Working with 'Social and Emotional Aspects of Learning' (SEAL): associations with school ethos, pupil social experiences, attendance, and attainment

Robin Banerjee[a]★, Katherine Weare[b] and William Farr[c]
[a]*University of Sussex, UK;* [b]*University of Southampton, UK;* [c]*Sussex Community NHS Trust, UK*

A programme of resources and activities relating to 'Social and Emotional Aspects of Learning' (SEAL) has been rolled out nationally to primary and secondary schools in the UK, but we know little about how variations in the implementation of this work relate to key indicators of school success. In the present study, a team of experienced school advisors used a semi-structured observation and interview protocol to rate various aspects of the implementation of SEAL in 49 primary and secondary schools. A total of 2242 pupils in 29 of these schools completed measures of social experiences and school ethos. School-level attainment and attendance statistics were collated for all participating schools. Analysis revealed that ratings indicative of a whole-school universal approach to SEAL were significantly associated with school ethos, which in turn mediated associations with pupils' social experiences, overall school attainment, and persistent absence. Thematic analysis of the advisors' records illuminated key dimensions and exemplars of whole-school implementation. Results highlight the role of school ethos in systematically connecting whole-school practices relating to SEAL with key indicators of school success. Directions for further longitudinal work to elucidate specific causal mechanisms are discussed.

Schools have been described as facing 'a barrage of demands from various sources… demands [which] focus on numerous aspects of schooling including curriculum, uses of time, testing, accountability, management, parental involvement, and professional development' (Honig & Hatch, 2004, p. 16). Against this backdrop, there has been growing interest in the potential value of school-based programmes for promoting the 'social and emotional learning' (SEL) of pupils. Proponents argue that such efforts in schools are not only important in and of themselves, but can also deliver related advantages in terms of behaviour, well-being, and academic learning (see CASEL, 2012). Yet, there are pitfalls too: in the relentless pursuit of better attainment standards and other centrally prioritised 'outcomes' for pupils, schools can often become overwhelmed by a range of policies, strategies, and initiatives (see Bates, 2013), such that well-intentioned programmes to promote social and emotional learning are implemented in an uncoordinated, piecemeal, and incomplete way. The present work addresses the nature and implications of variations in the implementation of a national initiative to promote 'Social and Emotional Aspects of Learning' in the UK.

★Corresponding author. School of Psychology, University of Sussex, Falmer, Brighton, BN1 9QH, UK. Email: robinb@sussex.ac.uk

Recent research has underlined the potential benefits of universal (i.e., not solely targeted at selected pupils known to have particular difficulties or vulnerabilities) work on social and emotional learning at school. For example, a meta-analysis of 213 universal programmes for youths between 5 and 18 years found overall positive effects not only on social and emotional skills, but also on a wide range of outcomes including self-perceptions, peer relations, violence/aggression at school, and academic achievement (Durlak *et al.*, 2011). This evidence complements recent National Institute of Clinical Excellence (NICE) reviews concerning school-based strategies to promote well-being in primary and secondary school pupils (Adi *et al.*, 2007; Shucksmith *et al.*, 2007; Blank *et al.*, 2009).

Notwithstanding the overall positive effects of school-based programmes to promote social and emotional learning, reviews make it clear that there are significant variations in the level of positive impact achieved. For example, Durlak *et al.* (2011) have provided evidence from their meta-analysis that programmes are most effective when they follow a logical *sequence* of skills development, when they involve *active* approaches to learning, when there is enough dedicated time to *focus* on this area of work, and when the learning opportunities within the programme *explicitly* address specific social and emotional skills (the so-called SAFE features).

However, beyond the nature of the programme itself, there are additional aspects of implementation to consider. Even highly successful programmes may not lead to uniformly positive consequences across all settings because of variations in how they have been implemented (Durlak & DuPre, 2008). Weare and Nind's (2010) recent review of school-based strategies to promote mental health—which included work on the promotion of social and emotional skills—suggests that the most positive outcomes are likely to arise in the context of a multi-modal, whole-school approach. Apart from having a well-organised programme of learning opportunities for all pupils, a genuinely whole-school approach involves broader considerations regarding how responsibility for the work is delegated across the entire body of staff, as well the role played by school organisation and policies. Indeed, 'research and practice increasingly have shown that schools will be most successful… when systematic decisions are made about how best to identify and implement innovative practices *in the context of the entire school community*' (Greenberg *et al.*, 2003, p. 471, emphasis added). Such engagement of the school community may be a crucial platform for creating the kind of school ethos that can reinforce and amplify children's social and emotional learning.

Furthermore, it is likely that certain contextual supports are needed in order to establish and maintain a successful whole-school approach to developing pupils' social and emotional skills. There are numerous factors which may lay a foundation for developing an effective whole-school approach, including having high-quality assessment information, regular staff development opportunities, and positive relations with families and the community (e.g., Greenberg, 2010); indeed, staff training and family support have already been identified as potentially significant in the NICE reviews referred to above (e.g., Adi *et al.*, 2007; Blank *et al.*, 2009). The strength of the evidence discussed above is reinforced by the fact that all of these dimensions of implementation (e.g., a whole-school approach, universal as well as targeted work, explicit curriculum focus on social and emotional skills, training and development for

staff, engagement with families) figure prominently in NICE Public Health Guidance on promoting social and emotional well-being, both for primary schools (NICE, 2008a) and for secondary schools (NICE, 2008b).

An important word of caution is provided by the latest meta-analysis of universal social and emotional learning programmes. Contrary to previous findings (e.g., Catalano *et al.*, 2002), Durlak *et al.* (2011) observed that multi-component approaches were no more likely to bring about positive effects than single-component (classroom curriculum only) approaches. In interpreting this result, the authors noted that multiple strands of work to promote social and emotional learning are difficult to plan and integrate, and indeed multi-component approaches were significantly more likely to have encountered implementation problems—which separate analyses confirmed would diminish the positive impacts of the school-based work. These pitfalls should by no means detract from the potential value of whole-school, multi-component work on social and emotional learning, but they do underscore the urgent need for careful consideration of variations in implementation.

Social and Emotional Aspects of Learning (SEAL)

The SEAL programme is an English multi-component approach designed to support the social and emotional skills of children and young people and thereby facilitate broader goals relating to behaviour, relationships, and learning at school. As Bywater and Sharples (2012) have observed, the national focus on SEAL in schools emerged in the context of a broader political emphasis on children's services, captured within the Every Child Matters focus on five major outcomes for children: being healthy, staying safe, enjoying and achieving, making a positive contribution, and achieving economic well-being (DfES, 2004). Following the publication of a commissioned report on strategies for promoting children's social and emotional competence (Weare & Gray, 2003), the UK government went on to commission the development of resources for primary schools (DfES, 2005) and for secondary schools (DfES, 2007), which have been in widespread use in England; estimates in 2010 suggest that 90% of primary schools and 70% of secondary schools had engaged with SEAL resources to at least some extent (see Humphrey *et al.*, 2010).

The SEAL resources include a curriculum element (incorporating materials for assemblies and class activities) that focuses on a number of themes relating to social and emotional skills, addressing constructs such as self-awareness, motivation, empathy, and conflict resolution, among others. These curriculum materials are designed to support both universal work on developing social and emotional aspects of learning across the entire pupil body, and targeted work to provide additional support through small group activities for selected pupils perceived to need this. It is also important to note that SEAL has a major emphasis on the ways in which the whole school community as a setting can promote positive social and emotional development, including resources relating to staff development, school organisation, management and leadership, family and community relations, and school ethos.

It is clear that the introduction of SEAL, alongside a range of other national initiatives to promote other educational outcomes, raises important challenges for successful implementation. As stated in a recent evaluation of the overall impact of the

former UK government's National Strategies, 'The frequent introduction of new initiatives, materials and guidance led to overload and diminished the potential effectiveness of each individual initiative' (Ofsted, 2010, p. 5). Perceived tensions could be identified between SEAL and other initiatives that—while certainly not mutually exclusive in principle—may have made competing demands on staff time, effort, and resource.

