



[BG Research Online](#)

Jeffery, T. & Whiteoak, D. (Eds.) (2016). *educationUndergraduate: Journal of Undergraduate Research in Education*, Volume 8. Lincoln: Bishop Grosseteste University.

This is a journal published by Bishop Grosseteste University in its final form on 25 November 2016.

All articles appearing in *educationUndergraduate*, the Journal of Undergraduate Research in Education, are protected by copyright. All rights reserved.

Except for the quotation of short passages for the purposes of personal research, review or criticism, no part of *educationUndergraduate*, the Journal of Undergraduate Research in Education, may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without prior permission in writing from Bishop Grosseteste University.

For enquiries about BG Research Online email bgro@bishopp.ac.uk.



*education***Undergraduate**



BISHOP
GROSSETESTE
UNIVERSITY

Journal of Undergraduate Research in Education
Volume 8: November 2016

Contents

What are practitioners' perceptions of qualifications and progression within the early years' sector? A small scale research project within a pre-school setting Philippa Coldicott: BA (Hons) Applied Studies (Early Childhood)	1
The benefits of Forest School to children aged 2-16: A systematic review Rebecca Dix: BA (Hons) Psychology and Early Childhood Studies	18
Slither down the snake of success: The link between synthetic phonics and reading attainment Kate Kent: BA (Hons) Education Studies and Applied Drama	37
Is the app evaluation rubric developed by Weng and Taber-Doughty (2015) an effective system for educators to select the most appropriate apps for children with Special Educational Needs in the United Kingdom? Alex Liddle: BA (Hons) Primary Education with QTS (Qualified Teacher Status)	49
What do upper KS2 children from a small village primary school perceive to be the benefits and potential challenges of Physical Education lessons? Joseph Piper: BA (Hons) Primary Education with QTS	67
Has growing awareness of mental health issues been reflected in improvements in support and awareness within schools? Emily Spalding: BA (Hons) Education Studies and Applied Drama	83

Editors: Tracy Jeffery, Daphne Whiteoak
Associate Editors: Kate Adams, Chris Atkin
Production Editor: Ellie Foster

Editorial Contributions

Ashley Compton, Elizabeth Hopkins, Sacha Mason

Editorial Policy

Articles submitted for consideration in *education***Undergraduate**, the Journal of Undergraduate Research in Education, originated as research projects undertaken by honours graduates in their final year of study at Bishop Grosseteste University. The original submissions achieved a first class honours award. Enquiries relating to submissions in future editions of *education***Undergraduate**, the Journal of Undergraduate Research in Education, should be directed to a member of the editorial team.

Copyright

All articles appearing in *education***Undergraduate**, the Journal of Undergraduate Research in Education, are protected by copyright. All rights reserved. Except for the quotation of short passages for the purposes of personal research, review or criticism, no part of *education***Undergraduate**, the Journal of Undergraduate Research in Education, may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without prior permission in writing from Bishop Grosseteste University. The opinions stated in the articles are those of the authors and do not necessarily reflect the opinions of the Editors or Bishop Grosseteste University.

© Bishop Grosseteste University 2016

ISSN 1756-1280

What are practitioners' perceptions of qualifications and progression within the early years' sector?

A small scale research project within a pre-school setting

Philippa Coldicott

Abstract

The enhanced political interest in early years' provision throughout England in recent decades has influenced considerable change across all areas of the sector. Fundamental to political discourse was a government pledge to improve outcomes and achievements for all children, primarily through improving the sector workforce. A commitment to improving sector quality has been largely attributed to raising qualifications, and a professionalisation of the workforce. Despite an apparent focus on the workforce itself, sector retention remained poor, amidst poor salaries and low status. This small scale study provides an insight into a small group of practitioners' perceptions regarding these issues. Four practitioners were interviewed in order to explore the multidimensional aspects relating to these issues. The findings suggest that passion and commitment to childcare and education are key drivers and motivators for the practitioners. However, a fragmented system of qualifications, training options and progression routes are hindering practitioners' progression opportunities. It is recommended that training options and progression routes are better mapped out to improve accessibility and clarity for practitioners in the sector. Moreover, it is recommended that further research into practitioners' perceptions of current training options and their ability to progress within the sector would be beneficial.

Introduction

The early years (EY) sector within England has seen continuous development and progression within the last two decades. An increase in political interest led to increased funding, a standardised curriculum, and mandatory assessments (McGillivray, 2008). Research into the benefits and outcomes of quality early childcare and education for children has reinforced the need to make improvements across the sector (Duffy, 2014). Similarly, Jones (2014) suggested that upskilling and professionalising the workforce through improved qualifications and higher levels of qualification can be attributed to raising quality in the EY sector. This influenced the transformation of qualifications, additional training routes, and the introduction of a specialist EY post-graduate qualification (Jones, 2014). However, issues relating to the status and conditions of the workforce are increasingly relevant (The Children's Society, 2013). Duffy (2014) claimed the EY sector workforce continues to have poor salaries and low status in society, and the increasing demands, workload and expectations are impacting on progression and retention. The Professional Association for Childcare and Early Years (PACEY), reported a five percent decline in practitioners across the workforce between 2005 and 2015, and government funding in the sector is beginning to decline (Kalitowski, 2016). Despite this, practitioners' perceptions of current qualifications and related career opportunities appear to be neglected. Therefore, through gaining practitioners' perceptions of factors relating to these issues within the EY sector, these multiple dimensions can be explored. The reasons for conducting this research relate to personal interest in qualification and progression opportunities across the sector. The main aim of this research is to engage with practitioners to develop an understanding of their perspectives relating to current training routes, and progression opportunities. In

addition, this research will seek to explore practitioners' perceptions of quality indicators. Due to the small scale of this research, and limitations relating to time-scales, the data retrieved will not be indicative for the EY sector as a whole, it can only serve purpose examining personal perceptions of individual practitioners from a small pre-school setting.

Literature Review

The development of the sector

The EY sector has a deeply engrained history entailing perceptions of a poorly qualified, and largely female, workforce (Hallet, 2013). The post war labour market, identified the benefits of a female workforce which developed a demand for child care (Hallet, 2013). This was primarily to enable middle class mothers to return to work, for both economic and societal reasons (Hallet, 2013). McGillivray (2008) claimed the low status of the workforce reflected the perceived low status of the children they were caring for, with an emphasis on the care rather than education of young children. In recent decades the government committed to improving outcomes for children and raising the status of the workforce through standardisation, professionalisation and increased qualifications (Chalke, 2013).

Moss (2006) argued the traditional emphasis of 'care' within the EY sector is largely embedded within contemporary society, which is reflected by poor salaries and conditions for its workforce. Traditional discourse requires the EY workforce to challenge societal interpretations and diminish the ideology of a 'substitute mother' figure (Moss, 2006, p. 34). McGillivray (2008) suggested the government's commitments to invest in a skilled workforce and raise qualifications will support practitioners to challenge this discourse. However, Osgood (2006) argued that care and emotional attachments in the EY are vital for providing supportive environments and, therefore, impact the quality of provision. Osgood (2009) moved on to remark that members of the workforce view care as a critical element and motivational aspect of their professional identity within the sector. Despite complexities regarding the status of the EY workforce, a wealth of evidence, research and theory has developed the general consensus that EY education is vital for improved child development outcomes and future academic success (Sylva, Melhuish, Sammons, Siraji-Blatchford & Taggart, 2004). The complex relationship between education and care in the EY sector remains largely debated.

