

The decline in breaktimes and lunchtimes in primary and secondary schools in England: Results from three national surveys spanning 25 years

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Abstract

Breaktimes are ubiquitous in English schools. Research suggests they have social value for children, but school staff often have a range of concerns about breaktimes and tend to undervalue them. However, there is little understanding about these times, not least because data are not collected about their organisation and characteristics. This paper brings together data from three national surveys undertaken in 1995, 2006 and 2017 of head teachers of primary and secondary schools to provide an understanding of the nature, organisation and staff attitudes towards breaktimes and how they have changed over 25 years. At each survey point, completed questionnaires were received from representative random samples of over 1000 primary and secondary schools. Results showed marked reductions in the average total amount of time for breaks, the virtual abolition of afternoon breaks and a decline in time available for lunchtime breaks. The reductions were largely for behavioural reasons and to increase time for learning. Results also show variations in the length of breaktimes across school types and in relation to socioeconomic disadvantage, and changes to the amount of supervision provided by schools. Attitudes towards breaks varied across primary and secondary phases, and the withholding of breaks was used by schools to address poor pupil behaviour and disengagement. Schools continued to

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have concerns about the management of behaviour during breaktimes, even when breaks had already been shortened. It is suggested that staff undervalue the potential contribution that breaktimes afford the development and wellbeing of children and young people in school.

KEYWORDS

breaktime, playtime, primary school, recess, secondary school

Key insights

What is the main issue that the paper addresses?

This paper brings together data from three national surveys undertaken in 1995, 2006 and 2017 of English primary and secondary schools to provide an understanding of the nature, organisation and staff attitudes towards breaktimes and how they have changed over 25 years.

What are the main insights that the paper provides?

- Marked reductions over 25 years in the average total time for breaks in primary and secondary education.
- A decline in afternoon breaks and a shortening of lunchtime breaks.
- Variations in the length of breaktimes across school types, and in relation to socio-economic disadvantage.
- Increased supervision of breaktimes.
- The withholding of breaks to address poor pupil behaviour and disengagement.

INTRODUCTION

Although comparisons between countries are difficult, it seems that many school systems have some kind of break in the school day (Beresin, 2016). In this paper we use the term 'breaktimes' for these periods, though in UK primary schools the term 'playtime' is sometimes used, and in other countries the preferred term is 'recess'. In the United Kingdom there is usually a morning break and a longer lunchtime break, with some schools having an afternoon break as well. As we shall see, breaktimes in the United Kingdom take up a sizeable proportion of the school day, and yet information about this time is lacking.

School breaktimes are often taken for granted by adults—they are a habitual, relatively unimportant pause in a busy day. When breaktimes are considered by school staff, it is often in relation to the practical problems that can arise, for example bullying, squabbles between friends and health and safety risks that can occur. This regularly results in management decisions about controlling behaviour (see Blatchford, 1998; Gill, 2007). This view also means that the activities and events that take place during breaks are not perceived as having much value. The time may be seen as expendable in favour of other 'worthy' activities, such as more time spent learning, for introducing interventions or as a time for broadening the curriculum through the use of more adult-led enrichment activities (Blatchford & Sumpner, 1996; Gorard et al., 2017; Margo et al., 2006).

Breaktimes can, however, be viewed more positively. We know that pupils value breaktimes for the opportunities they provide to meet friends and play, and they enjoy breaktimes more than any other part of the school day (Blatchford, 1998; Mulryan-Kyne, 2014). Some have argued that breaktimes are important contexts for children's development, health and wellbeing and school engagement (Baines & Blatchford, 2011; Blatchford et al., 2003; Forsberg et al., 2022; Pellegrini et al., 2002; Prisk & Cusworth, 2018; Ramstetter et al., 2010) and there is good evidence of efficacy in these areas (Baines & Blatchford, 2011; Blatchford et al., 2016; Hodges et al., 2022; McNamara et al., 2018; Rhea & Rivchun, 2018). It is during these times that pupils get to meet friends and socialise, and engage in activities that are meaningful for them in a safe setting, relatively free of adult control (Blatchford, 1998). There are few other settings where children are afforded a level of autonomy to make their own decisions about the activities they engage in, the roles they adopt and the people they interact with. From a research point of view, the study of breaktime behaviour provides an important window into a child's social and emotional development (Pellegrini & Blatchford, 2002).

Whether one adopts a positive or negative view of breaktimes, what is clear is that they are a little understood part of the school day. Virtually no information on the nature, organisation and supervision of school breaks is collected at a national or international level (Baines & Blatchford, 2019). Even the Organisation for Economic Co-operation and Development, which provides extensive statistics on many aspects of education, provides little information on breaktimes (OECD, 2016). In the United Kingdom there are no national policies and few expectations about what these times may involve, either from the government or from Ofsted, the national body responsible for inspecting school education. Although, as part of employment law in England, full-time school staff are entitled to have a break, there is no formal or legal requirement for schools to provide breaktimes for children.

Just about the only systematic and representative data available on breaktimes in schools, and as far as we know anywhere in the world, comes from two national surveys of English schools, undertaken in 1995 (with information on changes to breaktimes since 1990) and 2006, funded by the Nuffield Foundation (Blatchford & Baines, 2006; Blatchford & Sumpner, 1996). The two national surveys showed that between the early 1990s and 2005, there had been changes to the number of breaks, their length, organisation and supervision. Most notably, findings indicated that the time available for breaks had been eroded. School staff often justified this reduction in terms of efforts to control bullying, as well as creating more time for coverage of the school curriculum (Blatchford & Baines, 2006). By contrast, this research also showed that for pupils, breaktimes are some of the most valued times and experiences they have in school (Blatchford, 1998; Blatchford & Baines, 2006; Blatchford et al., 2003).

The two earlier surveys are unique and significant in providing a comprehensive understanding of a little understood part of the school day in primary and secondary schools. However, since the second national survey in 2006, there have been substantial changes to the structure of schools, education and curriculum. There is increased national and international pressure on schools to improve academic standards, and in England many school leaders now have greater control over the nature and length of the school day (DfE, 2011). These changes are accompanied by marked changes in children's social lives outside of school, which may have led to a decline in children's independence of movement, play outside and a corresponding increase in online opportunities for informal peer interaction and in-home entertainment (Baines & Blatchford, 2012; Gray, 2011; Play England, 2012; Shaw et al., 2013; Singer et al., 2009). Breaktimes can also be viewed in the context of concerns about school food provision, obesity, lack of physical activity and the narrowness of the curriculum. Breaks are often seen as times when more can be done to address these issues through more adult-organised 'enrichment' activities (see Batty & Wintour, 2013; Bertram

et al., 2017; Briggs & Simons, 2014; MacIntyre, 2021; Public Health England, 2020), thus potentially taking away from the autonomous, self-directed and informal nature of breaks.

