students' sense of belonging in school. In M.L. Maehr & P.R. Pintrich (Eds.) *Advances in motivation and achievement (Motivating students, improving schools: The legacy of Carol Midgley)* (Vol. 13, pp.27–63). Greenwich: Elsevier.

Arai, L. (2009). *Teenage pregnancy: The making and unmaking of a problem.* Bristol, UK; Portland, OR: Policy Press.

Atkinson, R. (1998). *The life story interview.* London: SAGE Publications Ltd.

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529.

Bunting, L. & McAuley, C. (2004). Research review: Teenage pregnancy and parenthood: the role of fathers. *Child & Family Social Work, 9*(3), 295–303.

Cordes, C., Norman, W. & Savage, V. (2009). *Meet the parents – Stories of teenage pregnancy and parenthood in Lewisham.* London: The Young Foundation.

Department for Children Schools and Families. (2010). *Teenage Pregnancy Strategy: Beyond 2010.* London: DCSF.

Department for Children Schools and Families & Department of Health. (2008). *Getting maternity services right for pregnant teenagers and young fathers.* Nottingham: DCSF.

Elliott, J. (2005*). Using narrative in social research.* London: SAGE Publications Ltd.

Faircloth, B.S. (2011) School belonging. In R.J.R. Levesque (Eds.) *Encyclopaedia of adolescence.* New York, NY: Springer.

Futris, T.G., Olmstead, S.B., Pasley, K. & Nielsen, R.B. (2012). A fork in the road to high school completion: Exploring adolescent fathers' educational paths. *Fathering: A Journal of Theory, Research & Practice about Men as Fathers, 10*(3), 291–313.

Goodenow, C. & Grady, K.E. (1993). The relationship of school belonging and friends' values to academic motivation amongst urban adolescent student. *The Journal of Experimental Education, 62*(1), 60–71.

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence, 13,* 21–43.

Gummadam, P., Pittman, L.D. & Ioffe, M. (2016) School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. *Journal of Experimental Education, 84*(2), 289–306.

Jaffee, S.R., Caspi, A., Moffitt, T.E., Taylor, A. & Dickson, N. (2001). Predicting early fatherhood and whether young fathers live with their children: Prospective findings and policy reconsiderations. *Journal of Child Psychology and Psychiatry, 42*(6), 803–815.

Juvonen, J. (2006). Sense of belonging, social bonds, & school functioning. In P. Alexander & P. Winne (Eds.) *Handbook of educational psychology* (2nd edn, pp.655–424). Mahweh: Lawrence Erlbaum.

Kiselica, M.S. (1995). *Multicultural counselling with teenage fathers: A practical guide.* Thousand Oaks, CA: Sage Publications.

Osborn, M. (2007). *Being there: Young men's experience and perception of fatherhood.* Ph.D. Thesis. Anglia Ruskin University: UK.

Osterman, K.F. (2000) Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323–367.

Quinlivan, J.A. & Condon, J. (2005). Anxiety and depression in fathers in teenage pregnancy. *The Australian and New Zealand Journal of Psychiatry, 39*(10), 915–920.

Quinton, D., Pollock, S. & Anderson, P. (2002). *The transition to fatherhood in young men: Influences on cmmitment. Summary of key findings.* Bristol: School for Policy Studies, Bristol University.

Reeves, J. (2006). Recklessness, rescue and responsibility: Young men tell their stories of the transition to fatherhood. *Practice, 18*(2), 79–90.

Riessman, C.K. (2008). *Narrative methods for the human sciences.* London: SAGE Publications Ltd.

Ross, N., Church, S., Hill, M., Seaman, P. & Roberts, T. (2010). *The fathers of children born to teenage mothers: A study of processes within changing family formation practices.* Scotland: Children1st.

Samano, R., Martinez-Royano, H., Robichaux, D. et al. (2017). Family context and individual situation in teens before, during and after pregnancy in Mexico City. *British Medical Council Pregnancy and Childbirth, 17,* 382–390.

Scott, M.E., Steward-Streng, N.R., Manlove, J. & Moore, K.A. (2012). *The characteristics and circumstances of teen fathers: at the birth of their first child and beyond.* Washington, DC: Child Trends.

Sheldrake, S. (2010). *The experiences of being a teenage father: An IPA analysis.* Birmingham University, UK.

Sigle-Rushton, W. (2005). Young fatherhood and subsequent disadvantage in the United Kingdom. *Journal of Marriage and Family, 67*(3), 735–753.

Speak, S., Cameron, S. & Gilroy, R. (1997). *Young single fathers: Participation in fatherhood – Barriers and bridges.* London: Family Policy Studies Centre.

Tyrer, P., Chase, E., Warwick, I. & Aggleton, P. (2005). 'Dealing with it': Experiences of young fathers in and leaving care. *British Journal of Social Work, 35,* 1107–1121.

UNICEF (2017). *Report Card 14: Building the Future: Children and the Sustainable Development Goals in Rich Countries.* Florence, Italy: UNICEF Office of Research.

Vincent, K. (2012). *Schoolgirl pregnancy, motherhood and education: Dealing with difference.* London: Trentham Books Ltd.

Warham, K. (2012). Engaging with young people through narrative co-construction: Beyond categorisation. *Educational and Child Psychology, 29*(2), 77–87.

Wiggins, M., Rosato, M., Austerberry, H., Sawtell, M. & Oliver, S. (2005). *Sure Start Plus National Evaluation: Final Report.* London: SSRU, Institute of Education.

Ye, F. & Wallace, T.L. (2014) Psychological sense of school membership scale. *Journal of Psychoeducational Assessment, 32*(3*),* 202–215.

Appendix A
Opening interview script:

> 'I am interested in your story, how you see things, how you think about things and how you say things in your own words. I'd like you to talk as much or as little as you want to.
>
> I will be asking you about your experiences at school. I hope that by looking at these experiences we might learn about better ways to support young people like you in the future.'

Appendix B
Life story grid

Jason.

CHAPTER	TITLE	STORYLINE
1	coming to school.	came to live with Dad.
2	going to pmenary	getting to know friends and education
3	secondary	downhill – stopped going to school
4	after secondary	wrong crowd
5	prison	Just prison
6	coming out to now	trying to get back on track.

Understanding the relationship between youths' belonging and bullying behaviour: An SEM Model

Christopher D. Slaten, Chad A. Rose & Jonathan K. Ferguson

Aim: *Bullying is a significant problem among school children and within the climate and culture of many schools. Research has indicated that environmental and psychosocial factors may play an important role in the culture change needed to minimise bullying behaviours in schools (Goldweber et al., 2013; Mehta et* al., *2013; Sapouna & Wolke, 2013). A growing body of literature suggests that belonging, one such type of psychosocial factor may act as a buffer for bullying perpetration. For this reason, the current study aimed to explore the relationship between peer, family, and school belonging and bullying behaviours.*

Method/Rationale: *Students from rural middle schools (ages 11–14; N=912) in the United States completed surveys including questionnaires on bullying and peer, family, and school belonging. Structural equation modeling was used to examine the relationship between belonging and bullying behaviour.*

Findings: *The results support the hypotheses and suggest there is a link between sense of belonging (peer, family, and school) and bullying behaviour.*

Limitations: *The most notable limitation is that the data are cross-sectional, examining the variables at one particular time point, which eliminates the possibility of studying longitudinal impact. Further, all measured constructs examined were done through self-report assessments. Thus, observational and behavioural information was not collected or utilised in the current study.*

Conclusions: *These findings have an important applied component and could lead to stronger intervention efforts. Specifically, interventions that focus on increasing positive peer-level interactions, coupled with a stronger sense of school community or belonging, could result in decreases in bullying behaviours.*

Keywords: *Bullying; belonging; structural equation modelling; school climate; peer relations; family relations.*

BULLYING has a longstanding history within American schools, and has emerged as a notable public health concern for school-aged youths (Gladden et al., 2014). Involvement in bullying, as both perpetrators and victims, has demonstrated a long-term, detrimental impact on mental health (see National Academy of Sciences, Engineering & Medicine [NASEM], 2016 for review). Despite the encouraging statistics that suggest bullying involvement has decreased within American schools, the data continues to suggest that more than one in five students continue to experience high rates of victimisation (Musu-Gillette et al., 2018). Therefore, schools continue to face

challenges in reducing bullying behaviour (Espelage et al., 2015). Research has indicated that environmental and psychosocial factors may play an important role in the culture change needed to minimize bullying behaviours in schools (Goldweber et al., 2013; Mehta et al., 2013; Sapouna & Wolke, 2013).

Over the last few decades many researchers have identified predictors of bullying behaviour including psychosocial skill deficits, such as social and communication skills, motivation, and engagement (Espelage et al., 2015; Mehta, et al., 2013; Rose et al., 2015; Skues et al., 2005). The question remains, how do we as scholars and educational professionals

impact these psychosocial skills in such a way that we are reducing bullying perpetration and victimisation? Previous research has indicated that school climate and other environmental variables, such as belonging, are related to school engagement and motivation, providing support for belongingness to be classified as a process that supports learning, which could theoretically serve as a moderator for bullying perpetation (Goodenow & Grady, 1993; Voelkl, 1997; Slaten et al., 2017). However, the literature examining the predictive relationship of belonging to bully perpetation specifically has been sparse. Belonging is frequently defined as the perception of consistent interaction and persistent caring from others (Baumeister & Leary, 1995; Slaten et al., 2016). Research has indicated that belonging is significantly related to academic achievement and positive behavioural outcomes, whereas bullying is associated with low levels of engagement, achievement, behavioural deficits, and lack of social support (Andermann, 2002; Goodenow & Grady, 1993; McMahon et al., 2008; Mehta, et al., 2013; NASEM, 2016). Based on foundational literature, it is conceivable that belonging and bullying behaviours may be inversely related. The current study employs structural equation modeling to ascertain whether this relationship exists and the possible future implications for designing bully prevention interventions.

Bullying

Bullying has been described as 'a distinct, pervasive subset of peer aggression that affects youth worldwide' (Rose et al., 2015, p.339). The Center for Disease Control and Prevention (CDC) defined bullying as: 'Any unwanted aggressive behaviour(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is likely to be repeated.' (Gladden et al., 2014, p.7). This definition relates to the interactions between school-aged youths and is inclusive of the contexts in which bullying

can occur, as well as the different modalities by which bullying is perpetrated (e.g. physical, verbal, relational, and property damage).

While bullying is a dynamic process that is grounded in the reciprocity between perpetration and victimization, evidence suggests that the role association is fluid, and students are rarely identified as 'pure' bullies or victims (NASEM, 2016; Rose et al., 2015). Although attending to the reciprocity of bullying involvement is important, understanding the context by which students engage in bully perpetration, as well as the environmental conditions that may prevent such behaviours, could serve as a vehicle for more effective and efficient intervention efforts. For example, bullying is a social construct (Hong & Espelage, 2012), and when the social nature of the school environment is considered, those that engage in bully perpetration may be attempting to situate themselves within a desired peer group (Rodkin et al., 2015). Specifically, individuals who engage in bully perpetration may be socially savvy or regarded as popular, or attempting to gain popularity among their peers (Peeters et al., 2010; Vaillancourt et al., 2003). It is, however, conceivable that individuals engage in bully perpetration because of skill deficits, behavioural deviations from peer group norms, supportive attitudes for violence and aggression, and risky or deviant behaviours (Bosworth et. al., 1999; Rose & Espelage, 2012; Vaillancourt et al., 2010). Given these deviations, it is plausible that the school context, or a perception of belongingness, has a direct or indirect impact on bullying behaviours (Rose et al., 2015).

Unfortunately, bully perpetration is associated with academic deficits, interparental violence, and detrimental psychosocial outcomes (Baldry, 2003; Kokkinos & Panayiotou, 2004; Woods & Wolke, 2004). For example, Gini and Pozzoli (2009) conducted a meta-analysis that examined the relationship between bullying behaviours and psychosocial outcomes, and determined that students who engage in bully perpetra-

tion were more likely to report psychosocial deficits when compared to those uninvolved. Additionally, Casas et al. (2013) determined that personality traits, perceptions of school climate, and role variation were predictors of increase bullying and cyberbullying. However, NASEM (2016) argued that 'there is a rich literature on aggressors and the outcomes of being aggressive, there are few studies examining bullying perpetration specifically' (pp.4–19). Therefore, it is critical to examine this form of pervasive peer aggression, and the contexts and conditions by which these behaviours are reinforced.

Belonging
Belonging has been defined as a fundamental need and motivator for human behaviours (Baumeister & Leary, 1995; Maslow, 1954) comprised of a perception of persistent caring and consistent interaction with others in a particular group. This construct has been studied across various facets of life (i.e. family, peers, school, and university; Goodenow, 1993; Slaten et al., 2016). In Baumeister and Leary's (1995) *belongingness hypothesis* they define belonging as 'a need to form and maintain at least a minimum quantity of interpersonal relationships (p.499).' According to Baumeister and Leary (1995) this entails at least one interpersonal connection within a group for most individuals, although for some individuals, they hypothesise, it may be more. Belongingness has been connected to a plethora of constructs. School belonging, specifically, has been related to academic motivation, academic performance, adjustment, transition, and dropout prevention (Andermann, 2002; Goodenow & Grady, 1993; Kuperminc et al., 2008; Pittman & Richmond, 2007; Slaten et al., 2017). In addition, family belonging has been related to career decision-making and academic achievement (Slaten & Baskin, 2014). Further, research has shown peer belongingness to be related to positive adjustment and wellbeing (Van Ryzin et al., 2009).

Some research has been conducted that provides support for examining a possible relationship between bullying and belonging (Goldweber et al., 2013; McMahon et al., 2008; Mehta et al., 2013). For example, Goldweber and colleagues (2013) examined the link between high bullying/low bullying classrooms and the association with psychosocial constructs, where students in high bullying classrooms reported increased levels of victimisation and internalising problems, and lower levels of classroom/school safety and belonging. This study indicates that there is a possible relationship between bullying behaviour and belonging, although not measured directly, rather indirectly through identified classrooms that have high reported incidents of bullying behaviour. Further, Mehta and colleagues (2013) and McMahon and colleagues (2008) indicates that there may be a relationship present between school/classroom climate variables, such as belonging, and bullying/victimization. Although the relationship in these studies is addressed through the study implications, rather than directly examined. In addition, the authors suggested that future research explore possible interventions to increase the sense of school belonging among students.

In addition to belonging at school, there are other domains of a youths' life that are salient and in which they may feel a sense of belonging, including among family and peers. According to Baumeister and Leary (1995) this sense of belonging can be found in any domain and may compensate for a lack of belonging in other areas. Previous literature has examined family structure, influences, and behaviours that may predict bullying behaviour (Spriggs et al., 2007), but not a perceived sense of belonging to one's family specifically. Other scholars have examined the impact of peer influences on bullying behaviour (Espelage et al., 2000), suggesting that a perceived sense of connections to peers may influence bullying behaviour.

Ecological Systems Theory
Risk factors associated with bullying involvement include how one identifies themselves,

as well as how one interacts within their social environment (Espelage, 2014; Rose et al., 2015) Therefore, to understand the complexity of bullying involvement and the intersection between bullying behaviours and belonging, bully prevention scholars have drawn upon Bronfenbrenner's (1977) Ecological Systems Theory. Specifically, bullying involvement is grounded in complex interactions between an individual and the social and environmental systems that surround the individual (Hong & Espelage, 2012). In brief, *microsystem* refers to the complex relations between the individual and their immediate setting, *mesosystem* refers to interrelations among an individual's major settings at a specific point in time, *exosystem* refers to formal and informal social structures that impinge upon the individual's immediate setting, *macrosystem* refers to institutional patterns of the culture or subculture, and *chronosystem* refers an individual's developmental changes over time within the environment with which the individual resides (Bronfenbrenner 1977; 1986).

Applying Bronfenbrenner's Ecological Systems Theory to bullying involvement, Espelage and Swearer (2004) offered a social-ecological framework for bullying/victimisation, which included individual, familial, peer group, school, community, and societal factors. Since 2004, scholars have argued that direct and vicarious interactions between these factors and within these environments are predictors of bullying involvement (Rose et al., 2012; Rose et al., 2015). For example, the National Academies of Sciences, Engineering, and Medicine (NASEM, 2016) suggested that individual factors such as gender and gender identity, sexual orientation, race, ethnicity, nationality, religious affiliation, and disability status may serve as risk factors for bullying involvement. Consequently, factors that are associated with increased marginalisation of youth parallel those of bullying involvement, and when these factors compound (i.e. multiple identities that deviate from normed peer group) the risk for bullying involvement is also compounded (Espelage, 2014; Hong & Espelage, 2012; Rose et al., 2012).

The crux of bullying involvement within the ecological system, however, may hinge on the *mesosystem*, where interactions between the individual factors (i.e., *microsystems*) and environmental factors are present. For example, Rose and Espelage (2012) argued that bullying may be grounded in social and communication skill deficits, where youth struggle with or excel in social interactions. These skills are associated with protective factors such as social support and belongingness (Espelage, 2014; Monks et al., 2009), where students who can establish a protective peer base, have a strong sense of belongingness, and are seamlessly integrated into their school environment are less likely to be involved in bullying (Rose et al., 2015).

While many scholars have drawn upon the *Ecological Systems Theory* to understand bullying involvement among school-aged youth, it is relatively complex and few studies have examined bullying involvement across several systems (Rose et al., 2015). Therefore, the current study draws upon the *microsystem* and *mesosystem* to understand the influence of various types of belongingness on bullying behaviours. Specifically, we hypothesise that the *microsystems* of family, peer, and school will predict bullying, but we also believe that the interactions with individuals within the family and peer structures will directly influence group-level interactions in the school, resulting in indirect effects on bullying behaviours.

Summary and purpose
Since bullying has emerged as a pervasive problem among school-aged youths, especially among middle school students (Rose et al. 2015), schools and related personnel are pressured to implement provisions and supports to reduce the prevalence of bullying. An emerging body of literature suggests that belongingness impacts a myriad of academic and psychosocial factors, substantiating school belonging as a protective factor for students with and without disabilities (Rose et al., 2015; Slaten

et al., 2016). Few scholars have examined the indirect effects of peer and family belonging through school belonging and its association with bully perpetration. Therefore, this study sought to examine the following hypotheses:

1. Increased peer, family, and school belonging will independently predict decreased bully perpetration.
2. Increased school belonging coupled with increased peer and family involvement will predict decreased bully behaviour above and beyond the single, direct effects of peer, family, and school belonging.

Method

Participants

Participants for this study included 912 students from 2 rural middle schools (youths ages 11 to 14) in the Midwest United States. Each school was situated in two separate towns ($N \approx 11{,}500$; $13{,}500$) located approximately 40 miles apart, and located approximately 40 miles from the nearest city ($N \approx 115{,}000$). School selection and inclusion criteria included grade level (i.e. served students in grades six through eight), public school status, existing multi-tiered system of support, expressed interest in assessing school climate (see Procedures Section), and provided a continuum of support for students with diverse needs. Overall, the racial breakdown of the sample included 83.0 per cent Caucasian or White ($N = 757$), 10.6 per cent African American or Black ($N = 97$), 4.9 per cent Latino/a ($N = 45$), 1.1 per cent Asian or Pacific Islander ($N = 10$), and 0.3 per cent Native American ($N = 3$). While the racial distribution between the two sample schools was relatively similar, there are notable variations between the sample schools and the closest city, which included 62.1 per cent Caucasian or White, 20.2 per cent African American or Black, 6.1 per cent Latino/a, 5.3 per cent Asian or Pacific Islander, .4 per cent Native American, and 6.0 per cent multi-racial. The gender distribution included 50.9 per cent male ($N = 464$) and 49.1 per cent female ($N = 448$), with a grade distribution of 36.6 per cent in

6th grade (ages 11 to 12) ($N = 334$), 31.1 per cent in 7th grade (ages 12 to 13) ($N = 284$), and 32.2 per cent in 8th grade (ages 13 to 14) ($N = 294$).

Procedures

In the 2014–2015 academic year, administrators from both schools contacted the second author regarding the creation of a school-wide climate survey to be administered to all students in grades 6 through 12. The impetus for the development of the instrument was to assess the overall school climate in order to provide more appropriate and school specific services within a Positive Behavioural Interventions and Supports (PBIS) framework, which is a tiered framework for responding to behaviours based on intensification through universal, group, and individualised support (Sugai & Horner, 2002). Over the course of the 2014–2015 academic year, as a service to the schools, the second author met with school/district administrators to assist in the construction of an instrument that assessed constructs that the schools identified as critical to improving services and the school climate, especially at the Tier II level. Once the instrument was developed, the schools established a plan for administration that included annual fall and spring administrations.

In the fall of 2015, the schools launched the initial administration of the instrument. Both schools were designated as PBIS schools, where their existing schedule included a block of time designed to provide targeted or intensive services to students based on their individual need. On a day designated by school officials, and following at least 30 days in school, the assessment was administered to all students in each school. The paper and pencil surveys were distributed to students during this designated period by their classroom teachers, where students completed the assessment independently. Teachers were available to answer questions, provide clarification, prompt students for completion, and, if necessary, read items aloud. Once surveys were complete, they provide the hard

copy data to a designated school counsellor, who deidentified all data prior to providing data to the second author. The second author provided data analysis as a service to the schools. This survey administration was approved by district-level school officials, and deemed exempt, due to the deidentified nature of the data, by the authors' institution.

Measures

As previously stated, each school elected to administer a school-wide climate assessment that included a range of subscales. These subscales included self-report measures that assessed interpersonal and intrapersonal skills, social-ecological factors, externalising behaviours, peer relationships, overall perceptions of school climate, and social supports. For the purpose of this study, self-reported bullying and belongingness were examined.

University of Illinois Bully Scale

The eight-item *University of Illinois Bully Scale* (Holt & Espelage, 2007) was used to assess the frequency of self-reported bully perpetration. Items included, 'I upset other students for the fun of it,' 'I helped harass other students,' and 'I spread rumors about other students.' Response options range from 'Never = 1' to '7 or more times = 5.' Internal consistency of the scale was calculated using Cronbach's α, resulting in an α of .85.

Milwaukee Youth Belongingness Scale

The Milwaukee Youth Belongingness Scale (MYBS) is a 24-item self-report scale used to measure an individual's perceived belongingness in different areas of their life, including family, peer, and school domains (Slaten et al., 2018). Participants were given the opportunity to respond to the items on a 4-point Likert-type scale ranging from disagree to agree. The 8-item peer belonging subscale examined how an individual perceives his or her relationships with their peers (e.g. People my age care about my feelings). The 8-item subscale of family belonging assessed participants' perceived level of belongingness with their family (e.g. I feel comfortable when I am around my family). The

8-item school belonging sub scale measured perceived belongingness within the school setting (e.g. There is an adult at my school that I can talk to). Internal consistency of the subscales was calculated using Cronbach's α, resulting in an α of .83 for family belongingness, .80 for school belongingness, and .75 for peer belongingness.

Missing data

To address the concern of missing data, a multiple imputation (MI) procedure was conducted using the fully conditional specifications MCMC maximum likelihood process in SPSS version 23 (IBM Corp., 2015). In order to create one parsimonious dataset, and based on Enders' (2010) recommendations, 10 complete datasets were calculated, and all estimates were pooled using Rubin's (1987) rules. Missingness ranged from 0.8 per cent to 3.5 per cent, with an average level of missingness across the 33 was 2.2 per cent. While Luengo et al. (2010) suggested that missingness under 5 per cent is manageable, some scholars have noted that missingness can bias a sample (Davey et al., 2005; Rubin, 1976).

Analytic plan

To evaluate the research questions, we used structural equation modeling (SEM) because SEM provide accurate estimates of unbiased parameters by examining latent constructs while controlling for measurement error (Little, 1997). SEM is a method of analysing data that allows the evaluation of observed data, while addressing many of the assumptions that are associated with more traditional approaches such as multiple regression and analysis of variance. Therefore, SEM can be used to evaluate the interplay between several constructs, within a single model, while accounting for the overarching assumptions and associated statistical errors (type 1 and type 2) that accompany more traditional approaches to data evaluation (Little, 2013). As such, one could evaluate a complex model, such as the interplay between microsystems and mesosystems, within a single model to assess construct predictability from a more holistic lens. To

evaluate the structural model, we established a theoretical model based on the literature that suggests that belongingness and social support serve as factors associated with bully perpetration (Rose, Espelage, et al., 2015), but hypothesised that school belongingness would serve as a moderating variable between social supports and bully perpetration. To evaluate this theoretical model, we first had to confirm the factor structure through confirmatory factor analysis. As an initial step, we created three parcels per construct using an item-to-construct balancing procedure (Little et al., 2002). The *a priori* decision to establish parcels was made because the focus of the study was on latent construct; not item level indicators. By using this approach, we could establish a just-identified model resulting in one unique solution regardless of the constructs that are entered into the model (Little et al., 2002). To establish the parcels for each construct, a single fixed-factor exploratory factor analysis (EFA) with maximum likelihood estimation was calculated in SPSS version 23 (IBM Corp., 2015). Based on the EFA results, the three highest loadings were used to anchor each parcel, where the next highest loadings were added to each anchor in inverse order (Little et al., 2002). Based on the theoretical underpinnings of scale development, an *a priori* decision was made to retain each item, regardless of the factor loading. Overall, EFA loadings of bullying ranged from .71 to .53, school belongingness ranged from .70 to .47, family belongingness ranged from .75 to .44. While all of these loadings were within a conventional acceptance range, factor loadings from peer belonging ranged from .82 to .15 (few people my age like the way I am – Reverse Coded). While this item was retained based on the decision rules, it should be noted that the next lowest loading was .32, and within conventional acceptance limits.