Thus, although the multidimensional profile for SEAL may have the potential to generate far-reaching impacts at school, it also triggers an obvious question about the nature and implications of variations in school practice and implementation of this work. The formal guidance for SEAL, in fact, makes a particular point of *not* enforcing a single way of working: 'The SEAL resource is built on the premise that each school or setting should find its own way into, and use for, the materials' (Department for Education and Skills, 2005, p. 11). Indeed, existing evaluation reports on SEAL (Hallam *et al.*, 2006; Ofsted, 2007; Smith *et al.*, 2007; Humphrey *et al.*, 2008, 2010a) underline, time and again, the existence of wide variations in the way that SEAL is delivered and implemented at different schools. These go some way to explaining the rather mixed patterns of findings of these evaluations when it comes to evidence of overall impact.

The most recent national evaluation work on Secondary SEAL (Humphrey *et al.*, 2010a; Wigelsworth *et al.*, 2012) found little overall difference between 'SEAL schools' and 'non-SEAL schools' in terms of longitudinal impact on measures of pupils' self-rated social and emotional skills and socio-behavioural adjustment. Yet, the researchers' case study analysis of nine of the 'SEAL schools' showed a very mixed picture of implementation, with levels of engagement with the work varying dramatically from school to school (Lendrum *et al.*, in press). The barriers to implementation identified by researchers include programme characteristics such as the complexity, views of staff (perceived relevance of SEAL to their work), and contextual factors (competing demands and priorities in school). Ultimately, these factors all contribute to substantial variations in whether and to what extent the work on SEAL becomes woven into the fabric of the whole school community. In particular, where the work is perceived as simply teaching 'emotional intelligence' and staff express doubts about the nature of such a construct and its amenability to 'teaching' (see Humphrey *et al.*, 2007), then the likelihood of other priorities taking over is very high; in such a context, the implementation of SEAL is likely to be piecemeal at best.

On the other hand, a more nuanced framing of SEAL is also possible. Some scholars have expressed concerns about cultural assumptions underpinning the notion of 'emotional intelligence' (see Ecclestone & Hayes, 2009), but in fact the SEAL resource does not rely on a single construct of this kind. Instead, it may be positioned within the context of a long-established and extensive scholarly literature (see Wentzel, 1991; Saarni *et al.*, 2006) linking a range of social and emotional competencies (from self-regulation to conflict resolution) with a range of valued outcomes (from social acceptance and mental health to school adjustment and academic achievement). Yet, one cannot—nor should not—escape the crucial point that cultural endorsement of the underlying principles really matters. For a start, Saarni *et al.* (2006) caution that academic findings regarding emotional competence cannot be assumed to generalise to non-western societies. And even within the context of a

single school, it may be wrong to assume that all stakeholders share a common understanding of the issues relevant to a programme like SEAL. This, of course, raises the question of whether different ways of working with SEAL in school can be systematically linked to variations in pertinent aspects of school functioning.

The present study

In Bywater and Sharples's (2012) helpful review of evidence-based interventions for emotional well-being, the authors note that the evidence base for 'home-grown' programmes on social and emotional learning in the UK is still seriously limited. Given the existing evidence regarding SEAL—alongside the considerable work that has been put into SEAL in a very large number of schools—we believe there is a pressing need to capture and actively investigate variations in implementation, in order to understand how they map onto differences in outcomes for pupils and schools. The present investigation was designed to draw on evidence from multiple informants to provide preliminary insights into the connections between: (a) schools' approaches to the implementation of SEAL; (b) the social and emotional ethos of the schools, as perceived by pupils; and (c) pupils' social experience, attendance, and attainment results. We particularly sought to address the hypothesis that schools which had more fully engaged with SEAL as a whole-school universal programme, and which had contextual supports in place to facilitate this work, would be schools where pupils were more positive about overall socio-emotional ethos, where pupils reported more positive social experiences, where persistent absence was lower, and where academic attainment was higher. Testing these associations is a crucial starting point for a much broader research agenda about how school improvement over time is systematically modulated by particular ways of delivering and implementing wide-ranging work on social and emotional learning at school.

   Our choice of correlates for this initial investigation was designed to reflect the wide-ranging profile of the SEAL programme itself. Most fundamentally, where the goal of achieving an effective whole-school approach to SEAL has been fully realised, the school should have a *more positive socio-emotional ethos*; indeed, the very first statement in official guidance on what SEAL involves states that it uses 'a whole-school approach to create the climate and conditions that implicitly promote the [social and emotional] skills and allow these to be practised and consolidated' (Department for Education and Skills, 2007, p. 4). This includes aspects such as relationships and interactions between pupils as well as between staff, behaviour in and out of class, and enjoyment of (and pride in) school (see CSEE, 2010). In turn, perceptions of such school-level features should clearly map onto pupils' own personal experiences of positive and negative social interactions (e.g., being socially included vs. being victimised), as well as onto levels of attendance and attainment; existing literature clearly demonstrates the broad predictive function of school ethos and climate (see Brookover *et al.*, 1978; Battistich *et al.*, 1995; Kuperminc *et al.*, 1997; Way *et al.*, 2007; Kearney, 2008). Crucially, then, the socio-emotional ethos of the school should mediate the connections between variations in implementing SEAL as a whole-school universal approach (supported by relevant contextual supports) on the one hand, and pupils' social experience, attendance, and attainment on the other.

Below, we describe the preliminary work that created the structure for our main research investigation, before turning to an account of the key methodology and results of this study in relation to the basic hypothesis described above.

Preliminary work

Two years prior to the present investigation, local authorities (LAs) had been asked by National Strategies (the body commissioned by the UK government to deliver educational strategies for achieving the nation's learning priorities) to identify schools involved in some way with the SEAL programme, and specifically to nominate schools representing a variety of type, size, stage of implementation, and Ofsted (national school inspection) gradings. The aim was to provide a broadly representative range of school practices with regard to SEAL. The selected schools agreed to be visited regularly by an experienced team of National Strategies Regional Advisors for Behaviour and Attendance and tracked over time. The primary schools were located in 31 LAs across the country, and the secondary schools were located in 24 LAs. The LAs varied in size, historical engagement with the SEAL programme, and demography. In the year prior to the present investigation, the participating schools had been visited termly by their regional advisors. Network meetings of school and local authority staff were also conducted at the end of that year to share experiences and provide a forum for future planning. A preliminary qualitative analysis revealed key themes emanating from the notes on school visits, the examples of practice submitted by schools, and information arising from discussions at the network meetings. These themes were then carried forward into the measurement of key aspects of SEAL implementation and the design of survey approaches utilised in the main investigation (see below).

Method

Participating schools and young people

For the present investigation, a total of 28 primary and 21 secondary schools were visited by 'behaviour and attendance' regional advisors from National Strategies. This sample of schools included pupils from a wide range of socio-economic status backgrounds. The average free school meals percentage in this sample was 20.1%; this ranged from 0% to 77.8% among the primary schools (national average, 17%) and from 3% to 55% among the secondary schools (national average, 14.5%). Attainment, attendance, and exclusions at the participating schools also varied substantially, according to the latest available statistics at the time of data analysis: the percentage of pupils attaining Level 4 or higher in Key Stage 2 English and mathematics SATs ranged from 44% to 94% (national average, 72%); the percentage of pupils attaining five or more GCSE A–Cs including English and mathematics ranged from 24% to 84% (national average, 53%); overall absence ranged from 3.48% to 14.80% (national average, 5.3% for primary and 7.25% for secondary); and fixed-period exclusions as a percentage of pupils on roll ranged from 0.90% to 28% (national average, 1.06% for primary and 9.86% for secondary).

Measures

Implementation of SEAL.   Regional advisors arranged one-day school visits with all 49 participating schools through their normal liaison with the schools. They followed a semi-structured protocol involving prompts and questions relating to activities during the visit, including accompanied tours around the school, interviews with SEAL staff leads, observations of SEAL learning opportunities and follow-up discussions with the staff involved, and group discussions with pupils. Notes were recorded by the regional advisors in relation to the various prompts and questions regarding these visit activities. Based on the school visits, regional advisors rated the schools' implementation of SEAL on 13 individual aspects of implementation identified from our preliminary qualitative analysis, using a three-point scale, from low to medium to high quality of implementation (each with a specific evidence descriptor). Principal components analysis of the ratings revealed two factors representing ten of the implementation aspects; one related to a whole-school universal implementation of SEAL and one related to contextual supports. Table 1 shows these aspects of implementation, with a summary of the highest level descriptor for each. As indicated in the table, both factors showed good internal consistency. Each school received a mean score across the items within each factor, ranging from '1' (*relatively low quality*) to '3' (*relatively high quality*).

