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Singing in School: A Study of Year 4 Pupils' Perspectives on Singing for Pleasure and Learning

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Abstract

Many adults find the thought of singing anywhere outside of the shower simply daunting. However, from observation, children seem far keener to take the opportunity to sing in all sorts of scenarios. Indeed, research suggests its application in primary schools – inside and outside of lessons – can provide benefits for children, in both their wellbeing and their learning. Focusing on the transition between Key Stage 1 and Key Stage 2, and to provide the most useful comparisons with previous literature, this proposed case-study aims to investigate Year 4 pupils' perspectives on singing in school for pleasure and for learning. A questionnaire will provide quantitative data at a whole-class level, followed by a semi-structured interview with six children selected by stratified random sampling. The latter will further our understanding of their perspectives through open-ended questions and qualitative responses.

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Introduction

Perspectives on singing appear to vary greatly – whilst many aim to do it in their careers, and an even larger number simply for pleasure, a lot of people feel immense anxiety towards singing outside of the shower. It is interesting to note that, from observation, children often seem the most confident and happiest singers. Indeed, research suggests singing in school (beyond the music curriculum) benefits both pupils' wellbeing (e.g. Welch et al., 2014), and their learning (e.g. An et al., 2013). Once in the long-term memory, songs are difficult to forget – just as is demonstrated with the alphabet, this could prove very useful in pedagogy.

Personally, it was being given opportunities to sing at primary school that resulted in the activity playing a huge role in my childhood. Singing brought my friends and I such joy, mainly due to the feeling of being 'part of something', which research implies is a common notion. It also greatly benefitted my learning – I still remember the educational songs I wrote and listened to during my school exam years to this day. However, despite evidence suggesting positive effects, research on pupils' feelings surrounding the use of singing in lessons – which is equally important – is lacking. I am therefore very interested to see current primary school-aged children's perspectives on singing, specifically enquiring about the following two Research Questions (RQs):

RQ1. How does singing in school for pleasure and learning make pupils feel?

RQ2. Do pupils believe that singing songs in lessons supports their remembrance of facts and vocabulary for their learning?

From a personal perspective, I have observed children in my family have a great love for singing around Key Stage 1 age, and sadly lose this by upper Key Stage 2 – perhaps this is due to a lack of singing opportunities which could be provided in education. As such, it will be interesting to analyse pupils' perspectives on singing in between these ages. This research will therefore focus on Year 4 pupils. First, previous literature relating to this topic will be discussed and critically analysed. Methodology for this proposal will then be described, with the important element of ethics

considered. Finally, I will reflect upon the implications of this research on my future teaching practice.

Literature Review

Uses of singing in school for pleasure and learning

Whilst music is a required part of the National Curriculum, singing may also be socially integrated into other school activities (Bresler, 1995). This could include singing in: class to start the day; assemblies; school productions; extra-curricular groups; competitions or festivals; and locally at Churches, performance venues, or in care homes. Even simple incorporation of singing into the register, transitions and behaviour management may prove beneficial and enjoyable for pupils, as I have observed at "New School". Kern et al. (2007) found that when a class teacher sang familiar tunes with changed lyrics for instance to address hand-washing, this generally improved the independence of a boy with autism during multi-step self-care tasks, simultaneously promoting this as an inclusive enterprise. Further, singing can be used across the curriculum through subservient integration (Bresler, 1995), arguably in any subject. It would be useful to consider any differences in children's perspectives within these different scenarios, thinking about the effects of singing on how people feel, which shall now be discussed.

Feelings evoked by singing

Many research reports suggest that group singing provides benefits for people across the globe, one finding that choral singing helped members of the general public during times of stress and depression, with the group ethos and dynamics providing a sense of belonging (Judd & Pooley, 2014). In 2012, Livesey et al. reported that the positive effects of singing may be experienced to a similar degree regardless of wellbeing status, nationality, age or gender – this may imply that singing can help everyone everywhere, although it is worth noting that this was focused on adults over the age of 50. There is great interest in this area of research – in 2009, a documentary ("Music Instinct: Science and Song") revealed results from Professor Lawrence Parsons' brain scans of Jarvis Cocker when he sang alone, and when he sang with Richard Hawley playing guitar. These showed that during duet singing, Cocker's brain was more active in areas for cognitive and emotional interaction – this switching on of the 'social brain' is seen to an even greater extent in choral singing (Welch, 2015).

Generally, less research has focused on the impact of singing on school-aged children – purposing this study – though existing reports show interesting findings.