Following the creation of the parcels, the measurement model, followed by the structural model was evaluated. To evaluate these models, we fixed (i.e. set the scale) the latent variances of each construct to 1.0 using MPlus version 7.11 (Muthén & Muthén, 2012). Conventional methods of evaluating

model fit were employed, including χ^2, the Root Mean Square Error of Approximation (RMSEA), RMSEA 90 per cent Confidence Interval, Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI). Acceptable model fit was based on conventional thresholds, including $\chi^2/df < 3$ (Kline, 1998). However, it should be noted that χ^2 is sensitive to sample size (Cheung & Rensvold, 2002), and for the current sample may not be the most accurate measure of model fit. RMSEA scores less than .05 (Hu & Bentler, 1999) are considered close fitting models, where scores between .05 through .08 are considered acceptable. TLI and CFI scores greater or equal to .95 (Schermelleh-Engel et al., 2003) are considered close fitting models, where scores between .90 through .95 are considered acceptable.

Results

Measurement Model

Following the creation of parcels, and as previously stated, the freely estimated measurement model was evaluated by fixing the latent variances of each construct to 1.0. The function of the measurement model is to establish the utility and independence of each unique construct. While the χ^2/df fit statistic exceeded 3 ($\chi^2/df = 5.02$), it should be noted that the sample size is relatively large, which may influence the overall model fit (Cheung & Rensvold, 2002). However, the RMSEA, TLI, and CFI were demonstrated an acceptable fitting model ($\chi^2_{(48)} = 241.37$, RMSEA = .066 (.058 – .075), TLI = .94, CFI = .95; see Table 1). The standardised factor loadings for each parcel by construct are presented in Table 2, and (λ^a) ranged from .37 to .51 for bullying, .50 to .59 for school belonging, .47 to .54 for peer belonging, and .44 to .65 for family belonging. Additionally, Table 3 includes latent mean scores and correlations to demonstrate the relative association between constructs. Overall, the results of the measurement model suggest an acceptable fitting model, demonstrating the independence of each construct.

Table 1: Fit indices for measurement and structural models

Model	χ2	*df*	*p*	RMSEA	RMSEA 90% CI	TLI	CFI
Null model	589.74	53	<.001	.105	.098 – .113	.84	.87
Measurement model	241.37	48	<.001	.066	.058 – .075	.94	.95
Structural model	244.65	49	<.001	.066	.058 – .075	.94	.95

Table 2: Loadings, intercepts, estimated latent variance, mean scores, unique residuals, and squared multiple correlations for measurement model

Scale	λ	τ	λ^a	*M*	Θ	R^2
Bully						
P1	.37 (.01)	1.22 (.02)	.79	1.22	.09 (.01)	.62
P2	.47 (.02)	1.33 (.02)	.85	1.33	.08 (.01)	.72
P3	.51 (.02)	1.36 (.02)	.76	1.36	.18 (.01)	.58
School belonging						
P1	.58 (.02)	3.03 (.03)	.78	3.03	.21 (.02)	.61
P2	.50 (.02)	3.19 (.02)	.73	3.19	.22 (.02)	.54
P3	.59 (.03)	2.95 (.03)	.66	2.95	.46 (.03)	.43
Peer belonging						
P1	.49 (.03)	3.15 (.03)	.65	3.15	.34 (.02)	.42
P2	.47 (.02)	2.86 (.03)	.73	2.86	.19 (.01)	.54
P3	.54 (.02)	3.38 (.02)	.76	3.38	.21 (.02)	.57
Family belonging						
P1	.65 (.02)	3.30 (.03)	.84	3.30	.17 (.02)	.71
P2	.58 (.02)	3.40 (.02)	.81	3.40	.17 (.01)	.66
P3	.44 (.02)	3.61 (.02)	.67	3.61	.24 (.01)	.45

Note: PN = Parcel Number, λ = loading estimates (SE); τ = intercept estimates (SE); λa = standardized loading-STDYX; Θ = residual (SE).

Table 3: Correlations among the latent constructs

	Bully	SB	PB	FB
Bully	1.00			
SB	–.22**	1.00		
PB	–.11**	.48**	1.00	
FB	–.20**	.37**	.37**	1.00
Mean scores (SD)	1.29 (.47)	2.91 (.50)	2.97 (.46)	3.42 (.62)

Note. * = *p* < .05, ** = *p* < .01; SB = School Belonging, PB = Peer Belonging, FB = Family Belonging

Structural model

The structural model was established by evaluating the direct paths from peer belonging, family belonging, and school belonging to bullying; the direct paths from peer belonging and family belonging to school belonging; and the indirect paths from peer belonging and family belonging through school belonging to bullying. After non-significant paths were removed, the model fit statistics were evaluated (*see* Table 1). The χ^2/df fit statistic exceeded 3 ($\chi^2/df = 4.99$), yet the RMSEA, TLI, and CFI demonstrated an acceptable fitting final structural model ($\chi^2_{(49)} = 244.65$, RMSEA = .066 (.058 − .075), TLI = .94, CFI = .95).

Direct effects

The final model examined the direct effects of family belonging and school belonging on bullying, and peer belonging and family belonging on school belonging. It should be noted that peer belonging on bullying resulted in a nonsignificant path, which was trimmed based on conventional decision rules. All direct effects are presented in Table 4, and represented in Figure 1. Within the final model, lower levels of family belonging ($\beta = -.13$, $z = -2.78$, $p < .001$) and school belonging ($\beta = -.20$, $z = -4.11$, $p < .001$) predicted higher levels of bully perpetration. Conversely, higher levels of peer belonging ($\beta = .47$, $z = 10.74$, $p < .001$) and family belonging ($\beta = .27$, $z = 6.05$, $p < .01$) predicted higher levels of school belonging.

Indirect effects

In addition to the direct effects, the final model evaluated the indirect effects of peer belonging and family belonging through school belonging on bully perpetration. The indirect effect for family belonging through school belonging on bullying ($\beta = -.05$, $z = -3.31$, $p < .01$) was significant, suggesting that lower levels of family belonging coupled with lower levels of school belonging predicts increases in bully perpetration. The indirect effect for peer belonging through school belonging on bullying ($\beta = -.09$, $z = -3.76$, $p < .01$) was significant, suggesting that lower levels of peer belonging coupled with lower levels of school belonging predicts increases in bully perpetration.

Discussion

The current study was designed to examine the relationship between youths belonging (family, peer, and school) and bullying behaviour with the purpose of understanding more the promise for reducing bullying behaviour through increasing youths belonging more comprehensively. Employing structural equation modeling, the authors examined data from a sample of over 900 middle school youths to explore to the following research hypotheses: increased peer, family, and school belonging

Table 4: Beta weights and z scores for the final structural model

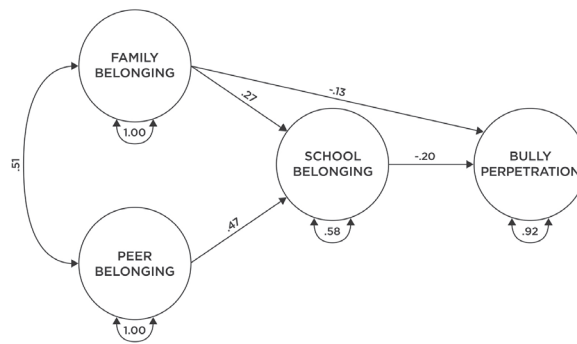| Construct	B (SE)	z Score	β
Direct path to bully			
School	−.20 (.05)	−4.11**	−.20
Family belonging	−.13 (.05)	−2.78**	−.13
Direct path to school belonging			
Family belonging	.27 (.04)	6.05**	.27
Peer belonging	.47 (.04)	10.74**	.47
Indirect path to bully			
Family belonging through school belonging	−.05 (.02)	−3.31**	−.05
Peer belonging through school belonging	−.10 (.03)	−3.76**	−.09

Note: * = $p < .05$, ** = $p < .01$.

Figure 1: Final structural model for peer, family, and school belonging on bully perpetration (scores represent standardised estimate)

will independently predict decreased bully perpetration, and increased school belonging coupled with increased peer and family involvement will predict decreased bully perpetration above and beyond the single, direct effects of peer, family, and school belonging.

Surprisingly, peer belonging did not independently predict bully perpetration. This finding was unexpected given that the extant literature has demonstrated associations between peer belonging academic motivation, psychological distress, and moderated the influence of depressive symptoms and loneliness (Baskin et al., 2010). Additionally, Rose, Espelage, and colleagues (2015) found that peer social support independently predicted bully perpetration, victimisation, fighting, and anger for a large sample of middle school youths. However, Slaten & Baskin (2014) found that peer belonging had nonsignificant impact on psychological distress and career-related outcomes, while family belonging was significantly related to each construct. Unfortunately, peer belonging is under-evaluated compared to other peer-related constructs (e.g. peer acceptance, peer influence, etc.), and should be considered independent from the other variables that typically measure peer-level relationships and associations, which would warrant further evaluation in the context of peer associations and bullying involvement.

Contrary to peer belonging, a significant, inverse relationship existed between family belonging and bully perpetration. Specifi-

cally, the stronger connection an individual has with their family, the less likely he/she is to engage in bullying behaviour. Interestingly, Rose, Espelage and colleagues (2015) found family social support to be a nonsignificant predictor of bullying, victimisation, fighting, and anger, suggesting that social supports and belongingness represent different constructs. On the other hand, the current findings are consistent with previous research on the importance of family connectedness as it relates to K-12 outcomes (Marchant et al., 2001; Sharkey et al., 2008). For example, Sharkey and colleagues (2008) demonstrated that youths with low family assets had lower school engagement compared to their peers with high family assets. Further, Marchant and colleagues (2001) reported that perception of parental involvement as well as parenting style predicted school achievement. Given the current body of literature, and the findings from the present study, it is evident that family belonging is an important aspect of youth development.

In addition to family belonging, the current study found a significant, inverse relationship between school belonging and bullying behaviour. An emerging body of research has demonstrated the overall impact of school belonging in educational outcomes (Slaten et al., 2016). More specifically, school belonging has been found to be a protective factor against many psychologically stressful concerns in school settings, such as behavioural problems (Loukas et al.,

2010), anxiety and depression (McMahon et al., 2008; Newman et al., 2007), and academic achievement (Sirin & Rogers-Sirin, 2004). The current extends the extant body of literature, supporting the hypothesis that increased school belonging predicts decreased bullying behaviour.

Based on the *Ecological Systems Theory* (Bronfenbrenner, 1977) and our theoretical model, we tested the indirect effects of individual-level interactions' (peer belonging, family belonging) on bullying behaviours through group-level interactions (school belonging) representing an evaluation of *Mesosystems.* Overall, these findings suggest that increased peer and/or family belonging is predictive of increased school belonging, which, in turn, leads to stronger, more substantive decreases in bullying behaviours. Baumeister & Leary (1995), suggest that the construct of belonging is satiated, where different types of belonging and relationships could potentially act as a buffer for the areas in one's life where belonging is lacking. Further, when an individual has a strong perceived sense of belonging in multiple domains, the educational outcomes, including bullying involvement, would be more positive than a strong perceived sense of belonging in a single domain. Therefore, consistent with previous literature, increase belonging at the individual- and group-levels demonstrate significant influence on psychosocial factors (Slaten et al., 2016), including bullying behaviour.

Implications
The results of the current study provide insight for professionals working in schools supporting youths who are involved within the bullying dynamic. The results suggest that belonging was inversely related to bullying perpetration, implying that students who feel a stronger connection and sense of belonging to their schools are significantly less likely to engage in bullying behaviour. Further, those that have a stronger sense of peer and/or family belonging are more likely to feel a connection to their school.

The results of the current study supports, empirically, a strong link between belonging and bullying behaviour. Knowing this information can help professionals in aiding youths who experience distress and isolation, to avoid the possibility of bullying behaviour. School mental health professionals, administrators, and teaching staff can support youths who are involved in bullying, including perpetrators and victims, find ways to connect with peers in school, particularly sharing experiences with other youths who have similar likes and interests. Further, establishing opportunities for youths experiencing feelings of isolation, or feeling dissimilar from other youths in their school, to connect with their peers in order to avoid possible future bullying behaviour. An example could be a process-oriented or psychoeducational group for youths who have felt isolated, ostracised, or marginalised in the schools to receive peer and adult support. School counsellors and school psychologists are uniquely prepared to execute such a group and may assist in helping youths on the margins feel more connected to school and their peers. Further, finding ways within the school to make all youths feel included in some capacity (e.g. clubs, sports, school events) and encouraging youths to build community with others that have similar interests may prevent bullying behaviour and future bullying involvement. In addition to assisting youths with engaging in school and their peers, the current study provided evidence that family belonging was significantly important as well, and additional efforts to design psychoeducational programmes and supports for parents regarding school participation and academic engagement for youths could assist in making stronger connections for families with their child and the school environment.

Limitations/future research directions
While this study addresses several gaps in the literature, it is not without limitation. First, the correlational nature of SEM allows for confirmation of relationships, but not causation. Follow-up studies could examine if there are additional implications between how bullying

and belonging impact one another by utilising different analytical methods. The most notable limitation is that the data are cross-sectional, examining the variables at one particular time point, which eliminates the possibility of studying longitudinal impact. Lastly, all measured constructs examined were done through self-report assessments. Thus, observational and behavioural information was not collected or utilised in the current study. Future scholarly work could establish well designed interventions to enhance a sense of belonging within the school building in the hopes that the intervention will directly increase school belonging and distally decrease bullying behaviour. Further, it would be advantageous to assess victimisation and how 'being bullied' could impact one's sense of belonging in their school and with their peers.

Conclusion

Bullying remains a central issue within American schools. Extant literature has examined predictive and protective factors associated with bullying involvement, yet few have directly evaluated the influence of various forms of belonging on bully perpetration. The current study suggests that belongingness is an important factor in predicting bullying behaviours, where increases in belonging predicts decreases in bullying, and higher levels of multiple forms of belongingness is related to significantly lower levels of bullying behaviours. These findings have an important applied component and could lead to stronger intervention efforts. Specifically, interventions that focus on increasing positive peer-level interactions, coupled with a stronger sense of school community or belonging, could result in decreases in bullying behaviours.

Address for correspondence
Christopher D. Slaten,
University of Missouri-Columbia, Educational, School, and Counseling Psychology, 16 Hill Hall, Columbia, MO, 65211
Email: slatenc@missouri.edu

References

Anderman, E.M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology*, *94*, 795–809. doi:10.1037//0022-0663.94.4.795

Baldry, A.C. (2003). Bullying in schools and exposure to domestic violence. *Child Abuse & Neglect*, *27*, 713–732. doi:10.1016/S0145-2134(03)00114-5

Baskin, T.W., Wampold, B., Quintana, S. & Enright, B. (2010). Belongingness as a protective factor against loneliness and potential depression in a multicultural middle school. *The Counseling Psychologist*, *38*, 626–651. doi:10.1177/0011000009358459

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497.

Bosworth, K., Espelage, D.L. & Simon, T.R. (1999). Factors associated with bullying behavior in middle school students. *The Journal of Early Adolescence*, *19*, 341–362. doi:10.1177/0272431699019003003

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*, 513–531.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*, 723–742.

Casas, J.A., Del Rey, R. & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior, 29*, 580–587. doi:10.1016/j.chb.2012.11.015

Cheung, G.W. & Rensvold, R.B. (2002) Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*, 233–255. doi:10.1207//S15328007SEM0902_5

Davey, A., Savla, J. & Zupei, L. (2005). Issues in evaluating model fit with missing data. *Structural Equation Modeling, 12*, 578–597. doi:10.1207/s15328007sem1204_4

Enders, C.K. (2010). *Applied missing data analysis*. New York: Guilford Press.

Espelage, D.L. (2014). Ecological theory: preventing youth bullying, aggression and victimization. *Theory into Practice, 53*, 257–264.

Espelage, D.L., Bosworth, K. & Simon, T.R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling & Development*, *78*(3), 326–333.

Espelage, D.L., Rose, C.A. & Polanin, J.R. (2015). Social-emotional learning program to reduce bullying, fighting, and victimization among middle school students with disabilities. *Remedial and special education*, *36*(5), 299–311. doi:10.1177/0741932514564564

Espelage, D.L. & Swearer, S.M. (2004). *Bullying in American schools: A social-ecological perspective on prevention and intervention.* Mahwah: Erlbaum.

Gini, G. & Pozzoli, T. (2009). Association between bullying and psychosomatic problems: A meta-analysis. *Pediatrics, 123,* 1059–1065. doi: 10.1542/peds.2008-1215

Gladden, R.M., Vivolo-Kantor, A.M., Hamburger, M.E. & Lumpkin, C.D. (2014). *Bullying surveillance among youths: Uniform definitions for public health and recommended data elements, Version 1.0.* Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.

Goldweber, A., Waasdorp, T.E. & Bradshaw, C.P. (2013). Examining the link between forms of bullying behaviors and perceptions of safety and belonging among secondary school students. *Journal of School Psychology, 51,* 469–485.

Goodenow, C. (1993). Classroom belonging among early adolescent students relationships to motivation and achievement. *The Journal of Early Adolescence, 13*(1), 21–43. doi:10.1177/0272431 693013001002

Goodenow, C. & Grady, K.E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *The Journal of Experimental Education, 62*(1), 60–71. doi: 10.1080/00220973.1993.9943831

Holt, M.K. & Espelage, D.L. (2007). Perceived social support among bullies, victims, and bully-victims. *Journal of Youth and Adolescence, 36*(8), 984–994. doi: 10.1007/s10964-006-9153-3

Hong, J.S. & Espelage, D.L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggressive and Violent Behavior, 17,* 311–322. doi:10.1016/j.avb.2012.03.003

Hu, L.T. & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1–55. doi:10.1080/1070551990540118

IBM Corp. (2015). *IBM SPSS statistics for Windows, Version 23.0* [Computer software]. Armonk, NY: Author.

Kline, R.B. (1998). *Principles and practice of structural equation modeling.* New York: Guilford Press.

Kokkinos, C.M. & Panayiotou, G. (2004). Predicting bullying and victimization among early adolescents: Associations with disruptive behavior disorders. *Aggressive Behavior, 30,* 520–533. doi:10.1002/ab.20055

Kuperminc, G.P., Darnell, A.J. & Alvarez-Jimenez, A. (2008). Parent involvement in the academic adjustment of Latino middle and high school youth: Teacher expectations and school belonging as mediators. *Journal of Adolescence, 31*(4), 469–483. doi: 10.1016/j.adolescence.2007.09.003

Little, T.D. (1997). Mean covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research, 32,* 53–76.

Little, T.D. (2013). *Longitudinal Structural Equation Modeling.* New York, NY: Guilford Press.

Little, T.D., Cunningham, W.A., Shahar, G. & Widaman, K.F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9,* 151–172.

Loukas, A., Roalson, L.A., Herrera, D.E. (2010). School connectedness buffers the effects of negative family relations and poor effortful control on early adolescent conduct problems. *Journal of Research on Adolescence, 20,* 13–22. doi:10.1111/j.1532-7795.2009.00632.x

Luengo, J., García, S. & Herrera, F. (2010). A study on the use of imputation methods for experimentation with radia basis function network classifiers handling missing attribute values: The good synergy between RBFNs and event covering method. *Neural Networks, 23,* 406–418. doi:10.1016/j.neunet.2009.11.014

Marchant, G.J., Paulson, S.E. & Rothlisberg, B.A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools, 38,* 505–519. doi:10.1002/pits.1039

Maslow, A.H. (1954). *Motivation and personality.* New York: Harper

McMahon, S.D., Parnes, A.L., Keys, C.B. & Viola, J.J. (2008). School belonging among low income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools, 45,* 387–401. doi:10.1002/pits.20304

Mehta, S.B., Cornell, D., Fan, X. & Gregory, A. (2013). Bullying climate and school engagement in ninth-grade students. *Journal of School Health, 83,* 45–52. doi:10.1111/j.1746-1561.2012.00746.x

Monks, C.P., Smith, P.K., Naylor, P., Barter, C., Ireland, J.L. & Coyne, I. (2009). Bullying in different contexts: commonalities, differences and the role of theory. *Aggression and Violent Behavior, 14,* 146–156.

Musu-Gillette, L., Zhang, A., Wang, K. et al. (2018). *Indicators of School Crime and Safety: 2017 (NCES 2018-036/NCJ 251413).* National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.

Muthén, L.K., & Muthén, B.O. (2012). *MPlus version 7.11.* Los Angeles, CA: Author.

National Academies of Sciences, Engineering, and Medicine. (2016). *Preventing Bullying Through Science, Policy, and Practice.* Washington, DC: The National Academies Press. doi: 10.17226/23482.

Newman, B.M., Newman, P.R., Griffen, S., O'Connor, K. & Spas, J. (2007). The relationship of social support to depressive symptoms during the transition to high school. *Adolescence, 42,* 441–459.

Peeters, M., Cillessen, A.H. & Scholte, R.H. (2010). Clueless or powerful? Identifying subtypes of bullies in adolescence. *Journal of Youth and Adolescence, 39*, 1041–1052. doi:10.1007/s10964-009-9478-9

Pittman, L.D. & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of Experimental Education, 75*(4), 270–290. doi:10.3200/JEXE.75.4.270–292.

Rodkin, P.C., Espelage, D.L. & Hanish, L.D. (2015). A relational framework for understanding bullying: Developmental antecedents and outcomes. *American Psychologist, 70*, 311–321.

Rose, C.A., Allison, S. & Simpson, C.G. (2012). Addressing bullying among students with disabilities within a multi-tiered educational environment. In D.W. Hollar (Ed.), *Handbook of children with special health care needs* (pp.383–397). New York: Springer Publishing.

Rose, C.A. & Espelage, D.L. (2012). Risk and protective factors associated with the bullying involvement of students with emotional and behavioral disorders. *Behavioral Disorders, 37*(3) 133–148.

Rose, C.A., Espelage, D.L., Monda-Amaya, L.E., Shogren, K.A. & Aragon, S.R. (2015). Bullying and middle school students with and without specific learning disabilities: An examination of social-ecological predictors. *Journal for Learning Disabilities, 48*, 239–254. doi:10.1177/0022219413496279

Rose, C.A., Nickerson, A.B. & Stormont, M. (2015). Advancing bullying research from a social-ecological lens: An Introduction to the Special Issue. S*chool Psychology Review, 44,* 339–352. doi:10.17105/15-0134.1

Rose, C.A., Simpson, C.G. & Moss, A. (2015). The bullying dynamic: Prevalence of involvement among a large-scale sample of middle and high school youth with and without disabilities. *Psychology in the Schools, 52*, 515–531. doi:10.1002/pits.21840.

Rubin, D.B. (1976). Interference and missing data. *Biometrika, 63*, 581–592.

Rubin, D.B. (1987). *Statistical analysis with missing data.* New York: Wiley.

Sapouna, M. & Wolke, D. (2013). Resilience to bullying victimization: The role of individual, family and peer characteristics. *Child Abuse & Neglect, 37*, 997–1006.

Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research, 8*, 23–74.

Sharkey, J.D., You, S. & Schnoebelen, K. (2008). Relations among school assets, individual resilience, and student engagement for youth grouped by level of family functioning. *Psychology in the Schools, 45,* 402–418. doi:10.1002/pits.20305

Sirin, S.R. & Rogers-Sirin, L. (2004). Exploring school engagement of middle-class African American adolescents. *Youth & Society, 35,* 323–340. doi:10.1177/0044118X03255006

Skues, J.L., Cunningham, E.G. & Pokharel, T. (2005). The influence of bullying behaviours on sense of school connectedness, motivation and self-esteem. *Australian Journal of Guidance and Counselling, 15*(01), 17–26.

Slaten, C.D. & Baskin, T.W. (2014). Examining the impact of peer and family belongingness on the career decision-making difficulties of young adults: A path analytic approach. *Journal of Career Assessment, 22,* 59–74.

Slaten, C.D., Ferguson, J.K., Allen, K.A., Brodrick, D.V. & Waters, L. (2016). School belonging: a review of the history, current trends, and future directions. *The Educational and Developmental Psychologist, 33,* 1–15.

Slaten, C.D., Elison, Z., Deemer, E., Hughes, H., Shemwell, D.A. (2017). The development and validation of the University Belongingness Questionnaire. *Journal of Experimental Education,* 1–19.

Slaten, C.D., Rose, C.A., Bonifay, W. & Ferguson, J.K. (2018). The Milwaukee Youth Belongingness Scale (MYBS): Development and validation of the scale utilizing item response theory. *School Psychology Quarterly.* Advance online publication. http://dx.doi.org/10.1037/spq0000299

Spriggs, A.L., Iannotti, R.J., Nansel, T.R. & Haynie, D.L. (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health, 41*, 283–293. doi:10.1016/j.jadohealth.2007.04.009

Sugai, G. & Horner, R.H. (2002). Introduction to the special series on positive behavior support in schools. *Journal of Emotional and Behavioral Disorders, 10*, 130–135.

Vaillancourt, T., Hymel, S. & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Psychology, 19*, 157–176.

Vaillancourt, T., McDougall, P., Hymel, S. & Sunderani, S. (2010). The relationship between power and bullying behavior. In S.R. Jimerson, S.M. Swearer & D.L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp.211–222). New York: Routledge.

Van Ryzin, M.J., Gravely, A.A. & Roseth, C.J. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth and Adolescence, 38*(1), 1–12. doi:10.1007/s10964-007-9257-4

Voelkl, K.E. (1997). Identification with school.*American Journal of Education, 105*, 294–318.