School ethos and pupil social experience.   Staff contacts in each school were asked to administer online pupil surveys to a selection of classes/tutor groups of pupils within the school. A total of 2242 pupils in a subsample of 29 schools (average of 77 pupils per school, 87% from Years 4–6 in the primary schools, 91% from Years 7–11 in the secondary schools) provided anonymous, self-report survey data on overall school ethos and their own social experiences. The pupils rated given statements on a four-point scale, with 15 items for school socio-emotional ethos (based on Developmental Studies Center, 2005), and five items each for positive social experiences and victimisation (based on Crick & Grotpeter, 1996). As indicated in Table 2, all scales showed good internal consistency. Each pupil received a mean score across the items in each scale, ranging from '0' (*almost never*) to '3' (*nearly all the time*).

   In order to provide confirmation of convergence between informants regarding school ethos, a total of 538 staff members at a further subsample of 12 of the primary and nine of the secondary schools also made anonymous responses to the identical school ethos items as the pupils, with the scale showing excellent internal consistency, $\alpha = .93$. In a clear demonstration of multi-informant agreement, the school means of the teacher and pupil ethos ratings were very highly correlated with each other, $r(19) = .83$, $p < .001$, although the teacher ratings were in absolute terms significantly higher than the pupil ratings, means (SD) = 2.37 (.28) *vs.* 1.82 (.33), respectively, $t(20) = 13.83$, $p < .001$.

Attendance and attainment.   The National Strategies database provided the latest statistics for school attainment (for primary schools, the percentage scoring Level 4 and above in Key Stage 2 English and mathematics SATs; for secondary schools, the percentage with five or more A–Cs at GCSE, including English and mathematics), and

Table 1. Implementation rating items (with highest rating descriptor) and factor loadings[a]

Implementation item	Summary of highest rating descriptor	Whole-school universal ($\alpha = .84$)	Contextual supports ($\alpha = .80$)
Cross-school delegation of SEAL responsibilities	SEAL responsibilities clearly articulated and delegated across various levels, and all staff involved in SEAL and related programmes within a clear management structure	.88	
Staff engagement	Most or all (including support) staff clearly engaged in the SEAL strategy and involved in related activities	.87	
Universal SEAL activities	Well-organised programme of cross-school engagement in SEAL learning opportunities in most or all years	.78	
Integration with behaviour and well-being	Evidence that most or all staff have an integrated approach to SEAL, behaviour, and well-being	.61	
Data collection	Regular programme of audits/surveys regarding pupil attitudes and well-being, and whole-school engagement in data collection process, including staff and parents		.84
Use of data	Data used to evaluate school strategies, identify vulnerable pupils, and inform planning, and results fully disseminated		.81
CPD work	Ongoing programme of regular CPD opportunities for most or all staff regarding SEAL and related areas		.57
Integration of SEAL with learning	Specific evidence of a cross-school focus on SEAL and related skills to achieve pupils' learning targets	.52	.57
Parent/community contact	Substantial direct work with parents, strong evidence of partnership with families and community		.52
Staff well-being	Established system for monitoring emotional health and well-being of staff, and regular programme of activities to support and promote awareness of own social and emotional needs		.52

Notes: (a)Varimax rotation, showing loadings > .5.

for attendance (percentage of persistent absence). In order to facilitate analyses of attainment using the whole sample of data, attainment scores were standardised within primary and secondary phases.[1]

Table 2.   School ethos and social experience items

School ethos (α = .91)	Positive social experience (α = .78)	Victimisation (α = .81)
Pupils are good at working in groups with each other	Other pupils say kind things to me.	Other pupils leave me out of activities on purpose
Pupils hurt or upset each other on purpose★	Other pupils choose to spend their free time with me	Other pupils call me names or say nasty things to upset me
Pupils enjoy coming to school	Other pupils at school share things with me	Other pupils upset me by not talking to me or ignoring me
Pupils behave well in class	Other pupils help me when I'm upset or hurt	Other pupils hit, kick, or push me in a mean or nasty way
Everyone tries hard to help each other	Other pupils let me join in with what they are doing	Pupils at school say nasty things about me to other people[†]
Pupils help to decide what goes on in the school		
Pupils hate their classes★		
Teachers get on well with each other		
Pupils are caring towards each other		
Pupils behave badly when adults are not around★		
Everyone feels safe at school		
Pupils are really interested in learning		
People pay attention to other people's feelings		
Pupils at school can trust each other		
Everyone feels proud about the school		

Notes: ★Reverse-scored items. [†]Correction added on 19 September 2013, after first online publication: This entry has been corrected.

Results

Overview of survey analysis

First, descriptive statistics regarding the two SEAL implementation factors, and their correlations with measures of school attainment and attendance are presented for the entire sample of 49 schools. The main, multi-level analysis focused on evaluating the predicted associations between SEAL implementation, perceptions of school ethos, and the three key measures of pupil social experiences, attainment and attendance.

Descriptive statistics and correlations

Table 3 presents the descriptive statistics for the two SEAL implementation factors. It is noteworthy that secondary schools were rated as significantly lower than primary schools on whole-school universal implementation but not on contextual supports. Overall, the two SEAL implementation factors were found to be significantly correlated with each other, $r(47) = .60$, $p < .001$. The whole-school universal factor was

Table 3.   Descriptive statistics for SEAL implementation scores

Implementation	School type	Mean	SD	Min	Max
Whole-school universal	Primary (n = 28)	2.56	0.46	1.75	3.00
	Secondary (n = 21)	2.18[a]	0.66	1.00	3.00
	Total (n = 49)	2.40	0.58	1.00	3.00
Contextual supports	Primary (n = 28)	2.23	0.48	1.00	2.83
	Secondary (n = 21)	2.15	0.56	1.17	2.83
	Total (n = 49)	2.20	0.51	1.00	2.83

Notes: (a)t-test comparing primary *vs.* secondary, p < .05.

significantly related to both greater attainment, $r(47) = .38$, $p = .004$, and lower persistent absence, $r(47) = -.42$, $p = .002$. The contextual supports factor showed a similar but more modest pattern, with neither correlation attaining statistical significance (rs = .21 and −.20, respectively). Neither of the implementation factors was correlated with the proportion of pupils eligible for free school meals (ps > .20), and the correlations between the whole-school universal factor and both attainment and persistent absence therefore remained virtually unchanged after controlling for free school meals (rs = .35 and −.41, respectively).

Breaking the sample down into the 28 primary and 21 secondary schools substantially reduces the statistical power for correlational analysis within each phase, but it is noteworthy that the correlation between whole-school universal scores and attainment is reasonably similar for both primary and secondary schools (rs = .32 and .47, respectively), whereas the inverse correlation with persistent absence is clearly evident only in secondary schools (rs = .10 and −.51, respectively).