Focusing on the largest children's choir organisation in the world, 'Young Voices', Hinshaw et al. (2015) looked at the effects of singing on the wellbeing of 60 Key Stage 2 school children from high and low socio-economic areas. Qualitative data suggested positive outcomes for psychological wellbeing, for example related to feelings of enjoyment, pride, excitement, accomplishment over challenges, and positive changes in attitudes and aspirations towards singing. Unexpectedly though, psychological wellbeing and positive emotional state quantitatively decreased significantly at the time after the choir performance. Indeed, weighted mean wellbeing scores were significantly higher in the non-choir group than in the choir group only after the choir performance through independent sample t-tests. The researchers suggest that, since there were no significant changes in positive outlook, the singing activity may be associated with reduced immediate states of happiness in participants. Equally, they state that – based on children's comments – this could simply relate to lack of family support and involvement, and the tiredness and potential boredom caused by the final performance (Hinshaw et al., 2015). This demonstrates the benefits of using both qualitative and quantitative data analysis for more in-depth understanding.

A report published by Welch et al. (2014) collected data from 6087 children aged 7+ to 10+ of the 'Sing Up' initiative from 2008-2011 via responses to a questionnaire relating to their sense of social inclusion, recording their level of agreement to statements via a seven-point Likert scale. In contrast to the results of Hinshaw et al. (2015), quantitative analysis of these data indicated that normalised singing development (through singing practice in school) is directly proportional to a child's sense of social inclusion and self-concept, regardless of age, sex and ethnicity. This implies that singing practice may support wellbeing. It is interesting that this paper notes the involvement of parents and carers in the concert-type performance in the local cathedral – this could possibly explain the difference in quantitative results. The reliability of this data is heightened in comparison with the other paper given the sample size is over 100-times greater. In addition, results of an 18-month investigation of children aged 7-8 showed that music training may positively modulate reactive aggressive behaviour in primary school children, suggesting positive implications upon their wellbeing (Roden et al., 2016).

Similarly, from their musical engagement questions, Rinta et al. (2011) found the most significant positive correlation to be between the number of days per week that 8–11-year-old children sang at school, and how socially included they felt (Pearson Correlation, $p<0.05$; 0.001). Children involved in this study also agreed that regular singing with friends made them feel more socially included (Rinta et al., 2011). Further, Hallam (2019) found that after participation in the 'Out of the Ark Singing School Project', with over 1000 children completing pre- and post-questionnaires, scores in response to the statements "I like singing with my class" and "I am good at music" significantly increased (most significantly with the former), implying enjoyment and improvement in self-confidence. Interestingly though, when comparing genders, the latter change was only significant for girls. Also, although the mean score did increase, there was no significant difference after the programme for the statement "I am good at singing"; perhaps this implicates that generic use of singing in school mainly impacts upon children's enjoyment, as opposed to their concern over their ability, especially where their teachers noted positive changes in enjoyment and confidence in singing and music. From this paper, it is also worth noting that the greatest increase in mean score relating to liking singing with the class was in Year 4. Ultimately, it will be beneficial to compare this and the above literature with the perspectives of Year 4 pupils about singing for pleasure at a school without a formal singing programme (arguably with less pressure, energy and time required for the activity) through the present proposal.

Learning through singing

Evidence of the effects of singing on learning

Music and singing are considered critical in primary school, so much so the Department for Education ('DfE') created 'A National Plan for Music Education' which included an evidence-based review of its importance in academic learning (DfE, 2011). In one study, singing was included in extended music training for pupils aged 7-8 as part of a longitudinal study, where alongside a control group (receiving extra Natural Sciences training) children completed computerized test batteries thrice within 18 months. One should consider that the music group scored significantly higher in the standardized intelligence quotient (IQ) tests, so inter-group comparisons may not be as reliable. However, the results showed that improvements in tests addressing phonological loop components of working memory (concerning verbal and auditory information) increased more significantly in the music group than in the control group. Further, music training appeared to support the central

executive (controlling attention) in the working memory model. Overall, the report suggests music training particularly benefits aspects of cognitive functioning which are strongly related to auditory information processing, specifically improving verbal intelligence in children (Roden et al., 2014). Linking to its observed benefits in sociability, singing has also been observed to enhance basic social skills in children as young as 6-months, including listening, eye-contact and following of instructions – attributes which ultimately need to be learnt (Zadnik & Habe, 2017).