Woods, S. & Wolke, D. (2004). Direct and relational bullying among primary school children and academic achievement. *Journal of School Psychology, 42*(2), 135–155. doi:10.1016/j.jsp.2003.12.002

Peer–peer relationships: A key factor in enhancing school connectedness and belonging

Annie Gowing

Aims: *The relational climate of schools is highly influential in nurturing a sense of connectedness to school with the teacher-student relationship widely recognised as the central relationship for students. Peer-peer relationships have been less scrutinised in terms of their contribution to students' feelings of closeness to school. This mixed-methods study explored young people's understandings of school connectedness and their experience of their peer relationships at school.*

Method: *Data sources included focus groups, a questionnaire and diaries with a total sample size of 336 students aged between 13 and 18 years. Focus groups and diaries were analysed using thematic analysis and the questionnaire data were examined using descriptive and inferential statistical analyses.*

Findings: *Students' relational worlds at school were peopled by teachers and peers, however peers emerged as the lead relationship. This was evident for students across the school connectedness spectrum. For some students with low self-reported connectedness, their peer relationships were the single positive aspect of their school experience.*

Conclusions: *Young people in this study were unequivocal in naming peer relationships as the most valued aspect of their school experience. This view of peer relationships as a resource that builds connectedness to school invites all school staff to provide multiple planned and spontaneous relational opportunities among peers, both within and outside the classroom. The educational psychologist, as a relational specialist, has a key role in this work.*

Keywords: *School connectedness; peer-peer relationships; teacher-student relationships; mixed methods; school enjoyment.*

Introduction

YOUNG PEOPLE'S relationship with school is a significant element in their relational set and with school a compulsory feature of most young people's lives, the nature of their relationship with this institution can be highly influential in terms of the quality of their overall school experience. School connectedness (SC) describes young people's relationship to school and has attracted increasing research interest over the past two decades. Young people who experience a strong connection to their schools demonstrate improved academic outcomes (Nasir et al., 2011), enhanced self-efficacy (Murphy & McKenzie, 2016), reduced depressive symptoms (Joyce & Early, 2014), higher commitment to school (Libbey, 2004), and a greater sense of safety in the school environment (Ethier et al., 2018). Young people with low SC are more likely to withdraw from their education (Finn, 1989) and experience the precarious outcomes that often follow (Bloom & Haskins, 2010). SC first attracted scholarly attention in the 1990s when Resnick and colleagues named it as protective against a range of adolescent risk behaviours (Resnick et al., 1997; Resnick et al., 1993). Since these early studies research interest has accelerated and SC continues to be regarded as both protective

(Wilson et al., 2018) and promotive of young people's wellbeing (Yang et al., 2013).

Definitions of SC have also evolved since the 1990s, moving towards an ecological understanding of the concept as co-constructed and transactional (Gowing & Jackson, 2016). This understanding shifts from viewing SC as an individual attribute and positions individuals as active agents in shaping their own and others' SC through multiple reciprocal transactions that are influenced to a greater or lesser degree by the school and broader societal ecologies within which they are located (Rowe & Stewart, 2011; Waters et al., 2009). The current study formed part of a larger research project exploring the ways in which students and staff at a large Australian secondary college understood SC. Using a qualitatively-driven mixed methods approach, the study found that the school's relational climate was the main component of SC for both students and teachers, and for students their peer affiliations and friendships at school were the lead relationships.

School connectedness and peer-peer relationships
Peer relationships are widely regarded as influencing young people's psychological wellbeing in both positive and negative ways (Balluerka et al., 2016; Gray et al., 2018) and within the school context peer affiliations contribute to the overall school climate (Traylor et al., 2016). Recognising that schools are one of the main locations in which peer attachments are formed, their impact on young people's experience of school attracts strong research interest (McGrath & Noble, 2010). Early SC definitions and measures however tended to place greater focus on students' relationships with their teachers rather than their peers. In 1993 Resnick and colleagues talked about schools as being 'the primary source of connectedness with adults' (p.S6), however by 1997 Resnick et al. included 'feeling close to people at school' (p.825) as a component of the SC measure, although peers were not specifically named. Similarly, the influential study by Bonny et al. (2000) defined SC as feeling close to school personnel. Blum (2005), a prominent scholar in the field of SC, observed that: 'The relationships formed between students and school staff members are at the heart of school connectedness.' (p.4), with the only mention of peers referring to peer pressure.

The shift away from school staff as the sole relational focus for young people within definitions of SC is often obscured in non-specific terms such as 'significant others' (Rasmussen et al., 2005), 'people' (McNeely et al., 2002), and 'caring relationships' (McNeely & Falci, 2004). While peers have been named along with teachers and/or other staff members as part of the relational mix in some definitions of SC (Santos & Collins, 2016), the focus either remains heavily weighted towards teacher-student relationships or the inclusion of peers is impossible to discern under the umbrella relational terms mentioned earlier.

Peers are even less present in SC measures with the most frequently used instrument, the School Connectedness Scale (SCS), containing no specific mention of peer relationships. The recently developed SC measure by Chung-Do et al., (2015) however does include peer relations as one of five factors along with teacher support. The situation is further complicated by approaches which separate SC and peer connectedness (Carter et al., 2007; Yang et al., 2013), presenting them as different constructs with different measures, although this approach at least clearly includes peer relationships as a point of attention. Waters et al. (2009) present a more integrated model of adolescent connectedness to school following a systematic review of the SC literature. Their model of a school ecology which promotes SC contains an interpersonal domain consisting of peer, teacher, and family relationships.

The current study
Method
This study explored student and staff understandings of SC through a qualitatively

driven mixed methods approach within a concurrent triangulation design (Cresswell et al., 2003). The qualitative data were collected via student and staff focus groups and student diaries, and both qualitative and quantitative data were gathered via a 109-item researcher developed student questionnaire. The questionnaire drew on the SCS (Resnick et al., 1997), one of the most widely used measures of SC (Furlong et al., 2011), but also fashioned a series of items based on other known variables such as student voice, participation in extracurricular activities, and academic engagement. While research has reached some consistent conclusions about the factors associated with SC, there is less focus on how those factors are experienced by students and facilitated by schools. The questionnaire for this study was therefore designed to identify factors associated with SC, but also to explore those factors in greater depth. The qualitative data enabled the exploration of meanings of SC as offered by students and staff, while the quantitative data generated a participant profile of connectedness. Results from both data sources were triangulated.

A visual analogue scale (VAS), asking students to indicate their level of connectedness on a horizontal line, was also included in the questionnaire. The VAS has been used extensively in health research to measure subjective experiences such as pain intensity (Crichton, 2001), and patient quality of life (de Boer et al., 2004) and demonstrates reliability, validity and sensitivity (Gift, 1989). Although its use outside the health field is less established, its inclusion in this study appealed because it directly sought students' own assessment of their connectedness to school and provided the dependent variable for analysis. The VAS used in this study was horizontal, 10mm long and anchored on the left-hand side with the label '*not connected at all*' and on the right-hand side with the label '*very connected*'.

The researcher facilitated all focus groups, which were conducted following the protocols established by Stewart and Shamdasani (1990). Each student focus group was mixed-sex in composition, ranged in size from six to 13 participants and consisted of a single year level. Staff focus groups ranged in size from five to eight participants and were drawn from different staffing and faculty areas within the school. The questionnaire was completed during class time with the researcher present on all occasions, along with the classroom teacher. While students were randomly assigned to complete the questionnaire or participate in focus groups, students who kept diaries volunteered for this task, due to the known challenges in engaging and maintaining participant commitment to this form of data collection (Hayman et al., 2012). Participants kept their diaries over a three-week period and the researcher met individually with each diarist on two occasions during this period to provide encouragement and, given the reflective nature of keeping a record of thoughts and feelings with possible consequent discomfort or distress, to monitor young people's wellbeing.

Ethical approval was obtained from the University of Melbourne Ethics Committee and the principal of Woodlands College. All participants were provided with information about the research and all students and their parents, and staff participants provided consent.

Participants

The location of the study was a large secondary school, Woodlands College (a pseudonym), in outer metropolitan Melbourne. The researcher was employed at the college as the school counsellor and had been in this role for two years prior to the beginning of the study. The genesis of the research lay in the practitioner's professional experiences at the college, ultimately leading to a coalescing of the practitioner and researcher roles which positions the study as practitioner research or practice-based research (Mockler, 2014). Woodlands had an enrolment of 1,590 students at the time of the study and a staff of 167 (68 males, 99 females). Student participants ranged in age from 12 to 18 ($M =$

Table 1: Study participants by method of data collection

Data collection activity	Number of participants	Number of groups	Cohorts	Sex	
				M	F
Student questionnaire	206		Year 7	21	18
			Year 8	15	14
			Year 9	16	19
			Year 10	14	23
			Year 11	12	16
			Year 12	13	25
Student focus Groups	118	2	Year 7	10	13
		2	Year 8	6	9
		2	Year 9	8	10
		2	Year 10	8	9
		2	Year 11	10	11
		2	Year 12	12	12
Student diaries	12		Year 7	2	2
			Year 8	1	1
			Year 10		3
			Year 11		1
			Year 12		2
Staff focus groups	71	3	Teachers	9	12
		1	Executive Staff	4	1
		1	Year Coordinators	4	3
		1	Student Support	1	5
		1	Administrative		5
		1	Special Education	2	4
		1	Resource Centre		5
		1	Performing Arts	3	4
		1	Physical Education	5	4

15.09, *SD* = 1.67). A total of 336 students (187 females, 149 males) participated in the study. Seventy-one staff (43 females, 28 males) took part in focus groups. Table 1 presents the participants by method of data collection.

Data analysis
The qualitative data, the main data source for this study, were drawn from focus groups, student diaries, and open response items in the questionnaire, and were thematically analysed, following the steps identified by Braun and Clarke (2006). These steps began with familiarisation with the data through transcription of focus group discussions and repeated listening to recordings and reading of transcripts. All extended responses to questionnaire items were also listed and

read multiple times. Initial codes were then generated followed by deeper analysis of the codes in order to start combining them into themes and searching for relationships between codes, themes and sub-themes. Step four involved a careful review of themes and the drawing of a thematic map which enabled themes to be further refined. Narrative inquiry was used to supplement thematic analysis, particularly with data from the focus groups and student diaries. Narrative inquiry has no single method of analysis (Riessman, 1993), but uses a variety of approaches and combinations of approaches to interpret the stories that individuals tell (Esin et al., 2013). Thematic analysis is often used within narrative analysis to provide initial coding and an organisational framework from which further

analysis can be conducted (Baughman et al., 2014).

Students' self-rated SC levels, derived from the VAS, were converted into five categories ranging from *very low* to *very high*. Cross-tabulations with study variables produced a profile of connectedness and disconnectedness, in which contrasts and similarities between students with low SC and high SC could be identified.

Results

Student viewpoint

A single meta-theme, *school is a place of opportunities*, emerged from thematic analysis of all data sets, with three sub-themes identified: learning, relational, and extra-curricular opportunities. The relational opportunities contained two distinct sets of relationships; those with friends and peers and those with teachers and other staff members. The lead interpersonal relationship for students however was with friends and peers. In answering an item in the questionnaire, asking what students would miss most if they left Woodlands, 192 out of the 206 respond-

ents, named friends and peers. The year level and gender composition of the respondents to this item are shown in Figure 1. Of the 11 students who did not list friends, six had self-rated high SC and five had average to low SC, indicating that among this sample, peer relationships were of major importance regardless of level of connectedness.

Friends, also frequently referred to as 'mates', were pivotal to how students understood their connection to school and this applied to males and females and across all year levels. In every focus group and diary young people proclaimed the importance of friends, attesting to their central role in how they experienced school as revealed in these diary entries from two senior students:

Great to see all my mates again after five days. Everyone was so happy and had loads of stories to share. Makes you feel good when your friends laugh and joke with you. I look forward to school because of my mates, because they make me feel so alive.
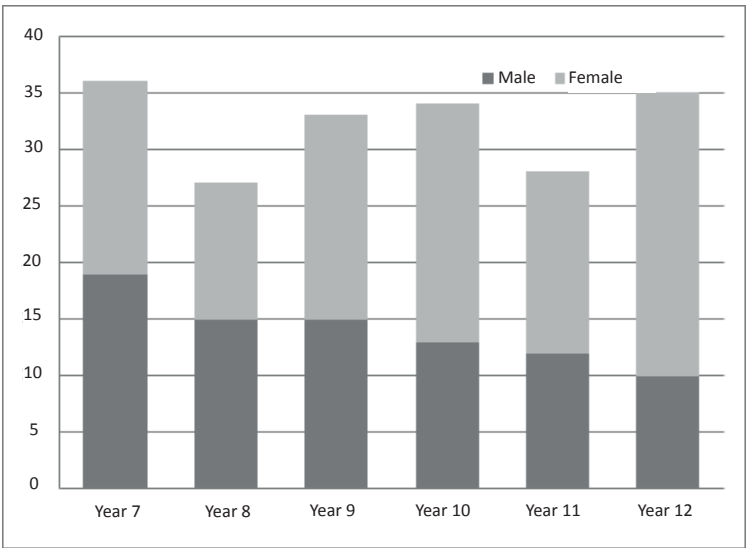
(Senior Male)

Figure 1: Sex and year level of students naming friends/peers as the aspect of school they would miss most if they left Woodlands

I know I've been going on about my social life, but because I felt it was really important for you to understand how the whole social side of things works. I have a great relationship with every teacher and really excel academically but that doesn't mean a thing unless you're happy with your friends. It is so what it's about.

(Senior Female)

The relational net was cast wider however, and peers also populated students' affiliative sets. Peers were also referred to as 'other students', 'my year level', 'my class', 'my home group', and 'the people I get to hang around with'.

The terms *socialising* and *social life* were popular among participants to describe spending time with friends and peers and often conveyed unstructured relaxed situations outside formal classroom settings in which students could mingle with each other, as revealed in the following comments from an item in the questionnaire asking students about their favourite places at Woodlands:

Socialising at lunch in the school ground, there's so much space for walking and talking.

(Female, Year 12)

Places where there is sun, shade and shelter and somewhere to sit with people and just hang out together.

(Female, Year 8)

Friends and peers were regarded as more than a key source of free-spirited enjoyment and companionship. Most respondents also saw them as a source of support during challenging times. When asked on the questionnaire who would notice if they were having a difficult day at school, 88 per cent (182) of respondents indicated that someone would notice and of these, 97 per cent (176) said friends and 66 per cent (121) said peers or someone in their class. This contrasts with 29 per cent (53) who named their homeroom teacher, 24 per cent (45) who indicated their year level coordinator and 23 per cent (42)

who named a subject teacher as someone who would notice if they were distressed at school.

The size of the school was named on a number of occasions as contributing to the relational opportunities available to students. Having access to large numbers of peers was seen as creating more possibilities for friendships to form and less constrained interpersonal options. Comments highlighted that the size of the school meant 'having so many more people around to mix with', 'lots of different people', and 'meeting heaps of friends and cool people'. The following observation from a year 10 male captures the relational possibilities associated with the size of the school:

There's lots of people so you kind of got more options… more friends to choose from if you don't like somebody, you choose someone else.

While friendships were the source of enjoyment and pleasure and central to the experience of school for some young people in this study, relationships could also generate a range of negative emotions. A diary entry from a senior female student eloquently captures the double-edged nature of relationships:

I have an awesome extensive network of friends, with one closest friend, a tight knit group containing 2 other amazing girls… a wider group of about 7 or 8 guys and girls and then I get along with everyone else. I love school because of the people. So that's what it's all about. And for many who don't enjoy school, I'd say that's what it's all about too.

When students were asked in the questionnaire what they didn't like about being a student at Woodlands, 15 per cent (31) named 'other students', 'other people', or some aspect of their interpersonal relationships with peers or friends, however all of these students also named their friends as the most

valued aspect of their school life. This was also the case with the 18 young people with very low self-rated connectedness (M = 10, F = 8); all of these young people indicated that their friends were the aspect of school they most enjoyed.

Staff viewpoint

In considering how staff understood students' connectedness to school, thematic analysis of staff focus group discussions produced five themes including membership of a friendship and/or peer group. The quality of these relationships with peers and friends was considered an important indicator of SC across all staff groups. A majority of staff talked about 'the visibility' of students who did not have a place in a peer or friendship group. They were described as 'sitting apart', 'on the periphery', and 'separate from everyone'. Their visible isolation caused concern and many staff repeatedly flagged this separation from the peer group as undermining the students' overall experience of school as shown in the following comments:

> *I think often where they don't actually have a close friend or a group of friends that concerns me and I would see that as being a child who is not really connected.*

> *There was a student who didn't have any friends and at lunchtime she would hang around outside the room pretending to read the bulletin or sitting by herself always at lunchtime and she wasn't involved in anything and looked quite lonely. She left school before year 12 so the ultimate disconnection.*

While being part of a friendship or peer group was regarded as important, some staff were also aware that peer groups and friendships could be volatile and membership in a group could quickly be terminated as this exchange from a focus group reveals:

> *M: Well peer groups can cut both ways, can't they?*

> *F: For sure.*

> *M: They can send kids into disconnection.*

> *F: Yeah.*

> *M: From connection.*

> *F: They can isolate them.*

This loss of peer group connection was considered as potentially pushing students into a fragile space or as a teacher commented 'peers can actually send kids over the edge'.

Conversely for some students, relationships with peers and friends provided their sole source of connection to school as this female year coordinator described:

> *I've noticed there are quite a few students who are sort of disconnected but they rely a lot on their friends. When I say disconnected I mean disconnected from school but not from their peer group and that peer group is so important.*

This idea was also discussed in another focus group:

> *M: For some students the connection with friends is the most important part of school and for some the only reason they come.*

> *M: Some of those who are disconnected are only going on to year 12 because of the difficulty in moving away from their friendship groups. They aren't really interested in the work.*

> *F: For some students friends are the only thing school's about. It's what keeps them coming.*

The majority of staff in all focus groups considered peers and friends to be pivotal in a student's relationship to school and viewed

isolation in the peer group as a concern. This isolation was considered a serious threat to a young person's connection to school, although the fluctuating nature of relationships meant students could cycle in and out of connection depending on the embrace or rejection of peers and friends. Students whose friends and peers were the only point of connection to school were regarded as particularly vulnerable during periods of relational volatility.

Discussion

The lead relational experience for young people in this study was with their friends and peers. Their experience of the other dimensions of school life was heavily influenced, both positively and negatively, by these peer relationships. Relationships with teachers also influenced their connection with school, however were less central to their school life. While peers are widely recognised as becoming increasingly influential as young people enter adolescence (Woolley et al., 2009) and can be a source of stress (Murray-Harvey & Slee, 2007) and negative influence (McDonough et al., 2016), this view of peers presents an incomplete account of their role in young people's relational set. Viewing peer relationships as an asset for many students in their experience of school invites a deep consideration of the factors that promote this aspect of the school's social ecology (Roffey, 2012).

This alternative view of peer relationships as a resource that builds connectedness to school has been identified in a small number of studies. In their qualitative study of factors influencing SC among a sample of 52 Chinese high school students, Yuen et al. (2012) found that students identified peer relations as a central component of their connectedness to school. Despite the cultural differences between the students in this study and the Woodlands students, comments from the young people in both studies share similarities. Students in both groups talked about the time spent with their peers as influencing their connection to school. The majority of

students in the current study commented that their friends and peers were the main reason they enjoyed being at school. This sentiment is echoed in Yuen and colleagues' study in the observation of a student who commented that '"For me, the source of feeling connection to school does not come from the teacher but from the students. …"' (Yuen et al., 2012, p.59). Jørgensen (2016) also found that young people in her study of migrant and minority youth in English and Spanish secondary schools named peers as the most important aspect of their educational experience. Drawing on the concept of social capital she uses the term 'peer social capital' to describe this key resource.

With a focus on resilience rather than SC, Fuller et al. (1999) consulted 1147 Australian senior secondary students in a mixed methods study on factors that promote resilience. Over 96 per cent identified having good friends as the most important factor, while having good teachers and feeling respected by teachers were ranked at five (78.6 per cent) and six (76.8 per cent) respectively. The researchers concluded that peer connectedness, defined as having good friends, and SC, defined as fitting in at school and having good teachers, were key factors in enhancing resilience. While not specifically researching SC, this study nevertheless highlighted the importance young people place on their peer relationships.

Similar results were found in a study by Gristy (2012) exploring the importance of peer relationships for student engagement in a remote rural secondary school in the UK. Through a case study methodology including interviews with students, Gristy found that the young people's experience of school was almost exclusively social and that this social experience was overwhelmingly with their peers. These students were from a socio-economically disadvantaged community and most had fractured connections to school, yet their descriptions of seeing their peers and social activity as their central motivation for attending school resonates with both the opinions and language used by

Woodlands students to describe their peer relationships. Student and teacher understandings of wellbeing in schools were also the subject of a large-scale mixed methods study by Graham et al. (2016). They found that both groups identified relationships as central elements of wellbeing. Of particular interest however in the context of the current study is their finding that students placed more emphasis on their relationships with friends and peers, while teachers prioritised the teacher-student relationship.

Peer relationships can also inflict distress and impact young people's wellbeing through bullying and harassment (Agoston & Rudolph, 2016) and association with risk-taking peers (Traylor et al., 2016). A small number of Woodlands students did speak of the pain associated with being teased and excluded and such experiences can impact young people's connection with school (McGrath & Noble, 2010; O'Brennan & Furlong, 2010). While this aspect has been heavily canvassed by scholars in a substantial corpus of research into bullying (Rigby & Smith, 2011), the insistent message of young people about the joys of their relational connection to friends and peers and the meaning such connection gives to their experience of school has received less attention. A rare exception is a study by Gorard and See (2011) in which they examine factors which enhance young people's enjoyment of school. Approximately 3,000 secondary students in England were involved in the mixed methods study and they named the social aspect of school life and having friends at school as pivotal to their enjoyment. Similarly, Goswami (2012) found that positive peer relationships impacted young people's subjective wellbeing. These findings resonate with the current study. When Woodlands students were asked what they would miss most if they had to leave the school, 95 per cent (196) named friends and peers.

The large school size was named in a number of student focus groups as providing additional opportunities for peer connections and informal social encounters.

This view is in contrast to research that has established reduced levels of SC in larger schools (Thompson et al., 2006). For many Woodlands students however, the large peer cohort provided opportunities for broad and varied affiliations beyond the more intimate bonds they shared with their friends.

The voice of teachers in SC research is largely absent with only a small number of studies taking this focus (Vidourek & King, 2014; Vidourek et al., 2011, 2012). A single study (Chapman et al., 2013) used a qualitative approach in exploring teachers' perceptions of SC and its influence on student behaviour with both student-teacher and peer-peer relationships identified as influencing SC. Woodlands staff identified the central role that peers and friends play in a young person's connection to school, and recognised that these relationships can both build and diminish students' enjoyment of school. Most staff regarded fragile peer connections as heightening students' vulnerability to a weakening of their relationship to school. The loneliness that may accompany an impoverished peer or friendship network can place young people at risk of adverse mental health outcomes (Houghton et al., 2016) and reduced enjoyment of school (Rönkä et al., 2017), which in turn can attenuate the connection to school. Regarded in this way, peer relationships are a source of social capital (Jørgensen, 2016) and a significant influence on young people's wellbeing (Hall-Lande et al., 2007).

Staff in this study considered the volatility of many peer relationships as posing a threat for students whose primary connection to school was through their peers. In the absence of strong links to other aspects of school life, these students were regarded as highly vulnerable to losing connection to school during times of peer conflict. While Woodlands staff saw peer isolation or low peer social capital as posing a threat to school connection, the converse can also be true, with Moses and Villodas (2017) finding that for young people who had experienced adverse childhoods, high quality peer rela-

tionships were protective against the effects of their earlier trauma and promotive of school engagement.

Strengths and limitations
The strength of the study lies in its qualitative contribution to SC research which to date has preferred the empirical domain with student surveys the default data source of most studies (Chapman et al., 2013). Bringing student and staff voices into the research facilitated a deep exploration of SC from which layered and complex understandings emerged. Focus groups provided insights into the meanings that participants brought to their experiences of school and the interactions within the focus groups also facilitated co-constructed narratives of life at Woodlands and the sources of connection for students. Participant diaries provided an intimate and finely grained view of young people's experiences of school life (Harvey, 2011).

There are limitations to this study. Students and staff were drawn from a single school and are therefore not representative of all students or staff or the multiple school sectors in Victoria and elsewhere. The purposive sampling strategy may have excluded some participants whose experiences of connectedness differed from those who participated in the study. The voluntary nature of teacher participation in focus groups also means that not all teacher perspectives were captured. The questionnaire used in the study was researcher-developed and has not been validated, although it drew on validated measures of SC. A further limitation is the cross-sectional nature of the study, not allowing any conclusions about causality to be determined (Cornell & Huang, 2016). Additionally, the self-reported data from the questionnaire and the student diary entries cannot be independently verified.

Implications
The adolescent social world has long been subjected to heavy adult scrutiny, producing characterisations that both demonise and romanticise this world (Crosnoe, 2011). While both views contain elements of the adolescent relational domain, the voices of adult researchers and commentators have overwhelmingly told the story (Schall et al., 2014). This study invited Woodlands students to tell their own stories about their connection with school and they foregrounded their peer relationships as central to their experience of school.

The gathering voice of young people regarding the importance of their peer relationships to their experience of school invites closer attention within SC research. Pianta et al. (2012) acknowledged in their study on student engagement in the classroom that peer interactions are central to students' experience of the social environment of school, observing that the intensity of students' peer interactions outside the classroom are dynamic, brimming over with 'youthful energy, excitement, and enthusiasm' (p.369). Most Woodlands students conveyed a similar message of exuberant delight in their peer interactions and were unequivocal in naming peer relationships as the most valued aspect of their school experience. As discussed, this view aligns with a number of studies, however the influence of peer relationships on SC has to date been under-considered with definitions and measures of the concept too often either placing peer-peer relations in a subordinate position to the teacher-student connection or subsuming them in a catchall relational milieu that is unyielding to more nuanced analysis. This teacher-centric emphasis has distracted research attention from a more robust exploration of the influence of peer relationships on SC.