SEAL implementation and school ethos

Table 4 provides school-level descriptive statistics for the pupil survey data (school ethos and social experiences), which confirm that ethos ratings were higher in primary than in secondary schools, although reported victimisation was lower in the latter. Within the subsample of 29 schools with pupil survey data, preliminary analysis of

Table 4.   School-level descriptive statistics for pupil perceptions of school ethos and social experiences

Measure	School type	Mean	SD	Min	Max
School ethos	Primary (n = 18)	1.98	0.26	1.54	2.40
	Secondary (n = 11)	1.62[a]	0.25	1.13	1.92
	Total (n = 29)	1.85	0.31	1.13	2.40
Positive social experiences	Primary (n = 18)	1.96	0.14	1.66	2.23
	Secondary (n = 11)	1.94	0.11	1.66	2.05
	Total (n = 29)	1.95	0.13	1.66	2.23
Victimisation	Primary (n = 18)	0.64	0.17	0.37	1.10
	Secondary (n = 11)	0.52[a]	0.13	0.34	0.76
	Total (n = 29)	0.60	0.17	0.34	1.10

Notes: (a)t-test comparing primary *vs.* secondary, p < .05.

correlations at the school level (after controlling for free school meals) confirmed that whole-school universal implementation scores were positively correlated with attainment, $r(26) = .46$, $p = .008$, negatively correlated with persistent absence, $r(26) = -.35$, $p = .04$, and positively correlated with pupils' perceptions of school ethos, $r(26) = .59$, $p < .001$. Interestingly, in this subsample, the contextual supports scores showed similar positive associations with attainment and school ethos (both $rs = .33$, $ps < .05$), but neither of these associations remained significant after controlling for whole-school universal implementation ($ps > .20$). In other words, the associations between contextual supports and both ethos and attainment were fully mediated by whole-school universal implementation. Finally, although the school sample size becomes prohibitively small for analysing correlations within the group of 18 primary schools and the group of 11 secondary schools, it is again noteworthy that the association between SEAL implementation ratings and the average ethos score is very much stronger in the case of the latter ($rs = .25$ and $.81$, respectively).

Multi-level path analysis was used to evaluate the predictors of pupils' positive and negative social experiences. At the pupil level, school ethos was evaluated as a predictor of both positive and negative social experiences. The same pathways were evaluated at the school level, but whole-school universal implementation scores were included as an additional predictor of school ethos. Figure 1 shows the final model, with standardised coefficients and the model fit statistics. At the pupil level, unsurprisingly, school ethos was positively associated with positive social experiences and negatively associated with victimisation. At the school level, analysis revealed that the indirect pathway from whole-school universal implementation to positive social experiences—mediated by school ethos—was significant, standardised estimate = .61, $p < .001$). There were no school-level predictors of victimisation, and the direct path from whole-school universal implementation to positive social experiences was not significant (although this was taken into account in the model when estimating the mediated pathway above).

Within-school level

Between-school level

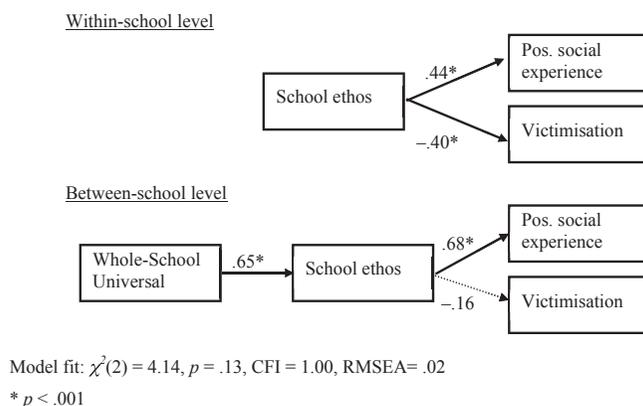Model fit: $\chi^2(2) = 4.14$, $p = .13$, CFI = 1.00, RMSEA = .02

* $p < .001$

Figure 1. Multi-level path model of whole-school universal SEAL implementation, school ethos, and pupil social experience. Note: Intraclass correlation coefficient was .26 for school ethos, .02 for positive social experience, and .05 for victimisation. Free school meals was allowed to covary with all other variables.

Model fit: $\chi^2(1) = .41$, $p = .52$, CFI = 1.00, RMSEA = .00

Model fit: $\chi^2(1) = 1.59$, $p = .21$, CFI = .98, RMSEA = .02
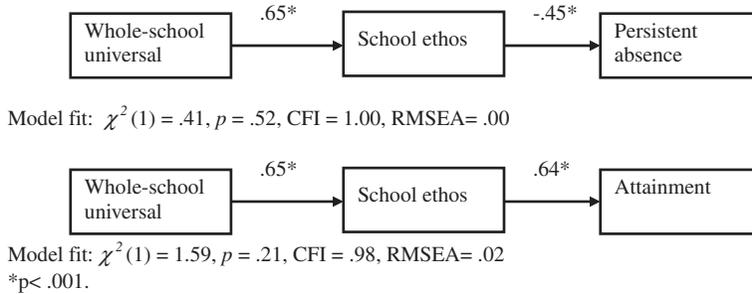*$p < .001$.

Figure 2.   School-level path models of whole-school universal SEAL implementation, school ethos, attainment, and persistent absence. Note: Intraclass correlation coefficient was .26 for school ethos. Free school meals was allowed to covary with all other variables.

Multi-level path analysis was also used to evaluate predictors of the school attainment and persistent absence statistics. Although school ethos was modelled at both the pupil and school levels, information on attainment and attendance was not available at pupil level, so pupil-level path models are not presented. As shown in Figure 2, school-level variance in school ethos again served as a mediator of the pathway from whole-school universal implementation to persistent absence; this indirect pathway approached significance, standardised estimate = $-.23$, p = .095. In addition, school differences in ethos significantly mediated the pathway from whole-school universal implementation to attainment, standardised estimate = .30, p = .03. Again, the direct paths in both these analyses were non-significant (although they were taken into account when estimating the mediated pathways). One final analysis examined whether any single implementation rating offered a significant prediction of social experience, persistent absence, or attainment, over and above the effect of school ethos. Only one pathway was found to be significant; specifically, the rating of how well SEAL was integrated with learning was found to offer a significant positive prediction of attainment, independently of the significant pathway displayed in Figure 2 (standardised estimate = .35, p < .05).

Thematic analysis of school practices

The notes made by the regional advisors in relation to the activities and interviews conducted during their visits to the participating schools were collated and analysed to identify key themes in SEAL implementation. These broadly corresponded to the two major dimensions of implementation referred to in the survey analysis (whole-school universal implementation of SEAL and contextual supports). The process of examining and re-examining the notes from each school visit in order to identify recurring themes and sub-themes (see Braun & Clarke, 2006) revealed specific clusters of school practice that neatly mapped onto the various aspects of implementation rated by the regional advisors for the quantitative analysis. Table 5 identifies the key themes and sub-themes corresponding to a whole-school universal implementation of SEAL, with examples of school practice for each. Table 6 provides a corresponding summary of the analysis of school visit notes with regard to contextual supports.

Table 5.   Key themes, sub-themes, and examples of school practice related to a whole-school universal approach to implementing SEAL

Theme	Sub-theme	Examples of practice
Universal learning opportunities for all pupils	Regularly-updated programme of timetabled learning activities	Weekly timetabled lessons, often linked to a broader school focus on SEAL set out in assemblies (sometimes including a 'thought of the week')
	SEAL learning outcomes incorporated in planning across the curriculum	Consideration of SEAL learning outcomes in devising group work activities, planning subject lessons, and organising tutor group time
	Whole-school systems for recognising and celebrating SEAL-related achievements	Stickers for celebrating SEAL-related qualities, pupil-nominated 'star of the week', SEAL as a standing agenda item for school council
Engagement of all staff in SEAL work	All staff involved in the planning and delivery of SEAL learning opportunities	SEAL as the focal point of PSHE and tutor group time, 'SEAL rep' in each subject team, staff rota for SEAL displays/assemblies
	Highlighted in staff training and tracked through regular slots in staff meetings	SEAL as a standing agenda item on staff meetings and/or termly meeting devoted to SEAL, training on SEAL for all staff
	Explicit modelling of SEAL skills in interactions with each other and with pupils	School emphasis on use of language by all staff (including midday supervisors) showing attention to what others are thinking and feeling
Integrated approach to SEAL, behaviour, and well-being	Universal SEAL as foundation for targeted work with vulnerable/ low-achieving pupils	SEAL learning outcomes integrated into targeted small-group interventions for social and/or mental health difficulties
	Integration of SEAL activities with related work on relationships and well-being	SEAL learning outcomes used to design strategies for peer mentoring and buddying, with close involvement of the staff member leading on SEAL
	Incorporation of SEAL into school policies (e.g., behaviour policy, anti-bullying policy)	Behaviour policy with explicit emphasis on the central role of SEAL in promoting positive behaviour
Delegation of responsibility for SEAL across all staff	Clear management structure	Head teacher and senior leadership team have strategic responsibility for SEAL, but planning of curriculum is delegated to year/subject leaders
	Responsibility distributed across all staff	Staff involvement with SEAL coordinated by a dedicated steering group including representatives from every subject team
	Time allocated to all staff for including SEAL in curriculum planning	Staff in each department provided with time to develop its own SEAL plan (e.g., linking ICT with cyberbullying, linking PE with peer assessment)