Songs and singing have been shown to benefit pupils' learning of curriculum subjects, even as early as in preschool word learning which is critical ahead of any further learning. Here, both sung and rhythmically spoken songs significantly increased children's depth of word knowledge compared to words taught with picture cards (Lawson-Adams et al., 2022). Comparing Spanish pupils' ability to identify English vocabulary before and after engaging with English songs, Vinyets (2013) found an increase in the identification of 'head, ears, shoulders, knees and toes' after the song in 6/7-year-old pupils, although the percentage of children able to identify the English for 'eyes, nose and mouth' was actually greater before hearing the song. This could have potentially been due to these vocabulary terms being arguably easier in the first instance, and thus receiving less attention after the song (Vinyets, 2013). For children aged 11-12, the proportion able to identify different vocabulary increased for each word after listening to a song (except for one word staying the same) (Vinyets, 2013). Kaminski (2016) noted that remembrance through songs is due to memorisation rather than constructed thinking, however this should not necessarily be seen as a drawback given that a lot of the primary curriculum essentially needs to become part of memory rather than always 'worked-out', such as times tables and vocabulary.

Some informally argue that music 'combined' with mathematics through coequal-cognitive integration (Bresler, 1995) is often only superficial, for example in counting beats (Rogers, 2004). However, a research paper reported that 5-6-year-old pupils' mathematics attainment significantly improved after singing songs for practising addition and subtraction fluency, and in learning functions – this was through subservient rather than coequal integration (An et al., 2013; Bresler, 1995). Further, Hallam (2019) found that after the 'Out of the Ark Music Singing School Project' – which provides singing resources for lessons – using t-tests, children's listening and spatial skills, phonics, reading fluency and simple mathematics skills all significantly improved according to teacher evaluations. There were also statistically significant improvements in the percentage of correct mathematics responses, with no significant differences according to gender. However, this was not

replicated significantly in English. This could be due to a great benefit of the songs being fact-learning, as implied by the teachers (Hallam, 2019), which is harder to apply in English lessons. Equally, the contents of these assessments were not shared, making it difficult to reason these differences.

An important consideration in discussing this literature is that singing is only one part of the music interventions – whilst research has shown that listening to songs of a familiar tune supports short-term memory (e.g. Rainey & Larsen, 2002), few studies have looked at the effects of singing on memory and learning in children in isolation. Calvert and Tart (1993) found retrieval of words from long-term memory through singing rather than speaking resulted in significantly greater recall. Further, Ludke et al. (2014) showed that a "listen-and-sing" 15-minute learning strategy supported verbatim short-term memory for spoken foreign language phrases, with significantly superior performance in the singing group. However, in both studies, all participants were adults. Building on this, research papers that have looked at the impact of singing specifically for learning have focused on language-learning – whist this is beneficial background for the present research project, it does prove the need for greater understanding of singing for learning across the curriculum.

Various studies have found singing and song-based interventions to facilitate language-learning in students. For instance, a recent paper by Busse et al. (2021) reported that Year 3 pupils with singing intervention outperformed lyric-speaking and control pupils in both French grammar and spelling learning, and – unlike the speaking group – they showed a significantly enhanced positive effect compared to the control group. In an Italian high school, although singing activities did not reduce anxiety for students learning English as a foreign language, when teachers used singing activities, the association between self-efficacy and anxiety became weaker, indicating that students with lower self-efficacy may benefit from singing songs to cope with foreign-language anxiety. The authors of this paper suggest this is due to songs providing a comfortable, relaxing, amusing and informal classroom environment, promoting positive emotions. This effect on wellbeing may then have mediated improved learning, where English speaking performance was better in these students when music activities were incorporated into the curriculum (Passiatore et al., 2019).

Evidence regarding the effects of singing on learning is key. However, pupil perspectives are just as important and should not be overlooked. Ultimately, enjoyment of school impacts children's

wellbeing and engagement with their learning, and so this paper will discuss the responses children themselves have had to singing in school.

Pupil perspectives on singing for learning in school

The limited literature on pupils' perspectives on singing for learning focuses on languages, evidencing the need for the present study which will research perspectives under a whole-curriculum context. Nevertheless, the available background is helpful and informative. For instance, using questionnaires to study pupils' perceptions, Vinyets (2013) found that a vast majority of Spanish children aged 6-7 agreed they like singing English songs in school – similar to 8-9-year-old children in Taiwan (Chou, 2012), they particularly enjoyed being able to dance simultaneously, which they thought more effective. However, they did not do this outside of school, emphasising the importance of providing this opportunity during the school day. Questioning 11-12-year-old children's perceptions, they too felt it easier to remember vocabulary and improve pronunciation through song, motivated by this in the main (Vinyets, 2013).