Given these changes, and the lack of officially gathered systematic information on break-times, we felt it was timely to undertake a further follow-up national survey, and an important opportunity to map trends in this little understood part of school life over the past 25 years. There were three main areas of interest.

The first area to consider is the nature, organisation and supervision of breaktimes as well as associated staff views on the role of these times. Our previous surveys show that most schools have two or three breaks in the school day, usually a short break of between 15 and 20 min in the morning, a period at around midday for children to have their lunch and spend some time in the playground, and in a few schools a short period in the afternoon towards the end of the school day (Blatchford & Baines, 2006). However, there has been interest in alternative scheduling of breaks (National Union of Teachers, 2015), and some schools may adopt markedly different approaches to breaktimes based on a shortened or continental school day, or even schedule a short break every hour, as is practiced in some other countries (Beresin, 2016).

A second main area of interest was whether the demographics of the schools involved influenced the characteristics of breaktimes. The academy and free schools programme,¹ which has led to greater autonomy in the way that schools in England are run and funded (Walford, 2014), may have implications for the duration and nature of breaktimes. With increased autonomy over the school day (DfE, 2011), it is likely that schools with different characteristics and in different socioeconomic or geographical contexts may organise their school day and breaktimes in different ways (e.g., to reduce travel at peak times). Research in the United States has found that schools in more deprived neighbourhoods have less recess time than schools in wealthier locations (Barros et al., 2009; Ramstetter et al., 2010). It may also be the case that where urban pollution levels are high, schools allow less time for breaks than in more rural areas with cleaner air. Our previous surveys have found that schools serving the youngest children (aged 5–7 years, in KS1) and in KS2 (children aged 7–11 years) tend to offer more time for breaks in the school day than secondary schools (KS3 and KS4—pupils aged 11–14 and 14–16, respectively).

The third and final area of interest is in the way breaktimes may have changed over time. The three surveys of breaktimes in primary and secondary schools in England undertaken in 1995, 2006 and 2017 offered a significant opportunity to identify changes in the timing, organisation/supervision and staff views over a period of 22 years.

In terms of the timing of breaks, our previous research has suggested a trend in the shortening of breaks, often for academic and behavioural reasons, and we wanted to find out whether this trend has continued. The organisation and supervision of breaktimes may also have changed, given the changing nature of teaching and support staff in schools (Blatchford et al., 2009). Concerns about the narrowing of the curriculum, especially in primary education (Pollard, 2012), and an increased interest in the provision of extra-curricular adult-structured activities to enrich pupils' experiences in school (Chanfreau et al., 2015; Margo et al., 2006), may have altered the activities and nature of supervision in school playgrounds.

As in previous surveys, we were keen to ascertain staff views on the value or contribution of breaktimes and the challenges they present. These may have changed in the light of shifting management of schools (Walford, 2014), approaches to mealtimes (School Food Trust, 2009) and recent thinking in relation to play, bullying, behaviour and obesity (APPG on a Fit and Healthy Childhood, 2015a, 2015b; DfE, 2016). In previous surveys we found that schools often identify poor behaviour and management of breaks as presenting particular challenges, and secondary schools in particular take a more functional view of breaks as times for eating and physical activity. In light of anecdotal reports and the absence of

research data, we were also interested in occasions when children may miss breaktimes and possible reasons for this.

METHODS

Design

Each study involved a large-scale national survey of primary and secondary schools in England, case studies of schools with varying breaktime arrangements in place and, for the 2005 and 2017 studies, a survey of pupils' views on school breaks and social life in and outside of school. Only selected results from the three national surveys of schools are presented here (see Baines & Blatchford, 2019 for information about case studies and pupil surveys).

The school breaktime survey

The school breaktime questionnaire was devised for the 1995 survey on the basis of extended pilot work (see Blatchford & Sumpner, 1996). At each subsequent survey point in 2005 and 2017, questions were reviewed and feedback sought from school staff to ensure that questions remained relevant. In order to allow comparisons over time, the questions and response options for core questions (e.g., on the length of breaktimes, length of the school day, number of supervisors present in the playground, etc.) remained the same at each time point. It was necessary, however, to make a few adjustments to capture recent changes to schools and the school system. Questions were largely in closed categorical response format, but these varied in the exact nature of the response options available (see Baines & Blatchford, 2019 for full details of questions asked and response options). Several questions allowed for multiple categorical responses or sought open-ended answers. A number of questions sought further information to enable the contextualisation of the information about breaktimes (e.g., example information about the number of pupils on the school roll, the length of the school day, school composition, etc.). There was also a question about the nature of changes to breaktimes in the past 5 years, as well as an open-ended follow-up question that asked about the reasons for changes. Additionally, there was a retrospective question in the 1995 survey which provided information on the nature of breaks in 1990 and changes since then. This enabled the surveys to cover the periods 1995–2017 and in terms of changes to breaktimes 1990–2017, so over a period of approximately 25 years.

Sample selection, procedure and response rate

To get a comprehensive account, a large sample of schools was sought. For the 2005 and 2017 surveys, a publicly available national database of schools was used to identify and select random samples of schools. Based on an annual school census organised by the Department for Education, this database provides the name of the school leader, school contact details along with demographic information about the school (e.g., size, number of boys and girls on roll, age range accepted, gender composition of the school, etc.). For information on the sample of schools approached for the 1995 survey and the characteristics of those that responded, see Blatchford and Sumpner (1996).

At each time point a random sample of primary and secondary state-funded (and in 1995 and 2017 only, independent) schools were selected and a letter and a paper copy

of the questionnaire and a return postage-paid envelope were sent to the school leader. Surveys were sent to 2550, 4097 and 4301 schools for the 1995, 2006 and 2017 surveys, respectively. For the 2005 and 2017 surveys, there was the option to complete and return the survey electronically. In the event, most responding schools returned questionnaires by post. Reminders were sent to schools that had not returned questionnaires within a month of being sent the first survey. Due to evidence of declining response rates in other studies undertaken during this period, larger numbers of schools were approached for the 2005 and 2017 surveys. Response rates declined over the three surveys, from over 60% of contacted schools returning questionnaires in 1995 to approximately 26% in 2017 (see Table 1).

The samples of schools that responded were compared to schools that did not respond and to the wider population of schools in the database. The responding samples were found to be largely representative of the overall population of schools at the time and to schools that did not respond, in relation to most measures (e.g., school type, proportion of pupils receiving free school meals [FSM], geographic location, school pupil gender and Ofsted status; see Baines & Blatchford, 2019 for further information).