Discussion

Previous work has highlighted the importance of investing in research that can illuminate the implementation of interventions in school settings (e.g., Lendrum *et al.*,

Table 6.   Key themes, sub-themes, and examples of school practice related to Contextual Supports for implementing SEAL

Theme	Sub-theme	Examples of practice
Staff professional development	Regular CPD opportunities for all staff to launch, sustain, and enhance SEAL work	Initial launch activity, regular SEAL activity for all staff every half-term, extension training for specific areas of development
	Opportunities for staff collaboration, mentoring, and peer learning about SEAL	Peer observations with a specific focus on SEAL, coaching of individual members of staff by the SEAL lead, pairing of staff to share experiences
	Explicit attention to SEAL in support for new staff	Emphasis on SEAL in the induction process and in the mentoring programme for new staff
Staff well-being	Clear structures for promoting staff well-being, including structured peer support	Programme of regular social activities to promote cohesion, dedicated week of staff well-being activities after school
	Multiple channels of communication for staff to share concerns and difficulties	Regular surveys of staff well-being, 'worry box' or 'staff hotline', preventative system of free health checks available to staff
	Close liaison with external sources of support for staff experiencing difficulties	Weekly activity led by a qualified mental health worker, cross-school meeting every half-term
Data collection and use of data	Use of existing tracking systems to support and inform SEAL work	Use of electronic system for recording behaviour incidents in order to design and evaluate SEAL-related interventions
	Direct assessments of pupil social and emotional skills	Diagnostic questionnaires and self-assessments to measure pupils' and parents' perceptions of social and emotional skills
	Use of assessment data to inform planning, targeted work, and evaluation of change	Survey results used to create a 'SEAL guide' for each class, assessments used to track pupils' progress in relation to SEAL learning outcomes
Engagement of parents and community	Regular communication with families about SEAL work at school	Use of Family SEAL resource, pupil-led assemblies on SEAL for parents and governors
	Dedicated staff resources for engaging with parents and supporting families	Dedicated staff members (e.g., family support workers, parent support advisors) to enhance links with families and promote parents' engagement
	Involvement of pupils in applying SEAL skills to contribute to the local community	Pupil-run 'SEAL councils' to liaise with local community (e.g., police, bus companies, care homes), SEAL linked to school's charitable activities

in press). The present investigation underlines the value of addressing variations in the implementation and delivery of educational strategies concerned with social and emotional dimensions of the school context. As revealed by our multi-informant design, a whole-school approach to SEAL that engages all staff and pupils was a key predictor of subjective ratings of school ethos, which in turn mediated associations with more positive social experiences for pupils, lower levels of persistent absence, and higher levels of attainment. More detailed analysis of school practices identified multiple facets of this whole-school universal approach, as well as various features of school functioning that appear to facilitate the positive associations. The results indicate how variability in whole-school practices related to SEAL is systematically connected to key school outcomes via links with perceptions of school ethos. These findings set a crucial foundation for further research to elucidate the cycles of school improvement that can potentially be triggered by work on social and emotional learning, and raise important questions about how best to maximise the effectiveness of such work.

The interplay of SEAL and school ethos

A key starting point in making sense of the observed results concerns the centrality of school ethos. In the present study, we can be confident that pupils' perceptions of the social and emotional ethos of the school were not just a matter of individual children's subjective attitudes; there was a strong correlation between the mean scores from pupils and the mean scores from staff, and—as one would expect—the data on ethos had a much higher proportion of between-school variance than was apparent in the case of children's reports of personal positive and negative social experiences. Most importantly, the school differences in ethos served as a bridge between variations in the implementation of SEAL on the one hand, and school-level differences in social experiences, attendance, and attainment on the other. First, the most consistent predictor of pupil-rated social and emotional ethos was the composite score of whole-school universal implementation, involving features such as engagement of all staff, universal learning opportunities for all pupils, and integration with other work on behaviour and well-being. This builds on evidence referred to earlier regarding the significance of universal approaches embedded within a genuinely whole-school implementation (e.g., Greenberg, 2010; Weare & Nind, 2010). Our analyses provide evidence for the argument that approaches that engage all staff and pupils in promoting positive social relationships and in understanding and managing emotions are most likely to predict a positive school environment. The thematic analysis shows how very wide-ranging the school practices are in this respect: regular dedicated lessons on social and emotional skills were but one component of the work in schools, which included an extension of the SEAL learning outcomes into activities across the entire educational context, not just with pupils, but also with the staff themselves. What seems particularly striking is that it is not the 'buy-in' of the leadership *per se* that emerges as the strongest feature, but rather the action that results from this: engagement of all staff in the work on SEAL and the weaving of the key learning outcomes through all school activities, and the integration of SEAL into the fabric of the school in terms of basic school policies as well as links with other initiatives.

Second, school differences in the levels of positive peer interactions reported by pupils could be tracked back to perceptions of social and emotional ethos, which in turn were predicted by a whole-school universal approach to implementation, as discussed above. This falls in line with existing longitudinal evidence that students' perceptions of school climate often predict their subsequent social and emotional adjustment (e.g., Way *et al.*, 2007), as well as with indications that a positive sense of school community is associated with a host of social-attitudinal and behavioural variables (Battistich *et al.*, 1995). When considering this research, it must of course be recognised that there is a degree of overlap between the two, in that positive social relationships and behaviours are clearly an element of a positive social and emotional climate at school. Yet, it is important to recognise that school social and emotional ethos is more than simply a reflection of individual children's experiences. In the present study, the multilevel analyses of these variables showed that a far greater proportion of variance in school ethos ratings was explained at a between-school level, in comparison with the individual social experience ratings. Thus, two children might vary a great deal with respect to their individual social experiences within the peer group, but might still share a perception of the school ethos that is clearly differentiated from that of children from another school. Moreover, self-reported experiences of peer victimisation were related to perceptions of ethos only at the individual (within-school) level. Thus, it is important to highlight the significant finding from our school-level model, namely that differences between schools in perceived ethos relate in a systematic way specifically to the overall level of *positive* social interactions experienced by the children and young people.

Crucially, the reach of work in this area appears to extend to other indicators of school functioning. The analyses concerning attainment and attendance results show that, in line with previous research, the broad social and emotional dynamics of a school are closely connected with key school outcomes: the implementation of a whole-school universal approach to SEAL was connected with the key attainment indicators at the end of Key Stages 2 and 4, via the enhanced subjective perceptions of social and emotional ethos, and a similar pathway approached significance in the case of predicting lower persistent absence. The former result is entirely compatible with longstanding and more recent evidence regarding the associations between school climate and achievement (e.g., Brookover, 1978; Bear *et al.*, 2011), as well as with substantial review work showing significant gains in achievement test scores following the use of programmes to enhance pupils' social and emotional learning (e.g., Durlak *et al.*, 2011). In the present research, we did not have the opportunity to track individual pupils' attainments over time, but our results are also consistent with previous studies showing that pupils' social relationships and interactions are significant predictors of academic performance (Wentzel, 1993; Flook *et al.*, 2005). In many schools, the regional advisers' positive implementation ratings reflected highly effective strategies for consolidating pupils' learning by promoting more positive motivation and goal-setting, self-awareness of progress, and collaborative group-working skills. Our results add to mounting evidence of links between socio-emotional dimensions of school life and academic outcomes (Zins *et al.*, 2007).

The inverse associations of persistent absence with whole-school universal implementation of SEAL and school ethos were comparatively modest, but the statistical

tendency observed in the analyses raises questions about how improvements to school climate could potentially reduce problems in this area; indeed, researchers have long been aware of the fact that teenagers with higher levels of persistent absence are less likely to see schools as meeting their emotional needs (Eaton & Houghton, 1974). Moreover, in the long term, even modest links could translate into important societal outcomes: Barile *et al.* (2012) have recently demonstrated that positive student perceptions of climate at school, with a particular focus on relationships, predicted lower odds of student drop-out before completing high school.