In response to a lesson with songs compared to one without in a school in Lima, the percentage of children aged 7-9 who said they like their English class "a lot" increased with songs, as did the percentage saying that listening to and singing songs encourages them to learn English, taking position as the most preferred method. Interestingly though, the percentage who said they "liked [the lesson] a lot", and liked participating in their English class "a lot", decreased. It is worth noting that in the latter case this was only reduced by one pupil per class, and that observers also scored average participation, interest, attention (including behaviour) and motivation in both classes' lessons without and with songs, finding increases in each when using songs. The authors argue the difference between pupil and observer perceptions on motivation and perception may be due to children's opinions being volatile, and children not being used to completing surveys (Aguirre et al., 2016), although as stated, pupil perspectives are key.

Results from a Cypriot primary school similarly suggested strong benefits of using songs in 9-12-year-olds' learning of English (Diakou, 2013). Using questionnaires before and after the use of songs, there were significant increases in the proportion agreeing "I like to learn grammar" and "vocabulary", a majority feeling the use of songs made them "more relaxed" and leads to more effective grammar and vocabulary learning. Evidence of improved learning was included. Notably, whilst 41.4% said they felt bored and just 18.3% happy while learning grammar in the pre-

questionnaire, these values decreased to 18.7% and increased to 45.6% respectively after the use of songs, implying positive effects on both learning and wellbeing. This included a child who only stopped disturbing others and (successfully) attempted the work after songs were incorporated into the lessons, commenting, "I couldn't believe it! I could do something the other kids could." That itself suggests such a profound effect of singing songs in school, not only academically but arguably most importantly, for the child's self-esteem, self-belief and behaviour (which in this case was also affecting others) (ibid.). Those that had difficulties with songs specified that these were due to pace – though upon questioning, over two-thirds stated they did not feel negative effects on learning grammar due to the song being too fast – and noise, although Diakou (ibid.) noted the act of singing played a role in motivation and practising new vocabulary.

Over 80% of 8-11-year-old children in a school in Taiwan believed singing English songs supported their understanding of the language, with 87.5% feeling they learned more quickly and easily by singing English songs, simultaneously moving with the rhythm. However, 93.8% felt stories had a greater impact, providing more visual stimuli. Those aged 10-11 concluded singing made them become distracted by their peers, and whilst 8-9-year-old pupils felt singing was the more motivating learning activity, 10–11-year-olds found stories resulted in higher motivation (Chou, 2012). Perhaps, given other literature has focused on children up to the age of 9, this implies that there could be an age limitation on the use of singing in productive learning, and the best solution would be to provide songs to children up to 9-years through videos with relevant visual aids, particularly in the context of dual coding. However, this is the perspective of just 36 children aged 10-11 in one school, and so cannot be generalised.

Overall, research confirms that after singing had been incorporated into lessons, attainment has improved for children in subjects such as mathematics, reading, phonics and languages. Further, it has shown that children perceive singing as useful for learning, however this has only really focused on languages – it is therefore important that understanding of pupils' perspectives on singing for learning in a broader sense is developed through the present study.

Methodology

Research design

For this proposal, I have chosen to utilise a case study approach, given that this provides opportunity for an in-depth analysis of a specific case – generally, this could be a school, class, a few individuals, or a single individual (Evans, 2008). This paper will study the perspectives of a Year 4 class on singing for pleasure and learning in school through a questionnaire, and a few individuals through a semi-structured interview. In this instance, the case study will be instrumental – whilst the case will be looked at in depth, this is to support understanding of the more generic concept of the impact of singing in school on children's feelings, and whether they feel it supports their memory for learning (Noble & Heale, 2019). Nevertheless, as previously discussed, specific reasons have influenced the decision to focus on Year 4 pupils.

'Feelings evoked by singing' and 'Learning through singing' discussed papers which included pupils' perspectives on singing – in each case, questionnaires proved especially useful for quantitative data collection and analysis. A questionnaire will therefore focus on developing understanding of the class's feelings about singing for pleasure and learning in school. Alongside this – particularly where statistical testing will not be possible for this type of study – interviews will be helpful for building a bigger picture and more complete understanding of pupils' thinking in relation to the questionnaire, providing qualitative data. The methodology has been designed in this way due to the purpose of triangulation, where researchers aim to clarify and provide greater reliability, credibility and validity to the meaning of data by using more than one source of data collection (Evans, 2008). Whilst Mason (2006) argues that there are limited opportunities with this approach given the difficulty of methods corroborating each other straightforwardly, the benefits appear to outweigh this collectively-viewed main limitation (Noble & Heale, 2019). However, with this in mind, I will need to ensure the questionnaires and semi-structured interview questions complement and match one other in the context of methodological triangulation. In order to increase reliability of the quantitative data from which statistics will be calculated, sample size should be maximal, specifically with at least 30 participants for quantitative analysis, although ideally this number would be greater to be representative enough to make generalisations (Cohen et al., 2018; Taber, 2013). As such, each consented pupil in the class will be invited to complete the questionnaire. Practically, a smaller number (six) will then need to be selected to be involved in the semi-structured interview (Taber,

2013) to expand upon their thoughts from the questionnaire, supporting my discussion of the research questions. With these methods, children may try to answer the questions in a way that they think would please the researcher (Cohen et al., 2018; Hopkins, 2008). Hence, it is vital that the children understand that there are no right or wrong answers.