In this study the school's relational climate emerged as the engine room of SC, with peer relationships the lead connection. For most Woodlands students, even those with very low self-reported SC, their peer relationships were a source of enjoyment and support, making school a place they wanted to be. This finding reinforces the important work schools do to provide safe physical and

psychological environments in which positive relationships can flourish (Bradshaw et al., 2014). Relationships however are volatile, and schools need to be responsive to ruptures in peer and friendship groups which can inflict distress and undermine connection to school (Rönkä et al., 2017).

The practice implications that emerge from this study pivot around the relational climate of schools. A key pathway to building SC for all young students is through the relationships which underpin the educational enterprise of schools. The opportunities for educational psychologists to contribute to this work are multiple but may require some revisioning of aspects of their role. While responding to peer disputes and working with students who have experienced and/or initiated bullying are core components of their skill set, there is scope for more preventive, preemptive and assertive engagement with school colleagues and students in promoting and monitoring a positive school relational climate. Similar to Theron and Donald's 2011 call for educational psychologists to adopt an eco-systemic approach in their practice, particularly in their conceptualisation of resilience in young people's lives, this study urges a similar approach to SC. This research draws on an ecological understanding of SC as co-constructed with multi-directional pathways along which peer relationships strengthen and diminish, emerge and dissolve, within the layered ecologies in which young people move, both inside and outside school. This understanding calls on educational psychologists to view young people's peer relationships as key sites for developing SC with all the volatility and opportunity that such a view offers. Furthermore, this view acknowledges young people as the key influencers in developing their own and others' SC.

As skilled communicators, educational psychologists are well positioned to initiate and participate in reflective, provocative conversations with students and school staff about how positive peer-peer relationships are facilitated in the daily routine of school life, both within and outside the classroom. Their relational expertise in conversation with teachers' pedagogical expertise has the capacity to generate a more deliberate consideration of ways in which school environments hinder and promote opportunities for positive peer-peer encounters to occur and relationships to develop. Working with school personnel to view positive peer relationships as a resource that builds connectedness to school and placing this outcome as part of the school improvement agenda are ripe opportunities for educational psychologists to embrace and add to their already extensive professional repertoire.

Address for correspondence
Dr Annie Gowing, Level 5,
100 Leicester Street, Melbourne Graduate School of Education,
The University of Melbourne
Victoria, 3010, Australia
Email: annie.gowing@unimelb.edu.au

References

Agoston, A.M. & Rudolph, K.D. (2016). Interactive contributions of cumulative peer stress and executive function deficits to depression in early adolescence. *Journal of Early Adolescence, 36*(8), 1070–1094. doi:10.1177/0272431615593176

Balluerka, N., Gorostiage, A., Alonso-Arbiol, I. & Aritzeta, A. (2016). Peer attachment and class emotional intelligence as predictors of adolescents' psychological well-being: A multilevel approach. *Journal of Adolescence, 53*, 1–9. doi:10.1016/j.adolescence.2016.08.009

Baughman, K.R., Aultman, J.M., Ludwick, R. & O'Neill, A. (2014). Narrative analysis of the ethics in providing advance care planning. *Nursing Ethics, 21*(1), 53–63. doi:10.1177/0969733013486795

Bloom, D. & Haskins, R. (2010). *Policy brief: Helping high school dropouts improve their prospects.* Retrieved from http://www.futureofchildren.org

Blum, R. (2005). *School connectedness: Improving the lives of students.* Baltimore, Maryland: John Hopkins Bloomberg School of Public Health.

Bonny, A.E., Britto, M.T., Klostermann, B.K., Hornung, R.W. & Slap, G.B. (2000). School disconnectedness: Identifying adolescents at risk. *Pediatrics, 106*(5), 1017–1021.

Bradshaw, C.P., Waasdorp, T.E., Debnam, K.J. & Johnson, S.L. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health, 84*(9), 593–604.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. doi:10.1191/1478088706qp063oa

Carter, M., McGee, R., Taylor, B. & Williams, S. (2007). Health outcomes in adolescence: Associations with family, friends and school engagement. *Journal of Adolescence, 30*, 51–62. doi:10.1016/j.adolescence.2005.04.002

Chapman, R.L., Buckley, L., Sheehan, M. & Shochet, I.M. (2013). Teachers' perceptions of school connectedness and risk-taking in adolescence. *International Journal of Qualitative Studies in Education, 27*(4), 413–431. doi:10.1080/09518398.2013.771225

Chung-Do, J.J., Goebert, D.A., Hamagani, F., Chang, J.Y. & Hishinuma, E.S. (2015). Understanding the role of school connectedness and its association with violent attitudes and behaviors among an ethnically diverse sample of youth. *Journal of Interpersonal Violence.* doi:10.1177/0886260515588923

Cornell, D. & Huang, F. (2016). Authoritative school climate and high school student risk behavior: A cross-sectional multi-level analysis of student self-reports. *Journal of Youth and Adolescence.* doi:10.1007/s10964-016-0424-3

Cresswell, J.W., Plano Clark, V.L., Gutmann, M.L. & Hanson, W.E. (2003). Adanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.) *Handbook of mixed methods in social and behavioral research* (pp.209–240). Thousand Oaks, CA: Sage.

Crichton, N. (2001). Information point: Visual analogue scale (VAS). *Journal of Clinical Nursing, 10*, 697–706.

Crosnoe, R. (2011). *Fitting in, standing out: Navigating the social challenges of high school to get an education.* New York: Cambridge University Press.

de Boer, A.G.E.M., van Lanschot, J.J.B., Stalmeier, P.F.M. et al. (2004). Is a single-item visual analogue scale as valid, reliable and responsive as multi-item scales in measuring quality of life? *Quality of Life Research, 13*, 311–320.

Esin, C., Fathi, M. & Squire, C. (2013). Narrative analysis: The constructionist approach. In U. Flick (Ed.) *The Sage handbook of qualitative data analysis* (pp.203–216). London: SAGE Publications.

Ethier, K.A., Harper, C.R. & Dittus, P.J. (2018). School environment is related to lower health and safety risks among sexual minority middle and high school students. *Journal of Adolescent Health, 62*, 143–148. doi:https://doi.org/10.1016/j.jadohealth.2017.08.024

Finn, J.D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142.

Fuller, A., McGraw, K. & Goodyear, M. (1999). Bungy jumping through life: What young people say promotes well-being and resilience. *Australian Journal of Guidance & Counselling, 9*(1), 159–168.

Furlong, M.J., O'Brennan, L.M. & You, S. (2011). Psychometric properties of the ADD Health School Connectedness Scale for 18 sociocultural groups. *Psychology in the Schools, 48*(10), 986–997. doi:10.1002/pits.20609

Gift, A.G. (1989). Visual analogue scales: Measurement of subjective phenomena. *Nursing Research, 38*(5), 286–288.

Gorard, S. & See, B.H. (2011). How can we enhance enjoyment of secondary school? The student view. *British Educational Research Journal, 37*(4), 671–690. doi:10.1080/01411962.2010.488718

Goswami, H. (2012). Social relationships and children's subjective well-being. *Social Indicators Research, 107*(3), 575–588. doi:10.1007/s11205-011-9864-z

Gowing, A. & Jackson, A.C. (2016). Connecting to school: Exploring student and staff understandings of connectedness to school and the factors associated with this process. *The Educational and Developmental Psychologist, 33*(1), 54–69. doi:10.1017/edp.2016.10

Graham, A., Powell, M.A. & Truscott, J. (2016). Facilitating student well-being: Relationships do matter. Educational Research. doi:http://www.tandfonline.com/action/showCitFormats?doi=10.1080/00131881.2016.1228841

Gray, S., Romaniuk, H. & Daraganova, G. (2018). *Adolescents' relationships with their peers*. Retrieved from https://growingupinaustralia.gov.au/research-findings/annual-statistical-reports/adolescents-relationships-their-peers

Gristy, C. (2012). The central importance of peer relationships for student engagement and well-being in a rural secondary school. *Pastoral Care in Education, 30*(3), 225–240. doi:http://www.tandfonline.com/action/showCitFormats?doi=10.1080/02643944.2012.671343

Hall-Lande, J.A., Eisenberg, M.E., Christenson, S.L. & Neumark-Sztainer, D. (2007). Social isolation, psychological health, and protective factors in adolescence. *Adolescence, 42*(166), 265–286.

Harvey, L. (2011). Intimate reflections: Private diaries in qualitative research. *Qualitative Research, 11*(6), 664–682. doi:10.1177/1468794111415959

Hayman, B., Wilkes, L. & Jackson, D. (2012). Journaling: Identification of challenges and reflection on strategies. *Nurse Researcher, 19*(3), 27–31.

Houghton, S., Hattie, J., Carroll, A., Wood, L. & Baffour, B. (2016). It hurts to be lonely! Loneliness and positive mental wellbeing in Australian rural and urban adolescents. *Journal of Psychologists and Counsellors in Schools, 26*(1), 52–67. doi:http://dx.doi.org/10.1017/jgc.2016.1

Jørgensen, C.H.R. (2016). 'Peer social capital' and networks of migrant minority ethnic youth in England and Spain. *British Journal of Sociology of Education.* doi:http://dx.doi.org/10.1080/01425692.2015.1131144

Joyce, H.D. & Early, T.J. (2014). The impact of school connectedness and teacher support on depressive symptoms in adolescents: A multilevel analysis. *Children and Youth Services Review, 39*, 101–107. doi:10.1016/j.childyouth.2014.02.005

Libbey, H.P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness and engagement. *The Journal of School Health, 74*(7), 274–283. doi:10.1111/j.1746-1561.2004.tb08284.x

McDonough, M.H., Jose, P.E. & Stuart, J. (2016). Bi-directional effects of peer relationships and adolescent substance use: A longitudinal study. *Journal of Youth and Adolescence, 45*(8), 1652–1663. doi:10.1007/s10964-015-0355-4

McGrath, H. & Noble, T. (2010). Supporting positive pupil relationships: Research to practice. *Educational & Child Psychology, 27*(1), 79–90.

McNeely, C.A. & Falci, C. (2004). School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *The Journal of School Health, 74*(7), 284–292. doi:10.1111/j.1746-1561.2004.tb08285.x

McNeely, C.A., Nonnemaker, J.M. & Blum, R.W. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health, 72*(4), 138–146.

Mockler, N. (2014). When 'research ethics' become 'everyday ethics': The intersection of inquiry and practice in practitioner research. *Educational Action Research, 22*(2), 146–158. doi:10.1080/09650792.2013.856771

Moses, J.O. & Villodas, M.T. (2017). The potential protective role of peer relationships on school engagement in at-risk adolescents. *Journal of Youth and Adolescence*, 1–18. doi:10.1007/s10964-017-0644-1

Murphy, E.L. & McKenzie, V.L. (2016). The impact of family functioning and school connectedness on preadolescent sense of mastery. *Journal of Psychologists and Counsellors in Schools, 26*(1), 35–51. doi:10.1017/jgc.2015.17

Murray-Harvey, R. & Slee, P.T. (2007). Supportive and stressful relationships with teachers, peers and family and their influence on students' social/emotional and academic experience of school. *Australian Journal of Guidance & Counselling, 17*(2), 126–147.

Nasir, N.i.S., Jones, A. & McLaughlin, M. (2011). School connectedness for students in low-income urban high schools. *Teachers College Record, 113*(8), 1755–1793.

O'Brennan, L.M. & Furlong, M.J. (2010). Relations between students' perceptions of school connectedness and peer victimization. *Journal of School Violence, 9*(4), 375–391. doi:10.1080/15388220.2010.509009

Pianta, R.C., Hamre, B.K. & Allen, J.P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S.L. Christenson, A.L. Reschly & C. Wylie (Eds.) *Handbook of research on student engagement* (pp.365–386). New York: Springer.

Rasmussen, M., Damsgaard, M.T., Holstein, B.E., Poulsen, L.H. & Due, P. (2005). School connectedness and daily smoking among boys and girls: The influence of parental smoking norms. *European Journal of Public Health, 15*(6), 607–612.

Resnick, M.D., Bearman, P. S., Blum, R. et al. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *JAMA, 278*(10), 823–832.

Resnick, M.D., Harris, L.J. & Blum, R.W. (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Paediatric and Child Health, 29 Suppl 1*, S3-9.

Riessman, C.K. (1993). *Narrative analysis*. Newbury Park, CA: Sage.

Rigby, K. & Smith, P.K. (2011). Is school bullying really on the rise? *Social Psychology of Education, 14*, 441–455. doi:10.1007/s11218-011-9158-y

Roffey, S. (2012). Developing positive relationships in schools. In S. Roffey (Ed.) *Positive relationships: Evidence based practice across the world* (pp.145–162). Netherlands: Springer. doi:10.1007/978-94-007-2147-0_9

Rönkä, A.R., Sunnari, V., Rautio, A., Koiranen, M. & Taanila, A. (2017). Associations between school liking, loneliness and social relations among adolescents: Northern Finland Birth Cohort 1986 Study. *International Journal of Adolescence and Youth, 22*(1), 93–106. doi:10.1080/02673843.2015.1136659

Rowe, F. & Stewart, D. (2011). Promoting connectedness through whole-school approaches: Key elements and pathways of influence. *Health Education, 111*(1), 49–65. doi:10.1108/09654281111094973

Santos, C.E. & Collins, M.A. (2016). Ethnic identity, school connectedness, and achievement in standardized tests among Mexican-origin youth. *Cultural Diversity and Ethnic Minority Psychology, 22*(3), 447–452. doi:http://dx.doi.org/10.1037/cdp0000065

Schall, J., Wallace, T.L. & Chhuon, V. (2014). 'Fitting in' in high school: How adolescent belonging is influenced by locus of control beliefs. *International Journal of Adolescence and Youth.* doi:10.1080/02673843.2013.866148

Stewart, D.W. & Shamdasani, P.N. (1990). *Focus groups: Theory and practice (Vol. 20).* Newbury Park, CA: Sage.

Theron, L.C. & Donald, D.R. (2011). Educational psychology and resilience in developing contexts: A rejoinder to Toland and Carrigan (2011). *School Psychology International, 34*(1), 51–66. doi:10.1177/0143034311425579

Thompson, D.R., Iachan, R., Overpeck, M., Ross, J.G. & Gross, L.A. (2006). School connectedness in the health behavior in school-aged children study: The role of student, school, and school neighborhood characteristics. *Journal of School Health, 76*(7), 379–386.

Traylor, A.C., Williams, J.D., Kenney, J.L. & Hopson, L.M. (2016). Relationships between adolescent well-being and friend support and behavior. *Children & Schools, 38*(3), 179–186. doi:10.1093/cs/cdw021

Vidourek, R.A. & King, K.A. (2014). Enhancing school connectedness: Teachers' perceived confidence in positively connecting students to school. *International Journal of School & Educational Psychology, 2*(2), 85–94. doi:10.1080/21683603.2013.876949

Vidourek, R.A., King, K.A., Bernard, A.L., Murnan, J. & Nabors, L.A. (2011). Teachers' strategies to positively connect students to school. *American Journal of Health Education, 42*(2), 116–126. doi:10.1080/19325037.2011.10599179

Vidourek, R.A., King, K.A., Nabors, L.A., Bernard, A.L. & Murnan, J. (2012). Teachers' perceived benefits and barriers to connecting students to school. *American Journal of Health Studies, 27*(3), 136–145.

Waters, S., Cross, D.S. & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health, 79*(11), 516–524.

Wilson, M.N., Asbridge, M. & Langille, D.B. (2018). School connectedness and protection from symptoms of depression in sexual minority adolescents attending school in Atlantic Canada. *Journal of School Health, 88*(3), 182–189. doi:10.1111/josh.12595

Woolley, M.E., Kol, K.L. & Bowen, G.L. (2009). The social context of school success for Latino middle school students: Direct and indirect influences of teachers, family, and friends. *The Journal of Early Adolescence, 29*(1), 43–70. http://jea.sagepub.com/content/29/1/43 doi:10.1177/0272431608324478

Yang, F., Tan, K.-A. & Cheng, W.J.Y. (2013). The effects of connectedness on health-promoting and health compromising behaviors in adolescents: Evidence from a statewide survey. *Journal of Primary Prevention.*

Yuen, M., Lau, P.S.Y., Lee, Q.A.Y. et al. (2012). Factors influencing school connectedness: Chinese adolescents' perspectives. *Asia Pacific Education Review, 13*, 55–63. doi:10.1007/s12564-011-9176-7

Social and emotional learning: From individual skills to class cohesion

Brenda Dobia, Roberto H. Parada, Sue Roffey & Madelaine Smith

Aim: To evaluate the impact and process of introducing Circle Solutions (Circles) in six primary schools.
Rationale: Many frameworks for social and emotional learning (SEL) aim to develop individual skills. Circle Solutions is based on a collective approach with a specific pedagogy. This paper explores the impact that Circle Solutions have on belonging and inclusion.
Method: Teachers in six primary schools were trained in Circle Solutions and asked to run the intervention once a week for up to six months, with three additional schools providing a waitlist control condition. A mixed-method approach was used to evaluate changes in pupils social-emotional skills, behaviour and connectedness. Five teachers completed the Teacher Attitudes to Social Emotional Learning survey (TASEL) prior to and following the intervention. 157 pupils completed a modified version of the California Healthy Kids Survey (CHKS) plus two open-ended questions.
Findings: Although quantitative findings did not indicate statistically significant differences, qualitative responses suggested that the introduction of Circle Solutions increased inclusiveness and valuing of others, developed students' emotional awareness, enhanced a positive sense of self and stimulated student engagement. Teachers increased their sense of efficacy for teaching social emotional skills and identified improvements in teacher-student relationships as well as in student confidence, peer relationships, empathy, kindness, and student engagement.
Limitations: Issues with systemic implementation were identified.
Conclusion: Circle Solutions appears to have the potential to improve relationships, contributing to more connected and inclusive classrooms where children feel valued and appreciate others. Consideration needs to be given to sustainability and methodology in the evaluation of such programmes. There is a role for educational psychologists in establishing and supporting this intervention as happened throughout this study.
Keywords: Circle Solutions; ASPIRE; social and emotional learning; inclusion; kindness; relationships.

Introduction

MENTAL HEALTH concerns for young people in the UK are rising, and the government is planning on spending considerable sums of money on supporting those identified (Depts of Health & Education, 2018). This post-diagnosis approach, although clearly needed, does not promote the protective factors that may help at an earlier stage. Social and emotional learning (SEL) is one way of addressing these issues pro-actively (Merrell & Gueldner, 2010). SEL was identified by Noble et al. (2008) as one of the seven pathways to student wellbeing. Others included physical and emotional safety, pro-social values, a supportive and caring community and a strengths approach, all of which are actively addressed in the Circle Solutions framework.

Systematic evaluation in the United States of SEL programmes based on the Collaborative for Academic, Social and Emotional Learning (CASEL) (2015) framework has provided evidence for its effectiveness in improving not only social and emotional skills but also attitudes, behaviour and academic performance (Durlak et al., 2011). The primary focus of the CASEL model is on individual skill development

in five core competencies: self-awareness, self-management, social awareness, responsible decision-making and relationship skills. The social and emotional competencies of teachers have been identified as a significant factor in quality implementation of SEL programmes in schools (Jennings & Greenberg, 2009). In UK secondary schools an evaluation of secondary Social and Emotional Aspects of Learning (SEAL) (Wigelsworth et al., 2015) showed little evidence of positive outcomes and implementation factors, including teachers' 'will and skill', were raised as a potential reason for this finding (Lendrum et al., 2013).

The use of 'circles', as a framework for interaction, has a long history in both community and education settings. This includes: yarning circles in Australian Aboriginal communities (Robertson et al., 2005), learning circles (Swaminathan et al., 2014), magic circles (Moskowtiz et al., 1982), and Circle Time (Mosely, 1993). The latter was introduced by Jenny Mosley in the UK as part of the personal, social and health education curriculum, and later used extensively to support the Social and Emotional Aspects of Learning (SEAL) programme, introduced in 2005. Although there are overlaps between Circle Solutions, Circle Time and the CASEL model, Circle Solutions differs in key ways. Unlike the CASEL model, it does not focus primarily on individual skills but on learning collectively, addressing feelings and perspectives that influence social behaviour, while building a positive and inclusive classroom climate that promotes both effective learning and student wellbeing (Roffey, 2014). This approach aims to directly enhance belonging through participation as a valued member of the group – a factor which enhances resilience (Werner, 2005; Roffey, 2017a). Further, the Circle Solutions approach is underpinned by the following set of principles that guide effective facilitation of SEL as a social process: agency, safety, positivity, inclusion, respect and equity – giving the acronym ASPIRE – that together determine the pedagogy and process underpinning the intervention. The

rationale, research base and practice for ASPIRE is elaborated in Table 1. This conceptual framework has developed as an outcome of evidence and practice, drawing from the fields of educational and positive psychology. Circle Solutions takes a strengths-based approach that emphasises the importance of creating a safe classroom environment for SEL for both teachers and children (Ecclestone & Hayes, 2009; Dobia & Roffey, 2017; Roffey, 2017b).

How children learn about the social and emotional aspects of their lives is as important as what they learn. Since 2009 over 3,500 teachers in both primary and secondary education have undertaken professional development in Circle Solutions. Most are in Australia, but others are based in the UK, Singapore, New Zealand, Mauritius, Egypt, Hong Kong, South Africa, China and Japan. While strong uptake and positive responses indicate broad satisfaction with the methodology, there has been a need for more specific and direct evaluation. The study by McCarthy & Roffey (2013) explored third party views, and Dobia et al. (2013) focused on specific outcomes for Aboriginal girls. Both studies indicated evidence of changed behaviour and increased connectedness in pupils, but pre-post studies have not previously been undertaken, nor any research in the UK context. This study addresses this gap. In particular we explored issues of friendship, empathy, belonging and class climate. As the terms 'Circles' and 'Circle Solutions' are both used by pupils and teachers, we will follow this practice and employ both terms interchangeably in this paper. NB. The research was undertaken independently from the trainer to maintain ethical integrity.

Method
Using a mixed methodology, the research investigated the impact of the Circle Solutions pedagogy for social and emotional learning for the wellbeing of pupils in years 5 and 6 in six UK primary schools. For the purpose of the study, 'wellbeing' was defined

Table 1: ASPIRE principles and application

PRINCIPLE	RATIONALE/EVIDENCE	PRACTICE in SEL
AGENCY	There is now a body of evidence on the value of self-determination for wellbeing, motivation and optimal functioning (Deci & Ryan, 1994; Kumpulainen et al., 2014; Guay et al., 2008).	Active engagement in learning encourages pupils to have a stake in their own learning, a voice in what concerns them, make decisions and take responsibility. Where activities generate discussion and reflection, the role of the teacher is to guide and facilitate rather than direct.
SAFETY	Young people are less likely to engage or take risks in learning when they do not feel safe in school – either physically or emotionally (Cohen, 2006; Morrison, 2007).	Safety is actively addressed by discussing issues, not incidents, giving the right to stay silent, the use of the third person, using a solution focused approach and promoting collaborative rather than individual activities.
POSITIVITY	Fredrickson (2001) has highlighted the benefit of positive emotions for creativity and problem-solving. Playfulness is also valuable within social and emotional learning (Hromek & Roffey, 2009).	Many activities in Circles are presented as games. Evaluations report how motivating having fun was for both engagement and connecting with others (McCarthy & Roffey, 2013; Dobia et al., 2013). Positivity is also generated by having a solution focus on issues rather than focusing on deficits, and exploring and identifying strengths.
INCLUSION	A sense of belonging is critical for psychological wellbeing (Baumeister & Leary, 1995). This needs to be inclusive belonging that does not dehumanise those outside the group (Roffey, 2013).	Pupils are mixed up regularly, so they work with – and get to know – others in their class. Nearly all activities are paired, small or large group and none are individually competitive.
RESPECT	Three studies exploring the development of constructive relationships in schools highlighted the importance and meaning of respect (Roffey, 2005). Dobia & Roffey (2017), writing about Aboriginal communities, extend this to respect for culture, and show the overarching importance of relational over competency-based dimensions of SEL.	Respect is encapsulated in the following expectations and behaviours: Listening when one person is speaking; not putting others down either verbally or non-verbally; not pre-judging others; showing consideration; acknowledgement; contextual awareness; cultural awareness.
EQUITY	The literature indicates that equality is a factor underpinning societal wellbeing (Wilkinson & Pickett, 2010). However, treating everyone the same does not respect diversity nor lead to what is essentially fair. This requires flexibility and adaptation. The construct of equity reflects this.	The aim of Circles is for everyone to have their turn and opportunities to contribute. This means that support may be needed for some individuals. The teacher/facilitator has oversight of the process but engages in all activities alongside students. Feedback indicates this enhances the quality of relationships between staff and pupils as well as between pupils.

as a positive attitude towards self, school and fellow pupils together with a feeling of support and belonging (Noble et al., 2008; Werner, 2005). The impacts for teachers who delivered the intervention were also explored.

Six experimental and three wait-list primary schools were identified in Essex by

the educational psychologist (EP) working in the area, who was already trained in Circle Solutions. She ascertained their interest and the schools were invited to take part. The one-day training for teachers took place at the end of term 1. At the beginning of term 2, following ethical protocols, pupils completed an amended online version of the California Healthy Kids Survey (CHKS), including the Personal, Social and Emotional Appendix. Teachers took the Teacher Attitudes to Social and Emotional Learning (TASEL) survey, also online. This included a qualitative component which allowed for gathering data on reasons for responses. Teachers then facilitated Circles for a minimum of once a week for 30 to 45 minutes.