Cooke and Lawton (2008) undertook a study examining practitioners' motivations and ambitions within the EY sector, claiming that passion for improving outcomes for children was a resounding key driver for their choice of career. A majority of participants within the study commented on their passion, motivation, and love of working within the EY (Cooke & Lawton, 2008). However, issues relating to low status and poor pay appeared to have a significant negative impact amongst the practitioners (Cooke & Lawton, 2008). It is significant to note this research could potentially be portrayed as dated due to the variety of sector changes in recent years. However,

despite continuous political debates regarding quality and qualifications, practitioners' opinions of such matters appears to be the neglected view. Brock (2013) highlighted the EY workforce is often unheard, despite arguably being the most significant voice. Moreover, this concern has been reiterated by the workforce itself. In a survey of EY practitioners, 89 percent of respondents felt that the government neglected to consult the workforce on leading debates, such as qualifications and pay (Pre-school Learning Alliance, 2014). It is apparent that factors including qualifications, salaries and status within the EY sector are intrinsically linked and affect progression and retention within the workforce (Duffy, 2014; McGillivray, 2008).

Quality in the early years

The increased international interest in the EY sector resulted in a focus on improving quality as a way of promoting positive outcomes for children's holistic development (Georgeson & Campbell-Barr, 2015). The Effective Provision of Preschool Education (EPPE) project (2004) stated that highly qualified practitioners have a significant positive impact on child developmental outcomes, suggesting a correlation between qualifications and quality (Sylva et al., 2004). The early years of a child's life are widely recognised as formative years, a period of holistic growth essential for future achievements, in both school and later life (Kalitowski, 2016; Sylva et al., 2004). Therefore, the quality of early years' care and education a child receives has been increasingly attributed to workforce qualifications, and expertise.

Numerous studies have shown that high quality EY settings support young children's development across a range of skills, such as cognitive development, linguistic ability and social skills (Hillman & Williams, 2015). However, issues and debates surrounding the definition of 'quality' are apparent within the sector. As suggested by Nutbrown (2006), the term 'quality' is culturally determined, reflective of societal and individual perceptions. Cottle and Alexander (2012) agreed, stating 'quality' is a value based term, often cited but rarely defined. Ideologies regarding 'quality' in the EY sector are largely subjective and often reflect an individual's beliefs and priorities (Cottle & Alexander, 2012).

Within the EY sector, there are various frameworks for assessing and measuring quality. The Early Years Foundation Stage curriculum (2014) (EYFS) is a mandatory framework of curriculum which outlines various areas of directives that practitioners are expected to work alongside (Wall, Litjens & Taguma, 2015). Another quality assurance assessment derived from inspections carried out by the Office for Standards in Education, Children's Services and Skills (Ofsted), who assess individual settings practice across a range of indicators, including leadership, and the implementation of the EYFS (Wall et al., 2015).

As Mathers, Roberts and Sylva (2014) suggested, these common assessments of quality in the EY sector focus on three aspects. The first aspect, 'Process quality', relates to the experiences of a child, such as; activities; care given; and relationships formed within the setting. The second aspects, 'Structural quality', assesses

environmental factors such as staff to child ratios and staff qualifications. Finally, 'Outcomes' is a measure of children's development and achievements (Mathers et al., 2014). Mathers et al., (2014) argue that despite indications that 'Process quality' measures deliver more significant outcomes for child development, policy makers show preference over 'Structural quality' methods of assessment, due to time restraints and ease of sampling. However, due to the subjective nature of defining quality, it could be argued each of these methods lack rigour.

Cottle and Alexander (2012) claimed that diverse perceptions between a range of stakeholders present a barrier to defining and achieving 'quality'. They suggested that policy makers' visions surrounding 'quality' within the sector focus on qualifications and upskilling of the workforce. However, a large number of practitioners within their study reported 'experience' as a quality indicator within the EY sector (Cottle & Alexander, 2012). The practitioners felt the time frame spent practicing within a setting contributed to their knowledge, understanding and improved practice (Cottle & Alexander, 2012). Conversely, a government document, *Getting it right first time* 2013, outlined contrasting features of high-quality provision (DfE, 2013). The document stated that quality settings maintain strong leadership, well qualified staff, and high expectations for all children (DfE, 2013). Although the document focused on 'structural quality' indicators, terminology surrounding 'quality' remained ambiguous, which in itself could represent as a barrier to achieving quality.

Raising qualifications

Issues relating to quality, qualifications, and the impact these have on the development of children have been a concern for academics and policy holders alike (Baldock, Fitzgerald & Kay, 2013; Sylva et al., 2004). The first graduate qualification in the EY sector was introduced in 2007 as the Early Years Professional Status (EYPS) (Lloyd & Hallet, 2010). However, following a review of qualifications, Nutbrown (2012) argued that the quality of the EY sector was poor as a result of a poorly qualified workforce, unsuitable qualifications, and confusing progression opportunities. This is at the detriment of children's development and their early educational experiences (Nutbrown, 2012).

In response to Nutbrown's review (2012), the qualification was re-configured in 2013 as the Early Years Teacher Status (EYTS) (Jones, 2014). The new qualification supported many of Nutbrown's recommendations, including enhanced standards and course admission requirements. Although the new requirements are similar to those of a primary teaching qualification, Gaunt (2016) argued that practitioners undertaking EYTS qualifications are placed at a significant disadvantage compared to teachers, as the qualification does not achieve Qualified Teacher Status (QTS) despite similar course requirements. Therefore, EYTS does not receive the same recognition or pay scales, and is confined to the Private, Voluntary and Independent sector (PVI) (Gaunt, 2016). The issue of funding an upskilled workforce is an ongoing debate, with concerns for increased fees for families, and the threat of a dwindling workforce (Jones, 2014). Fitzgerald (2016) suggested that EY practitioners showed reluctance to undertake a course with limited progression opportunities. Moreover, Harris (2016) claimed due

to poor opportunities following an EYTS qualification, recruitment on the courses and within the sector is poor, and there are growing concerns of retention. Fitzgerald (2016) highlighted that figures emphasised a fall in graduates in settings of four percent between 2014 and 2015.

Sims-Schouten and Stittrich-Lyons (2014) researched the experiences of practitioners during higher education programmes. Their participants concluded that although further training had enhanced their knowledge and practice within the setting, the experience gained through work-based learning was invaluable. However, issues surrounding confidence and status, particularly how the workforce was perceived by the wider community were all too familiar, and participants suggested that additional qualifications were rarely recognised within society (Sims-Schouten & Stittrich-Lyons, 2014). PACEY (2015) acknowledged this issue, stating that parents rarely ranked high levels of qualification as a quality indicator when choosing formal childcare providers. It could be suggested that continuous changes in qualifications and professional development have led to confusion and uncertainty amongst the workforce, and throughout society. This in itself could be a barrier to achieving higher levels of recognition within the sector. Jones, (2014) remarked that societal recognition of the EY workforce is vital to enhancing the status of the sector.