Participants

The present case is a class of 8-9-year-old Year 4 pupils ("Class 4A") at a school in which singing is valued by staff. Whilst the emphasis on singing in this school may be suggested to implicate bias in the children, it should support the research given that they have had greater exposure to varied singing opportunities, and perhaps therefore have more-developed opinions on this area. Year 4 pupils have been chosen to provide comparisons with previous literature in which this age group was a particular focus, in one instance showing the most significant increases in enjoyment of singing once this was introduced into their lessons (Hallam, 2019), and from a personal perspective, having observed changes in attitudes towards singing around this age. Further, younger children may struggle to articulate their thinking and emotions (Hopkins, 2008).

One drawback of the interviews involves limitations of representation. Regarding sample size, this is however considered appropriate for a small-scale qualitative study of a Year 4 class (Cohen et al., 2018), and Taber (2013) argues that a modest-sized sample that is representative of some population (in this case, Year 4 children) provides more information about the population than a non-representative larger-sized sample. Additionally, each individual in the class will be very different and with that, there may potentially be various limiting factors in making this selection representative. In any case, it would not be possible to account for each of these (Cohen et al., 2018), particularly where subpopulations (for instance, of children from a specific ethnicity) may be small and ultimately production of generalisations is not an aim. (Note specific data about "Class 4A" is not available.) Nevertheless, discussion with the class teacher regarding their views on whether there are particular individuals who should not take part will be very important (Levy, 2009).

Notably though, whilst this is not a focus of this paper, research suggests attitudes around singing in school appear to vary significantly according to gender (e.g. Hallam, 2019). Combining these pieces of information with the point that in a class of approximately 50% girls and 50% boys, the sample should be of the same proportions for fair representation of the population (Cohen et al., 2018), I will split the class into two homogenous groups of males and females. From this, three pupils from each

will be selected at random using a probability 'random stratified' sample in which each child in the populations will have an equal chance of being selected, maximising representation and reducing bias (Cohen et al., 2018; Taber, 2013).

Data collection

Questionnaire

The questionnaire (Appendix 1) has been formatted based on a combination of ideas from previous related research. The first question will ask the children to select one emotion in response to the question, "How does singing in school make you feel?", using the emotions (e.g. happy, nervous) from the questionnaire created by Diakou (2013) as a basis. Hopkins (2008) suggests the use of visual aids such as emoticons can be useful for adults and children alike, particularly in avoiding limitations for those who find pure-text more challenging, and in making the questionnaire appear more informal. Emoticons were used in questionnaires of peer-reviewed papers discussed in 'Feelings evoked by singing' (Aguirre et al., 2016; Vinyets, 2013) and shall similarly be used to aid understanding of each emotion in the present questionnaire.

Emoticons will also be used in the closed-question section, specifically influenced by children's preferences on their appearances in questionnaires (Read et al., 2002), and all neutral-yellow to avoid influence over selection (for example where green may be associated with the 'correct' answer). This section will enable efficient quantitative analysis (Cohen et al., 2018) of children's feelings towards specific uses of singing in school, and how they feel this may or may not support them in their learning. Reliability is thought to be greater for verbal rather than numerical rating scales, since the former seem to provide greater clarity (Krosnick & Presser, 2009; Schwarz et al., 1991). Given trichotomous scales are potentially limiting in catching more truthful responses, seven plus or minus two-point scales are recommended (Cohen et al., 2018; Krosnick & Presser, 2009; Schwarz et al., 1991). Considering Likert scales already require a lot of decision-making from children, and one does not wish to overwhelm them, I have designed this part of the questionnaire to comprise an 'in-between' five-point Likert scale, ranging from 'strongly disagree' (very sad face) to 'strongly agree' (very happy face). Clarity on the meaning of these will be provided. One drawback is that children may often decide to choose the 'neutral' option, which is not so informative, however it is important to include this since it could reflect a child's opinion.