Analysis

Descriptive and comparative statistical analyses provide a detailed examination of the main topic areas surveyed and in relation to phase of education (primary and secondary school and Key Stages in education) and across school types (e.g., non-LA-maintained, LA-maintained and independent schools). Data and findings relating to independent schools (which made up 5% of the total samples in 2017 and 1995) are reported separately to enable comparisons with the 2006 survey, which did not survey independent schools. Given the categorical nature of the survey data, analyses largely involve cross-tabulations, multiple-response analyses and chi-square analyses. Correlation and analysis of variance (ANOVA) were used to compare continuous data (such as the length of breaks) across explanatory variables (e.g., school type, percentage of pupils in receipt of FSM). Where needed, post-hoc Bonferroni follow-up tests were used to understand the differences between levels of explanatory variables and effect sizes (partial eta squared) are reported. Data from open-ended questions were analysed thematically in a way consistent with the process outlined by Braun and Clarke (2006).

A second layer of analysis involved comparing trends over time across the three surveys. As the surveys were undertaken with different random samples of schools, they were treated as independent samples. Analyses are largely descriptive, except in relation to continuous

TABLE 1 The number of schools that were sent and returned surveys and the percentage response rate.

Survey and school phase	Sent	Returned	Response (%)
<i>1995 survey</i>			
Primary	2075	1245	61
Secondary	475	289	61
<i>2006 survey</i>			
Primary	3419	1336	39
Secondary	678	230	34
<i>2017 survey</i>			
Primary	3510	933	27
Secondary	791	199	25

Note: Figures for 1995 and 2017 surveys include independent schools and for 2006 include schools in Wales.

data, where ANOVAs with Bonferroni tests were used to test for differences between surveys. Additionally, for some questions, comparisons could be made with estimates of arrangements in 1990 as the 1995 survey included questions relative to the number and length of breaks and changes since 1990. These analyses overall provide insights into changes and adjustments in school and playground life over 10–25 years.

RESULTS

Results are first reported in relation to data collected in 2017 and then subsequently within each section in relation to changes since 2006 and 1995.

Number and duration of school breaktimes

Findings show that in 2017 all schools reported two or three breaks in the school day (see Table 2), with the majority having a break in the morning and at lunchtime. Some maintained schools also reported a third break, which took place in the afternoon. Just over half of primary schools (54%) reported having an afternoon break at KS1 (pupils aged 5–7), but only 15% offered this at KS2 (pupils aged 7–11) and virtually no state secondary schools (1%) reported offering an afternoon break.

The total daily duration of breaktimes decreased with pupil age. For the 2017 survey, at KS1 total breaktime length was on average 85 min, at KS2 it was 76 min and at KS3 (pupils aged 11–14) and KS4 (pupils aged 14–16), 63 min (see Table 3). These figures include time spent eating a midday meal, since English schools tend not to separate mealtime from the total time available for the lunch break. ANOVA tests show that the total duration of breaktimes varied by school type for each Key Stage (all p values < 0.05 ; effect sizes ranged from 0.025 to 0.46). Independent schools had longer breaks than state schools, with total durations of approximately 90 min per day at all Key Stages. Within state-funded education, academies and free schools tended to have less total amount of time for breaks at KS1 than LA-maintained schools (average of 82 min vs. 86 min), but there were no differences found between them at later Key Stages.

A categorical analysis of the duration of breaktimes provides further insights (Table 2). This showed that in 2017 most state primary schools report morning breaks at KS1 and KS2 of 15 min with a small proportion reporting 20 min. Lunch breaks of about an hour (55–64 min) were most common. More schools reported lunchtime breaks of longer than an hour at KS1 than at KS2. By contrast, more schools reported shorter breaks of up to 55 min at KS2 than at KS1.

The presence of afternoon breaks varied across Key Stages, as we have seen (Table 2). About 85% of schools reported not having an afternoon break at KS2, whereas nearly half of schools (46%) reported that KS1 pupils had them. When present, afternoon breaks were most often 15 min.

At secondary level, patterns were very similar across KS3 and KS4. Most schools reported morning breaks of 20 min, with just over a fifth reporting morning breaks of 15 min and 14% of schools reporting morning breaks of 25 min or more. Nearly a quarter of secondary schools allowed 35 min or less for lunch breaks (including time to eat lunch) and a quarter had lunches of between 36 and 45 min. This means that more than half of secondary schools had lunch breaks of 45 min or less. Approximately 16% of secondary schools reported lunch breaks of around an hour. Afternoon breaks effectively do not exist in state-funded secondary schools, with nearly all schools (99%) reporting not having them.

TABLE 2 Differences in the duration of breaks in state-funded schools by Key Stage and over time (in 1995, 2005 and 2017).

	Key Stage 1			Key Stage 2			Key Stage 3 + Key Stage 4		
	1995 ^a	2006	2017 ^a	1995 ^a	2006	2017 ^a	1995 ^a	2006	2017 ^a
<i>AM</i>									
No break	0%	0%	0%	0%	0%	0%	0%	0%	0%
10 min	3%	1%	1%	4%	2%	1%	2%	1%	0%
15 min	79%	83%	82%	81%	84%	81%	49%	40%	22%
20 min	16%	15%	15%	13%	14%	16%	46%	53%	64%
25+ min	2%	2%	2%	1%	1%	2%	3%	6%	14%
<i>Lunch</i>									
Up to 35 min	2%	1%	0%	2%	1%	0%	5%	9%	24%
36–44 min	1%	0%	1%	1%	0%	1%	6%	13%	28%
45–54 min	2%	4%	6%	7%	17%	19%	21%	34%	30%
55–64 min	35%	51%	72%	59%	69%	75%	52%	39%	17%
65–74 min	16%	15%	10%	15%	8%	4%	15%	5%	1%
75+ min	44%	29%	12%	17%	4%	2%	1%	0%	0%
<i>PM</i>									
No break	30%	30%	46%	58%	74%	85%	88%	96%	99%
5 min	0%	1%	1%	0%	0%	1%	0%	1%	1%
10 min	17%	21%	15%	13%	11%	6%	3%	2%	0%
15 min	51%	46%	37%	27%	14%	9%	5%	1%	0%
20 min	2%	3%	1%	1%	1%	0%	1%	0%	0%
25+ min	1%	0%	0%	1%	0%	0%	5%	0%	1%

^aPercentages exclude independent schools (in 1995 and 2017) to ensure fair comparison with 2006 study. Independent school data are presented separately as means and standard deviations in Table 3. Dark grey highlight indicates reduction over time. Light grey highlight indicates increase over time.