Level three qualifications have seen reforms with the introduction of Early Years Educator (EYE) qualifications and an early years' apprenticeship scheme (Kalitowski, 2016). Nutbrown (2012) had argued that previous level three qualifications lacked the required content, and were not always relevant to the practice setting. The new EYE level three qualification required minimum grade C GCSE levels in maths and English on completion (NDNA, 2015). The government moved on to adapt the course specifications, which saw the requirement of a grade C GCSE move from a precondition, to an exit requirement (NDNA, 2015). However, concerns regarding a lack of trainees on such courses, continued to be debated (NDNA, 2015).

The National Day Nurseries Association (NDNA) (2015) suggested that level two practitioners were reluctant to progress to level three courses, due to concerns regarding their ability to complete the GCSE requirements. A recent campaign group, Save Our Early Years (2016), argued that the government requirements are limiting to the sector. The group argued that alternative Functional Skills qualifications in Maths and English should be accepted as exit requirements within the level three training, but the government rejected the proposal (Save Our Early Years, 2016). Crown (2016) remarked that EYE trainers and settings have reported a significant fall in applicants, suggesting this is due to increasing expectations. This led to further concerns of maintaining levels of availability for families accessing EY provision across England (Crown, 2016). It could be suggested that although the government made progress to upskill the EY sector, the policies implemented may have resulted in the sector facing new issues in successful recruitment and training.

Progression opportunities

Within the EY sector, higher levels of qualifications have increasingly been commended as a quality indicator. Brock (2013) stated that training, qualifications, professionalism and progression interrelate as a multi-dimensional aspect of the EY sector, and, therefore, correlate to affect the overall quality. Further education in the EY sector enables a greater understanding of practice, through engaging in research and theories, supporting contemporary issues (Hallet, 2013). In addition, Goddard (2015) proposed that professional development enables practitioners to develop their roles and responsibilities, in a continuously developing and demanding sector. This suggests there is a general consensus that continuous professional development prepares the EY workforce for developing policy expectations in a range of areas such as curriculum, regulation and assessment. Further recommendations within the Nutbrown review (2012) focused heavily on improving opportunities for the workforce through clear and rigorous progression opportunities for all. Despite continuous reforms of qualifications there have been issues and debates relating to these qualifications, their value, and progression thereafter. Kalitowski (2016) states the ‘...(EY sector) lacks clear links between training, higher qualifications and better pay and opportunities’. Clear pathways of progression and enhancements at higher levels are needed in order to retain a highly skilled workforce (Fitzgerald, 2016).

The Daycare Trust (n.d.) argued that despite the implementation of new qualification routes through EYT and EYE, little has been done to raise the overall salary of practitioners within the sector. Kalitowski (2016) suggested that the traditional links between progression and salary enhancement is not apparent within the EY: on average a nursery manager receives only £3,550 per annum more than other staff within a setting. Further evidence provided by NDNA (2015) claimed national issues relating to recruitment and retention of level three qualified staff are increasing and are intensely linked to poor salary and status.

There have been increasing debates across the EY sector regarding a lack of clear development and progression pathways for practitioners who do not wish to progress to EYTS, or graduate level, suggesting there needs to be variation of opportunities (Kalitowski, 2016; Pacey, 2015). This could suggest that continued professional development across all levels of the sector is key to providing quality EY provision, therefore, professional progression is a vital aspect of practice. As implied by Wall et al., (2015), the qualifications held are not the quality indicator directly: rather it is the knowledge gained through undertaking the qualification which enables practitioners to provide stimulating environments and experiences to promote development. However, it could be argued without societal acknowledgement and recognition of such qualifications the status of the sector will also lack recognition (Jones, 2014).

It is therefore apparent that the views of practitioners in the sector are a significant viewpoint to be sought. This report asks: What are practitioners’ perceptions of qualifications and progression within the early years’ sector?

Methodology

As the main intention of this research was to seek opinions and attitudes, a qualitative approach was taken, allowing for depth, and a variety of opinions and viewpoints (Aubrey et al., 2000; Walker & Solvason, 2014). The sample of participants consisted of four practitioners, and were chosen through 'purposive sampling'. This form of sampling reduces the risk of bias through engaging in specific aspects of the participants' expertise (Roberts - Holmes, 2011). The sampling frame of selecting participants in relation to their expertise incurs limitations, as results can be subjective. To minimise this limitation, the sample included practitioners with a variety of qualifications, skills and expertise in the sector (Davies, 2010). As interview data is often in-depth and lengthy, the sample is often smaller than that of other methods, such as questionnaires (Gillham, 2005). The timeframe of this report represented as a limitation, due to the time interviews take and the data analysis involved: therefore, the sample was relatively small.

The method of semi-structured interviews was chosen as the data collection strategy, in consideration of participants varying expertise in the field (Aubrey et al., 2000). Roberts-Holmes (2011) claimed interviews encourage the participant to 'speak their mind' in relation to the topic or issue. The degree of flexibility available through semi-structured interviews ensured that interview questions were relevant to each participant's level of expertise. Questions were adapted to each participant, which maintained ethical considerations relating to their participation (Gillham, 2005). Silverman (2014) highlighted that semi-structured interviews rely on some pre-determined questions, which are explored further, in accordance to the specifics of the phenomenon. A sample of interview questions was initially composed, and additional probing questions were asked where relevant. Focus groups were considered as a data collection strategy, but were rejected due to the varying qualifications and expertise of participants. Interviews ensured that each participant felt able to express their views and perceptions without the influence of others' perceptions and opinions (Mukherji & Albon, 2010).

Aubrey et al. (2000) suggested a vital element of researching within an interpretivist paradigm is the researcher's ability to recognise their own professional knowledge, and through reflexivity, personal bias can be highlighted. Although personal bias is difficult to adapt, recognising the researchers own philosophic position ensures an awareness of its influence during analysis, therefore, aiding the validity and reliability of data, analysis and outcomes.

Ethics

Ensuring the project was ethically sound is a vital aspect of research and requires the utmost consideration at each stage and throughout (Walker & Solvason, 2014). Prior to any data collection, ethical implications relating to the specifics of the research and methodology were detailed, and approved by the researcher's supervisor at Bishop Grosseteste University (BERA, 2011; BGU, 2014). Consent to undertake the research was sought from the

setting's owner, to ensure transparency. Walker and Solvason (2014) stated the importance of informing the 'gatekeeper', in this case the setting owner, of relevant information relating to the research. Aubrey et al., (2000) suggested the first vital consideration for any researcher is to ensure the well-being and safety of all participants throughout, in an emotional, mental and physical context. Seeking approval from various sources ensured the research is ethically sound and ensured participants' safety (Aubrey et al., 2000).

Participants were initially invited to participate in this research project and provided with an information letter which highlighted the voluntary nature of participation, detailing the purpose of the research, its aims, the researcher's responsibilities and ethical considerations (EECERA, 2015; Silverman, 2014). The letter to participants clearly stated the participants' right to anonymity within the report, and to respect throughout (Roberts-Holmes, 2011). Informed consent was sought and granted from each participant through written format, during which participants were reminded of their right to voluntary participation and their withdrawal rights from the research (BERA, 2011; EECERA, 2015). Participants were informed that interviews would be recorded using an electronic device and that interviews would be transcribed. Each participant was offered a copy of their own transcript (Davis, 2010). Davis (2010) suggests that electronically recording the interviews, rather than recording responses by hand, is a more reliable and valid method. Interviews were arranged informally between the researcher and participants to suit a mutual time within the research schedule. To ensure the study adhered to ethical standards and regulations, the transcripts, electronic files and consent forms were stored securely in a locked cabinet, in compliance with the Data Protection Act 1998. On completion of the report all data were destroyed (BGU, 2014; Data Protection Act 1988).