Towards the end of term 3 the teachers and pupils were invited to re-take the surveys. One in-depth interview was held with one teacher and four focus group interviews were completed with pupils. The survey results were analysed using IBM SPSS 25 (IBM Corp, 2017), and the qualitative data was analysed thematically.

The role of the Educational Psychologist
The involvement of the EP was critical at the outset of this study. She had established a relationship with all the schools involved and was able to offer them this supported opportunity. As findings indicate that on-going support for teachers engaged with Circle Solutions makes a significant difference to sustainability, her role was also important in ensuring that Circles continued to run for the duration of the study. This included email communication with teachers to flag up any issues with implementation and meeting with senior leadership teams in schools to ensure teachers were provided with the necessary time to plan and run their Circles. Solution-focused consultations were also provided by the EP when requested by teachers. Four out of the six teachers met individually with the EP as they were the only teacher in their school running the intervention. In one school where two teachers were running the intervention, both teachers

attended the same consultation. The number of consultations given to teachers ranged from 1 to 4 and lasted approximately 1 hour. As the EP was also the link for the schools, it was possible to arrange consultations on days when the EP was already in the school, thus reducing the time commitment of this work for the EP Service. Themes raised during consultations included advice on lesson planning and reflections on teacher practice and pupil behaviour.

Findings
Teacher results
Only four teachers from the experimental schools responded in the post-Circles survey plus one deputy head from a waitlist school whose communications with the researchers indicated enthusiasm about SEL. Although this number was not sufficient for any statistical analysis, the data did show some notable trends. Teachers clearly indicated that they felt more confident and comfortable teaching social and emotional skills and endorsed the need for all teachers to receive training in SEL. However, two teachers were concerned with a lack of school leadership support for SEL. In a separate scale teachers were asked to indicate the extent of changes observed in pupil behaviour as a result of teaching Circles. The strongest positive change observed was in student-teacher relationships. Other improvements included student confidence, empathy and kindness, and peer relationships. Student engagement with learning was also positively endorsed by all participants. One teacher commented on the changes observed as follows.
- *'Children remember and use the phrase "No put downs".'*
- *'Children seem to include special needs children more in classroom life.'*
- *'Children appear to think more before saying something they shouldn't.'*

When asked what issues they would like addressed in any further training opportunities, teachers identified that access to model Circle lessons and ready-to-use templates, as

well as further activities and resources would be helpful. One teacher wanted more guidance on dealing with behavioural issues, and another was interested in how they could ensure that a school prioritised social and emotional learning.

Pupil quantitative results

Exploratory Factor Analysis of the California Healthy Kids survey data yielded six factors which explained 50 per cent of the variance. Based on item loadings the factors were identified as: School Connectedness (e.g. '*I look forward to most of my lessons*'), Social and Emotional Learning (e.g. '*I try to understand how other people feel*'), Responsible Behaviour (e.g. '*Are pupils at this school well behaved?*'), Self-efficacy (e.g. '*I can do most things if I try*'), Bullying (e.g. '*How often have you seen pupils bullying others at this school?*') and School Engagement/Participation (e.g. '*Do the grown-ups at school ask you about your ideas?*'). Cross factor correlations were low (Mean =

.02, Min = .17 Max= .37). The reliability of the scales was fair, with a mean Cronbach's alpha of .75 across the six factors (Min= .67, Max = .84).

Figure 1 plots pre- and post-mean scale scores for both waitlist and experimental schools. As can be seen, there was very little difference between pre and post in either the experimental schools or the waitlist (control) schools. None of the differences between scores were found to be statistically significant. Accordingly, no further analysis was conducted.

Pupil qualitative results

The online post survey administered to the experimental group had three open ended questions: '*What have you enjoyed most about Circles lessons?*', '*What, if anything, do you think could be improved about Circles lessons?*', and '*Please tell us one thing you have learnt about yourself through doing Circles lessons*'. There were responses from 157 pupils from the
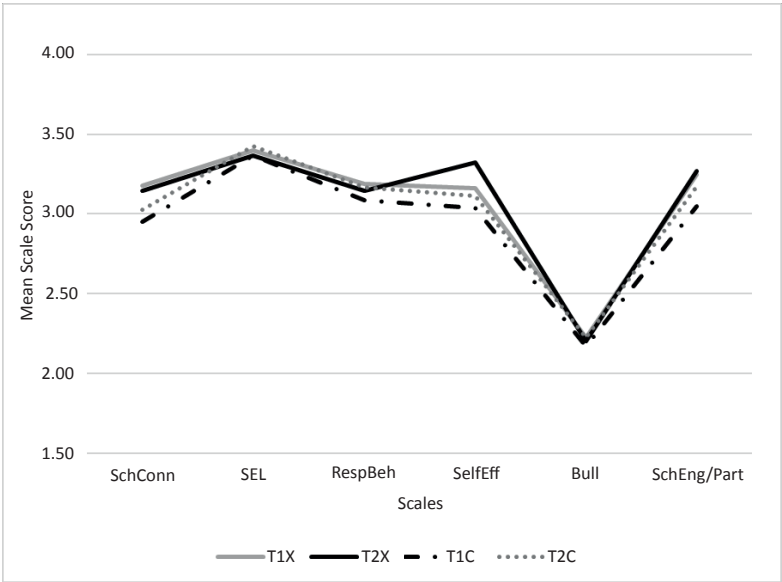

Figure 1: Mean scores for experimental and control groups

SchConn = School Connectedness; SEL = Social Emotional Learning;
RespBeh = Responsible Behaviour; SelfEff = Self Efficacy; Bull = Bullying; SchEng/Part = School Engagement/Participation.
Scores range from 1 to 4.

six experimental schools, 71 males and 85 females. A content analysis was carried out looking at the text within each question using a process of emergent coding (Hsieh & Shannon, 2005; Stemler, 2015). The responses were first read and separated into individual statements expressing a singular idea/response. On a second reading, similar ideas were clustered, and each cluster was given a code. The statements were read again in an iterative manner until all statements had been assigned to create the fewest number of themes that encompassed all of the responses.

Table 2 summarises the themes extracted from the question: *'What have you enjoyed most about Circles lessons?'.* 154 pupils provided a total of 185 responses to this question. These 185 responses were clustered into 12 themes. These were: activities/games/

having fun; personal insights, knowing/care about others; playing/working with others; confidence/try/problem solve; empathy/ listening/caring; everything/most; express feelings/ideas; talking/explaining; nothing/ OK; other; help others.

Figure 2 provides a gender breakdown of findings for what pupils enjoyed.

It can be seen from Table 2, that pupils' self-reported experiences in Circles were generally very positive. Pupil responses indicated strong engagement within the group and appreciation of doing things together. Having fun together and finding out about each other appeared to enhance both understanding of others and having a more positive view of self. This is consistent with the teacher feedback of raised confidence and improved class relationships. Figure 2 shows that having fun together was engaging for

Table 2: What students enjoyed most about Circle lessons

Themes	Sample Responses	Count	Per cent
Activities/Games/Fun	'we can play fun games and have lots of fun each week'	53	28.6
Personal insight	'I can be independent more than I thought that I can'	26	14.1
Knowing/Care about others	'finding out more about people to make us better friends'	24	13.0
Play/Work with others	'I mostly enjoyed when we were working in partners to achieve a thing with a whole class'	16	8.6
Confidence/Try/Problem Solve	'I have learned that I can do more stuff if I try'	15	8.1
Empathy/Listening/Caring	'I've learnt that if I try to listen to other people maybe I will understand more'	13	7.0
Everything/Most	'I have enjoyed all of the different activities'	9	4.9
Express feelings/ideas	'we can shere our idears with others' [sic]	9	4.9
Talking/Explaining	'that we all get to talk to each other'	8	4.3
Nothing/DK	'Nothing' 'not sure'	7	3.8
Other	'They don't take very long'	4	2.2
Help others	'help others figure out the answer/problem'	1	0.5
Total		185	100.0

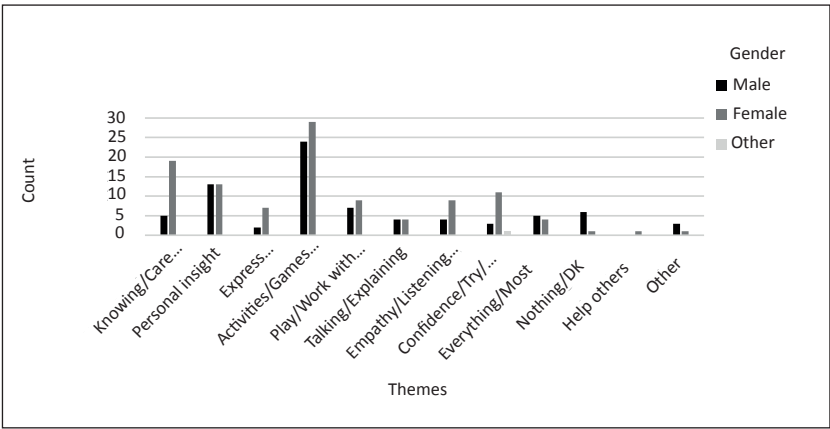Note: A total of 185 responses were made by 154 pupils.

Figure 2: Gender breakdown of Circles enjoyment
Only one pupil identified as 'other' (i.e. neither male nor female).

both boys and girls and that gaining personal insight was also the same for both. Responses related to social and emotional issues were considerably stronger for girls.

Table 3 summarises the themes identified for the question: *"What, if anything, do you think could be improved about Circles lessons?"*. 146 pupils provided a total of 146 responses to this question, which were clustered into 10 themes as presented in Table 3.

Figure 3 provides a gender breakdown for what pupils thought could be improved.

Table 3 shows that many students appreciated the Circle lessons in their existing format, and several wanted more of them.

Figure 3 illustrates some particularly interesting gender related responses. Girls wanted more student participation, which suggested that teachers may not have been following the ASPIRE principle of agency, where students are active rather than passive learners. Some boys wanted a wider range of activities, which may also reflect the teacher response of needing access to more resources.

Table 4 summarises the themes found for the question: *'Please tell us one thing you have learnt about yourself through doing Circles lessons'*. 146 pupils provided a total of 146 responses which were clustered into 14 themes as illustrated in the Table.
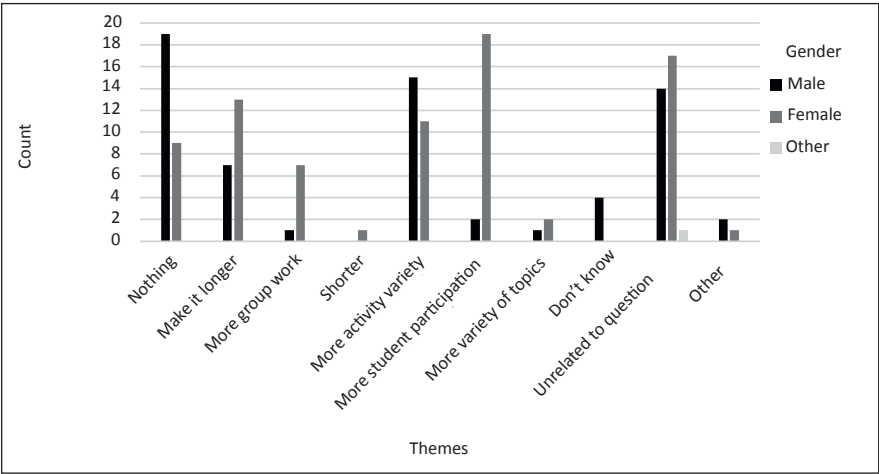

Figure 3: Gender breakdown of suggested improvements

Table 3: Pupils' suggestions for improving Circles lessons

Themes	Sample Responses	Count	Per cent
Unrelated to question	'the pupils are kind to each other most of the time'	32	21.9
Nothing	'nothing its brilliant'	28	19.2
More activity variety	'More different activities'	26	17.8
More student participation	'Less people say pass'	21	14.4
Make it longer	'do it more often like once of twice a week' [sic]	20	13.7
More group work	'To do more activities in groups'	8	5.5
Don't know	'I'm not really sure'	4	2.7
Other	'the rules'	3	2.1
More variety of topics	'I would like to talk about a few more different subjects'	3	2.1
Shorter	'they could be a little bit shorter'	1	0.7
Total		146	100

Figure 4 illustrates the gender distribution in what pupils said they learned.

These results indicate that Circles have the potential to support both student connection and individual wellbeing. The strong finding for kindness is of particular note, and may be associated with the emphasis in Circle Solutions on getting to know and appreciate others. Finding out and talking with others about what you have in common are frequent components of Circle Solutions, intended to support resilience and mental health.
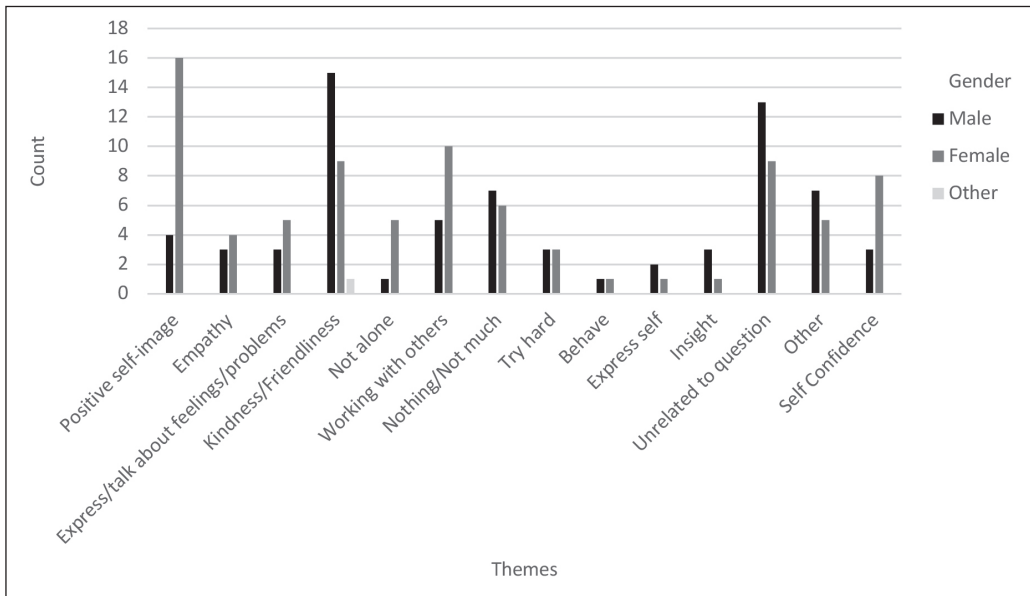

Figure 4: Gender breakdown of what pupils learned about themselves

Table 4: What pupils learned about themselves through Circles

Themes	Sample Responses	Count	Per cent
Kindness/Friendliness	'Kindness is its own reward! Try and be fun and friendly'	25	16.2
Unrelated to question	'The silliness when everyone else is trying to work'	22	14.3
Positive self-image	'I learnt that I am patient and I get along with most people'	20	13
Working with others	'that I enjoy working with pupils that I don't really work with all the time'	15	9.7
Nothing/Not much	'Nothing because I can't think of anything'	13	8.4
Other	'more equipment in class'	12	7.8
Self Confidence	'I have learnt to be more confident with myself and not to put myself down'	11	7.1
Express/talk about feelings/ problems	'to talk to people when you are sad'	8	5.2
Empathy	'I have things in common with other people'	7	4.5
Try hard	'I can work harder if I put my mind to it'	6	3.9
Not alone	'I have more friends than I thought'	6	3.9
Insight	'that im not patient' [sic]	4	2.6
Express self	'How to communicate better'	3	1.9
Behave	'stop talking in class'	2	1.3
Total		154	100

When broken down by gender it is evident that boys in particular identified learning about kindness, while girls learnt about the kind of person they were.

Discussion

In general, it appears that the Circle Solutions intervention was well received by teachers and pupils. Despite the absence of statistically significant pupil outcomes based on the CHKS survey, the qualitative data provides indications that pupils felt that they benefited from the intervention, both at an individual level and in generating a more positive class climate.

The findings reflect the Circle Solutions focus on learning about relationships through building relationships. As long ago as 1991, Fredrickson reported that indi-vidual or small group social skills training with targeted pupils may lead to an increase in skills but that these were not sustainable when those pupils returned to their class. She determined that this was because perceptions of peers had not changed and they reinforced earlier behaviours according to their expectations. By contrast, the contextualised approach to SEL of Circle Solutions provided structured opportunities for teachers and pupils to build positive and productive connections alongside skills. As active participants in shaping the trajectory of their SEL, pupils worked together with peers in ways that nurtured mutual acceptance and growth. These kinds of benefits may not be well supported by other, teacher-led frameworks of SEL instruction.

The gender differences in responses are of particular interest as they seem to suggest the potential to positively influence some of the negative impacts typically associated with gender at this age. An increase for girls in positive self-image is potentially protective as they enter early adolescence (Impett et al., 2008). For boys the opportunity to engage and affirm kindness and friendliness may provide an alternative to aggressive masculinity (Haywood & Mac an Ghaill, 2012). Further research to explore the impacts of Circle Solutions on gender identity development is identified as an interesting area for further investigation.

Teacher responses indicated that they felt that Circles had impacted positively on teacher-student relationships and enhanced student engagement in learning. However, the low rate of teacher responses and requests for further examples and templates suggest that more time and support was needed for teachers to become proficient with the intervention. Implementation research indicates that assessable benefits for students are likely only after consistent high-quality implementation over a more extended period (Durlak, 2016).

Resourcing and school engagement are also critical factors for effective implementation. As this was an unfunded pilot project, both resources and time commitment were limited. This resulted in differential levels of engagement across the experimental schools, with two of the six experimental schools showing low levels of engagement which may have impacted on implementation quality. By contrast, one of the control schools was highly engaged and proactive around SEL. These factors seem likely to have contributed to the lack of differentiation in experimental and control school outcomes.

Despite these limitations, it is apparent that the process of implementing Circle Solutions has changed the staff and students' perceptions of relational climate in the classroom in positive ways. Both students and teachers reported a greater sense of connectedness and greater appreciation of what others could bring to the class. Student comments provided evidence of growing self- and social awareness.

To realise gains on a programmatic basis and at the same time ensure that teachers are able to plan and carry out relevant, well-targeted and developmentally sequenced Circles, opportunities for teachers to access additional support with lesson planning and behaviour management would be helpful. With their extensive knowledge and understanding of typical and atypical developmental trajectories of childhood and adolescent mental health, along with their skills in consultation, educational psychologists are well placed to deliver on this in schools.

Limitations

A key limitation of the study in relation to outcome measures was its short time frame of only six months. Limited resources to support the range of schools leave unanswered questions as to implementation quality. In addition, low numbers of post-test responses from teachers have precluded more detailed analysis of implementation factors. There is also focus group data to be finalised. This will contribute to a further paper.

Conclusion

Wellbeing in schools is now firmly on the UK agenda (DoHSC & DoE, 2018) as is the plan to mandate relationship and sexuality education (DoE, 2017). However, there is so far little clarity as to how these are being implemented. Mental health proposals are largely focused on individual support for those diagnosed with difficulties rather than the promotion of positive mental health and wellbeing. Of critical benefit, both for supporting those experiencing mental health difficulties and reducing mental health risk factors, are universal interventions that develop an emotionally supportive school climate and positive relationships at all levels (Graetz et al., 2008). In this study the positive perceptions as reported by staff and students who participated in Circle Solu-

tions would suggest that there is potential for this approach to address significant protective factors for pupils' mental health. These include cultivating positive pupil-teacher relationships, fostering inclusiveness and enhancing engagement in learning. Further research is required to substantiate these findings.

Models of development that focus on the individual tend to overlook connection with others as a key driver of growth and a source of resilience (Condly, 2006). In seeking to promote positive connections that are characterised by mutual empathy, respect and empowerment Circle Solutions aims to build a positive environment for classroom learning, in which both pupils and teachers have a voice to make a difference.

For interventions to be safe and constructive, teachers need to feel confident with both content and pedagogy. This UK pilot of Circle Solutions, though limited in scope, has generated promising findings for teachers' sense of efficacy for SEL, through providing an engaging pedagogy and improving relationships and engagement at multiple levels.

The collective rather than individual focus of Circle Solutions makes it qualitatively different from other SEL interventions. As a consequence, the focus and trajectory of skill development are unlikely to follow the pattern assumed by CASEL and embedded in the measures used in this study to measure outcomes. In light of gains suggested for student connectedness and class climate, an important direction for further research will be to evaluate the impact of class climate on the scope and pattern of social emotional skill development through Circle Solutions.

Educational psychologists are well placed to support wellbeing in schools, not only for identified individuals but for systemic development that promotes prevention, early intervention and a positive emotional climate for learning and behaviour. This study has found that Circle Solutions was well received by teachers and students. Implementation support where accredited professionals train cohorts of staff, support sustainability and assist schools in evaluating the impact of the intervention could increase its benefit.

Acknowledgement

Address for correspondence
Dr Sue Roffey, 32 Ellington Road, Muswell Hill, London, N10 3DG
Email: s.roffey@exeter.ac.uk

References

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529.

CASEL (Collaborative for Academic, Social and Emotional Learning). (2015). *Social and Emotional Learning Core Competencies.* Retrieved 20 September 2018 from https://casel.org/core-competencies/

Cohen, J. (2006). Social, emotional, ethical and academic education. Creating a climate for learning, participation in democracy and wellbeing. *Harvard Educational Review, 76*(2), 201–237.

Condly, S. (2006). Resilience in children: A review of literature with implications for education. *Urban Education, 41*(3), 211–236.

Deci, E.L. & Ryan, R.M. (1994). Promoting self-determined education. *Scandinavian Journal of Educational Research, 38*(1), 3–14.

Department of Education (2017) *Policy Statement: Relationships Education, Relationships and Sex Education, and Personal, Social, Health and Economics Education* (PSHE). London: Crown.

Department of Health and Social Care and Department of Education (2018). *Government response to the consultation on Transforming Children and Young People's Mental Health Provision: a green paper and Next Steps.* London: Crown.

Dobia, B. & Roffey, S. (2017). Respect for culture: Social and emotional learning with Aboriginal and Torres Strait Islander youth. In R. Collie, E. Freydenberg & A. Martin (Eds.) *Social and Emotional Learning in Australia and the Asia Pacific.* Dordrecht: Springer.

Dobia, B., Bodkin-Andrews, G., Parada, R.H., O'Rourke, V., Gilbert, S., O'Daley, A. & Roffey. S.(2013). *Aboriginal Girls Circle: Enhancing connectedness and promoting resilience for Aboriginal girls: Final Pilot Report.* Sydney: Western Sydney University.

Durlak, J.A. (2016). Programme implementation in social and emotional learning: Basic issues and research findings. *Cambridge Journal of Education, 46*(3), 333–345. doi:10.1080/0305764X.2016.1142504

Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405–432.

Ecclestone, K. & Hayes, D. (2009). *The dangerous rise of therapeutic education.* London: Routledge.

Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226.

Graetz, B., Littlefield, L., Trinder, M. et al. (2008). KidsMatter: A Population Health Model to Support Student Mental Health and Well-being in Primary Schools. *International Journal of Mental Health Promotion, 10*(4), 13–20.

Guay, F., Ratelle, C.F. & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology/Psychologie canadienne, 49*(3), 233–240.

Haywood, C. & Mac an Ghaill, M. (2012) 'What's next for masculinity?' Reflexive directions for theory and research on masculinity and education. *Gender and Education. 24*(6), 577–592.

Hsieh, H.F. & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277–1288.

Hromek, R. & Roffey, S. (2009). Games as a pedagogy for social and emotional learning. 'It's fun and we learn things'. *Simulation and Gaming, 40*(5), 626–644.

IBM Corp. (2017). *IBM SPSS Statistics for Windows, Version 25.0.* Armonk, NY: IBM Corp.

Impett, E.A., Schooler, D., Sorsoli, L., Henson, J.M. & Tolman, D.L. (2008). Girls' relationship authenticity and self-esteem across adolescence. *Developmental Psychology, 44*(3), 722–733.

Kumpulainen, K., Lipponen, L., Hilppo, J. & Mikkolo, A. (2014). Building on the positive in children's lives: A co-participatory study on the social construction of a children's sense of agency. *Early Child Development and Care, 184*(2), 211–229.

Jennings, P.M. & Greenberg, M.T. (2009). The pro-social classroom. Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525.

Lendrum, A., Humphrey, N. & Wigelsworth, M. (2013). Social and emotional aspects of learning (SEAL) for secondary schools: implementation difficulties and their implications for school-based mental health promotion. *Child and Adolescent Mental Health, 18*(3), 158–164. doi:10.1111/camh.12006

McCarthy, F. & Roffey, S. (2013). Circle Solutions: A philosophy and pedagogy for learning positive relationships. What promotes and inhibits sustainable outcomes? *International Journal for Emotional Education, 5*(1), 36–55.

Merrell, K.W. & Gueldner, B.A. (2010). *Social and emotional learning in the classroom: Promoting mental health and academic success.* New York: Guilford Press.

Morrison, B. (2007). *Restoring safe school communities: A whole-school response to bullying, violence and alienation.* Sydney: Federation Press NSW.

Moskowtiz, J., Schaps, E. & Malvin, J. (1982). Process and outcome evaluation in primary prevention: The magic circle program. *Evaluation Review, 6*(6), 775–788.

Mosley, J. (1993). *Turn your school round.* Wisbech, Cambridgeshire: LDA.

Noble, T., McGrath, H., Roffey, S. & Rowling, L. (2008). *Scoping study on approaches to student wellbeing.* Canberra: Department of Education, Employment and Workplace Relations, Australian Federal Government.