In 2017, independent schools were significantly more likely to report longer morning and lunch breaks (Table 3) than state-funded primary and secondary schools. ANOVAs relating to the mean duration of morning and lunch breaks by school type at each Key Stage were all statistically significant ($p < 0.05$) with effect sizes ranging from 0.01 to 0.30. Only 10% of independent secondary schools had lunch breaks of 45 min or less, and nearly 80% had breaks of 55 min or more, with over a third of these reporting lunch breaks of more than an hour. Independent secondary schools were also more likely than state-funded schools to report that students had an afternoon break, with around 35–40% reporting this. There are indications that afternoon breaks in independent schools are more structured. In many cases, during lunch breaks or during afternoon breaks, pupils were offered an array of informally arranged enrichment activities. These findings can only be tentative, since the numbers of participating independent schools and response rates were lower than for maintained schools. There was also variability across independent schools, as indicated by the higher standard deviations (Table 3).

TABLE 3 Average time for breaks (min) over the school day and average total breaktime in 1995, 2006 and 2017 in relation to school type (state funded vs. independent).

	Key Stage 1			Key Stage 2			Key Stage 3+Key Stage 4		
	1995*	2006	2017*	1995*	2006	2017*	1995*	2006	2017*
<i>AM break</i>									
State schools									
Mean	15.9a	15.9	15.9a	15.6a	15.7	15.9a	17.5a	18.2	19.8a
SD	4.4	2.5	2.4	3.8	2.3	2.4	3.3	3.3	3.6
Independent schools									
Mean	22.5b	–	21.6b	24.4b	–	20.6b	21.5b	–	22.2b
SD	5.5	–	6.0	7.2	–	5.7	4.6	–	4.7
<i>Lunch break</i>									
State schools									
Mean	68.2a	65.1	61.6a	61.5a	58.2	57.6a	55.4a	50.1	43.9a
SD	11.5	9.4	7.2	10.6	7.2	6.2	10.0	10.1	9.2
Independent schools									
Mean	56.1b	–	66.6b	52.3b	–	63.3b	62.5b	–	59.2b
SD	23.1	–	15.2	20.5	–	13.3	18.6	–	9.4
<i>PM break</i>									
State schools									
Mean†	14.1	13.7	13.6	13.6	12.9	12.9	11.2	10.6	16.3
SD	4.8	2.8	2.7	4.6	3.1	2.9	5.3	3.9	13.6
Independent schools									
Mean†	19.0	–	15.0	24.6	–	22.5	16.1	–	29.1
SD	4.6	–	0	15.0	–	10.6	8.2	–	23.9
<i>Total break</i>									
State schools									
Mean	94.2a	90.6	84.9a	83.1a	77.3	75.5a	74.2a	68.8	63.4a
SD	13.6	11.1	10.5	11.8	9.4	8.1	10.9	10.4	9.2
Independent schools									
Mean	87.3b	–	90.8b	86.1a	–	86.4b	90.0b	–	91.6b
SD	25.8	–	17.6	23.5	–	16.4	15.6	–	19.9
Overall total									
Mean	94.1	90.6	85.0	83.2	77.3	75.7	76.6	68.8	68.4
SD	13.9	11.1	10.7	12.3	9.4	8.5	13.00	10.4	15.9

*ANOVAs within each survey period (1995, 2017) compare breaktime duration (not PM break) by school type (state vs. independent). Differing bold letters show significant differences across school type ($p < 0.05$).

†Calculations exclude schools without an afternoon break.

Duration of breaks in relation to other school characteristics

Partial correlations show that at KS1 and KS2, when controlling for the length of the school day, the total duration of breaktime in state schools is negatively correlated with the percentage of pupils within the school who receive FSM. Partial correlations were -0.24 ($p < 0.01$) and -0.27 ($p < 0.01$) for KS1 and KS2, respectively. This was not found at secondary school

levels (-0.06 and -0.12 at KS3 and KS4, respectively). This indicates that primary schools with a greater level of socioeconomic disadvantage (higher percentage of FSM is a proxy measure of socioeconomic disadvantage; see Taylor, 2017) had less total time for breaks, even when the overall length of the school day was controlled for. When taken together with the longer total amount of time for breaks in independent secondary schools, there are indications of a marked connection between school socioeconomic status demographic and time in school for breaks.

Differences in the total amount of breaktime were also evident between schools in urban and rural locations, with slight differences evident at KS1 and KS2 but not at secondary school level, with rural schools having on average slightly more total breaktime (see Baines & Blatchford, 2019 for more information).

Change in total duration of breaktimes between 1995 and 2017

There were marked changes between 1995 and 2017 in the total amount of time allocated to breaks (Table 3). State-funded schools experienced a marked decline in breaktime length over time at KS1 [$F(2, 3156) = 136.3, p < 0.001, \eta^2 = 0.08$]. At KS1, average total time for breaks was 94 min in 1995, 91 min in 2006 and 85 min in 2017. Across the 20-year period, this amounts to an overall average decline of 9 min per day, or a total of 45 min less breaktime per week.

At KS2 there was a similar decline, but the largest reduction took place between 1995 and 2006, where total time for break reduced from 83 min per day to 77 min per day [$F(2, 2964) = 143.83, p < 0.001, \eta^2 = 0.09$]. In 2017, KS2 pupils had an average of 75 min per day; this is 8 min per day less than in 1995, equivalent to approximately 40 min on average less per week.²

The most substantial reduction in the total length of breaktime is evident in state-funded secondary schools [$F(2, 625) = 53.8, p < 0.001, \eta^2 = 0.15$]. In 1995, students had 74 min of breaktime in the day. This reduced to 69 min in 2006 and in 2017 it was 63 min. This is a reduction of 11 min per day since 1995, and equivalent to a reduction of 55 min per week, nearly a whole day's worth of breaktime per week. ANOVAs indicated that the differences in total amounts of breaktime in state schools at the different survey points are statistically significant (all p values < 0.001 ; effect sizes ranged from 0.08 to 0.15). Analyses for each Key Stage also indicated time (1995 vs. 2017) by school type (state vs. independent) interactions for each Key Stage, with the length of breaktimes in independent schools remaining largely unchanged whilst state-funded schools saw a reduction in the lengths of total breaktime between 1995 and 2017 (all p values < 0.01 ; effect sizes ranged from 0.002 to 0.026).