Process

The interviews took place in the participants' work environment, in a private room. Davies (2010) stated this is important to ensure the interview is conducted in an accessible environment, free from disturbance. Once the interviews had taken place, they were transcribed using a verbatim transcription method (Smith & Davies, 2010). Although this method is time consuming, it allows for greater reliability when coding and analysing the data (Smith & Davies, 2010). The audio recordings were listened to again, whilst re-reading the transcripts to ensure the information was accurately recorded (Gillham, 2005).

The transcripts were coded using Gillham's (2005) 'Ten-point procedure for analysis'. The procedure enables data to be categorised and analysed according to questions and responses, reducing the data size (Gillham, 2005). Initially, categories were formed from the transcripts, and separated into colour coded sections with a separate lettering code. The significant areas of each transcript were then highlighted in accordance to the specific code for the category in which it fell. Finally, another table was drawn together using the topics formulated, and each participant's response to the particular topic was recorded. This allowed for the data to be analysed and presented in a strategic manner, which enabled greater reliability and validity (Gillham, 2005).

Analysis, evaluation and outcomes

Semi-structured interviews were conducted with four participants. Pseudonyms have been used to protect the identity of participants. Participants were known as; Jan, Kal, Sam and Bev. The first two questions each participant was asked related to their length of service within the EY sector and their level of qualification. Jan and Kal both held a level three qualification. Jan was also studying level four at university. Sam held a level two qualification and Bev had no EY qualifications.

Practitioners' motivations

To generate a discussion exploring practitioners' perceptions of qualifications and progression, it appeared relevant to explore how participants became interested in the EY sector. Kal, Jan and Bev discussed previous experience of caring for children as an influence:

Jan stated she enjoyed *"looking after siblings when I was younger"*.

Bev commented *"I've always wanted to work in the sector and when I had my youngest I used to drop her off at playgroup and just seeing how the staff interact with the children, and like how you see them progressing and like."*

Moss (2006) suggested that traditional caring discourse relating to the EY workforce remains. Similarly, Osgood (2009) claimed practitioners often cite the care of children is a vital aspect of a career within the sector. This could suggest that 'care' is a fundamental aspect of EY provision, and particularly relates to practitioner motivation. However, there appear to be conflicting interests regarding the nature of care in EY. Moss (2006, p.34) suggested 'substitute mother figure' ideologies are an element of EY discourse that needs addressing. Conversely, Osgood (2006) argued that care and emotional attachments are a vital aspect of quality EY provision. The practitioners viewed the care, and progress of children in largely positive terms, often within the same sentence, suggesting that the practitioners felt they provided both care and education equally. Furthermore, it appeared the participants of the study enjoyed their career and these factors contributed to their drive and motivation:

Jan stated *"You get a sense of positive contribution"*.

Kal commented *"I enjoy working with the children, I like to see them progress"*.

The replies coincided with responses regarding practitioners' motivation for working within the sector within Cooke and Lawton's (2008) research. It could be suggested that caring for children and the rewards of supporting progression and development are key drivers for the practitioners in this study. As highlighted within the literature review, Mathers et al., (2014) argued that 'process quality' measurers, such as relationships within the setting between practitioners and children, have the greatest impact on developmental outcomes for children. Therefore, the current political focus of improving structural aspects of practice, such as raising qualifications, fail to adequately assess the benefits of care, relationships and experiences held by children in EY settings as a measure of quality.

Quality provision

In recent decades, progression within the EY sector has been driven by changing expectations of qualification, quality of provision and developmental outcomes for young children (Georgeson & Campbell-Barr, 2015; Sylva et al., 2004). However, Cottle and Alexander (2012) argue that 'quality' is a subjective term based on personal values. The participants in the present study were asked what they felt quality in the EY sector relates to. A significant theme to emerge from the interviews was participants' referral to 'experience' as a quality indicator. Although this was mainly mentioned in relation to the question 'Do you feel the level of qualification held impacts quality of provision?' it was also mentioned throughout interviews at various points.

Kal commented "How long you've been doing it, as in experience, it's probably a bit of both, some good qualifications don't mean a lot if that's all you have. But at the same time neither does experience".

Bev stated "No I don't think so I'm not as qualified as much as other staff here but I think given time everyone has that ability, I think if you have passion it doesn't matter what qualification you have".

The participants appeared to echo the findings from practitioners' perceptions within the study undertaken by Cottle and Alexander (2012), that experience impacts the quality of provision. Although the participants within this research mentioned other quality indicators such as passion, ensuring safety and well-being, and the development of children, the majority of responses related to relationships and practitioners' experience. Conversely, the DfE (2013) stated quality features included high qualifications and high expectations for all children. This highlights differing values relating to the term 'quality', and could suggest that practitioners feel an element of 'quality' practice within the EY sector benefits from work based, first-hand experience and 'process quality' measures (Mathers et al., 2014). Furthermore, as argued by Wall et al., (2015) quality is not directly impacted according to the level of qualification held: rather it is the experience and knowledge gained through undertaking further training that ultimately affects quality. It appears the practitioners within this study view quality provision differently from policy makers.

Further qualifications and training

The participants were asked questions relating to their future training options. Although the level of qualifications amongst participants varied, a significant finding arose from Bev and Sam's answers. Both participants commented that they were due to be progressing onto a level three EYE course. Significantly, the mathematics GCSE requirements appeared to be a barrier to their training. Save our Early Years Campaign (2016) argued the requirements are limiting to the sector.

Bev commented "Having to do my maths is making it really hard".

Sam stated "I can't get my level three until I have got my GCSE maths, I failed twice already".

Bev had commented that she felt having to complete her maths was making training in the sector difficult. The NDNA (2015) had suggested that level two practitioners were reluctant to progress to level three courses due to the GCSE requirements. However, Sam's statement does not coincide with these views, she appeared to be

willing to repeat her maths GCSE for the third time to progress to level three, displaying commitment to remain in the sector. It is significant to note that that is the view of one practitioner only.

Jan was the only practitioner who discussed progression through EYTS. As the only participant undertaking level four training at university, this could be associated with her most recent academic progress. However, the topic discussed appeared to reiterate Gaunt's (2016) comments regarding EYTS qualifications being confined to the PVI sector:

"Like the early years teacher, you can't go to a school setting and get paid more, you have to stay in a nursery setting, so I don't think it opens up any more doors" (Jan).

Jan suggested that the qualification does not result in salary or progression opportunities. A lack of QTS and the ability to progress throughout the PVI and maintained sector has previously been argued as a factor preventing progression on to EYTS courses (Fitzgerald, 2016; Harris, 2016). It could be argued that not accrediting QTS alongside the EYTS qualification is impacting upon progression and training decisions. However, due to the limited number of participants within the research this finding is only indicative of one practitioner's perception of EYTS course.