Robertson, B., Demosthenous C. & Demosthenous, H. (2005). Stories from the Aboriginal women of the yarning circle: When cultures collide. *Hecate, 31*(2), 34–44.

Roffey, S. (2005). *Respect in practice: The challenge of emotional literacy in education.* (paper presented at AARE conference)

Roffey, S. (2013). Inclusive and exclusive belonging: The impact on individual and community wellbeing. *Educational and Child Psychology, 30*(1), 38–48.

Roffey, S. (2014). *Circle Solutions for Student Wellbeing.* London: Sage Publications.

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

Roffey, S. (2017b). The ASPIRE principles and pedagogy for the implementation of social and emotional learning and whole school wellbeing. *International Journal of Emotional Education, 9*(2), 59–71.

Stemler, S.E. (2015). Content analysis. *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*, 1–14.

Swaminathan, S., Byrd, S., Humphrey, W., Heinsch, C. & Mitchell, M. (2014). Winning Beginnings Learning Circles: Outcomes from a Three-Year School Readiness Pilot. *Early Childhood Education Journal, 42*(4), 261–269.

Werner, E.E. (2005). What can we learn about resilience from large scale longitudinal studies? In S. Goldstein & R.B. Brooks (Eds.) *Handbook of resilience in children.* Boston, MA: Springer.

Wigelsworth, M., Humphrey, N. & Lendrum, A. (2013). An evaluation of a school-wide preventive intervention for adolescents: The Secondary Social and Emotional Aspects of Learning (SEAL) program. *School Mental Health, 5*(2), 96–109.

Wilkinson, R. & Pickett, K. (2010). *The spirit level: Why equality is better for everyone.* London: Penguin.

Understanding the connection between youths' belonging, resilience and self-regulatory learning

Christopher D. Slaten, Chad A. Rose, Zachary M. Elison
& Ming Ming Chui

The Aim(s): *Researchers have given little attention to the environmental and internal psychological processes that may influence self-regulated learning (SRL) self-efficacy. Yet, we know that social and emotional factors like belongingness significantly impact youths outcomes and that SRL self-efficacy is linked to academic success for youths. The goal of the current study is to examine two such processes, belonging and resilience, and how they relate to SRL self-efficacy.*
Method/Rationale: *The sample included 361 youths in a large urban school district in the Midwestern United States. These students ranged in age from 9 to 14. The researchers utilised a structural equation modeling (SEM) approach to gain insight and understanding into the relationships between SRL self-efficacy, belonging, resilience, and academic self-efficacy.*
Findings: *The researchers found a model with strong fit indices indicating an explanatory model that explained a significant portion of the variance in SRL.*
Limitations: *The largest limitation of the current study was the cross sectional data collection examining relationships, not causation. Thus, future work could look at longitudinal data sets to confirm the current results.*
Conclusions: *The findings suggest that belonging and resiliency specifically play a large role in understanding student self-regulatory learning self-efficacy. This finding suggests that interventions are needed to increase student belonging and internal resiliency in school. It's possible that interventions targeting these constructs could lead to higher confidence in learning for students.*
Keywords: *Belonging; self-regulatory learning; structural equation modeling; resilience.*

SELF-REGULATORY learning self-efficacy (SRL-SE), or the degree to which a person believes he or she is capable of initiating learning, is particularly important to educational professionals and researchers given its strong connection to actual performance (e.g. Bandura et al., 2003; Caprara et al., 2004). A large body of research demonstrates that students who have received training or interventions related to SRL-SE display higher levels of motivation and achievement, including academic grades (Schunk, 1996; Wood et al., 1990; Paris & Paris, 2001). Individuals with high SRL self-efficacy tend to have stronger goal commitment, higher aspirations, and increased resiliency compared to those with lower self-efficacy (Bandura et al., 1996). In contrast, students with low SRL self-efficacy often struggle to maintain attention in class, fail to prepare for exams, and fail to attend school (Zimmerman, 2002). Motivational declines and lack of SRL-SE in adolescent students are often the result of a poor fit between their social needs and educational environment (Eccles et al., 1993). These social needs are often met based on student perception of connecting to others in their environment, often referred to as belongingness (Baumeister & Leary, 1995; Goodenow, 1993).

Researchers have given a considerable amount of effort to exploring the academic impact of SRL-SE, but limited research exists on understanding the social and emotional aspects of students that contribute to their level of SRL-SE. Of the research that has been conducted, the focus has primarily been on features of the learning environment, the learner, and their interaction as it relates to SRL (Ben-Eliyahu & Bernacki, 2015). The research has focused on broader characteristics such as learning space and features of the learning space (e.g. classroom discipline). Unfortunately, research on the impact of psychosocial factors, such as belonging, and contextual variables influencing SRL-SE has been neglected in the literature.

Belongingness, or the perceived experience of feeling connected to others, has yet to be examined in connection to SRL-SE (Baumeister & Leary, 1995). Given that SRL-SE and belonging are both independently related to academic outcomes for youths, the current study was an attempt to evaluate the relationship between belonging and SRL-SE and what additional contextual and social variables influence SRL-SE based on the literature. Specifically, we utilised psychosocial variables that had connections to academic outcomes and/or SRL-SE, to assist in creating a theoretical model examining the relationship between belonging and SRL-SE. The research team was specifically interested in how certain social and contextual factors (i.e. resiliency, academic self-efficacy, belongingness), based on previous theoretical and empirical research, impacted students' SRL-SE. Below is a brief section on each variable defined that is being utilised in the hypothesised model.

Belongingness
One of the most powerful contextual social factors influencing academic and psychological outcomes for youths is belonging (Begen & Turner-Cobb, 2015; Newman et al., 2007; Goodenow, 1993; Slaten et al., 2016). Originally derived from Maslow's (1954) hierarchy of needs, the need to belong refers to the ubiquitous desire to feel supported and accepted by others (Baumeister & Leary, 1995; Osterman, 2000). Baumeister and Leary (1995) referred to it as a need for 'a minimum quantity of lasting, positive, and significant interpersonal relationships' (p.497). Belongingness is distinct from similar interpersonal constructs like social support and social acceptance in that it pertains to an individual's *active* engagement and perceived psychological connection to a social group (Brown et al., 1988; Mallinckrodt, 1992; Mallinckrodt & Wei, 2005). Thus, belongingness emerges out of an individual's experience of consistent interaction and persistent caring from others (Slaten et. al., 2016). Within the school context, belonging is shown to contribute to significant positive outcomes for youths, including: wellbeing, positive life transitions, reduced stress, increased self-esteem, and improved memory (Slaten et al., 2018).

Resilience
In a review of the literature, Khanlou & Wray (2014) found that resilience is a complicated factor that is often defined by many different scholarly disciplines in unique ways. However, all of the areas of resilience have a common thread: factors, both intrapersonal and contextual, that influence one's ability to overcome obstacles or trials in one's life. In particular we are referring to resilience in an academic context. Borman and Overman (2004) found that the most powerful factor influencing academic performance was through promotion of resiliency that was exemplified by a supportive school community where students feel a sense of belonging. Additional studies, clearly demonstrate a connection between resiliency factors and academic performance (Nota et al., 2004).

Academic self-efficacy
Within the educational domain, academic self-efficacy refers to the degree to which a person believes he or she is capable of performing the necessary tasks to attain a desired level of academic performance

(Gallagher, 2012; Van Dinther et al., 2011; Zimmerman, 1989). Academic self-efficacy is distinct from academic self-concept in that it does not include one's feelings of self-worth in connection with self-evaluation, but rather pertains only to a perceived judgment of academic capability. The effects of academic self-efficacy on academic performance are robust (Chemers et al., 2001; Greene et al., 2004; Zimmerman & Bandura, 1994). Bandura (1997) posits that self-efficacy beliefs affect student engagement by increasing motivation and persistence to master challenging academic tasks. In a meta-analysis comprised of nearly 70 studies, Multon et al. (1991) found that academic self-efficacy beliefs account for approximately 14 per cent of the variance in academic performance and approximately 12 per cent of the variance in academic persistence. Moreover, the impact of academic self-efficacy on performance seems particularly important for low-achieving students, as this relationship is significantly stronger than students making normative academic progress (Multon et al., 1991).

Current study

A theoretical lens in which to comprehend and understand how the aforementioned constructs relate can be found in examining self-determination theory (SDT; Ryan & Deci, 2000). SDT couples people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration. The theory identifies three such needs: need for competence, need for relatedness, and the need for autonomy. SDT posits, along with Baumeister & Leary (1995), that the basic needs of competence, autonomy, and relatedness (i.e. belongingness) must be satisfied across the lifespan for an individual to experience an ongoing sense of wellbeing and success (Ryan & Deci, 2000; Ryan & Frederick, 1997). The current study attempts to address the relationship between the need for perceived competence (i.e. self-regulated learning self-efficacy; academic self-efficacy) and need for relatedness (i.e. belonging-

ness). Although there has been little research examining the relationship between these two constructs, the theory and outcome research surrounding SDT suggest that such a relationship between the two constructs does exist (Ryan & Deci, 2000). The current study is an extension of previous research examining predictors of SRL self-efficacy and the first to examine belonging and resilience specifically. The overarching research question in the current study was to ascertain whether different types of belonging, resilience, and academic self-efficacy impact one's confidence in their ability to learn. More specifically, the research team hypothesised the following: (a) family belongingness would be positively associated with intrinsic resilience, extrinsic resilience, school belonging, academic self-efficacy, and SRL self-efficacy; (b) extrinsic resilience would be positively associated with school belonging, academic achievement self-efficacy, and SRL self-efficacy; (c) intrinsic resilience would be positively associated with academic achievement self-efficacy, school belonging, and SRL self-efficacy; (d) school belonging would be positively associated with intrinsic resilience, academic self-efficacy, and SRL self-efficacy; (e) academic self-efficacy would be positively associated with SRL self-efficacy.

In addition to direct pathways, we hypothesised indirect pathways as well: (a) family belonging would have an indirect positive association with SRL self-efficacy through extrinsic resilience, intrinsic resilience, academic self-efficacy, school belonging; (b) extrinsic resiliency would have an indirect positive association with SRL self-efficacy through school belonging and academic self-efficacy; (c) intrinsic resiliency would have an indirect positive association with SRL self-efficacy through school belonging and academic self-efficacy.

Methods
Participants
Participants included 361 students in a large urban area in the Midwestern United States. The sample was 50.5 per cent female

(N = 182) and 49.5 per cent male (N = 179), and made up of 44 per cent Black/African American (N = 159), 43.8 per cent White/European American (N = 158), 6.1 per cent Biracial (N = 22), 1.4 per cent Asian/Asian American (N = 5), 1.1 per cent Latino/Latina American (N = 4), and 3.9 per cent other race/ethnicities (N = 16). Ages ranged from 9 to 14 years old, with the mean age of 10.52 years old (SD = 1.45). All participants were currently enrolled in a public school, and age distribution was 29.1 per cent were age 9 (N = 105), 23 per cent were age 10 (N = 84), 23 per cent were age 11 (N = 83), 17.5 per cent were age 12 (N = 63), 6.9 per cent were age 13 or 14 (N = 25). In addition, 54.9 per cent of the students identified living in a two-parent household with at least one biological parent (N = 198), 28.5 per cent identified living in a single parent household (N = 103), and 16.6 per cent identified living in a household with no biological parents (e.g. grandparents, foster parents) at the time of data collection (N = 60).

Procedures
The current study was approved by the first author's university Institutional Review Board. Before survey administration, potential student participants were introduced to the study by teachers who read a prompt explaining the aim of the study, the expected time commitment, and procedures of participation. Students were encouraged to participate in the study by teachers, though no incentives were offered and students were reminded that participation was voluntary. Those that were interested in participating received a parental consent form that was to be taken home and signed by their parents. Additionally, the students signed an assent form indicating that they were aware of the study's procedures and wanted to participate. During survey administration, students that had both forms completed and were interested in participating were given a hard copy of the survey instruments to complete. Students read the items by themselves and responded accordingly. Both a teacher and

the first author were present in order to assist students with questions about survey items. All teachers administering the surveys were given a brief instruction by the first author about the survey instruments and survey administration in order to prepare them to answer participant questions. The survey took approximately 15 to 20 minutes to complete. Responses from these anonymous hard copy surveys were electronically catalogued by the second author and a graduate research assistant for statistical analysis.

Measures
SRL and academic self-efficacy
SRL self-efficacy and academic self-efficacy were measured using the Children's Perceived Self-Efficacy Scale (CPSE; Bandura, 2006; Bandura et al., 1996). The CPSE is comprised of 37-items representing seven domains of functioning that comprise three broad factors of self-efficacy: academic, social, and self-regulatory. Given the purposes of this study, only the academic factor, which encompasses the domains of SRL, academic achievement, and meeting personal, parental, and teacher academic expectations, were used. SRL was measured using the 10-items corresponding to its domain, which includes items on managing one's learning. Example items include 'How well can you concentrate on school subjects?' and 'How well can you study when there are other interesting things to do?' Similarly, academic achievement self-efficacy was measured using the 7-items corresponding to its domain, which includes items on student's beliefs on mastering various subjects. Example items include 'How well can you learn science?' and 'How well can you learn general mathematics?' For each item, participants rated their belief in their level of capability to complete specific activities related to each of the above domains using a 5-point scale ranging from 1 (i.e. *not at all*) to 5 (i.e. *extremely well*), with higher scores indicative of higher levels of self-efficacy. While the three-factor structure of the CPSE has been supported across various studies (e.g. Bandura, 2006; Pastorelli et al., 2001),

scholars have also shown support for the factor structure at the domain-level, particularly for the academic achievement and SRL domains (Choi et al., 2001; Fertmen & Primack, 2009; Miller et al., 1999). Previous studies have reported good internal consistency for SRL (α = .86 to .87) and fair internal consistency for academic achievement (α =.70 to .74; Bandura, 2006; Choi et al., 2001). In the current study, the estimated internal consistencies were α = .91 for SRL and α =.83 for academic achievement.

School and family belonging
School and family belonging were measured using the Milwaukee Youth Belongingness Scale (MYBS; Slaten et. al., 2018). The MYBS measures students' perceived level of belonging over three domains: peer, family, and school. Based on the work of Goodenow (1993) and Baumeister and Leary (1995), the MYBS is comprised of 24-items across three 8-item subscales to which participants rate their level of agreement using a 4-point Likert-type scale ranging from 1 (i.e. *disagree*) to 4 (i.e. *agree*). Higher scores are indicative of higher levels of belonging. For the purposes of the current study, school and family belonging subscales were utilised. The school belonging subscale assesses students' sense of connection to their school, with example items such as 'I feel comfortable being at school' and 'There is an adult at my school that I can talk to.' The family belonging subscale assesses students' connection and acceptance within their family, with example items such as 'My family rarely allows me to be myself' and 'I feel comfortable when I am around my family.' Slaten and colleagues (2018) found adequate factor structure for the MYBS with an estimated internal consistency of α = .83 for school belongingness and α = .89 for family belongingness. In the current study, the estimated internal consistencies were α = .79 for school belonging and α = .83 for family belonging.

Internal and external resiliency
Internal and external factors of resiliency were measured using the Student Resilience Survey (SRS; Sun & Stewart, 2007). The SRS is comprised of 47 items representing 12 domains believed to promote youths' resilience against adversity. These domains span factors external to a person (i.e. family connection, school connection, community connection, participation in home and school life, participation in community life, peer support) as well as internal or personal characteristics (i.e. self-esteem, empathy, problem solving, communication, and goals and aspirations). Similar to other scholars measuring resiliency (for a review, see Windle et al., 2011), domains were grouped using this external/internal distinction. Example items include 'Away from school, there is an adult who really cares about me' (external factor) and 'I can work out my problems' (internal factor). Participants rate the frequency of each item using a 5-point scale ranging from 1 (i.e. *never*) to 5 (i.e. *all the time*), with higher scores indicative of higher levels of perceived resilience. Previous studies have supported the factor structure of the SRS across K-12 student age groups and demonstrated its effectiveness in measuring resiliency factors predictive of mental health outcomes (Lereya et al., 2016; Sun & Stewart, 2007). Previous studies have reported good internal consistency for the SRS, ranging from α = .80 to .94 (Lereya et al., 2016; Sun & Stewart, 2007). In this study, the internal consistency was α = .89 for the intrinsic factors of resiliency and α = .86 for the extrinsic factors of resiliency.

Results
Model testing
To evaluate research hypotheses, we analysed the data using Structural Equation Modeling (SEM) in LISREL 8.7 (Jöreskog & Sörbom, 2004). While SEM is relatively complex, it was selected because it allows for the evaluation of several predictive constructs within a single model, while accounting for the assumptions that are associated with more traditional statistical approaches (e.g. multiple regression, analysis of variance). While the fit indices, or evaluation criteria, deviate from

more traditional approaches, SEM allows a researcher to evaluate a theoretical model from a more holistic lens by assessing the interplay between all of the constructs within the model, while accounting for the limiting assumptions of singular approaches and associated errors (Type 1 and Type 2; Little, 2013). Therefore, the current study followed the processes outlined by previous scholars to establish a parsimonious model that explains our theoretical model by examining all of the constructs within a single evaluation.

Following Monte Carlo simulation studies, Hu and Bentler (1999) showed that a combination of the standardized root mean residual (SRMR) and the chi-square test (χ^2), the comparative fit index (CFI), Root Mean Square Error of Approximation (RMSEA), or the Tucker-Lewis Index (TLI) minimises Type I and Type II errors. Moreover, a significant χ^2 can signify a poor fitting model, though this test is not reliable in larger samples (Tabachnick & Fidell, 2006). Criteria for fit indices range from less conservative (SRMR ≤ .10, CFI ≥ .90, RMSEA ≤ .10, TLI ≥ .90) to more conservative (SRMR ≤ .06, CFI ≥ .95, RMSEA ≤ .08, TLI ≥ .90; Hu & Bentler, 1999; West et al., 2012). In addition, we examined the Incremental Fit Index (IFI) for values >.95 and <1.00 to indicate better fit (West et al., 2012). We used an alpha level of .05. Scholars have cautioned using strict numerical cutoffs to determine model fit, rather, suggesting the consideration of other factors such as sample, model complexity, and the direction of path coefficients to inform decisions on fit (Tabachnick & Fidell, 2006; West et al., 2012).

Missing data
Of the sample, 78.6 per cent (N = 294) had no missing data, 20 per cent (N = 75) had missing data on one variable, and 1.4 per cent (N = 5) had missing data on two or three variables. Missing variable data was typically the result of a single item. Missing data was estimated using Markovchain Monte Carlo multiple imputation (MCMC-MI), which has been demonstrated to be more accurate and

preserve bias estimates than mean substitution or simple imputation in computer simulations (Peugh & Enders, 2004).

Descriptive statistics & measurement models
Before evaluating the explanatory model, we tested the independent construct measurement models to ensure each latent construct was measured accurately. Models demonstrated adequate fit and acceptable reliability, ranging from a low of α = .79 (i.e. school belonging) to a high of α= .91 (i.e. Self-regulated learning self-efficacy). Reliabilities, Cronbach's α, and goodness of fit indices of the confirmatory factor analyses are presented in Table 1. The standardised factor loadings for each item by construct are presented in Table 2, where loadings ranged from .75 to .94 for Extrinsic Resiliency, .73 to .89 for Intrinsic Resiliency, .67 to .81 for School Belonging, .77 to .92 for Family Belonging, .64 to .82 for Academic Achievement Self-Efficacy, and .74 to .88 for Self-Regulated Learning Self-Efficacy. Moreover, the mean self-regulated learning self-efficacy scale was 3.89 (on a 1–5 scale) and correlations between study variables ranged from .20 (i.e. Family Belonging and Academic Achievement Self-Efficacy) to .77 (i.e. Internal Resiliency and External Resiliency; Table 2). Means, standard deviations, and correlations are presented in Table 3. Overall, the descriptive statistics and measurement models suggest an acceptable fitting model, demonstrating the independence of each construct.

Structural model
Students' family belonging, extrinsic resilience, intrinsic resilience, school belonging, and academic achievement self-efficacy were linked to students' SRL self-efficacy (Figure 1). The final model showed an acceptable fit (SRMR =0.091; RMSEA = 0.096; TLI = 0.905; IFI = 0.912) and accounted for 56 per cent of the variance in students' self-regulated learning self-efficacy. All results below refer to direct effects and total effects (= direct effects + indirect effects), which are listed in Table 4.

Table 1: Reliabilities, Cronbach's α, and Goodness of Fit Indices of Confirmatory Factor Analyses

Scale	Relia-bility	Cron-bach's α	SRMR	CFI	IFI	TLI	RMSEA	Chi-sq	df	p	AGFI	RFI
Extrinsic resiliency	0.936	0.855	.006	1.000	1.000	1.000	.000	0.45	2	.799	.999	.998
Intrinsic resiliency	0.970	0.894	.079	.994	.994	.990	.032	31.95	23	.101	.987	.965
School Belonging	0.864	0.785	.054	.980	.980	.963	.058	17.95	8	.022	.983	.934
Family belonging	0.927	0.825	.034	.996	.996	.988	.054	4.20	2	.122	.990	.978
Academic achievement self-efficacy	0.892	0.826	.061	.985	.985	.975	.047	23.80	13	.033	.985	.947
Self-regulated learning self-efficacy	0.956	0.910	.068	.996	.996	.995	.018	39.33	35	.282	.988	.960

Family belonging

Direct effects and total effects for examined in the final model. Direct effects for family belongingness suggested that increases in belongingness predicted higher levels of academic achievement self-efficacy (β = .22, p < .001), school belongingness (β = .12, p < .001), and external resiliency (β = .55, p < .001). Additionally, the final model suggested that increases in family belongingness predicted higher levels of self-regulated learning self-efficacy (β = .18, p < .001), and total effects revealed that students whose family belonging exceeded the mean by 10 per cent averaged 2 per cent higher self-regulated learning self-efficacy (2% = 10% x 0.179, rounded, standardised coefficient from Table 4).

Extrinsic resilience

Direct effects for extrinsic resilience suggested that increases in extrinsic resilience predicted higher levels of academic achievement self-efficacy (β = .29, p < .001) and school belongingness (β = .04, p < .05). Additionally, the final model suggested that increases in extrinsic resilience predicted higher levels of self-regulated learning self-efficacy (β = .11, p < .001), and total effects revealed that students whose extrinsic resilience exceeded the mean by 10 per cent averaged 1 per cent higher self-regulated learning self-efficacy (2% = 10% x 0.108, rounded). Students whose family belonging exceeded the mean by 10 per cent averaged 1 per cent higher extrinsic resilience.

School belonging

In addition to the relationship with family belonging and external resiliency, direct effects for school belonging suggested that increases in school belongingness predicted higher levels of academic achievement self-efficacy (β = .27, p < .001). Additionally, the final model suggested that increases in school belonging predicted higher levels of self-regulated learning self-efficacy (β = .16, p < .001), and total effects revealed that students whose school belonging exceeded the mean by 10% averaged 2% higher self-regulated learning self-efficacy. Students whose family belonging or extrinsic resil-

Table 2: Factor loadings for each factor

Variable	Factor Loadings	SE	Uniqueness	SRMR	RMSEA	TLI	IFI
Extrinsic resiliency				.006	.000	1.000	1.000
XR3_1	0.941	0.027	0.116				
XR3_2	0.821	0.030	0.326				
XR3_3	0.888	0.030	0.212				
XR3_4	0.747	0.043	0.442				
Intrinsic resiliency				.079	.032	.990	.994
IR_3	0.845	0.030	0.285				
IR_4	0.803	0.025	0.355				
IR_7	0.730	0.035	0.467				
IR_8	0.845	0.028	0.286				
IR_12	0.810	0.029	0.343				
IR_15	0.848	0.031	0.281				
IR_16	0.892	0.018	0.205				
IR_17	0.788	0.030	0.379				
IR_19	0.790	0.030	0.376				
School belonging				.054	.058	.963	.980
YBS_1	0.811	0.042	0.342				
YBS_4	0.697	0.047	0.514				
YBS_6	0.719	0.047	0.483				
YBS_10	0.688	0.048	0.527				
YBS_17	0.670	0.049	0.551				
YBS_20	0.757	0.045	0.427				
Family belonging				.034	.054	.988	.996
YBS_9	0.787	0.042	0.380				
YBS_16	0.765	0.047	0.415				
YBS_21	0.890	0.029	0.208				
YBS_22	0.924	0.027	0.147				
Academic achievement self-efficacy				.061	.047	.975	.985
ASE_1	0.641	0.049	0.589				
ASE_2	0.815	0.032	0.336				
ASE_3	0.752	0.035	0.435				
ASE_4	0.705	0.043	0.503				
ASE_5	0.759	0.038	0.424				

Variable	Factor Loadings	SE	Uniqueness	SRMR	RMSEA	TLI	IFI
Academic achievement self–efficacy				.061	.047	.975	.985
ASE_6	0.813	0.033	0.339				
ASE_7	0.660	0.039	0.565				
Self–regulated learning self–efficacy				.068	.018	.995	.996
ASE_9	0.748	0.032	0.441				
ASE_10	0.875	0.021	0.235				
ASE_11	0.779	0.026	0.394				
ASE_12	0.744	0.031	0.446				
ASE_13	0.783	0.033	0.387				
ASE_14	0.859	0.024	0.262				
ASE_15	0.822	0.027	0.324				
ASE_16	0.810	0.027	0.344				
ASE_17	0.862	0.024	0.258				
ASE_18	0.875	0.019	0.235				

Table 3: Correlations, Means, and Standard Deviations for the Variables

Variable	M	SD	1	2	3	4	5	6
1. SRL Self–Efficacy	3.89	.96	–					
2. Academic Achievement Self–Efficacy	3.88	.91	.68***	–				
3. Family Belonging	3.56	.63	.25***	.20***	–			
4. School Belonging	3.34	.59	.54***	.35***	.47***	–		
5. External Resiliency	4.37	.95	.63***	.52***	.31***	.51***	–	
6. Internal Resiliency	4.10	.86	.69***	.59***	.21***	.53***	.77***	–

Note: *N*= 361. SRL=Self–Regulated Learning Self–Efficacy
*p < .05, **p < .01, ***p < .001

ience exceeded the mean by 10 per cent averaged 1 per cent or 0.4 per cent higher school belonging, respectively.