One statement in the Likert-rating table refers to children singing in the school choir, given this would indicate they choose to sing for pleasure. Further, the scenario of singing in school performances has been included since research suggests this may induce anxiety in primary school children (Miles, 2020). Before the questionnaire, two mathematics angles lessons will include encouragement of children to join in with singing the "Angles Song" (Maths Songs by NUMBEROCK, 2015), purposed to support pupils in meeting the National Curriculum requirement to *"identify acute and obtuse angles"* (DfE, 2013, p. 28). It will be useful to see if the children feel this does help their memory in this context, particularly where previous literature has found benefits of songs in mathematics. Cohen et al. (2018) note a limitation of questionnaires in lacking in-depth answers – as such, the option for 'any comments' is included, alongside subsequent semi-structured interviews.

Semi-structured interviews

In order to improve reliability of the data from questionnaires and develop a deeper understanding of pupils' perspectives of singing in school, three pupils will each be randomly selected from two homogenous groups (six pupils in total) through random stratified sampling, drawing names out of a hat for interviews. These will enable pupils to expand upon their answers in the questionnaire, providing supporting qualitative data. Specifically, the interviews will be semi-structured. This will provide focused guidance of the discussion through open-ended questions (Appendix 2), prompting relevant thinking for the children and (bearing in mind shorter attention spans of children) managing timings (up to 30 minutes). Equally, it will permit children more freedom in sharing their perspectives, and misunderstandings to be addressed. The described approach should minimise issues with children seeking to provide answers they think I would like to hear, and aims to reduce researcher-power (O'Reilly et al., 2013). Audibly recording the interviews (with consent) will enable more reliable analysis and transcription than in-the-moment written notes (Cohen et al., 2018; Jamshed, 2014) which could also make the children feel 'tested'.

Initially, I considered conducting individual interviews, conscious that children may otherwise be influenced by their peers (Daley, 2013), and have less opportunity to share their feelings (Cohen et al., 2018). However, there are many benefits of group interviews in literature which suggest this type may be more appropriate for this particular study. Children are typically more relaxed when interviewed with their peers, not only necessarily due to the more 'natural' setting, but also the reduction in researcher power since children outnumber the researcher (Eder & Fingerson, 2001;

Hinshaw et al., 2015). Group interviews also allow children to build upon each other's answers with 'sensitive and perceptive' discussions of a wider range of experiences than individual interviews would perhaps enable – particularly important where the researcher must show neutrality – providing potentially more accurate answers where they may need to defend their own and challenge their peers' opinions (Eder & Fingerson, 2001; Hopkins, 2008; Morgan, 1993). Given group interviews may result in some children giving little contribution, Hopkins (2008) suggests dividing the children into two groups of three or four to interview separately such that less confident children are interviewed together, preventing more confident children from dominating discussions. Therefore, two three-person semi-structured interviews will be conducted using the guidance sheet – which informs that questions will be addressed to each child where appropriate (Appendix 2) – seeking advice from the class teacher about which children to group together (including consideration of gender) to maximise their comfort, confidence and contribution.

Data analysis

In analysing quantitative questionnaire data, most papers researching pupils' perspectives on singing present their results in tables (e.g. Aguirre et al., 2016; Chou, 2012; Diakou, 2013; Hinshaw et al., 2015). Indeed, under relevant context, Cohen et al. (2018) state that although graphs and charts provide visual immediacy, tables often provide more information in a more succinct manner. Here, questionnaire data will therefore be shown in tables – one presenting pupils' responses about their feelings, and two presenting their Likert-scale responses to each statement regarding singing for pleasure and for learning respectively (Appendix 3). Frequencies and percentages will be demonstrated, enabling clear comparison between ratings for each statement, as well as between statements for evaluation of trends. This will, for example, show whether generally participants prefer singing in assemblies to singing in school plays, if they find songs useful for their learning but that singing does not make them more useful, or vice versa.

Both semi-structured interviews will be audio-recorded and transcribed verbatim. Where "thematic analysis (TA) should be seen as a foundational method for qualitative analysis" (Braun & Clarke, 2008, p. 77), this flexible, simple, yet detail-rich research tool will be used for analysis of interview data, following the six-phase framework for TA designed by Braun and Clarke (2008). Given this case study aims to analyse specific research questions, this TA will be mainly theoretical as opposed to inductive (Maguire & Delahunt, 2017). With this and previous research findings in mind (see

'Learning through singing'), the themes to be addressed may surround children's feelings around singing for pleasure in school (a potential sub-theme looking at the different scenarios such as assemblies), their enjoyment of singing for learning, and possible benefits of singing for remembering facts and vocabulary in their lessons. Importantly though, themes need to be flexible – children's comments cannot be predicted, and as such these may be modified and/or other themes identified only from the data themselves. It is worth noting the arguable main limitation of TA – whilst in some ways advantageous, flexibility does mean that interpretations which may be taken from the data are broad, potentially making it difficult to decide upon themes (Braun & Clarke, 2008). The key qualitative data taken in relation to the research questions of the present paper will be discussed through a narrative, correlating and/or comparing these findings with the quantitative results.