Progression through training

As previously highlighted, further education and professional development supports practitioners in their ever demanding and changing roles (Goddard, 2015; Hallet, 2013). Each of the participants discussed progression through training in largely positive terms. Participants who had recently undertaken training viewed the knowledge gained as an invaluable experience:

Sam commented *"It's affected me in a good way, because when I came here I was quite shy"*
Jan: *"It's affected my professionalism and confidence."*

These opinions appear to coincide with views in the study of practitioners' higher education experiences by Sims-Schouten and Stittrich-Lyons (2014).

Participants were asked questions relating to their long term career goals. Bev, Sam and Kal each spoke in terms of progression through undertaking additional qualifications:

Sam commented *"I need an education so I've got something behind me, so I'm higher up, not lower down"*.
Kal stated *"I want to do more training on levels above, levels above my level three"*.

However, there seemed to be a lack of knowledge surrounding the access of such training. When asked if they knew how to access further training, each of the practitioners commented that they were unaware of training routes:

Bev stated *"No, I didn't know about the level three until I got my job here. I didn't know anything about it"*.
Kal also stated *"No I don't know a lot, but it's not out there is it"*.

As acknowledged by Kalitowski (2016), the fragmented system of training in the sector is leading to confusion. Despite recommendations made within the Nutbrown review (2012), arguing for clearer training and progression routes, it appears issues to accessibility remain for these practitioners. It could be argued that a lack of clarity and accessibility surrounding access, has impacted practitioners' progression opportunities. It is significant to note however, that each participant is from the same setting and this factor could be due to demographic factors rather than a barrier to the general EY sector.

Retention

As highlighted within the literature review, the EY sector has faced issues relating to retention of EY practitioners across all qualification levels (Kalitowski, 2016; NDNA, 2015). The NDNA (2015) stated retention issues were most apparent amongst level three qualified staff, and argued this was attributed to salary issues. As the two practitioners with a minimum of level three qualification, Kal and Jan discussed this issue as a barrier on various occasions during the interview:

Jan commented *"I can't go anywhere, I can't go higher, and it doesn't pay when you do so I can't. Like I say the recognition isn't very good and the status isn't very good"*.

Jan later commented on progression ambitions *"Another role where I can progress and money wise"*.

Kal also commented *"I don't know, like, erm, I like working in early years, I love the job but you know, it's just the pay. So I don't think I will stay, it's hard to live isn't". (sic)*

With regards to Jan and Kal's perceptions of progression in the early years, it appears the issues of opportunities, pay and status are impacting their possible carer options. Kalitowski (2016) suggested the clear links between progression and pay that are seen traditionally across the economic workforce are largely absent from the EY sector, with senior staff earning marginally more than lower staff levels. This appears to support Jan's concerns. Jan suggested that even if she were to progress further, she did not feel the pay would attain any financial benefits. Therefore, it could be argued, even if there were increasing opportunities to progress within a professional capacity through academic training routes, there is little financial incentive for progression within the EY sector, due to a lack of funding.

A surprising response came from Jan, as quality and qualifications were discussed:

Jan commented *"It's the government that makes all these decisions and I don't think they have enough knowledge about what we even do. They need to listen to us and what we have to say"*.

Jan commented about policy makers' decisions in terms of feeling her viewpoint has been neglected. Brock (2013) previously suggested that the EY workforce opinion is the most neglected. Jan's opinion is arguably commonplace across the EY sector. As Sims-Schouten and Stittrich-Lyons (2014) study suggested poor status in society was a concern for many practitioners. Moreover, the Pre-school Learning Alliance (2014) claimed that 89 percent of practitioners feel a neglected stakeholder in government policy and leading debates.

Conclusions and recommendations

Overall findings from this research highlight participants' passion and commitment to working in the EY sector, particularly with regards to providing support and care for young children in their early years of education (Osgood, 2009). In line with previous studies, participants who had undertaken training within the sector discussed their experiences in largely positive terms (Sims-Schouten & Stittrich-Lyons, 2014). Although the government has committed to improving the quality of the sector through qualifications, practitioners felt that experience gained through working within a setting had more of an impact (DfE, 2013). As highlighted by Cottle and Alexander (2012) ambiguous terminology surrounding 'quality' lends to individual interpretations. It could be argued without a definitive representation, and a shared understanding of quality provision, barriers to achieving quality in all settings will remain.

Significantly, all of the practitioners demonstrated a keen commitment to undertaking further training relating to their career, for personal benefits. The NDNA's (2015) concerns regarding recruitment issues over level three GCSE requirements did not coincide with the relevant practitioners' views. However, it appeared through many of the findings that participants reiterated concerns highlighted elsewhere, that future training opportunities and progression within the sector were limited (Gaunt, 2016; Kalitowski, 2016). All practitioners in the present study reported they were unaware of training routes, and how to access additional sector relevant training. This appeared to align with the concerns that training routes and progression pathways remain unclear (Fitzgerald, 2016). Therefore, a recommendation would be to define and clarify training options and routes on a national and an immediate setting level. Although this had previously been recommended within the Nutbrown review (2012), it could be suggested lack of access and clarity for practitioners remains. It is significant to note this could be a setting issue rather than a national issue, therefore, further research into practitioners' perceptions would be beneficial, to assess the extent of the barriers.

Another significant concern for the practitioners related to their opportunities to progress within the sector, which appeared in relation to the lack of opportunities in a professional and financial capacity. One practitioner suggested being confined to PVI settings after undergoing EYTS, impacts her progression and training within the sector (Gaunt, 2016). For some of the practitioners, salaries were a significant influence for pursuing a career outside of the EY sector. As previously highlighted, the issue of poor salaries, status and the impact these have on progression and retention within the sector have been a resounding and continued concern, which policy makers must adequately address (Fitzgerald, 2016).

It is evident that the EY workforce faces a range of barriers and complexities, relating to policy holders' expectations and increasing demands. Furthermore, it appears these issues are intrinsically linked and it could be argued that the current retention concerns and training options are aspects of a multi-dimensional issue. Due

to the large range of issues related to qualifications and progression, and the limitation of a small sample, areas of this research could be explored in greater detail. It is evident further research into these issues, particularly from workforce perspectives, would be beneficial.