Academic achievement self-efficacy.
Direct effects for academic achievement self-efficacy suggested that increases predicted higher levels of self-regulated learning self-efficacy (β = .37, *p* < .001), where students whose academic achievement self-efficacy exceeded the mean by 10 per cent averaged 4 per cent higher self-regulated

learning self-efficacy. Moreover, students whose school belonging exceeded the mean by 10 per cent averaged 3 per cent higher academic achievement self-efficacy.

Intrinsic resilience
While intrinsic resilience was positively related to self-regulated learning self-efficacy, it was non-significant (β = .02, *p* > .05), and largely due to its interaction with school belonging. Specifically, the interaction between school belonging and

Table 4: Structural equation model total effects: unstandardized coefficients, (standard errors) and standardised coefficients

	SRL Self–Efficacy	Academic Achievement Self–Efficacy	School Belonging	External Resiliency
Family Belonging	0.241***	0.290***	0.106***	0.836***
	(0.050)	(0.039)	(0.012)	(0.066)
	0.179	0.215	0.122	0.552
External Resiliency	0.096***	0.257***	0.023*	
	(0.018)	(0.041)	(0.010)	
	0.108	0.289	0.040	
School Belonging	0.240***	0.424***		
	(0.038)	(0.069)		
	0.155	0.273		
Academic Achievement Self–Efficacy	0.365***			
	(0.039)			
	0.366			
Internal Resiliency	0.021			
	(0.091)			
	0.022			
School Belonging * Internal Resiliency	0.080***			
	(0.018)			
	0.422			

Note: *N*= 361. SRL=Self-Regulated Learning Self-Efficacy
*$p < .05$, **$p < .01$, ***$p < .001$

internal resiliency on self-regulated learning self-efficacy was significant ($\beta = .42$, $p < .001$), where students whose school belonging and intrinsic resilience exceeded the mean by 10 per cent averaged 4 per cent higher self-regulated learning self-efficacy.

Discussion
Overview of study
The current study involves utilising structure equation modeling to better understand the connection between SRL self-efficacy and belonging among youths. The results of the current study demonstrated a model that accounted for over 56 per cent of the vari-

ance in self-regulatory learning self-efficacy. Further, the most significant path predicting SRL self-efficacy was the interaction of school belonging and intrinsic resilience.

The exogenous variable of family belonging significantly related to SRL self-efficacy both directly and indirectly. Family belonging significantly impacted all other variables in the model, including: extrinsic resiliency, academic self-efficacy, and school belonging. These results are consistent with a previous study conducted among college students examining the impact of family belonging on academic/career related outcomes (Slaten & Baskin,
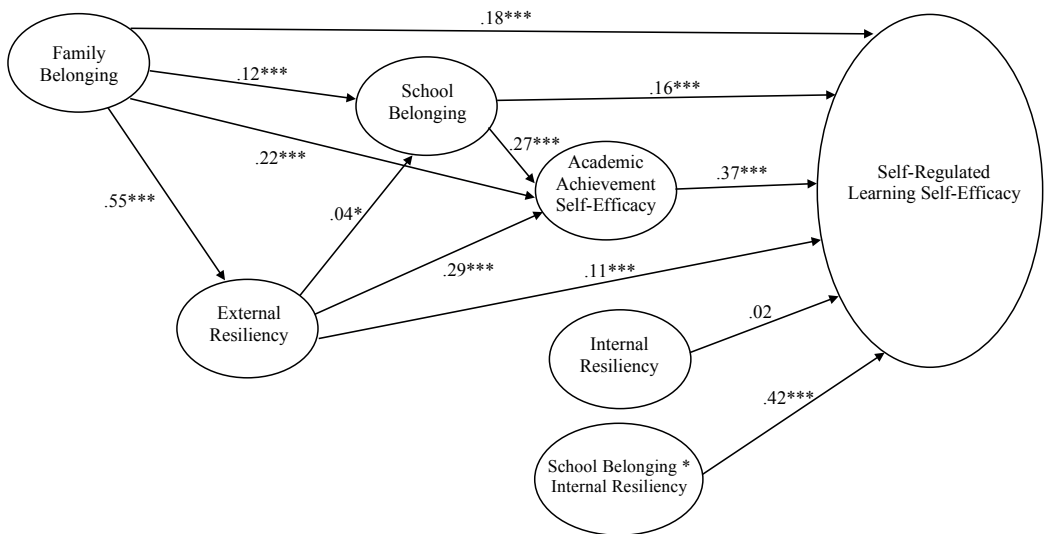
Figure 1: Structural equation model showing standardized coefficients of explanatory variables related to student's self–efficacy of self–regulated learning.

Note: *$p < .05$, **$p < .01$, ***$p < .0$

2014). Further, these results add to the work of Schultheiss & Blustein (1994) suggesting the importance of family dimensions and belonging on academic and career related outcomes for students. The importance of family belonging in this current study echoes the work of these previous scholars and reiterates the power of family belonging and its impact on school and academic related outcomes. One of the most interesting findings is the relationship between extrinsic resiliency and family belonging, given that only a few items on the extrinsic resiliency scale are related to family specifically. This suggests that it's possible that feeling a sense of belonging to your family may also be connected to additional community resources, something that should be investigated further in future research.

In addition to family belongingness, there are several other pathways that demonstrated significance. Academic achievement self-efficacy was found to be significantly related to SRL. This is confirmed by previous research on academic self-efficacy suggesting that the construct is related to a multitude of academic related outcomes (Schink, 1991; Bong & Skaalvik, 2003). Perhaps the novel result from this study

is that family belonging, extrinsic resilience, and school belonging significantly contributed to academic self-efficacy suggesting that if educational professionals and scholars intervene in providing interventions enhancing belonging and resilience, academic self-efficacy may increase as a result. The current study reinforces previous research regarding extrinsic resiliency factors, such as support, and the impact it has on academic-related outcomes (Bond et al., 2007). Previous work in K-12 school belonging literature has suggested that school-specific belonging (Goodenow, 1993) can have an impact on achievement-related outcomes and educational retention (Slaten et al., 2016).

Perhaps the most intriguing finding of the current study is the impact of the interaction of school belonging and intrinsic resilience on SRL self-efficacy. This path alone accounted for a significant portion of the variance explained in SRL self-efficacy. This is a powerful finding that has implications for scholars in the field and educators working to increase student confidence in learning. The current study provides a novel finding suggesting that the impact of the interaction of school belonging and intrinsic resilience

is significantly more powerful than the two constructs independently.

Limitations
The current study has several limitations. First, the study was conducted utilising a wide age range of early adolescents to late adolescents and future research may want to narrow the focus in order to more accurately ascertain the nuance differences between the broad age range. Secondly, the study was conducted in urban school settings and therefore is not generalisable to suburban and rural settings and future work could replicate the study to examine the different community settings. Lastly, the survey data was collected from students during the summer in between school semesters which may impact their comments regarding school and academic related questions.

Implications for Educational Psychology
Margolis and McGabe (2003) empha-sise the importance of professionals in school settings role in helping improve the self-regulatory learning self-efficacy of their students. The findings of the current study suggest that by designing classrooms and schools in such a way to foster stronger community, increasing school belonging-ness, may aid in efforts to improve SRL self-efficacy. This can be initiated and maintained by educational professionals in their buildings. This can happen through professional development workshops for teachers/staff, providing guidance lessens on fostering community and creating safe classroom environments, creating all school activities to have students experience a sense of belonging to others, and through advo-

cacy efforts by educational professionals to administration. Further, providing psycho-education around intrinsic resiliency skills (i.e. persistence, determination, confi-dence, hope) in small groups, classrooms, or individually. Pelco and Reed-Victor (2007) confirm this concept by suggesting in their review of the literature of SRL that classroom interventions focused on inter-personal interactions, communication, and community be developed to improve SRL. The findings in the current study are consistent with other work examining belonging and educational outcomes, most recently research conducted by Henderson and Guy (2017) affirming the importance of belonging in school and the impact on academic-related outcomes.

In addition to implications for school professionals, the current study has implica-tions for youths educational professionals in the community as well. Parents/guardians often refer their children to educational professionals in the community because of significant change in behaviour, usually academic performance is at least one of those changes (Weisz et al., 2005). Youths mental health counsellors and community educa-tional professionals can provide students with self-regulatory skill and intrinsic resil-iency skill training as part of the ongoing plan.

Address for correspondence
Christopher D. Slaten,
University of Missouri-Columbia, Department of Educational, School, and Counseling Psychology, 18 Hill Hall,
Columbia, MO, 65211
Email: slatenc@missouri.edu

References

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Macmillan.

Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*, *5*(307–337).

Bandura, A., Caprara, G.V., Barbaranelli, C., Gerbino, M. & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child Development*, *74*(3), 769–782.

Bandura, A., Barbaranelli, C., Caprara, G.V. & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, *67*(3), 1206–1222.

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497.

Begen, F.M. & Turner-Cobb, J.M. (2015). Benefits of belonging: Experimental manipulation of social inclusion to enhance psychological and physiological health parameters. *Psychology & Health*, *30*(5), 568–582.

Ben-Eliyahu, A. & Bernacki, M.L. (2015). Addressing complexities in self-regulated learning: A focus on contextual factors, contingencies, and dynamic relations. *Metacognition and Learning*, *10*(1), 1–13.

Benjamini, Y., Krieger, A.M. & Yekutieli, D. (2006). Adaptive linear step-up procedures that control the false discovery rate. *Biometrika, 93*, 491–507.

Bond, L., Butler, H., Thomas, L. et al. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health, 40*, 357–358.

Bong, M. & Clark, R.E. (1999). Comparison between self-concept and self-efficacy in academic motivation research. *Educational Psychologist*, *34*(3), 139–153.

Borman, G.D. & Overman, L.T. (2004). Academic resilience in mathematics among poor and minority students. *The Elementary School Journal*, *104*(3), 177–195.

Brown, S.D., Alpert, D., Lent, R.W., Hunt, G. & Brady, T. (1988). Perceived social support among college students: Factor structure of the Social Support Inventory. *Journal of Counseling Psychology*, *35*(4), 472.

Caprara, G.V., Barbaranelli, C., Pastorelli, C. & Cervone, D. (2004). The contribution of self-efficacy beliefs to psychosocial outcomes in adolescence: Predicting beyond global dispositional tendencies. *Personality and Individual Differences*, *37*(4), 751–763.

Chemers, M.M., Hu, L.T. & Garcia, B.F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, *93*(1), 55.

Cleary, T.J. & Zimmerman, B.J. (2004). Self-regulation empowerment program: A school-based program to enhance self-regulated and self-motivated cycles of student learning. *Psychology in the Schools*, *41*(5), 537–550.

Eccles, J.S., Midgley, C., Wigfield, A., Buchanan, C.M., Reuman, D., Flanagan, C. & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, *48*(2), 90.

Gallagher, M. (2012). Self-efficacy. In V. Ramachandran (Ed.) *Encyclopedia of human behavior, Vol. 2.* (pp.314–320). Oxford: Elsevier.

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, *13*(1), 21–43.

Greene, B.A., Miller, R.B., Crowson, H.M., Duke, B.L. & Akey, K.L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary Educational Psychology*, *29*(4), 462–482.

Henderson, D.X. & Guy, B. (2017). Social connectedness and its implication on student–teacher relationships and suspension. *Preventing School Failure: Alternative Education for Children and Youth*, *61*(1), 39–47.

Hu, L. & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55. http://dx.doi.org/10.1080/ 10705519909540118

Jöreskog, K. & Sörbom, D. (2004). *LISREL 8.7*. New York: Scientific Software International.

Kennedy, P. (2008). *A guide to econometrics*. Cambridge: Blackwell.

Khanlou, N. & Wray, R. (2014). A whole community approach toward child and youth resilience promotion: A review of resilience literature. *International Journal of Mental Health and Addiction*, *12*(1), 64–79.

Kitsantas, A., Steen, S. & Huie, F. (2009). The role of self-regulated strategies and goal orientation in predicting achievement of elementary school children. *International Electronic Journal of Elementary Education*, *2*(1), 65–81.

Lereya, S.T., Humphrey, N., Patalay, P. et al. (2016). The student resilience survey: Psychometric validation and associations with mental health. *Child Adolescent Psychiatry and Mental Health*, *10*(44), 1–15. doi:10.1186/s13034-016-0132-5

Little, T.D. (2013). *Longitudinal structural equation modeling*. New York: Guilford Press.

Mallinckrodt, B. & Leong, F.T. (1992). International graduate students, stress, and social support. *Journal of College Student Development*, *33*(1), 71–78.

Mallinckrodt, B. & Wei, M. (2005). Attachment, social competencies, social support, and psychological distress. *Journal of Counseling Psychology*, *52*(3), 358.

Margolis, H. & McCabe, P.P. (2003). Self-efficacy: A key to improving the motivation of struggling learners. *Preventing School Failure: Alternative Education for Children and Youth*, *47*(4), 162–169.

Maslow, A.H. (1954). Personality and motivation. *Harlow, England: Longman*, *1*, 987.

McCardle, L. & Hadwin, A.F. (2015). Using multiple, contextualized data sources to measure learners' perceptions of their self-regulated learning. *Metacognition and Learning*, *10*(1), 43–75.

Multon, K.D., Brown, S.D. & Lent, R.W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology, 38*(1), 30–38.

Newman, B.M., Lohman, B.J. & Newman, P.R. (2007). Peer group membership and a sense of belonging: Their relationship to adolescent behavior problems. *Adolescence*, *42*(166), 241.

Nota, L., Soresi, S. & Zimmerman, B.J. (2004). Self-regulation and academic achievement and resilience: A longitudinal study. *International Journal of Educational Research*, *41*(3), 198–215.

Osterman, K.F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, *70*(3), 323–367.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543–578.

Paris, S.G. & Paris, A.H. (2001). Classroom applications of research on self-regulated learning. *Educational psychologist*, *36*(2), 89–101.

Pelco, L.E. & Reed-Victor, E. (2007). Self-regulation and learning-related social skills: Intervention ideas for elementary school students. *Preventing School Failure: Alternative Education for Children and Youth*, *51*(3), 36–42.

Peugh, J.L. & Enders, C.K. (2004). Missing data in educational research. *Review of Educational Research*, *74*, 525–556.

Ryan, R.M. & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68.

Ryan, R.M. & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, *65*(3), 529–565.

Schunk, D.H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist*, *25*(1), 71–86.

Schunk, D.H. (1996). Learning theories. *Prentice Hall Inc., New Jersey*, 1–576.

Schultheiss, D.P. & Blustein, D.L. (1994). Contributions of family relationship factors to the identity formation process. *Journal of Counseling & Development*, *73*(2), 159–166.

Slaten, C.D. & Baskin, T.W. (2014). Examining the impact of peer and family belongingness on the career decision-making difficulties of young adults: A path analytic approach. *Journal of Career Assessment, 22*, 59–74.

Slaten, C.D., Ferguson, J.K., Allen, K.A., Brodrick, D.V. & Waters, L. (2016). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychologist*, *33*, 1–15.

Slaten, C.D., Rose, C.A., Bonifay, W. & Ferguson, J.K. (2018, December 17). The Milwaukee Youth Belongingness Scale (MYBS): Development and validation of the scale utilizing item response theory. *School Psychology Quarterly,* Advance online publication.

Sobel, M.E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.) *Sociological Methodology* (pp.290–312). Washington DC: American Sociological Association.

Sun, J. & Stewart, D. (2007). Development of population-based resilience measures in the primary school setting. *Health Education*, *7*(6), 575–599.

Tabachnick, B.G. & Fidell, L.S. (2006). *Using multivariate statistics*. Boston: Allyn & Bacon.

Ungar, M. & Liebenberg, L. (2011). Assessing resilience across cultures using mixed methods: Construction of the child and youth resilience measure. *Journal of Mixed Methods Research*, *5*(2), 126–149.

Van Dinther, M., Dochy, F. & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational Research Review*, *6*(2), 95–108.

Weisz, J.R., Sandler, I., Durlak, J.A. & Anton, B.S. (2005). Promoting and protecting through evidence based prevention and treatment. *American Psychologist, 60*, 628–648.

West, S.G., Taylor, A.B. & Wu, W. (2012). Model fit and model selection in structural equation modeling. In R.H. Hoyle (Ed.) *Handbook of structural equation modeling* (pp.209–231). New York: Guilford.

Windle, G., Bennett, K.M. & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and Quality of Life Outcomes, 9*(8), 1–18.

Wood, R., Bandura, A. & Bailey, T. (1990). Mechanisms governing organizational performance in complex decision-making environments. *Organizational Behavior and Human Decision Processes*, *46*(2), 181–201.

Zimmerman, B.J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, *81*(3), 329–339.

Zimmerman, B.J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82–91.

Zimmerman, B.J. & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal, 31*(4), 845–862.

Zimmerman, B.J. & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology, 82*(1), 51.

Zimmerman, B.J., Bandura, A. & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal, 29*(3), 663–676.

Zimmerman, B.J., Boekarts, M., Pintrich, P. & Zeidner, M. (2000). A social cognitive perspective. *Handbook of self-regulation, 13*(1), 695–716.

Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41*(2), 64–70.

Assessing perceived school support, rule acceptance and attachment: Evaluation of the psychometric properties of the School Belonging Scale (SBS)

Roberto H. Parada

Aim: To evaluate the psychometric properties of a new measure of school belonging.

Rationale: The sense of belonging to the school (organisation) as opposed to individuals within a school (peers) plays a significant part in pupils' behaviour and wellbeing. To date, few psychometrically robust, theoretically driven and brief scales exist. Consisting of only 12 items, the School Belonging Scale (SBS) was developed to assess three theoretically derived aspects of school belonging: attachment or bonding to school, acceptance of rules, and perceived school support.

Method: A total of 3522 (42.9 per cent male) pupils in Years 7 to 11 from 6 metropolitan private schools in Sydney, Australia participated in the present study. Participants ranged from 11 years to 17 years of age (M=13.8, SD= 1.4). The data collected from the participants was used to assesses the SBS's reliability and Confirmatory Factor Analysis (CFA) was used to assess its factor structure. Additional tests of factorial invariance were also carried out to test the validity of the measure across boys and girls.

Findings: Internal consistency estimates were very good to excellent. Results of the CFA indicated that all three factors were well defined. Invariance testing showed that the SBS is invariant across boys and girls.

Limitations: Participants were from private schools; other limitations are discussed.

Conclusions: The SBS is reliable and applicable to both males and female pupils. It can be used as a brief assessment for school belonging in research, intervention development, and evaluation.

Keywords: School belonging; confirmatory factor analysis; MPlus; school attachment.

Introduction

A multifaceted view of school belonging

ALTHOUGH often used, the concept of school belonging has been operationalised in various ways in the literature to include attachment, bonding, connectedness, inclusion, liking school, fitting in, and engagement to name a few (Jimerson et al., 2003; Libbey, 2004; Hazel, Vazirabadi & Gallagher, 2013). In general, however, school belonging is regarded as a student's sense of affiliation or connection to his or her school and community (Slaten et al., 2016; Boyle & Allen, 2018). Belonging is regarded as a fundamental psychological need (Baumeister & Leary, 1995; Deci &

Ryan, 2000) and several studies have demonstrated links between pupil's sense of school belonging and positive school achievement, health behaviours, and social emotional competence (Eisenberg et al., 2003; Allen et al., 2017). Conversely, a lack of school belonging is associated with school misconduct, loneliness, psychological distress, psychosocial disturbance and mental illness (Allen & Bowles, 2012; Demanet & Van Houtte, 2012). These effects have been shown to be long lasting. Longitudinal studies have demonstrated that for those years in which pupils report higher school belonging, they also felt that school was more enjoyable and

more useful, above and beyond their actual level of achievement (Neel & Fuligni, 2013). As such, school belonging has been recognised as an urgent and necessary area of research and interventions (Boyle & Allen, 2018; Roffey & Boyle, 2018).

Various instruments have been proposed for the measurement of school belonging, amongst the most popular being the Psychological Sense of School Membership (PSSM) Questionnaire (Goodenow, 1993; You et al., 2011), recent robust evaluations of its psychometric properties have indicated that the questionnaire's hypothesised factor structure has been difficult to replicate across different groups, and seldom are all items of the questionnaire used (You et al., 2011; Ye & Wallace, 2014; Abubakar et al., 2016). Hodges and colleagues conducted a thorough systematic review following PRISMA guidelines of the literature evaluating the psychometric quality of self-report school connectedness measures available for students aged 6 to 14 years. They examined published and grey literature using the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) taxonomy. Although they were able to find some measures which met some acceptable standards these were long (e.g. 35 items) and/or they did not appear that they met criteria to be used for interventions studies as, among other requirements, their factor structure (particularly factorial invariance at the scalar level – see below) had not been adequately assessed. In summary they concluded that there was significant need for further research in developing new and evaluating existing measure of school belonging (Hodges et al., 2018).

The present investigation

The validation of measures of psychological constructs, like school belonging, should ideally follow a within-network and between-network approach (Marsh et al., 2005). Within-network research seeks to empirically demonstrate the hypothesised features of the measure itself, such as, its factors or its measurement structure. This may be achieved with the use of techniques including reliability and confirmatory factor analyses. For example, within-network studies can test the dimensionality, reliability and validity of a measure with different groups to show that the measure is consistent with the theoretical literature of the construct it purports to measure. Between-network research establishes whether a logical, theoretically consistent pattern of relations between measures of school belonging and other constructs exists. Between-network studies seek to understand the effects or relations *between* the construct measured and desirable or undesirable outcomes and/or other constructs of importance (Marsh et al., 2005).

The present investigation follows a within-network approach and focuses on the results of the psychometric evaluation of a new very brief multi-factorial measure of school belonging for high school students, the School Belonging Scale.

Although a number of dimensions of school belonging have been proposed for example, attachment to school, teacher support, and several others (Abubakar et al., 2016), reviews have found that they have three operational aspects in common: (a) school-based relationships and experiences, such as support, (b) educational climate, such as student-teacher relationships/ disciplinary climate, and (c) and students' general feelings about school as a whole (Allen et al.; Chiu et al., 2016). As such, the School Belonging Scale (SBS) was designed to assess three aspects of school belonging: School attachment or bonding; Rule Acceptance (perception of disciplinary climate), and School support (see Ma, 2003; Wilson, 2004; McNeely & Falci, 2004; Oelsner et al., 2011; Allen, & Bowles, 2012; and meta-analysis by Allen et al., 2016). Twelve items make up the SBS with respondents indicating their answer on a six-point Likert scale (1 = completely disagree to 6 = agree). Table 1 presents item samples and description of the scales of the SBS.

Table 1: Summary description of the School Belonging Scale (SBS)

Scale	Description	Sample Items
Support	Feeling that the school as a whole supports and cares about the student	• I can count on help and support, if I need it, from my school • I can get back as much support as I give from my school
Rule Acceptance	Perceptions that the school rules are purposeful, fair and reasonable; pupil's perception of disciplinary climate	• I accept that there is good sense in the rules and procedures of my school • I agree that there are suitable standards and values set by my school
Attachment	Perceptions of connectedness and enjoyment of being at the school	• I feel I have a strong connection with my school • I feel best when I am at my school

Note: Responses to the 12 items were made on a six-point Likert scale 1=Completely disagree – 6= Agree. Items were preceded by the stem sentence 'about you and your school'. Each scale is made of four items. See appendix for more detail.

A combination of: reviewing the available literature for items and dimensions included in other instruments; prior language pilot testing of the items with adolescents; desire to keep the scale as brief as possible; item wording having high face validity; and importantly psychometric and statistical considerations which suggest that a minimum of four indicators per factor are recommended in scale development (see Marsh et al., 1998) contributed to the selection of the 12 items which were generated for the scale.

Method

Participants

Participants in the present investigation were part of a larger longitudinal study looking at the effectiveness of an anti-bullying intervention in secondary schools led by the author. The SBS was one of the instruments specifically developed by the author for this study. Schools participating in the present investigation were drawn from high schools affiliated to a large West of Sydney, Australia, Catholic Education Office Diocese. Six schools volunteered to participate. A total of 3522 pupils were involved. Participants ranged from 11 years to 17 years of age (M = 13.8, SD = 1.4). The sample included pupils from Years 7 to 11, 42.9 per cent males and 57.1 per cent females. The majority of the sample was

Australian born (86.1 per cent) with 19 per cent indicating they spoke a language other than English at home.

Consent to conduct the current study was obtained from Western Sydney University Ethics Review Committee (Human Subjects) as well as from the Catholic Education Office. Furthermore, active consent was sought from each of the school's Headmaster, and from each of the parents or legal guardians of the pupils participating in this investigation. In an active consent procedure, parents needed to allow their children to complete the questionnaires by signing and returning a consent form to the school. This procedure was completed by all participants prior to the administration of the questionnaire package.