Ethical considerations

In planning and writing this proposal, ethical considerations have been of paramount importance, following the guidance provided by the Faculty of Education, University of Cambridge, and the British Educational Research Association (BERA) (2018) as discussed below. First, in accordance with Article 3 of The United Nations Convention on the Rights of the Child (United Nations, 1990) which notes "the rights and duties of…individuals legally responsible for him or her" should be taken into account, I will share this research proposal – including the questionnaire and guidance for semi-structured interview – with the head teacher and class teacher, requiring their consent. Further, no child will be asked to participate in the questionnaire or interview without consent from their parents/carers via their signing of a letter that will be sent home in advance of the study, once checked by the Faculty and school. Likewise, children will need to complete a tick-box form. They will be informed that they may withdraw from the study at any time, and will not be asked for any explanation.

As the researcher, I will give children an unbiased background to the research, explaining why their thoughts, whatever they may entail, are so valuable (without influencing their free choice to participate). Further, they will be informed on what they will be invited to do, and where this information will be used. If participants have any questions – which they will be told they are very welcome to ask – I will ensure the answers to these are shared with the whole class population. I have researched ways to help the children feel as comfortable and settled as possible around this case study (see 'Methodology'). Consequently, I have used/will use emoticons in the questionnaire, child-

appropriate language in speech for interviews – which will purposefully be conducted as focus groups – and positive, unbiased language throughout (e.g. thanking them for their participation). Equally, I will conduct the research in a class with whom I have developed strong teacher-pupil relationships. It is important to note that this could influence the children's feelings of researcher or 'teacher' power, making these adaptations to settle the pupils and clarification that there will be no consequences to their decisions even more critical.

When I carry out this case study and write the final paper, all names will be anonymised or pseudonymised. In addition, once this project is complete, questionnaires, transcripts and any other written evidence (including digital work) about the participants will be destroyed in accordance with the Data Protection Act (2018).

Implications for future practice

Analysis of the literature for this proposal will greatly influence my professional development, both in and out of the classroom. For all ages, incorporating singing for pleasure into the school day would seem to support pupils' wellbeing – it will be useful to find out the particular scenarios in which children may enjoy this (or otherwise). Often, school productions are associated with the 'best singers' getting solos, but given the apparent positive influence of group singing on wellbeing, and that this may lower the self-esteem of those given 'smaller' parts, I will use this as a great opportunity for choral singing. Since research suggests attitudes towards school performances may be affected by family involvement, I will be particularly enthusiastic and encouraging in sharing the benefits of each child having at least one person from outside school in the audience, but equally sensitive of the fact that this may not be feasible.

It has been very beneficial to learn about the effects of songs and singing on learning in school. In my lessons, particularly in Lower Key Stage 2 (based on the available literature), I would like to incorporate educational songs to support pupils' enjoyment, engagement, motivation, and also in cementing their memory of facts and vocabulary. Specifically, research has shown improvement in language-learning, word-learning in the language of the school, mathematics, and phonics. Further, given their benefits for learning grammar in other languages, songs could be useful in grammar-based English lessons.

In the context of pupil perspectives, singing for pleasure appears to support children's feelings of social inclusion, and their wellbeing. In lessons, pupils have been reported to feel happier and less bored when songs are incorporated into their learning. Additionally, they themselves believe they learn more effectively, particularly in combination with movement. However, research has focused on language lessons, and it will therefore be interesting to learn more about children's feelings regarding singing for learning in school under a broader context, alongside singing for pleasure.

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Appendix 1

Questionnaire

Emoticons adapted from Donath, 2018 and Read et al., 2002.

Singing at School!

How does singing in school make you feel? Tick (✓) only **one**.

☐ Happy ☐ Excited ☐ Giddy ☐ Nervous ☐ Embarrassed ☐ Bored

I would love to know more about your thoughts on singing in school. For each sentence, please tick (✓) under one emoji. Thank you for your help! ☺

	Strongly disagree 	Disagree 	Neutral 	Agree 	Strongly agree 
I sing in the school choir					
I like singing in class at the start of the day					
I like singing in assemblies					
I like singing in school plays					
Singing in school helps me to feel like I belong					
I like singing in lessons to support my learning					
Singing makes my lessons more fun					
The 'Angles Song' helps me remember how to identify acute and obtuse angles					
Songs help me to remember facts and vocabulary in my lessons					
Singing the songs is more useful than just listening to the songs for my learning					

Any comments? _____

_____

_____

_____

Appendix 2

Semi-structured interview guidance

Semi-Structured Interview

This interview will be conducted twice (at a maximum time of 30 minutes), each time with three children randomly selected from two gender-separated stratified samples of "Class 4A" after their completion of the questionnaire. Open-ended questions will enable a deeper understanding of the pupils' perspectives on singing in school.