References

- Aubrey, C., David, T., Godfrey, R., & Thompson, L. (2000). *Early childhood educational research issues in methodology and ethics*. Retrieved from <http://lib.mylibrary.com.bishopg.idm.oclc.org/Open.aspx?id=26823>
- Baldock, P., Fitzgerald, D., & Kay, J. (2013). *Understanding early years policy* (3rd ed.). London: Sage Publications.
- Bishop Grosseteste University. (2014). *Research ethics policy*. Retrieved from <http://www.bishopg.ac.uk/Documents/Policies%20and%20Procedures%20-%20Governance/ResearchEthicsPolicy.pdf>
- British Educational Research Association. (2011). *Ethical guidelines for educational research*. Retrieved from <https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf?noredirect=1>
- Brock, A. (2013). Building a model of early years' professionalism from practitioners perspectives. *Journal of Early Childhood Research*, 11(1), 27-44. Retrieved from <http://ecr.sagepub.com/content/11/1/27.full.pdf>
- Chalke, J. (2013). Will the early years professional please stand up? Professionalism in the early childhood workforce in England. *Contemporary issues in early childhood*, 14(3), 212-222. Retrieved from <http://cie.sagepub.com.bishopg.idm.oclc.org/content/14/3/2012.pfd.full>
- Cooke, G. & Lawton, K. (2008). *For love or money: pay, progression and professionalisation in the 'early years' workforce*. Retrieved from http://www.ippr.org/files/images/media/files/publication/2011/05/for_love_or_money_1633.pdf?noredirect=1
- Cottle, M., & Alexander, E. (2012). Quality in early years settings: Government, research and practitioners' perspectives. *British Educational Research Journal*, 38(4), 638-654. Retrieved from <http://web.b.ebscohost.com.bishopg.idm.oclc.org/ehost/pdfviewer?sid=5cab5d0a-f701-430c-8ca7-b1f1a640b694%40sessionmgr103&vid=1&hid=125>
- Crown, H. (2016). *Functional skills campaign to stave off 'catastrophe' of GCSE's*. Retrieved from <http://www.nurseryworld.co.uk/nursery-world/news/1156743/functional-skills-campaign-to-stave-off-catasstrohe-of-GCSEs>
- Data Protection Act*. (1998). London: HMSO.
- Davies, J. (2010). Preparation and processes of qualitative interviews and focus groups. In L. Dahlberg, & C. McGaig (Eds.), *Practical research and evaluation; A start-to-finish guide for practitioners* (pp. 126-144). Retrieved from <http://lib.mylibrary.com.bishopg.idm.oclc.org/Open.aspx?id=355510>
- DaycareTrust. (n.d). *2020 Children and young people's workforce strategy: Consultation response from Daycare Trust*. Retrieved from http://www.familyandchildcaretrust.org/sites/default/files/response_to_202_cyp_workforce_strategy.pdf
- Department for Education. (2014). *Statutory framework for the early years foundation stage: setting the standards for learning, development and care for children from birth to five*. Retrieved from

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335504/EYFS_framework_from_1_September_2014_with_clarification_note.pdf

Department for Education. (2013). *Getting it right first time*. London: DfES.

Duffy, C. (2014). The early years' curriculum. In G. Pugh, & B. Duffy, (Eds.), *Contemporary issues in the early years*. (pp. 109-125). (6th ed.). London: Sage Publications.

European Early Childhood Education Research Association. (2015). *EECERA ethical code for early childhood researchers*. Retrieved from <http://www.eecera.org/documents/pdf/organisation/EECERA-Ethical-Code.pdf>

Fitzgerald, D. (2016, April 4). Quantity over quality. *Nursery World*, 2016(6), p.27-28.

Gaunt, C. (2016, January 11). Link 30 hours to workforce development: PACEY. *Nursery World*. Retrieved from <http://www.nurseryworld.co.uk/nursery-world/news/1155444/link-30-hours-to-workforce-development-pacey>

Georgeson, J., & Campbell-Barr, V. (2015). Attitudes and the early years workforce. *Early years*, 35(4), 321-332, doi: 10.1080/09575146.2015.1111688

Gillham, B. (2005). *Research interviewing: the range of techniques*. Retrieved from <http://lib.myilibrary.com.bishopg.idm.oclc.org/Open.aspx?id=95375>

Goddard, C. (2015). *Children's workforce guide to training and qualifications*. Retrieved from http://www.cypnow.co.uk/digital_assets/969/Qualifications-and-Training-Guide-2015.pdf

Harris, D. (2016 April 07). Action needed to recruit and retain early years teachers. *Nursery World*. Retrieved from <http://www.nurseryworld.co.uk/nursery-world/opinion/1156756/action-needed-to-recruit-and-retain-early-years-teachers>.

Hallet, E. (2013). *The reflective early years' practitioner*. Doi: 10.4125/9781473914919

Hillman, J., & Williams, T. (2015). *Early years education and care: Lessons from evidence and future priorities*. Retrieved from http://www.nuffieldfoundation.org/sites/default/files/files/Early_years_education_and_childcare_Nuffield_FIN_AL.pdf

Jones, P. (2014). Training and workforce issues in the early years., In G. Pugh, & B. Duffy, (Eds). *Contemporary issues in the early years* (pp. 255-271). (6th ed.). London: Sage Publications.

Kalitowski, S. (2016). *Towards an early years workforce development strategy for England*. Retrieved from <https://www.pacey.org.uk/working-in-childcare/workforce-development-policy-briefing-jan16.pdf>

Lloyd, E., & Hallet, E. (2010). Professionalising the early childhood workforce in England: Work in progress or missed opportunity? *Contemporary Issues in Early Childhood*, 11(1), 75-88. Retrieved from <http://cie.sagepub.com.bishopg.idm.oclc.org/content/11/1/75.full.pdf>

Mathers, S., Roberts, F., & Sylva, K. (2014). Quality in early childhood education. In G. Pugh & B. Duffy (Eds.), *Contemporary issues in the early years* (6th ed.), (pp. 55-71). London: Sage Publications.

McGillivray, G. (2008). Nannies, nursery nurses and early years professionals: Constructions of professional identity in the early years workforce in England. *European early childhood education research journal*, 16(2), 242-254. Retrieved from <http://web.b.ebscohost.com.bishop.idm.oclc.org/ehost/pdfviewer/pdfviewer?sid=d56e68-f80f>

- Moss, P. (2006). Structures, understandings and discourses: Possibilities for re-envisioning the early childhood worker. *Contemporary issues in early childhood*, 7(1). Retrieved from <http://cie.sagepub.com/content/7/1/30.full.pdf>
- Mukherki, P., & Albon, D. (2010). *Research methods in early childhood: An introductory guide*. London: Sage Publications.
- National Day Nurseries Association. (2015). *NDNA workforce survey 2015*. Retrieved from <http://www.ndna.org.uk/AsiCommon/Controls/BSA/Downloader.aspx?iDocumentStorageKey=db45cb65-2eea-4781-98dd>
- Nutbrown, C. (2012). *The Nutbrown Review. Foundations for quality the independent review of early education and childcare qualifications*. Retrieved from https://www.gov.uk/governemnt/uploads/system/uploads/attachement_data/file/175463/Nutbrown-Review.pdf
- Nutbrown, C. (2006). *Key concepts in early childhood education and care*. Retrieved from <http://lib.myilibrary.com.bishopg.idm.oclc.org/Open.aspx?id=179843>
- Osgood, J. (2009). Childcare workforce reform in England and 'the early years professional': A critical discourse analysis. *Journal of Education Policy*, 24(6), 733-751, doi: 10.1080/02680930903244557
- Osgood, J. (2006). Deconstructing professionalism in early childhood education: resisting the regulatory gaze. *Contemporary Issues In Early Childhood*, 7(1), 5-14. Retrieved from <http://cie.sagepub.com.bishopg.idm.oclc.org/content/7/1/5.full.pdf>
- Professional Association for Childcare and Early Years. (2015). *Building blocks: A report on the state of the early years' sector in England*. Retrieved from <http://www.pacey.org.uk/Pacey/media/Website-files/building520blocks/Building-blocks-full-report-v2-03-june-2015.pdf>
- Pre-school Learning Alliance. (2014). *Early years agenda: Interim report*. Retrieved from https://www.pre-school.org.uk/sites/default/files/early_years_agenda_interim_report.pdf
- Roberts-Holmes, G. (2011). *Doing your early years' research project* (2nd ed.). London: Sage Publications.
- Save Our Early Years. (2016). *What we want*. Retrieved from <http://www.saveourearlyyears.org.uk/what/-we-want/>
- Silverman, D. (2014). *Interpreting qualitative data* (5th ed.). London: Sage Publications.
- Sims-Schouten, W., & Stittrich-Lyons, H. (2014). 'Talking the talk' Practical and academic self-concepts of early years practitioner in England. *Journal of Vocational Education Training*, 66(1), 39-55. doi: 10.1080/1316820.2013.867526
- Smith, K., & Davies, J. (2010). Qualitative data analysis. In L. Dahlberg & C. McGaig (Eds.), *Practical research and evaluation: A start-to-finish guide for practitioners* (pp. 145-158). Retrieved from <http://lib.myilibrary.com.bishopg.idm.oclc.org/Open.aspx?id=355510>
- Sylva, K., Melhuish, E., Sammons, P., Siraji-Blatchford, I., & Taggart, B. (2004) *The effective pre-school education (EPPE) project: findings from pre-school to the end of key stage 1*. Retrieved from https://www.ioe.ac.uk/RB_Final_Report_3-7.pdf
- The Children's Society. (2013). *The children's society response to the early years childcare and deployment consultation*. Retrieved from <http://www.childrensociety.org.uk/sites/default/the-childrens-society-response-to-the-early-years-childcare-and-deployment-consultation.pdf>