Statistical analysis

The School Belonging Scale (SBS) is hypothesised to measure three key aspects of feelings of belonging to a school: feelings of being supported; acceptance of school rules as fair; and attachment to the school. Structural equation modelling (SEM), in particular confirmatory factor analysis (CFA), was used to assess this structure (see Byrne, 2012; Marsh et al., 2005; Kline, 2015). Between-network results, that is research on the relatedness or difference in school belonging with other constructs such as

gender, may be difficult to interpret when it is uncertain whether males and females interpret the instrument in a similar fashion. Mean differences across males and females may be due to non-equivalence of the instrument, rather than being caused by differences at the construct level. An extension of CFA is Multi-Group CFA (MG-CFA) with which it can be estimated if a set of indicators measures the same constructs with equal precision with different samples, referred to as measurement invariance (Marsh, 1994; Marsh et al., 2004, Marsh et al., 2005; Kline, 2015, McKay et al., 2016;). As such, tests of invariance across gender were also carried out.

All analysis in the present investigation were carried out with IBM-SPSS (IBM Corp., 2017) and MPlus 8.1 (Muthén & Muthén, 2018). Maximum likelihood was the method of estimation used for each of the models, which is robust in relation to violations of assumptions of normality, particularly in relation to parameter estimates (factor loadings, factor correlations, path coefficients, etc.) which are of primary concern for the present investigation (Hu et al., 1992). There was little missing data for the SBS individual items responses – Average 0.5 per cent (Range 0.2 to 0.8 per cent) as such, Expectation Maximization (EM) algorithm, which estimates the means, the covariance matrix, and the correlation of quantitative variables with missing values using an iterative process, was used to impute missing values prior to CFA and MG-CFA being carried out (see Schafer & Graham, 2002; Graham, 2009).

In order to evaluate the fit of the models tested, a number of fit indices were used. Although this included χ^2 test, for very large sample sizes and where multivariate normality is suspect, there is a high risk of relatively good-fitting models being rejected on the basis of the χ^2 test (Hoyle, 1995; Bentler & Bonett, 1980; Marsh, 1994; Marsh et al., 1996). For this reason, a series of adjunct fit indexes are also reported to evaluate model fit. These are the root mean square error of approximation (RMSEA, Browne &

Cudeck, 1993). The RMSEA is sensitive to model misspecification and model quality (MacCallum & Austin, 2000; Byrne, 2012). Values closer to zero indicate a better fit (i.e. lesser discrepancy between the observed and hypothesised matrix). A value of .05 indicates a good fit and values as high as .08 represent reasonable errors of approximation (Browne & Cudeck, 1993). Following Marsh et al. (1996) and Byrne (2012), also reported are the Tucker-Lewis index (TLI; Bentler & Bonett, 1980), and the comparative fit index (CFI; Bentler, 1990). Together with the RMSEA they provide a relatively nonbiased indication of fit for large sample sizes. The CFI contains no penalty for lack of parsimony (i.e. favouring more complex models), so that improved fit may be due to the introduction of additional parameters and reflect capitalisation on chance, whereas TLI and RMSEA contain penalties for lack of parsimony. The TLI and CFI yield values ranging from zero to 1.00, with values greater than .90 and .95 being indicative of acceptable and excellent fit to the data (Marsh, 1994; Marsh et al., 2005; Schumacker & Lomax, 1996; see also Putnick & Bornstein, 2016).

Analytical approach

Confirmatory Factor Analysis (CFA) was conducted using all the available data for the 12 items. In the model tested, each measured variable was permitted to load only on the one factor it was proposed to reflect by constraining all other correlations and uniquenesses (residuals for each measured variable) to zero. In the second stage, the measurement invariance of the SBS was tested in a hierarchical manner as follows: First, configural invariance in which all loadings, intercepts and uniquenesses are freely estimated for both groups. This is the baseline model assessing whether or not the same items measure the construct across male and females. Second, metric invariance (also known as weak invariance) was assessed. Metric invariance builds upon configural invariance by requiring that, in addition to the constructs being measured

by the same items, the factor loadings of those items must be equivalent across administrations. Attaining invariance of factor loadings suggests that the construct has the same meaning for male and female pupils. Third, scalar invariance (strong invariance) builds upon metric invariance by holding item intercepts to be equivalent in the two groups. Scalar invariance signifies that mean differences in the latent construct capture all mean differences in the shared variance of the items. The ability to justify mean comparisons across time, across groups and in relation to other constructs of interest (e.g. mental health; school achievement) is established by attaining scalar or strong invariance. Although further invariance test may be conducted it has been widely recognised that testing for invariance of error for example (i.e. uniquenesses/residuals) is an overly restrictive test of the data (Byrne, 2012; Byrne et al., 1989). As residuals are not part of the latent factor, testing for residual invariance is not a prerequisite for testing mean differences – as would occur in between network research. In effect, the item residuals are inconsequential to interpretation of latent mean differences (Putnick & Bornstein, 2016) and as such were not included. In each sequence of invariance, the preceding model served as reference. Reliability, as Cronbach's alpha for all the scales were also calculated.

Results
Reliability of the SBS
Internal consistency reliability estimates of the three scales of the SBS are presented in Table 2. For the total sample of pupils, internal consistency estimates were excellent (range = .87 to .88), with a median α of .88. The attachment scale had the lowest reliability coefficient, although it was still very good (α = .87). The reliability estimates were only slightly different for boys and girls (median α = .87 for boys and .88 for girls; mean α for both = .87).

Factorial Structure of the SBS: Confirmatory Factor Analysis (CFA)
Table 3 presents the results of Confirmatory Factor Analysis (CFA). The three factor model for the SBS provided an acceptable fit for the data: RMSEA = .079; TLI = .95; and CFI = .96 (χ^2 = 1157.857, df = 51 p < .001). The factor loadings indicate that all three factors are well defined. Each factor loading is statistically significant and substantial in size (range = .70 to .88; mean .80; median = .79).

Table 3 also presents the factor correlations among the three factors of the SBS. Correlations among the factors ranged from .71 to .87. Due to the high correlations between the three latent factors of the SBS, a second CFA was carried out to test a model containing one higher-order latent factor (school belonging), which affected the three

Table 2: Internal Consistency Coefficients Alpha (α) and number of items per scale for the School Belonging Scale (SBS) at Time 1 for Total Student Sample, Boys and Girls

School Belonging Scale	Coefficient Alpha (α)			
	All Pupils (*N* = 3522)	Boys (*N* = 1510)	Girls (*N* = 2012)	No. of Items
Scales				
Support	.88	.87	.86	4
Rules Acceptance	.88	.87	.88	4
Attachment	.87	.86	.88	4
Median reliability	.88	.87	.88	
Mean reliability	.88	.87	.87	

Table 3: Confirmatory Factor Analysis of the School Belonging Scale (SBS)

	Support	Rule Acceptance	Attachment
Items	Factor Loadings		
1	.76	.85	.77
2	.79	.71	.70
3	.79	.88	.86
4	.88	.79	.85
	Factor Correlations		
Suppt	--		
RulAcc	.71	--	
Attch	.87	.73	--
	Model Fit		
n^a	$\chi2^b$ df^c	TLI^d CFI^e	$RMSEA^f$
3522	1157.857* 51	.95 .96	.079

Note: All parameter estimates are presented in completely standardized format. For the 3 factor a priori model, each factor was inferred on the basis of four measured variables (indicated as 1–4 in the upper left column). Each measured variable was allowed to load on only the factor that it was designed to measure and all other factor loadings were constrained to be zero. All factor loadings for measured variables are statistically significant. [a] Sample size, [b]Chi square; [c] Degrees of Freedom; [d] Tucker-Lewis Index; [e]Comparative Fit Index; [f]Root Mean Square Error of Approximation. * $p < .001$.

scale factors (support, rule acceptance, and attachment). The results showed that both models had acceptable fit to the data (higher-order model fit indices were: TLI =.95; CFI = .96; RMSEA = .078). Therefore, the alternative representations are similar in terms of fit, but there may be advantages of one or the other in particular situations (e.g. use of higher-order factors avoids problems of multicollinearity but loses some of the richness of the description).

Factorial Structure Invariance of the SBS: Multi Group – CFA (MG-CFA)
Here, chi-square tests of model fit are reported but changes in fit indices will also be used as the basis of invariance assessment (see Chen, 2007; Cheung & Rensvold, 2002; Vandenberg & Lance, 2000). A decrease change (∆) in CFI of .01 or less and an increase ∆RMSEA of .015 or less

between a more restricted model and the preceding one indicate that the invariance hypothesis should not be rejected. It should also be noted that for indices incorporating a penalty for lack of parsimony such as the TLI and RMSEA, it is possible for a more restrictive model to result in better fit than a less restricted model; thus changes in TLI should also be inspected (Marsh, Hau et al., 2004). Results of the Multi Group–CFA are presented in Table 4. The multi-group analysis for the configural model yielded a χ^2 value of 1271.55 (df = 102) across boys and girls. The goodness of fit indexes indicates a reasonable fit (RMSEA = .081; TLI = .95; CFI = .96), providing support for the conclusion that a common three-factor model is satisfactory for both boys and girls. Tests for Metric invariance results (Model 2, Table 4) yielded a χ^2 value of 1286.12 (df = 111) across boys and girls. Other than for RMSEA which

Table 4: Invariance Tests Across Gender for the School Belonging Scale (SBS)

Model	χ^{2a}	df^b	TLI^c	CFI^d	$RMSEA^e$
1 Configural	1271.55*	102	.95	.96	.081
2 Metric	1286.12*	111	.95	.96	.078
3 Scalar	1325.91*	120	.95	.96	.076

Note: [a] Chi square; [b] Degrees of Freedom; [c] Tucker-Lewis Index; [d]Comparative Fit Index; [e] Root Mean Square Error of Approximation. * $p < .001$.

improved (.081 to .078), the fit of the model was relatively unchanged by the imposition of these additional constraints when compared to the initial baseline model without loading constraints (TLI = .95 sustained; CFI = .96 sustained). Therefore, it was concluded that the results support the metric invariance. Similar results were obtained for tests of scalar invariance in which RMSEA improved further (.078 to .076) with TLI and CFI showing no significant changes.

Conclusion

Results from the CFA conducted to assess the hypothetical structure of the SBS indicated that the three factor model: support, rule acceptance, and attachment, is adequate. The results from the measurement invariance tests conducted in relation to pupil's gender showed that the SBS meets criteria for invariance up to the scalar level. Scalar invariance signifies that mean differences in the latent construct (i.e. scale scores) capture all mean differences in the shared variance of the items. The CFI, TLI, and RMSEA indicated adequate model fit at all steps of the analysis. The ΔCFI and ΔTLI never showed a decrease superior to .01, the ΔRMSEA never showed an increase superior to .015. Internal consistency reliability estimates for support, rule acceptance, and attachment were excellent considering each scale has only 4 items (Mean α = .88).

Discussion

In order to capitalise on the documented benefits of strong school belonging and reduce the negative impact of reduced

school connectedness on pupils wellbeing and educational attainments, the reliable and valid measurement of this construct is important to researchers and educators alike (Hodges et al., 2018). The results of this investigation show that despite only being 12 items, the School Belonging Scale is a highly reliable, multidimensional measure which is invariant across boys and girls up to the scalar level. This suggests that scores obtained with the measure are not biased in relation to gender, and comparison between the groups are more an indication of true differences, rather than due to measurement error. The brevity and strong psychometric properties of the SBS makes it suitable to be included in large scale batteries assessing the effectiveness of interventions which seek to foment school belonging. Similarly, it can be used by schools to quickly attain a snapshot of their pupil's sense of feeling supported, disciplinary climate and attachment to their school prior to and post-intervention efforts.

As this is a scale in its early developmental stage, it is important to note some limitations in relation to the present investigation. The sample used was from the private school sector and pupils are likely to have been from a higher Socioeconomic Status (SES) defined as 'people's access to material and social resources, and their ability to participate in society' (ABS, 2008, p.5) than average. It should be noted however that Ma (2003) in a study of over 6000 students in Year 8 in 92 schools found no evidence of differential effects on school belonging based on SES when other factors were controlled for (see also McNeely, Nonne-

maker & Blum, 2002). Nevertheless, future studies of the SBS could use MG-CFA to test invariance across private/public schools. Similarly, the validity of the SBS needs to be assessed across primary, middle, and tertiary settings. This is particularly important given the evidence that sense of school belonging seems to be differentially impacted by developmental factors (Slaten et al., 2016; Allen et al., 2016; Boyle & Allen, 2018). It should also be noted that the results of CFA conducted to assess the a priori structure of the SBS provide evidence for the multidimensional nature of the instrument. However, the correlations between the latent factors were quite high. This is a quandary, as speaking from a measurement perspective it implies poor discrimination between the factors. Still, results from further analysis which tested a single higher second order factor to account for the high correlation did provide a satisfactory fit but no advantage over the one level three factor solution. Theoretically, on the other hand, it demonstrates that the individual factors are associated with a singular higher order 'school belonging' latent construct. This is, particularly important for the inclusion of pupil's disciplinary climate perceptions (Rule Acceptance factor), which the high cross factor correlations imply is indeed highly related to sense of school attachment and school support, a novel finding on its own.

When young people feel they are supported, cared for and wanted by their school, it makes it less likely that they will engage in behaviours that place their wellbeing at risk (Shochet et al., 2011).

Given school belonging's positive influence on, resilience, intrinsic motivation, mental health, school retention, academic and social functioning (Anderman, 2002; Pittman & Richmond, 2007; Demanet & Van Houtte, 2012) there are significant empirical grounds for the promotion and study of school belonging. Due to its brevity and strong psychometric properties, the School Belonging Scale may be used by school administration personnel, as well as, school and educational psychologist to quickly assess the progress of interventions at the school and student level. Particularly in relation to some of the components of school belonging such as school attachment, rule acceptance, and school support.

Address for correspondence
Roberto H Parada,
School of Education, Western Sydney University, Locked Bag 1797, Penrith NSW 2751, Australia
Email: r.parada@westernsydney.edu.au

References

Abubakar, A., van de Vijver, F.J., Alonso-Arbiol, I. et al. (2016). Assessing sense of school belonging across cultural contexts using the PSSM: Measurement and functional invariance. *Journal of Psychoeducational Assessment, 34*(4), 380–388.

Allen, K.A. & Bowles, T. (2012). Belonging as a guiding principle in the education of adolescents. *Australian Journal of Educational & Developmental Psychology, 12*, 108–119.

Allen, K., Kern, M.L., Vella-Brodrick, D. et al. (2016). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review, 30*, 1–34. doi:10.1007/s10648-016-9389-8

Allen, K., Vella-Brodrick, D. & Waters, L. (2017). School belonging and the role of social and emotional competencies in fostering an adolescent's sense of connectedness to their school. In *Social and emotional learning in Australia and the Asia-Pacific* (pp.83–99). Springer.

Anderman, E.M. (2002). School effects on psychological outcomes during adolescence. *Journal of Educational Psychology, 94*, 795–809.

Australian Bureau of Statistics (ABS). (2008). *Socioeconomic Indexes for Areas (SEIFA) –Technical Paper 2006*, cat. no. 2039.0.55.001, ABS, Canberra, Australia.

Baumeister, R.F. & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 11*, 497–529.

Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238–246.

Bentler, P.M. & Bonett, D.G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*, 588–606.

Boyle, C. & Allen, K. (2018). The path least followed: Moving into the future of school belonging research and towards clearer interventions. In K.-A. Allen & C. Boyle (Eds.) *Pathways to belonging contemporary perspectives of school belonging* (pp.219–224). Netherlands: Brill.

Browne, M.W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J.S. Long (Eds.) *Testing structural equation models* (pp.136–162). Newbury Park, CA: Sage.

Byrne, B.M. (2012). *Structural equation modeling with MPlus: Basic concepts, applications, and programming*. London: Routledge.

Byrne, B.M., Shavelson, R.J. & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin, 105*(3), 456.

Chen, F.F. (2007). Sensitivity of goodness of fit indexes to lack of measurement. *Structural Equation Modeling, 14*, 464–504.

Cheung, G.W. & Rensvold, R.B. (2002). Evaluating goodness-of fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*, 233–255.

Chiu, M.M., Chow, B.W.Y., McBride, C. & Mol, S.T. (2016). Students' sense of belonging at school in 41 countries: Cross-cultural variability. *Journal of Cross-Cultural Psychology, 47*(2), 175–196. doi:10.1177/0022022115617031

Deci, E.L. & Ryan, R.M. (2000). The 'What' and 'Why' of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry, 11*(4), 227–268.

Demanet, J. & Van Houtte, M. (2012). School belonging and school misconduct: The differing role of teacher and peer attachment. *Journal of Youth Adolescence, 41*, 499–514. doi:10.1007/s10964-011-9674-2

Eisenberg, M.E., Neumark-Sztainer, D. & Perry, C. (2003). Peer harassment, school connectedness, and academic achievement. *Journal of School Health, 73*(8), 311–316.

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79–90.

Graham, J.W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60*, 549–576.

Hazel, C.E., Vazirabadi, G.E. & Gallagher, J. (2013). Measuring aspirations, belonging, and productivity in secondary students: Validation of the student school engagement measure. *Psychology in the Schools, 50*, 689–704.

Hodges, A., Cordier, R., Joosten, A. et al. (2018). Evaluating the psychometric quality of school connectedness measures: A systematic review. *PLoS ONE, 13*, e0203373. doi:10.1371/journal.pone.0203373

Hoyle, R.H. (Ed.) (1995). *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage Publications Inc.

Hu, L., Bentler, P.M. & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted? *Psychological Bulletin, 112*, 351–362.

IBM Corp. (2017). IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.

Jimerson, S.R., Campos, E. & Greif, J.L. (2003). Toward an understanding of definitions and measures of school engagement and related terms. *California School Psychologist, 8*, 7–27.

Kline, R.B. (2015). *Principles and practice of structural equation modelling* (4th edn). New York: Guilford publications.

Libbey, H.P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health, 74*, 274–283.

Ma, X. (2003). Sense of belonging to school: Can schools make a difference? *The Journal of Educational Research, 96*(6), 340–349.

MacCallum, R.C. & Austin, J.T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology, 51,* 201–226.

Marsh, H.W. (1994). Confirmatory factor analysis models of factorial invariance: A multifaceted approach. *Structural Equation Modeling, 1,* 5–34.

Marsh, H.W., Balla, J.R. & Hau, K.T. (1996). An evaluation of incremental fit indices: A clarification of mathematical processes. In G.A. Marcoulides & R.E. Schumacker (Eds.) *Advanced structural equation modelling techniques.* Hillsdale, NJ: Erlbaum.

Marsh, H.W., Hau, K.T., Balla, J.R. & Grayson, D. (1998). Is more ever too much? The number of indicators per factor in confirmatory factor analysis. *Multivariate Behavioral Research, 33*(2), 181–220.

Marsh, H.W., Ellis, L.A., Parada, R.H. et al. (2005). A short version of the Self-Description Questionnaire II: operationalizing criteria for short-form evaluation with new applications of confirmatory factor analyses. *Psychological Assessment, 17,* 81–102. doi:10.1037/1040-3590.17.1.81

Marsh, H.W., Hau, K.T. & Wen, Z. (2004). In search of golden rules: comment on hypothesis testing approaches to setting cut-off values for fit indices and dangers in overgeneralising Hu & Bentler's (1999) findings. *Structural Equation Modeling*, 11, 320–341.

Marsh, H.W., Parada, R.H. & Ayotte, V. (2004). A multidimensional perspective of relations between self-concept (Self-Description Questionnaire II) and adolescent mental health (Youth Self-Report). *Psychological Assessment, 16*(1), 27–41.

McKay, M.T., Perry, J.L. & Harvey, S.A. (2016). The factorial validity and reliability of three versions of the Aggression Questionnaire using Confirmatory Factor Analysis and Exploratory Structural Equation Modelling. *Personality and Individual Differences, 90,* 12–15. doi:10.1016/j.paid.2015.10.028

McNeely, C.A., Nonnemaker, J.M. & Blum, R.W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health, 72*(4), 138–146.

McNeely, C. & Falci, C. (2004). School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health, 74*(7), 284–292.

Muthén, L.K. & Muthén, B. (2018). *Mplus user's guide.* Los Angeles, CA: Muthén & Muthén.

Neel, C.G.O. & Fuligni, A. (2013). A Longitudinal Study of School Belonging and Academic Motivation Across High School. *Child Development, 84*(2), 678–692. doi:10.1111/j.1467-8624.2012.01862.x

Oelsner, J., Lippold, M.A. & Greenberg, M.T. (2011). Factors influencing the development of school bonding among middle school students. *The Journal of Early Adolescence, 31,* 463–487. doi:10.1177/0272431610366244

Pittman, L.D. & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *The Journal of Experimental Education, 75*(4), 270–290.

Putnick, D.L. & Bornstein, M.H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental Review, 41,* 71–90. doi:10.1016/j.dr.2016.06.004

Roffey, S. & Boyle, C. (2018). Belief, belonging and the role of schools in reducing the risk of home-grown extremism. In K.-A. Allen & C. Boyle (Eds.) *Pathways to Belonging – Contemporary Perspectives of School Belonging.* Leiden: Brill.

Schafer, J.L. & Graham, J.W. (2002). Missing data: Our view of the state of the art. *Psychological Methods, 7*(2), 147–177.

Schumacker, R.E. & Lomax, R.G. (1996). *A beginner's guide to structural equation modeling.* Mahwah, NJ: Lawrence Erlbaum Associates.

Shochet, I.M., Smith, C.L., Furlong, M.J. & Homel, R. (2011). A prospective study investigating the impact of school belonging factors on negative affect in adolescents. *Journal of Clinical Child & Adolescent Psychology, 40*(4), 586–595. doi:10.1080/15374416.2011.581616.

Slaten, C.D., Ferguson, J.K., Allen, K.A. et al. (2016). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychologist, 33*(1), 1–15.

Vandenberg, R.J. & Lance, C.E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3,* 4–70.

Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *The Journal of School Health, 74,* 293.

Ye, F. & Wallace, T.L. (2014). Psychological sense of school membership scale method effects associated with negatively worded items. *Journal of Psychoeducational Assessment, 32,* 202–215.

You, S., Ritchey, K.M., Furlong, M.J. et al. (2011). Examination of the latent structure of the Psychological Sense of School Membership scale. *Journal of Psychoeducational Assessment, 29,* 225–237.

Appendix
School Belonging Scale Items by factor

School Belonging Scale	
Factors	**Items**
Support	I can get good support from my school I can count on help and support, if I need it, from my school I can get back as much support as I give from my school I am confident that I am well supported by my school
Rule Acceptance	I accept the rules and procedures set by my school I agree that there are suitable standards and values set by my school I accept the rules of my school I accept that there is good sense in the rules and procedures of my school
Attachment	I feel good about being in my school I feel the best when I am at my school I feel that I have a good attachment to my school I feel I have a strong connection with my school

Guidance for contributors

These guidelines are provided to assist Authors, Referees and Editors. Compliance in all respects is appreciated. Manuscripts are accepted for consideration on the understanding that they consist of the authors' original unpublished work that is not being submitted for consideration elsewhere.

The abstract

All papers should include an Abstract (of not more than 250 words) and up to five 'keywords'. The Abstract must be structured and presented under subheadings that indicate: The Aim(s); Method/Rationale; Findings; Limitations; Conclusions.

Length

The main body of text in papers should usually be 3500–5000 words in length although papers outside this range may be considered at the Editor's discretion. Authors must indicate the word-length of papers with and without the reference section, excluding any tables or figures.

Any one issue of the publication will usually consist of a maximum of eight papers. Referees' comments and Editors' judgement of the balance and salience of papers will determine which papers are finally selected for publication.

Style

Overall, the presentation of papers should conform to the British Psychological Society's *Style Guide*. Non-discriminatory language should be used throughout. Spelling should be anglicised when appropriate. Text should be concise and written for an international readership of applied psychologists. Abbreviations, acronyms and unfamiliar specialist terms should be explained in the text at least once. Referencing should follow the current Society formats. For example:

Black-Hawkins, K., Florian, L. & Rouse, M. (2007). *Achievement and inclusion in schools.* London: Routledge/Falmer.

Woolfolk-Hoy, A. & Weinstein, C.S. (2006). Student and teacher perspectives on classroom management. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management* (pp.181–219). London: LEA.

Jordan, A., Schwartz, E. & McGhie-Richmond, D. (2009). Preparing teachers for inclusive classrooms. *Teaching and Teacher Education, 25*, 525–542.

The Editorial Board reserve the right to amend text to achieve conformity with *Educational & Child Psychology*'s aims and style.

Manuscripts

An electronic copy should be sent to the Editor for a specific issue, by emailed attachment (in MS Word or rich text format). We are unable to consider papers that are not submitted for a specific issue. Graphs, pictures or diagrams, etc., must be submitted in a format suitable for printing in black-and-white. The cover page must provide the full title of the paper, all authorial details and address (postal and email). The body of the paper, starting on page 2, should include the title and abstract, but omit any detail by which the author(s) may be identified. Text should be in at least 12 point Times New Roman and double-spaced. The submission must confirm that all authors approve the submission and that the paper is their original work and not under consideration elsewhere. Manuscripts that do not conform to these requirements will be returned to the author(s).

Refereeing

All papers are usually read by two referees in addition to the Editor. The refereeing process is anonymous. It is important, therefore, that all submissions conform to the above guidelines.

The referees' comments will, at the Editor's discretion, be passed to the authors.

The Editorial Board is always pleased to consider suggestions for themed editions. Anyone wishing to propose a theme and to assist as a 'Guest Editor' should contact the General Editor, Dr Fraser Lauchlan, at the School of Psychological Science and Health, Strathclyde University, Graham Hills Building, Glasgow, G1 1XQ or by email to fraser.lauchlan@strath.ac.uk or fraserlauchlan@live.com

Contents

9 781854 337917 >