A categorical analysis of changes over time in the duration of breaktimes is shown in Table 2, where the data for 2017, already examined, are presented alongside results from the 1995 and 2006 surveys. At KS1 and KS2, morning breaks have remained constant, with the majority of schools reporting 15 min for morning break. However, at KS3 and KS4, morning breaktimes have been extended from 15 up to 20 min, and in a few cases longer.

The most substantive changes have been made to lunch breaks and afternoon breaks, where at all Key Stages there is a clear trend for shorter lunch breaks and a decline in the number of schools offering afternoon breaks. Taking into account the data that relate to 1990 (reported in 1995), 90% of primary schools indicated that KS1 pupils had an afternoon break. This had declined to approximately 70% in 1995 and remained stable between 1995 and 2006, but then there was a further reduction to 54% in 2017. At KS2 there was a substantial decline between 1990 and 1995 from 85% to 42%, a further decline to 26% in 2006 and in 2017 only 15% of schools reported having an afternoon break at KS2. Among secondary schools, while there was a considerable elimination of afternoon breaks between 1990 and

1995, from 41% to 13%, this has been eroded further to 4% in 2006 and then to 1% in 2017. These are fairly marked changes over this period of 27 years.

A range of reasons were given in response to the open-ended question in 2017 about the reasons for changes to breaktimes. A popular explanation for the shortening or abolition of breaks was to create more curriculum/teaching time (30%). The management of problematic behaviour was another main reason given for the shortening of breaks (14%), typically the lunchtime break, with some schools suggesting that the reduced time lessened opportunities for poor behaviour, whilst others suggested it enabled better concentration after lunch. In 6% of cases the abolition or shortening of breaks was to enable structured opportunities for physical exercise, such as the 'daily mile' or more PE. A few schools reported reducing breaktimes to enable a shorter school day (6%) and others staggered lunchtimes in order to manage the change to the universal provision of FSM for children at KS1 (7%).

Supervision at breaktime

At primary level in 2017, descriptive statistics show that support staff were the main supervisors at break and lunchtimes overall (see Table 4). Teaching staff in maintained schools were more likely to supervise during morning and afternoon breaks and support staff were more likely to supervise at lunchtimes.

Findings were different at secondary level, with supervisors more likely to be teaching staff than support staff for both morning and lunch breaks. There was a slight increase in numbers of support staff supervising (and a corresponding decrease in teachers supervising) at lunch breaks.

In relation to the patterns across the different surveys (Table 4), there has been a marked change since 1995 in the mean numbers of staff supervising at breaktime in both primary and secondary schools. At primary level, the numbers of support staff that supervise has increased, and by 2017 they are the main adults involved in supervision. At secondary level,

TABLE 4 Mean number of staff supervisors and ratio of pupils to supervisors relative to school roll (AM and lunch break only) in state-funded primary and secondary schools.

	Primary school						Secondary school					
	1995		2006		2017		1995		2006		2017	
	Mean	Ratio	Mean	Ratio	Mean	Ratio	Mean	Ratio	Mean	Ratio	Mean	Ratio
<i>AM break</i>												
Teaching staff	2.1	122	1.9	116	2.5	109	8.7	104	7.0	111	13.8	78
Support staff	1.1	156	1.6	119	3.0	92	0.5	337	1.2	354	2.6	242
Total ratio	86		67		52		97		92		54	
<i>Lunch break</i>												
Teaching staff	1.1	179	0.7	177	1.0	177	4.8	231	5.9	234	10.5	135
Support staff	5.9	38	6.2	35	7.8	32	4.8	186	5.4	216	5.1	209
Total ratio	33		33		29		91		99		57	

Note: Ratios are in terms of the number of pupils to a single adult within the relevant category. The figure 122 means 122:1 (i.e., 122 pupils to one member of teaching staff).

the average numbers of supervisors who are teachers has nearly doubled compared to 2006 figures, and they were far more likely to supervise break and lunchtimes than support staff.

Although the number of staff supervising at breaktimes has increased, this might be due to an increase in student numbers within school. It is therefore important to consider the student–staff supervisor ratios. Our findings show marked changes, with far fewer pupils to supervisors in 2017 than was the case in 2006 and 1995. At primary level this is particularly evident at morning breaktime and less so at lunchtimes, where ratios are generally consistent. At secondary level, the average numbers of staff supervising and the overall ratios of students to staff have changed markedly since 2006 and 1995, with the ratios of students to staff also substantially lower than in 2006 and 1995.

The 2017 survey provided insights into the nature of supervision, whether this involves adults keeping an eye on children while playing or taking a more active and deliberate role in the organisation of play activities. Results showed that in just over half of primary schools (53%), staff supervise at a distance (i.e., they tend to keep an eye on children without directly interacting with them) and allow pupils the freedom to undertake activities of their own choosing. However, in over a quarter of primary schools (28%), activities are organised informally by adults and in 15% of schools, staff are required by the school to organise activities and games for pupils to choose to participate in, if they wish. Only eight schools (2%) organised what might be described as ‘structured breaktimes’, where staff set up activities and the children must choose from the options available. At secondary level, ‘supervision at a distance’ was the most dominant form of supervision (91%), while in a few schools, staff either voluntarily (7%, $n=6$) or were ‘required’ (2%, $n=2$) to organise clubs/activities for students to participate in at lunchtime.

Children missing breaktimes

A question new to the 2017 breaktime survey asked about times when children might miss out on breaktimes. The question was very specific in that we were referring to those times when children miss a FULL breaktime or lunchtime, rather than just the first few minutes, as it implies a deliberate decision to do so. There can be a range of reasons for children missing breaktimes, including attendance of competitions, optional classes (e.g., to learn a musical instrument), as well as for disciplinary reasons or to finish off work.

Findings show that 64% of primary schools indicated that there are times when pupils miss a full break/lunchtime. Many primary schools said that withholding breaks was part of their formal behaviour policy. Primary schools indicated that children might miss a break due to poor behaviour in class (49%) or during breaktime (45%), and in over a fifth of primary schools (23%) this was to catch up with their class/homework. Extending this to all schools (including those that did not withhold breaks) shows that 58% of primary schools withhold breaks for behavioural reasons.

More than half of secondary schools (57%) indicated that students might miss a full break or lunchtime. Again, the majority of secondary schools reported that this was due to poor behaviour in class (51%), at breaktime (41%), or to finish off class/homework (30%). Extending this to all schools that answered this question shows that 53% of secondary schools withheld breaks for behavioural reasons.

The value of breaktimes

Staff in primary schools in 2017 felt that the main value of breaktimes (Table 5) was the opportunity it provided for: the release of energy/physical exercise (86%), socialising with

TABLE 5 The value of breaktimes at primary and secondary levels and over time.