Finally, the pattern of associations among school-level variables showed not only that subjective perceptions of school ethos were predicted by contextual supports such as professional training, engagement with parents and families, use of assessment data, and staff well-being measures, but also that these links were mediated by the whole-school universal ratings. This evidence seems to fall in line with suggestions that a variety of contextual conditions are associated with the effective whole-school approaches to social and emotional learning that seem to predict positive ethos and related outcomes (see Weare & Nind, 2010). Although more work is needed to flesh out the mechanisms that are most potent for facilitating effective whole-school work in this area, the establishment of stronger partnership with parents seems to be one particularly worthy of attention. More than 20 years ago, Haynes *et al.* (1989) reported on the way in which parental involvement could enhance school climate, and furthermore showed that use of a school improvement programme based on this was associated with gains in achievement and attendance. More recently, the potential value of 'Family SEAL'—one aspect of the SEAL programme focused specifically on engaging parents as partners in the work—has recently been highlighted (Downey & Williams, 2010), and the possible role of such work in generating improvements to the social and emotional ethos of schools deserves attention. In a similar way, our thematic analysis has highlighted a wide range of school practices relating to staff development and well-being, reminding us that work in this area involves far more than a package of teaching activities that are merely 'delivered' to children, but rather incorporates activities and systems that enable staff to facilitate such learning. Indeed, an increasing amount of recent work has begun to focus on explicit strategies for helping teachers to manage the social and emotional demands of school life, and thereby promote a school climate and social relationships that support pupils' learning (e.g., Roeser *et al.*, 2012).

Limitations and directions for future work

Demonstrating that variations in the implementation of SEAL may be connected not only with social and emotional experiences, but also with attainment and attendance, brings us forward in our understanding of how social and emotional learning may have wide-ranging implications for success at school. However, a number of important limitations constrain the conclusions we can draw from this body of data, and point to crucial directions for further work. First, the data for the main body of analysis were collected at one time point, and so we cannot draw strong conclusions about the temporal sequence of variables within a causal model. In fact, it seems highly likely that there are multiple causal pathways. For example, a positive social and

emotional ethos—with a strong sense of affiliation between pupils and staff, a shared pride in the school, and enjoyment of learning—must surely be regarded as an advantage in terms of being able to implement an effective whole-school universal strategy for any programme, including SEAL. Thus, we can reasonably postulate a reciprocal relationship between school ethos and whole-school work on SEAL. In a similar way, the relationship between school ethos and attainment itself may be cyclical. Previous work has already shown that a variety of school-level and classroom-level factors predict pupils' perceptions of school climate (Koth *et al.*, 2008), and it seems plausible that school ethos not only enhances, but is also enhanced by, improvements in attainment (and all the accompanying changes in self-efficacy, motivation, etc). It is striking, though, that our analyses revealed a particular association between ratings of the schools' effectiveness in integrating SEAL with broader learning on the one hand, and achievement on the other. This suggests a possible route for school staff into addressing pupils' difficulties in achieving their learning targets, by supporting the key underpinning social and emotional skills, such as mastery motivation, self-regulation, self-awareness, and group work. However, there is again a clear need for longitudinal work to track the pathways between variables over time. In sum, the promising indications from the present data need to be followed up by research over longer timescales in order to determine if the links observed here operate in a reciprocal cycle of school improvement, whereby work on improving the social and emotional ethos leads to improvements in pupil outcomes, which in turn lead to further improvements in ethos.

Further work also needs to be done to strengthen our assessment of key variables. First, the concept of variation in implementation is itself a highly multi-faceted one. In many intervention studies, this is understood in terms of fidelity to lesson content, but fidelity to the principles underlying the programme is also crucial. This is particularly the case in large-scale, multi-component interventions. It was noted earlier that implementation problems may be more likely in such cases (Durlak *et al.*, 2011), but on the other hand, the thematic analysis of observation notes reported here shows that—at least in the case of SEAL—it is indeed possible for schools to implement creative strategies for promoting work across the entire school community. Measuring these variations in a systematic way is a highly challenging task, and the present use of ratings from multiple school advisors based on a semi-structured observation protocol—notwithstanding the internal consistency of responses and concurrent validity in terms of links with the school ethos data from pupils—obviously cannot provide a comprehensive solution. A structured series of detailed observations at school (inside and outside the classroom), coupled with detailed questions about specific practices, would be an important next step. Such measures would need to capture not only the learning opportunities formally introduced to promote SEAL skills—which may have different effects depending on the particular skills being promoted (see Humphrey *et al.*, 2010b, c)—but also the broader range of staff activities, interactions, and environmental features identified in the thematic analysis of school practices described here.

In a similar way, the measurement of social and emotional school ethos in the present study was a very brief and simple one. Although the cross-informant (pupils *vs.* staff) convergence and observed links with other variables are encouraging, the extant

literature makes it clear that school ethos is itself a highly complex and multi-faceted construct (see Bear *et al.*, 2011). Especially as school leaders' efforts to develop school ethos may vary substantially on multiple dimensions (e.g., approaches to discipline, staff–pupil relationships, peer support measures, assessment strategies, etc), there is a pressing need to identify which features of school ethos are most potent in terms of links with social and emotional learning approaches as well as with school outcomes regarding achievement and attendance. Finally, those outcomes themselves need careful attention. For example, while headline public statistics regarding overall performance in key school tests and examinations are a reasonable starting point, it is clear that outcomes regarding educational achievement can be studied in a far more fine-grained manner. Indeed, Battistich and colleagues' (1995) work on schools as communities makes it clear that results may differ depending on the particular educational assessment being used (e.g., performance in different subjects; academic attitudes and motives).

Another important direction for future research concerns factors that might mediate and moderate the effects observed here. The present study points to perceptions of social and emotional ethos as a key mediating mechanism in the connection between SEAL implementation on the one hand, and social interactions, attainment, and attendance on the other. However, much more work is needed to understand how qualities of SEAL implementation translate into the social and emotional ethos of the school, as well as how that ethos itself may come to be reflected in better outcomes. Regarding the former, we need to target the extent to which different ways of working with SEAL relate to: (a) the specific social and emotional skills being targeted; (b) the relationships between stakeholders in the school community (e.g., pupils, teachers, support staff, parents); and (c) the feelings, beliefs, and values of those stakeholders. These, of course, can be assumed to inter-relate, and almost certainly play a role in the subsequent connections with outcomes such as school achievement. A good example of this kind of analysis may be found in Skinner *et al.*'s (2009) motivational analysis of engagement and disaffection at school. Their model holds that supportive vs. unsupportive social contexts—at school and beyond—have a crucial route to positive and negative learning outcomes via differences in self-perceptions, appraisals, and social cognitions, which in turn are associated with students' levels of engagement or disengagement in the classroom. One piece of very recent evidence in support of such pathways is an investigation by Reyes *et al.* (2012) showing that the positive relationship between classroom emotional climate and school achievement grades was mediated by levels of students' self-reported engagement with learning activities. The key question now is to understand more about how to couple this knowledge with the kind of evidence on SEAL implementation reported in the present work in order to bring about positive change, such that emotional climate, student engagement, and achievement outcomes are all enhanced.

Importantly, we must recognise that these kinds of effects may operate differently for different groups of children and indeed for different kinds of school communities. A first consideration is the extent to which the age of pupils plays a role in the pathways observed here. The sample of schools in the present work was not sufficient for a robust evaluation of moderation by school phase, but our tentative examination suggested that many of the relationships were stronger in secondary school. Although

further work is clearly needed with larger samples of schools, these indications are consistent with the notion that work on social and emotional dimensions of school life might be especially important in the context of secondary schools, where it has long been argued that changes in curriculum, organisation, discipline, and relationships can all contribute to low 'goodness of fit' between the school environment and the developing adolescent (see Eccles *et al.*, 1989).