Walker, R., & Solvason, C. (2014). *Success with your early years research project*. Retrieved from http://bishopg.worldcat.org/title/success-with-your-early-years-research-project/oclc/881417024?referer=list_view

Wall, S., Litjens, I., & Taguma, M. (2015). *Early childhood education and care pedagogy review England*. Retrieved from <http://www.oecd.org/education/early-childhood-education-and-care-pedagogy-review-england.pdf>

The Benefits of Forest School to Children Aged 2-16: A Systematic Review Rebecca Dix

Abstract

This systematic literature review aimed to identify strong recurring themes within the current literature regarding perceived benefits of Forest Schools for children aged 2-16 years. A thematic synthesis approach (Booth et al., 2012) was taken. Criteria for inclusion were that themes must appear within 50% or more of the literature reviewed, in order to be considered embedded within the literature. Themes found within the literature included: improved emotional and social wellbeing; increased motivation and concentration; improved awareness and management of risk; and support to physical development and wellbeing. It was concluded that as these themes were so prominent within the current literature, the principles of Forest Schools could be introduced into mandatory national education, subject to further research.

Defining Forest Schools

Forest School has been defined as 'an inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands on learning experiences in a woodland environment' (Forest Research, 2016). The Forest School Association (2016) states the Forest School ethos contains six key principles, which were agreed by the UK Forest School community in 2011 (see Table 1); these key principles set Forest Schools apart from other outdoor education.

Table 1: The 6 Key Principles of the Forest School Approach
(The Forest School Association, 2016)

- 1** Forest School is a long-term process of frequent and regular sessions in a woodland or natural environment, rather than a one-off visit. Planning, adaption, observations and reviewing are integral elements of Forest School.
- 2** Forest School takes place in a woodland environment or natural wooded environment to support the development of a relationship between the learner and the natural world.
- 3** Forest School aims to promote the holistic development of all those involved, fostering resilient, confident and creative learners.
- 4** Forest School offers learners the opportunity to take supported risks appropriate to the environment and to themselves.
- 5** Forest School is run by qualified Forest School practitioners who continuously maintain and develop their professional practice.
- 6** Forest School uses a range of learner-centred processes to create a community for development and learning.

Where do Forest Schools come from?

Forest Schools originated in Scandinavia in the 1950s, when a retired soldier began to use the environment and physical experiences to teach children in the woods and forests, with the notion that learning in an outdoor environment would contribute to the building of the self-confidence and self-efficacy that children need in life (Knight, 2009). The Danish adopted the Forest School approach, and this has become influential in the UK following a visit to Denmark in 1993 by Nursery Practitioner Students at Bridgwater College (Knight, 2009). Practitioners witnessed the Danish children using and exploring the environment with their own initiative and agenda (Knight, 2009). They saw that the children were benefitting from this, as well as from supervised tasks such as cooking on an open fire (Knight, 2009). The practitioners made a judgement that the Forest School approach was appropriate to use in their local context in England, and so applied what they had observed at Bridgwater College's Early Years Centre (Knight, 2009).

What are Forest Schools?

Although Bridgwater applied the overall approach they had observed in Denmark, it was in fact 'set up in a basic and different way to Denmark culture' (Pound, 2006, p. 71). The key principles of Forest School are widely open to interpretation. Due to this, there is much debate between practitioners about what exactly Forest Schools are. Knight (2009) has defined eight key elements which make a Forest School a Forest School and a unique initiative (see Table 2).

Table 2: 8 elements which make Forest School a Forest School

Elements (Knight, 2009)		
1	The setting is not the usual one	This may be in a wood (which is the ideal/preferred setting), or in another outdoor area, it is not part of the usual educational settings site and usual rules do not apply. Instead Forest School rules must be adhered to.
2	The Forest School is made as safe as is reasonably possible, in order to facilitate children's risk taking	Forest School leaders are trained to risk assess on a daily and sessional basis. They will risk assess activities, individuals' needs and the environment. This provides evidence that the environment has been made safe enough - but not risk free. Practitioners are then able to provide an open and free environment for children.
3	Forest School happens over time	For Forest School to have a lasting impact on a child, they must spend a significant amount of time experiencing a Forest School approach. Typically, Forest School occurs in blocks of 6 weeks (one half day each week), however blocks of 10 weeks are

		recommended as at 6 weeks the most significant changes in children begin to emerge. Longer opportunities of Forest School are always promoted and welcomed.
4	There is no such thing as bad weather, only bad clothing	Experiencing different weathers can be a hugely positive learning opportunity for children. The only weather which would prevent time in the Forest is high winds, (as branches may be blown off without warning). In this case, the camp would be moved to an open space. It would not mean a retreat indoors. There is a clear link between Forest Schools use of the natural environment and the EYFS (2014) prime area of learning - Physical development and specific learning area - Understanding the World. Forest Schools can aid the provision of such areas within the EYFS.
5	Trust is central	Rules are highly important in a Forest School, adults must be able to trust the children to follow the rules, and the children must trust the adults to do the same. Before children are sanctioned freedom in the Forest School environment, time is spent ensuring they understand each rule that is in place.
6	The learning is play based and, as far as possible, child-initiated and child-led	Forest School facilitates risk and holds no set timetable. Children are provided time and space to make their own choices and fulfil their own creativity and curiosity. Play is open-ended, freeing children from pressure to do things a certain way or achieving a specific outcome
7	The blocks and the sessions have beginnings and ends	Forest School can be a hugely beneficial experience for children, so it is important to readily prepare them for the beginning of the block of sessions and to officially mark the end of the sessions with a celebration of their achievements
8	The staff are trained	It is essential, due to the special and different nature of a Forest School, that staff are appropriately trained.