	Primary			Secondary		
	1995	2006	2017	1995	2006	2017
Pupils can eat and drink	–	19%	25%	–	68%	71%
Pupils can relax after time in classroom	68%	30%	31%	83%	37%	37%
Pupils can get fresh air	46%	29%	54%	30%	21%	43%
Pupils can engage in clubs/extra-curricular activities	6%	3%	10%	36%	15%	24%
Pupils can have time for free undirected recreation	32%	39%	44%	22%	15%	22%
Pupils can release energy/get physical exercise ^a	57% ^a	85%	86%	55% ^a	58%	57%
Pupils can socialise with friends/peers	58%	83%	83%	69%	60%	57%
To give teachers a break	–	9%	6%	–	22%	14%
Other	1%	1%	2%	4%	1%	0%
N	1268	1329	879	289	228	162

Note: This was a multiple-response question. Percentages and totals are of total respondents and thus total percentage will exceed 100.

^aFor the 1995 survey this was two separate questions.

peers (84%) and getting fresh air (54%). This was followed by opportunities to eat and drink (25%) and extra-curricular activities (10%). Independent schools, more than state-funded schools, emphasised the opportunity that breaks offer for free and undirected recreation (63% vs. 43%).

These values contrasted with secondary schools, where the emphasis was on the value of breaks in terms of more functional needs: as important times for students to eat and drink (71%), for energy release and exercise (57%) and time to socialise (57%). Only 24% saw breaks as important for enrichment activities or for undirected free recreation (22%).

Challenges of breaktimes

The majority of primary schools in 2017 (64%) indicated that there were concerns and challenges with regard to breaktimes (Table 6), with the poor social behaviour of a few pupils who have difficulties socialising (64%), followed by overcrowding in the dinner hall and outside (25%) and the quality of supervision (23%) the main concerns identified.

Secondary schools were more likely than primary schools to identify the presence of challenges (73%) at breaktimes. However, this varied by school type, with only 40% of independent schools indicating the existence of challenges and 80% of state-funded schools indicating that there were challenges [$\chi^2(1)=23.71$, $p<0.001$, $\phi_c^2=0.35$]. The main challenges identified by secondary schools were: the problematic behaviour of a few individuals (64%), followed by overcrowding of the dining hall and outside (53%) and the quality of supervision (31%).

In relation to previous surveys, the poor behaviour of certain students remains the main concern for primary and secondary schools over the past 30 years. Concerns about poor behaviour due to lack of physical activity has declined over time, as has concerns about the problems of the school site.

TABLE 6 Concerns and challenges with regard to breaktimes.

	Primary			Secondary		
	1995	2006	2017	1995	2006	2017
No	–	15%	36%	–	8%	27%
Yes	–	85%	64%	–	92%	73%
<i>N</i>	1265	1316	925	289	227	198
Poor behaviour of a small number of students who have difficulties in socialising	73%	70%	64%	63%	74%	64%
Poor behaviour due to lack of physical activity	12%	4%	1%	17%	9%	8%
Overcrowding in the dinner hall or outside	20%	17%	25%	50%	50%	53%
Problems concerning the quality of supervision	19%	22%	23%	28%	36%	31%
Poor behaviour due to students being disruptive	29%	11%	8%	16%	16%	16%
Problems of the school site/grounds	24%	20%	18%	33%	30%	21%
Team sports (like football) dominate the playground space	27%	43%	23%	5%	6%	12%
Problems concerning the provision of activities and/or equipment	20%	18%	18%	7%	15%	10%
Health and safety of the activities students want to engage in	–	–	5%	–	–	3%
Other	4%	5%	10%	9%	8%	13%

Note: This was a multiple-response question. Percentages and totals are of total respondents and thus total percentage will exceed 100. The second part of this table presents data that is a *subset* of the first (i.e., the proportions of those responding 'yes there were challenges').

TABLE 7 School's experience of any changes to the behaviour of pupils at breaktime or lunchtime in the past 5 years (i.e., since 1990, 2001 and 2012).

	Primary			Secondary		
	1995	2006	2017	1995	2006	2017
Improved	42%	43%	49%	28%	26%	34%
Not changed	37%	41%	35%	47%	40%	46%
Declined	21%	17%	9%	25%	34%	15%
Unsure	–	–	7%	–	–	6%
<i>N</i>	1240	1298	871	284	224	162

Behaviour at breaktime

The 2017 survey also asked more directly whether there had been any changes to children's behaviour at breaktimes in the last 5 years (Table 7). The response options given were 'Improved', 'Not changed', 'Declined' or 'Unsure'. The majority of primary school staff respondents in 2017 (49%) felt that behaviour had improved, with only 9% indicating that it had declined. At secondary level, 46% of schools reported that behaviour had not changed and a third said they felt it had improved. The main trend since 1995 and 2006 is that both primary and secondary school staff are less likely to report that behaviour has declined in the past 5 years, but rather that behaviour has improved. Nevertheless, behaviour remains the area of biggest concern for staff.

To consider whether the changes to the duration of breaktimes in 2017, reported earlier, were connected to reports of changes in children's behaviour in the last 5 years, we analysed these data further. Findings showed that schools that had made changes to breaktimes were

no more likely to report improvements or a decline in behaviour than schools that had not made changes to their breaktimes ($p=0.70$).

DISCUSSION

This research set out to collect current information on the nature of school break and lunchtimes in primary and secondary schools and staff views on these times. It also sought to provide a long-term analysis of trends by comparing findings with those from previous break-time surveys undertaken in 1995 and 2006. Analyses over the three time points provide a long-term view of the nature of, and changes to, breaktimes in schools over a 25-year period. To our knowledge, there is no other research that provides systematic data on breaktimes—either nationally or internationally. The study was rigorous in its approach to data collection, being based on data systematically collected via random samples of over a thousand schools in England covering the primary and secondary phases of education. Findings show that there have been marked changes over this period. We argue that these have important implications for pupils' social-emotional development and wellbeing, and significant implications for educational policy.

A main finding from the 2017 survey is that break and lunchtimes continue to be universally experienced in primary and secondary schools in England. There were no instances of schools that did not allow at least some time for pupils to have a break. Nearly all schools had at least two breaks in the school day—usually morning and lunch breaks—and a few had three breaks. However, our results are clear in showing a decline over time in the number and length of breaktimes in schools. In the second survey in 2006, we found that there had been a reduction in the lengths of breaks since the first survey in 1995. An important finding from the 2017 survey was that this trend has continued: primary pupils in 2017 experienced 40–45 min less breaktime per week than in 1995, and secondary pupils experienced over an hour (65 min) less breaktime per week.