Moreover, research has shown that the impacts of school-based initiatives are frequently modulated by social-contextual factors such as ethnicity and socio-economic status (see Leithwood & Levin, 2005), together with the characteristics and other activities of the schools (e.g., size, faith-based education). Indeed, an important limitation of the present work is that we did not have direct control over the heterogeneity of the sample; as noted earlier, National Strategies had identified schools for participation prior to the commencement of the research. Future work would benefit from the opportunity to recruit samples of schools with predefined variability in the kinds of moderating factors specified above.

As noted earlier in this paper, there is—inevitably—a cultural context to any school-based work on social and emotional learning, not only in terms of the broad socio-cultural context (e.g., importing an evidence-based programme from the USA; see Bywater & Sharples, 2012) but also in terms of the extent to which the staff, parents, and children within a single school community share a common understanding of the whole enterprise. Lendrum *et al.* (in press) give the example of a teacher who says: 'I've got fifty minutes and my priority is that they leave the room… knowing about particle theory. The fact that they're emotionally illiterate, well really… it's not your problem, is it?' Jones and Bouffard (2012) make the crucial point that social and emotional competencies develop within the context of social relationships, not just at home, but also at school. They draw the implication that 'because teachers' own SEL skills influence their relationships with and teaching of students, they are an important focus in their own right' (p. 10), and go on to make the recommendation that social and emotional learning approaches need to be 'integrated and embedded in ways that are both deep and wide' (p. 11), extending beyond the taught curriculum to the entirety of the school context.

We ought not to dismiss the potential positive impacts of a well-delivered stand-alone curriculum for social and emotional learning, but the broader school context *is* important. The implication, then, is that an assessment of implementation should address not only fidelity with respect to the prescribed use of curriculum materials, but—as we did in the present study—the degree to which the underpinning principles are embedded across the whole school. Our results offer the encouraging findings that where such foundational work has taken place—where the multiple stakeholders have come together in working towards a common purpose—there are systematically related advantages not only in subjective perceptions of school ethos and socio-emotional adjustment, but also in pupils' achievement results and attendance. Yet we clearly cannot assume a rapid convergence of expectations and values among staff, pupils, and parents. Hence, perhaps especially in settings where there are diverse sociocultural norms, future research will be crucial for capturing with more precision the ways in which different school communities can arrive at this kind of shared prioritisation of social and emotional learning.

Conclusions

Notwithstanding the important challenges ahead for future research, the present work underlines the simple but crucial points that school practices relating to SEAL can vary in a myriad of observable ways (only some of which relate to dedicated SEAL lessons), and that it is the variability in school practices that reach across the whole-school community that connects most powerfully with the pupils' perceptions of their schools' social and emotional ethos. Those perceptions (which we found were similarly recognised by staff) not only related to pupils' personal experiences of social interactions with their peers, but also predicted school-level variations in attainment and attendance.

Our thematic analysis underlines the potential for schools to develop and integrate SEAL practices that reach across the whole school. Indeed, when it comes to this area of work, our findings indicate that programme fidelity should be considered not simply in terms of following curriculum/lesson guidelines, but also in terms of broader adherence to core principles regarding the overall social and emotional environment at school. As Kress and Elias (2006) point out, 'In addition to… direct instruction, SEL skills are best taught when infused throughout the school day and in all aspects of a student's experience… A comprehensively implemented approach to SEL transcends work by individual teachers in individual classes' (p. 596).

Thus, notwithstanding the need for flexibility in local implementation of SEAL, the results of the present study underline the importance of disseminating and sharing whole-school SEAL practices. This is particularly so at times when national changes to the educational system mean that external direction/support in this area (e.g., from local authorities and National Strategies) has been reduced or, in some cases, removed altogether. Bywater and Sharples (2012) emphasise the key point that the apparently greater freedom for schools to make decisions about their educational approaches implies a greater-than-ever need for high-quality information about effective strategies and programmes. As well as their own valuable account of available initiatives, there are other useful reviews both in the UK (e.g., Allen's, 2011, review of early intervention programmes) and the USA (e.g., Collaborative for Academic, Social, and Emotional Learning's, 2012, guide to effective social and emotional learning programmes). Crucially, we must recognise that these programmes in no way preclude the use of an overarching framework for social and emotional learning, as formulated in the kind of whole-school universal approach to SEAL seen in some of the schools involved in the present study. In fact, Jones and Bouffard (2012) are explicit on this point: we need to shift our attention from a sole focus on 'programmes' to a 'continuum' approach that can 'provide an integrated, everyday foundation for SEL skills regardless of the scope of additional programs and supports' (p. 12). Interestingly, they also note that we have much to learn from policies in early education, where social and emotional learning is seen as an integral part of the overall learning experience (a feature that is true of the UK's most recent adaption of the Early Years Foundation Stage; DFE, 2012).

In his introduction to a series of school case studies depicting 'success against the odds', Gray (2001) noted that politicians 'have learnt to drive harder bargains. There has been a perceptible shift—change is not merely expected but demanded' (p. 2).

The demands for 'improvement' put pressure on schools to focus directly on the key metrics used to evaluate success, perhaps most vividly exemplified in league tables of attainment results. Against that backdrop, spending time on social and emotional learning can sometimes seem like a gamble. But this may be missing the point: the real investment required may not be concentrated in a given 'programme' or 'curriculum' *per se* but rather in a sustainable commitment to the underlying principles. The results of the present study offer a promising foundation for further work to elucidate the particular mechanisms by which primary and secondary schools' efforts in this area can potentially play an integral role in school improvement.

Acknowledgements

NOTE

[1] Note that the project also included collection of pupil, staff, and school data on other measures relating to issues not addressed in the present report.

References

Adi, Y., Kiloran, A., Janmohamed, K. & Stewart-Brown, S. (2007) Systematic review of the effectiveness of interventions to promote mental wellbeing in primary schools. Report 1: Universal approaches which do not focus on violence and bullying. Report for NICE, University of Warwick.

Allen, G. (2011) *Early intervention: The next steps*. Independent Report (London, Cabinet Office).

Barile, J. P., Donohue, D. K., Anthony, E. R., Baker, A. M., Weaver, S. R. & Henrich, C. C. (2012) Teacher–student relationship climate and school outcomes: Implications for educational policy initiatives, *Journal of Youth and Adolescence*, 41(3), 256–267.

Bates, A. (2013) Transcending systems thinking in education reform: Implications for policymakers and school leaders, *Journal of Education Policy*, 28(1), 38–54.

Battistich, V., Solomon, D., Kim, D., Watson, M. & Schaps, E. (1995) Schools as comunities, poverty levels of student populations, and students' attitudes, motives, and performance: A multilevel analysis, *American Educational Research Journal*, 32(3), 627–658.

Bear, G. G., Gaskins, C., Blank, J. & Chen, F. F. (2011) Delaware School Climate Survey—Student: Its factor structure, concurrent validity, and reliability, *Journal of School Psychology*, 49 (2), 157–174.

Blank, L., Baxter, S., Goyder, L., Guillaume, L., Wilkinson, A., Hummel, S. & Chilcott, J. (2009) *Systematic review of the effectiveness of universal interventions which aim to promote emotional and social wellbeing in secondary schools*. Report for NICE, University of Sheffield.

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

Brookover, W. (1978) Elementary school social climate and school achievement, *American Educational Research Journal*, 15(2), 301–318.

Bywater, T. & Sharples, J. (2012) Effective evidence-based interventions for emotional well-being: Lessons for policy and practice, *Research Papers in Education*, 27(4), 389–408.

Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S. & Hawkins, J. D. (2002) Positive youth development in the United States: Research findings on evaluations of positive youth development programs, *Prevention & Treatment*, 5(1), Article 15 .

Center for Social and Emotional Education (2010) School climate research summary—January 2010. *School Climate Brief*, 1(1).

Collaborative for Academic, Social, and Emotional Learning (2012) *2013 CASEL guide: Effective social and emotional learning programs*. Available online at: http://www.casel.org/guide (accessed 21 June 2013).

Crick, N. R. & Grotpeter, J. K. (1996) Children's treatment by peers: Victims of relational and overt aggression, *Development and Psychopathology*, 8(2), 367–380.