Introduction

"Hello x, y, and z. How are you feeling today? Thank you for completing the 'Singing' questionnaires – they were so useful to help me understand how you feel about singing in school. It's very kind of you to come and help me learn even more about your feelings towards singing in school, thank you. I have jotted down some questions to help us keep on topic, but I'd love to hear any of your thoughts about this, so please feel free to add comments even if you don't feel they exactly answer these questions, and remember this is not any sort of test, it is just to help me. I know you will all have super wonderful thoughts, so I'd like to hear these from each of you. Just to listen back to this later on, I'd like to record our chat – would that be okay with you? Do you have any questions?"

Questions – addressed to each child unless they were 'neutral' (though where appropriate, may enquire about this), using names, with slightly adapted wording

A. *Wellbeing*

1. If any child sings in the choir: "***Why did you choose to join the school choir?***"

2. "***Why do you really dislike / dislike / like / really like singing in class at the start of the day / assemblies / school plays?***" Choose one scenario for each child, varying the rating level if possible (e.g. one dislike, one like, one really like).

3. If the children have indicated preference to singing in class at the start of the day / assemblies / school plays, ask why, e.g.: "***Can you tell me more about why you prefer singing in school plays to singing at the start of the day in class?***"

4. Relating to the questions around how singing in school makes you feel, and the statement "singing in school makes me feel like I belong": ***"When you sing with your friends in school, how does that make you feel? You've ticked x on the questionnaire."***…"***Do you feel more like you belong when you get the chance to sing with your friends in school? Would you feel any different singing on your own?"***

B. *Learning*

5. "***Your answer suggests you really do not like / do not like / like / really like singing in lessons to support your learning – can you tell me why you feel this way?***"

6. **"*We've been listening to the 'Angles' song in Maths lessons – why do you really not feel / not feel / feel / really feel this helps you to remember how to identify acute and obtuse angles?*"**

7. **"*Why do you really not feel / not feel / feel / really feel songs help you to remember facts and vocabulary in your lessons?*"**

8. If positive feelings regarding songs supporting their memory of facts and vocabulary, "***Are there any particular subjects where you think songs are useful for remembering facts and vocabulary? Can you remember which songs you found useful for this?***"

9. "***Why do you really not feel / not feel / feel / really feel singing is more useful than just listening to the songs for your learning?***"

C. *Other comments*

10. If children have written any other comments on their questionnaires, expand upon these.

11. "***Would you like to tell me anything else about your feelings about singing in school, to do with how it makes you feel or how it might affect your learning?***"

Appendix 3

Data analysis (templates)

Emotion	Happy	Excited	Giddy	Nervous	Embarrassed	Bored	Total
Number							[30]
Percentage (%)							100%

Table 1 A class of [30] Year 4 pupils' feelings towards singing in school

Table 1 above shows a template for presentation of data from a questionnaire in which children selected one of six emotions in response to the question, "*How does singing in school make you feel?"*.

	Likert Scale Rating Number (%)				
'Singing for Pleasure' Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I sing in the school choir					
I like singing in class at the start of the day					
I like singing in assemblies					
I like singing in school plays					
Singing in school helps me to feel like I belong					

Table 2 A class of [30] Year 4 pupils' perspectives on singing for pleasure in school

Table 2 above shows a template for presentation of data from a questionnaire in which children selected one rating on the five-point Likert scale for each statement. Data presented as total numbers, and percentages for each statement. The highest percentage for each statement will be in bold.

	Likert Scale Rating Number (%)				
'Singing for Learning' Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I like singing in lessons to support my learning					
Singing makes my lessons more fun					
The 'Angles Song' helps me remember how to identify acute and obtuse angles					
Songs help me to remember facts and vocabulary in my lessons					
Singing the songs is more useful than just listening to the songs for my learning					

Table 3 A class of [30] Year 4 pupils' perspectives on singing for learning in school

Table 3 above shows a template for presentation of data from a questionnaire in which children selected one rating on the five-point Likert scale for each statement. Data presented as total numbers, and percentages for each statement. The highest percentage for each statement will be in bold.

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