The areas where breaks have been eroded are twofold. Firstly, the afternoon break has been virtually eradicated: fewer primary schools offer these to KS1 and KS2 pupils compared to schools in 1995 and 2006. Secondly, there has been a shortening of the lunch break. At KS2, in 1995, 30% of schools offered pupils a lunchtime of more than an hour. This is now 6% of primary schools. At secondary level, in 1995, one in ten schools had lunch breaks of less than 45 min, in 2017 this is now half of secondary schools and nearly a quarter of secondary schools have very short lunch breaks (up to 35 min). There is, then, good evidence of an historical trend over the past 30 years for a decline in the duration of breaktimes in schools.

The principal reasons given by school staff for shortening breaks are to provide more time for teaching and learning and to assist with the management of behaviour. The view is presented either that the time could be better used for covering the demands of the curriculum, or that if children have too much time on their hands, their behaviour deteriorates. These are similar themes to those identified in the 1995 survey (where many schools were concerned about bullying and providing more time for learning), but this has been used to justify *further* cuts to the length of breaktimes.

In our view, these reductions are concerning and suggest that breaktimes are taken for granted by school staff, and reflect a lack of recognition of the important contribution of these times for children and young people. Breaks may be one of the first areas to be eroded when new interventions, more curriculum time or meetings are introduced. A main problem is that this results in children missing out on time for socialising with peers and friends, play and physical activity, and a break from the pressures of the curriculum. These reduced opportunities may have implications for children's wellbeing, enjoyment and engagement with school (Baines & Blatchford, 2011). Breaktimes are important sites for peer interactions and the

development of friendship (Blatchford et al., 2003; Pellegrini et al., 2002), which can offer valuable experiences for children to enjoy school and feel a sense of belonging to school (Baines & Blatchford, 2011; McNamara et al., 2018), for developing social relational and communication skills. School breaktimes are not just important for children but also adolescents, as they provide valuable opportunities to socialise and connect with peers and friends, to explore their interests, identities and moral/social values (Blatchford, 1998; Blatchford et al., 2016; Orben et al., 2020).

Contrary to the views of some school staff, there is a developing evidence base for the value of breaks for improving behaviour generally (Barros et al., 2009) and in class after breaks (Jarrett et al., 1998), for enabling children to concentrate more when learning in class (Pellegrini et al., 1995; Rhea & Rivchun, 2018), and it is likely that the social-interaction skills provide important benefits when children engage in collaborative work in the classroom (Baines et al., 2009; Kutnick & Blatchford, 2013). The relationships and associated skills children develop provide a basis for future relationships (Bagwell & Schmidt, 2013).

The changes to breaktimes also have a wider importance in relation to children's social lives more generally. Recent evidence shows that young people are less likely to meet in person with friends and peers outside of school (Baines & Blatchford, 2019; Twenge et al., 2019), that there is a decline in outdoor play with peers (Gill, 2007; Gray, 2011; Singer et al., 2009), as well as reduced independence and freedom outside of the home (Play England, 2012; Shaw et al., 2013). By contrast, young people are increasingly more likely to socialise outside of school in online environments, through social media or gaming platforms (Anderson & Jiang, 2018; Twenge et al., 2019, 2020). There are some suggestions that this might be connected to increased reports among young people of feelings of detachment from friends and of loneliness (Baines & Blatchford, 2019; BBC, 2018; The Children's Society, 2015, 2019; Ibbetson, 2021; Loades et al., 2020; Siva, 2020). School breaktimes have an important role as a universal and safe opportunity that is relatively free of adult control for children and young people to socialise face-to-face with peers, to develop relationships and plan self-chosen activities in collaboration with peers. We suggest that schools should consider developing their own school policy on breaktimes and/or consider them as part of policies relating to the social, emotional development and wellbeing of children.

Another reason given for shortening the length of breaks was to enable more physical exercise. This aim is understandable in the light of health concerns and the reluctance that some children have for engaging in physical activity, but we argue that it is likely to be counterproductive to replace a part of the day that children value with more structured PE lessons. Research suggests that the physical activity during breaks can provide up to 40% of a primary aged child's daily exercise requirement, and that this can be increased through careful playground design (Ridgers et al., 2006) and can assist with reducing rates of obesity in childhood (Hyndman, 2017). It seems unnecessary and potentially counter-productive to repurpose this time for prescribed adult-led physical activity and to replace a time when primary aged children already *choose* to be physically active with a time when they are *required* to engage in physical activity.

Study findings also showed that the total amount of time available for breaks varied by the socioeconomic demography of the schools. Schools with children from more privileged backgrounds were likely to have more total time for breaks. This applied to both primary and secondary schools, though in different ways. Maintained primary schools with lower proportions of children in receipt of FSM tended to have more total breaktime than those with a higher percentage of pupils in receipt of FSM. Furthermore, students attending independent secondary schools had on average more total breaktime than students in state-funded secondary schools. It was noticeable that the figures for the total amount of breaktime in independent secondary schools are largely unchanged since 1995. These findings are surprising, though they reflect similar trends in the United States (Barros et al., 2009; Ramstetter

et al., 2010). Children in state-funded schools, and especially those with high levels of pupils in receipt of FSM, may be missing out in terms of the development of informal 'soft skills' not developed in classroom settings. On the other hand, and as some school leaders might argue, children in more deprived contexts may benefit from more time in the classroom. This should be an issue examined by future research.

Another set of results related to the levels and ratios of supervision of breaktimes over time. There has, in the United Kingdom and other countries, been a phenomenal increase in the use of para-professionals in schools (see Blatchford et al., 2012). Although predominantly utilised for classroom support (Blatchford et al., 2009, 2012), there has also been a trend for the greater use of support staff for supervision at breaktimes. Interestingly, the numbers of teachers supervising breaks has not declined over the same period. This means that the ratios of staff to students have reduced such that there are now fewer pupils per supervisor than in previous surveys. It is difficult to understand what may have led to these changes. Has it come from ongoing concerns about the need to deal effectively with behaviour and bullying in school? Schools have reported at all three survey points that these are the main challenges at breaktime. Alternatively, is it to do with a cultural need that seeks to protect and to actively monitor/guide young people's activities for them (Margo et al., 2006). We can only draw tentative interpretations here, but our findings suggest that concerns about behaviour and safety might be the impetus for increased staff supervision. There was little evidence of an altered approach to supervision from oversight at a distance to a more proactive approach involving the introduction of structured adult-led activities, though there is increased interest in more structured approaches (Burgess, 2016). It is also surprising that, despite concerns about managing behaviour at breaktimes and the general unpreparedness of para-professionals, little formal supervisor training is arranged, with schools often choosing informal approaches (see Baines & Blatchford, 2019 for further information). This begs the question of whether, if staff were better prepared and trained to manage issues of concern, there would be a need for so many supervisors and/or a need to shorten the duration of breaktimes.