Department for Education (2012) *Statutory framework for the Early Years Foundation Stage* (London, DFE).

Department for Education and Skills (2004) *Every child matters: Change for children* (Nottingham, DfES Publications).

Department for Education and Skills (2005) *Excellence and enjoyment: Social and emotional aspects of learning* (Nottingham, DfES Publications).

Department for Education and Skills (2007) *Social and emotional aspects of learning for secondary schools (SEAL)* (Nottingham, DfES Publications).

Developmental Studies Center (2005) *Scales from student questionnaire: Child Developmental Project (middle school student follow-up study)*. Available online at: http://www.devstu.org/research-child-development-project (accessed 21 June 2013).

Downey, C. & Williams, C. (2010) Family SEAL—a home–school collaborative programme focusing on the development of children's social and emotional skills, *Advances in School Mental Health Promotion*, 3(1), 30–41.

Durlak, J. A. & DuPre, E. P. (2008) Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation, *American Journal of Community Psychology*, 41(3-4), 327–350.

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.

Eaton, M. J. & Houghton, D. M. (1974) The attitudes of persistent teenage absentees and regular attenders towards school and home, *Irish Journal of Psychology*, 2(3), 159–175.

Eccles, J. S., Midgley, C., Buchanan, C. M., Wigfield, A., Reuman, D. & MacIver, D. (1993) Development during adolescence: The impact of stage/environment fit on young adolescents' experiences in schools and in families, *American Psychologist*, 48(2), 90–101.

Ecclestone, K. & Hayes, D. (2009) Changing the subject: The educational implications of developing emotional well-being, *Oxford Review of Education*, 35(3), 371–389.

Flook, L., Repetti, R. L. & Ullman, J. B. (2005) Classroom social experiences as predictors of academic performance, *Developmental Psychology*, 41(2), 319–327.

Gray, J. (2001) Introduction, in: M. Maden (Ed.), *Success against the odds—Five years on: Revisiting effective schools in disadvantaged areas* (London, Routledge Falmer), pp. 1–39.

Greenberg, M. T. (2010) School-based prevention: Current status and future challenges, *Effective Education*, 2(1), 27–52.

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H. & Elias, M. J. (2003) Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning, *American Psychologist*, 58(6/7), 466–474.

Hallam, S., Rhamie, J. & Shaw, J. (2006) *Evaluation of the primary behaviour and attendance pilot. Research Report RR717* (Nottingham, DfES Publications).

Haynes, N. M., Comer, J. P. & Hamilton-Lee, M. (1989) School climate enhancement through parental involvement, *Journal of School Psychology*, 27(1), 87–90.

Honig, M. I. & Hatch, T. C. (2004) Crafting coherence: How schools strategically manage multiple, external demands, *Educational Researcher*, 33(8), 16–30.

Humphrey, N., Curran, A., Morris, E., Farrell, P. & Woods, K. (2007) Emotional intelligence and education: A critical review, *Educational Psychology*, 27(2), 235–254.

Humphrey, N., Kalambouka, A., Bolton, J., Lendrum, A., Wigelsworth, M., Lennie, C. & Farrell, P. (2008) *Primary social and emotional aspects of learning: Evaluation of small group work. Research Report RR064* (Nottingham, DCSF Publications).

Humphrey, N., Lendrum, A. & Wigelsworth, M. (2010a) *Social and emotional aspects of learning (SEAL) programme in secondary schools: National evaluation. Research Report RR049* (London, Department for Education).

Humphrey, N., Kalambouka, A., Wigelsworth, M. & Lendrum, A. (2010b) Going for goals: An evaluation of a short, social–emotional intervention for primary school children, *School Psychology International*, 31(3), 250–270.

Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Lennie, C. & Farrell, P. (2010c) New beginnings: Evaluation of a short social–emotional intervention for primary-aged children, *Educational Psychology*, 30(5), 513–532.

Jones, S. M. & Bouffard, S. M. (2012) Social and emotional learning in schools: From programs to strategies, *Social Policy Report*, 26(4), 1–22.

Kearney, C. A. (2008) School absenteeism and school refusal behavior in youth: A contemporary review, *Clinical Psychology Review*, 28(3), 451–471.

Koth, C. W., Bradshaw, C. P. & Leaf, P. J. (2008) A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors, *Journal of Educational Psychology*, 100(1), 96–104.

Kress, J. S. & Elias, M. J. (2006) School-based social and emotional learning programs, in: K. A. Renninger, I. E. Sigel, W. Damon, R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 4: Child psychology in practice* (pp. 592–618) (Hoboken, NJ, Wiley).

Kuperminc, G. P., Leadbeater, B. J., Emmons, C. & Blatt, S. J. (1997) Perceived school climate and difficulties in the social adjustment of middle school students, *Applied Developmental Science*, 1(2), 76–88.

Leithwood, K. & Levin, B. (2005) *Assessing school leader and leadership programme effects on pupil learning. Research Report RR662* (Nottingham, DfES Publications).

Lendrum, A., Humphrey, N. & Wigelsworth, M. (in press) 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*.

National Institute for Health and Clinical Excellence (2008a) *Promoting children's social and emotional wellbeing in primary education*. NICE Public Health Guidance 12 (London, NICE).

National Institute for Health and Clinical Excellence (2008b) *Promoting young people's social and emotional wellbeing in secondary education*. NICE Public Health Guidance 20 (London, NICE).

Ofsted (2007) *Developing social, emotional and behavioural skills in secondary schools. HMI 070048* (London, Ofsted).

Ofsted (2010) *The National Strategies: A review of impact. HMI 080270* (London, Ofsted).

Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M. & Salovey, P. (2012) Classroom emotional climate, student engagement, and academic achievement, *Journal of Educational Psychology*, 104(3), 700–712.

Roeser, R. W., Skinner, E., Beers, J. & Jennings, P. A. (2012) Mindfulness training and teachers' professional development: An emerging area of research and practice, *Child Development Perspectives*, 6(2), 167–173.

Saarni, C., Campos, J. J., Camras, L. A. & Witherington, D. (2006) Emotional development: Action, communication, and understanding, in: N. Eisenberg, W. Damon, R. M. Lerner (Eds.) *Handbook of child psychology. Volume 3: Social, emotional, and personality development* (Hoboken, NJ, Wiley), pp. 226–299.

Shucksmith, J., Summerbell, C., Jones, S. & Whittaker, V. (2007) *Mental wellbeing of children in primary education (targeted/indicated activities)*. Report for NICE, University of Teeside.

Skinner, E. A., Kindermann, T. A., Connell, J. P. & Wellborn, J. G. (2009) Engagement and disaffection as organizational constructs in the dynamics of motivational development, in: K. Wentzel, A. Wigfield (Eds.), *Handbook of motivation in school* (Malwah, NJ, Erlbaum), pp. 223–245.

Smith, P., O'Donnell, L., Easton, C. & Rudd, P. (2007) *Secondary social, emotional and behavioural skills pilot evaluation. Research Report RR003* (Nottingham, DCSF Publications).

Way, N., Reddy, R. & Rhodes, J. (2007) Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment, *American Journal of Community Psychology*, 40(3–4), 194–213.

Weare, K. & Nind, M. (2010) Identifying evidence-based work on mental health promotion in schools in Europe: An interim report on the DataPrev project, *Advances in School Mental Health Promotion*, 3(2), 37–45.

Wentzel, K. R. (1991) Social competence at school: Relation between social responsibility and academic achievement, *Review of Educational Research*, 61(1), 1–24.

Wentzel, K. R. (1993) Does being good make the grade? Social behavior and academic competence in middle school, *Journal of Educational Psychology*, 85(2), 357–364.

Wigelsworth, M., Humphrey, N. & Lendrum, A. (2012) A national evaluation of the impact of the secondary social and emotional aspects of learning (SEAL) programme, *Educational Psychology*, 32(2), 213–238.

Zins, J. E., Bloodworth, M. R., Weissberg, R. P. & Walberg, H. J. (2007) The scientific base linking social and emotional learning to school success, *Journal of Educational and Psychological Consultation*, 17(2–3), 191–210.