Our findings also highlight the practice, in most schools surveyed, of withholding a full breaktime for some students as a consequence of misbehaviour and/or for non-completion of work. It was surprising that about half of schools reported this practice, and many mentioned that this was part of their school behaviour policy, following government guidance with regard to the management of behaviour (DfE, 2016).

These results are troubling. It is understandable that schools feel the need to have behaviour policies and to have practices to manage pupils when they are poorly behaved. The problem, however, is that it is likely that those children who have behaviour and/or social difficulties, or who are struggling at school, will be repeatedly prevented from having a break because of the behavioural sanctions. It is also likely that these are the young people who may benefit the most from greater social contact with a range of peers, and physical activity (Carriedo & Cecchini, 2022; Pellegrini & Horvat, 1995), and they are unlikely to become better behaved by being excluded from such contact. Those with repeated experience of missing breaks may find that their relationships with peers suffer. There are questions about whether this practice is effective, appropriate, or whether it is counter-productive in the long run. Some research evidence suggests that the approach is unproductive, with little positive effect on academic performance and a negative effect on student-teacher relations (Fink & Ramstetter, 2018; Golding, 2021; Payne, 2015). In the absence of clear policies or legislation about student entitlements to breaks, some children may have few or even no breaks in a school day (see Golding, 2021). We also query whether it contravenes Article 31 of the UN Convention on the Rights of the Child, to which the United Kingdom is a signatory, in terms of children's right to relax, play and engage in other recreational activities (see Ramstetter et al., 2022). A policy statement from the American Academy of Pediatrics (2013; reaffirmed

in 2016) makes the case that breaks should not be withheld for punitive or academic reasons. Schools should carefully reconsider the practice of withholding breaks as a consequence for poor behaviour and consider alternative approaches to managing children who are disruptive.

In terms of school staff views of the value of breaks in 2017, what stands out when comparing primary and secondary schools is the more functional view of breaks at secondary level, as times for meeting physical needs such as eating, drinking and energy release. Less priority is given to the social opportunities they provide, or the opportunities to undertake self-chosen activities that might enrich children's social and academic experiences. It may be that, with the focus on getting students fed in as efficient a way as possible (Dimpleby & Vincent, 2013), there has been less thought about the important value that lunchtimes afford for students in terms of their social, emotional development and wellbeing (Baines & MacIntyre, 2019; MacIntyre, 2021). But we know that students principally value this time for the opportunity it provides them to engage in social interaction with friends and peers (Baines & Blatchford, 2011, 2019).

It is perhaps unsurprising that independent schools were less likely than mainstream schools to report the presence of challenges during breaktimes. It was also positive to find a decline since 2006 in the percentage of maintained schools that identified challenges at breaktime. Of those reporting challenges, the poor behaviour of certain students has remained the main concern. Also of concern was overcrowding in the dinner hall and outside, and the quality of supervision at breaktime (also main areas of challenge in 2006). These concerns again speak to the problem of the length of lunchtime at secondary level. The poor behaviour of some pupils might be connected to frustrations associated with dining spaces (Baines & MacIntyre, 2019; MacIntyre, 2021; Pike, 2008). These challenges may be easily resolved by extending lunchtimes to ensure that they are more positive social times, when students can have both time to eat and opportunities for self-chosen activities.

Although schools highlighted poor behaviour as the biggest concern during breaks, most schools felt that behaviour had improved within the past 5 years, and there was an increase since 2006 in this positive outlook. This was not a result of reductions made by schools to the length of breaktimes or to their increased supervision. Schools that had reduced the amount of breaktime were no more likely to say that behaviour had improved or declined than schools that had not changed breaks in the past 5 years. Furthermore, primary and secondary schools that reported changes to breaktimes in the past 5 years were also more likely to report that there are challenges at breaktimes compared to schools that had not made changes. This may suggest that challenges may have come as a result of changes to breaks. Either way, there is a need for further research to understand the connections between the nature and length of breaks and the challenges that can arise during these times.

There are limitations associated with this research that need to be considered. Findings were based on three cross-sectional surveys and not a longitudinal study more sensitive to changes over time. This may mean that some schools were involved in the survey at more than one time point. However, due to the randomised approach to selection of a sample from a substantial number of schools, this is likely to have been rare. In addition, the time between surveys in all likelihood would mean marked changes within schools, not least to the staff and senior leaders that completed the survey. A further limitation is that while surveys were representative at the time point, there were slight differences between the different samples (e.g., fluctuations in the estimates of the percentages of pupils in receipt of FSM, school size, etc.). It is also possible that schools without breaks, with short breaks or where senior staff did not value breaks may have been less likely to participate in the research, indicating that in general a more positive picture of the status quo in relation to breaktimes may have been presented. Another limitation was the relatively poor response rate from independent

schools, particularly at primary school level. The findings and interpretations based on these data need to be treated tentatively.

To conclude, our findings show that in the past 25 years or more, schools have shortened break and lunchtimes, they have increased the number of supervisors in playgrounds and there is a widespread practice of withholding breaks as a consequence of poor student behaviour and non-completion of work. Nevertheless, schools still regard breaktimes as presenting challenges and, despite perceptions of the improvement in behaviour of children, these do not seem to be connected to the reduced time for breaks. These changes will have important implications for children's opportunity to socialise with peers, and to develop important social skills and valuing of school. It is essential to acknowledge the differences between schools in different socioeconomic circumstances and between state and independent sectors. Is breaktime increasingly a privilege for those in wealthier circumstances? In our view we need more research on the contribution of breaktimes to children's social lives, their wellbeing and the effect of breaktimes on learning in the classroom and to the development of social and 'soft' skills. Schools could do more to consider how breaktimes can be utilised to help children develop skills and explore self-chosen interests and activities.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data are not publicly available due to ethical restrictions.

ETHICS STATEMENT

The plans and processes for this research were reviewed by a University Ethics Committee before the data were collected.

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ENDNOTES

- ¹ Free schools and academies are funded directly by the government rather than by the local authority (LA) and thus have more control over the length of the school day and year and the curriculum. LA-maintained schools are funded via the local authority and are required to follow the national curriculum. Independent schools are not funded by the government and do not have to follow the national curriculum.
- ² Analyses also show that as a proportion of the school day for the 2006 and 2017 studies, total breaktime has also reduced, indicating that these differences are not due to less total time spent in school (see Baines & Blatchford, 2019).

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