Forest Schools in the UK

The Forest School approach is not a Government led initiative. However, the Government has acknowledged its benefits: both the Department of Health and the Department of Children, Schools and Families make reference to the Forest School approach being beneficial to the health and education of young children (Knight, 2009). The UK House of Commons Select Committee of Education and Skills (2005) have also agreed that outdoor learning is important, stating that 'we are convinced that out-of-classroom education enriches the curriculum and can

improve educational attainment' (p. 9). The Committee visited Denmark, Finland and Norway (countries which commonly use the outdoors as a tool for learning). They state they:

were particularly impressed by the Danish Forest School initiative which uses the environment as a tool to enrich the curriculum, whilst enabling students to experience a carefully monitored element of risk and to become more familiar with the natural world (p. 10).

Despite these acknowledgements, the Government has made no effective or reasonable action to support the growth of Forest Schools in the UK. However, Forest Schools have begun to grow in number throughout the UK and it seems to be becoming a social movement (Cree & McCree, 2012). Despite this, the researcher found it challenging to access any information regarding the actual number of settings practising a Forest School approach in the UK. Ofsted reports were sourced however, including two judged 'Outstanding' and one judged 'Good' (Ofsted, 2014; Ofsted, 2015; Ofsted, 2014).

Research to explore the benefits of Forest Schools to children's learning, development and well-being are few at the current time. Building this research base and the evidence for any such benefits will provide the Government, parents and education professionals with a better understanding of the significant positive impact a Forest School can have. Such evidence would provide the Forest School Association with better grounding in order to effectively promote the use and benefits of Forest Schools, and to encourage the Government to consider the nationalisation of the Forest School initiative becoming a mandatory aspect of the Early Years Foundation Stage (EYFS) and National Curriculum.

Philosophies of outdoor learning

Historical educational philosophers such as Rousseau, Owen, Froebel and Steiner, have emphasised the importance of play, freedom to explore and the natural outdoor environment (Pound, 2006). Rousseau's theory indicates development and learning emerge from environmental and social interaction (Finkel & Amey, 1995). Froebel emphasised the importance of the outdoor environment; he created garden designs including areas for gardening plants and vegetables, which were to be used in the kindergartens for food and play (Bruce, 2012). Owen 'believed that children should spend substantial amounts of time each day outdoors' (Pound, 2006, p. 71). 'Steiner believed that children who have suffered from pressure to succeed intellectually at too early an age often lack motivation to learn for themselves' (Pound, 2006, p.27). Steiner-Waldorf kindergartens and schools celebrate seasonal cycles of the year and have regular weekly activities outdoors (Pound, 2006; The Iona School, 2016).

Over the past decade, society appears to have lost sight of the importance of regular outdoor learning experiences for children. Pound (2009) explains that despite outdoor play for children being a strong tradition both in and out of education, over the years it has become limited to playtimes where there are few resources, limited time and lack of challenge; she suggests that this is due to irrational concerns for health and safety,

pressures to get children learning formally at a young age and a lack of understanding of the benefits of learning outdoors. Pound is not the only one to have made this observation. Dixey (1999) reported concerns regarding the over restricted exposure to risk, leading to risk aversion and a culture of fear. The UK Parliament House of Commons Committee on Education and Skills (2005) also acknowledged the decline in outdoor education in the UK. Louv and Charles (2009) highlight a concern similar to that of Pound and Dixey, that over the past several decades there has been significant changes in childhood and that these changes have resulted in children becoming disconnected from nature, Louv identifying this as 'nature deficit disorder'.

Research Question

The systematic review aimed to identify recurring themes regarding the benefits of Forest Schools for children aged 2-16 years, within the current literature and focussed on the following research question: What are the perceived benefits of Forest Schools for children aged 2-16 within the current literature?

Methodology

A thematic synthesis approach (Booth et al., 2012) was taken to conduct the current systematic review (Jesson et al., 2011). This allowed for themes to be identified within the included literature. It was decided by the researcher that themes must be present within 50% or more of the included sources, in order to be considered embedded within the literature.

Inclusion criteria

The scope of the current systematic literature review was determined by a set of inclusion criteria devised for the purpose of this review (see Table 3).

Table 3: Inclusion criteria

Criterion Type	Inclusion Criteria
Topic	Literature must relate to the research question.
Date of publication	Literature must have been published between 2000-2016. (However, if any literature published before 2000, holds particular relevance this may be included).
Focus age group of literature	Literature must relate to children aged 2-16 years.
Geographic spread	Literature may be from worldwide sources.
Reliability/Validity	Literature must be of a reliable nature. (This is determined by the weight of evidence criteria).

Sources searched

Sources searched include:

- Google
- publications.parliament.uk
- Worldcat via Bishop Grosseteste University
- Taylor & Francis online journals resource tool

Search terms

Search terms included:

- Benefits of forest schools
- Outdoor education
- Benefits
- Outdoor learning
- Forest School(s)
- Impacts of Forest Schools
- The natural world
- Children
- Special educational needs
- Forest School case studies

Search operators included:

- AND

Weight of Evidence criteria

A criteria was formulated based on Gough's (2007) formula for judging the weight of evidence (i.e. the reliability and validity of the literature); this was used to determine which literature was to be included in the current systematic literature review (see Table 4).

Table 4: Weight of evidence criteria

Quality Level	Criteria
Excellent (To be included)	<ul style="list-style-type: none">• Excellent methodology and design in research literature which give clear justification for all decisions taken and clear research questions.• Sources with reliable references and excellent evaluation of relevant research.• Literature is very closely aligned to the current research question.
Good (To be included)	<ul style="list-style-type: none">• Good methodology and design in research literature which gives evidence of sensible decisions taken to answer the research questions. Research questions must be clear.• Sources with reliable references and a good evaluation of relevant research.• Literature is broadly in line with the current research question.

Satisfactory (To be included)

- Research methodology and design in research literature may be implicit but appears sensible and likely to use useful data.
- Sources with reliable references and a satisfactory/adequate evaluation of relevant research
- Literature is at least partly relevant to the current research question.

Inadequate (Not to be included)

- Research methodology and design in research literature is not stated clearly and/or contains flaws.
- Sources with poor references to relevant research
- Literature does not address the current research question.

Searching and screening process

Google was searched using the search term 'benefits of Forest Schools'. This produced about 1,100,000 hits, of which seven were selected as being with the inclusion and weight of evidence criteria. The seven hits selected included five research studies and two literature reviews. Google was also searched using the search term 'impacts of Forest Schools'. This produced about 700,000 hits, of which two were selected as being within the inclusion and weight of evidence criteria. The two hits selected included one literature review and one official teachers' information guide.

Google was searched using the search term 'children AND the natural world'. This produced about 32,300,000 hits, of which three were selected as being within the inclusion and weight of evidence criteria. The three hits selected included three literature reviews. Google was searched using the search term ' Forest Schools AND special educational needs'. This produced about 17,500,000 hits, of which one was selected as being within the inclusion and weight of evidence criteria; this was a literature review. Google was searched using the search term 'Forest School AND risk, resilience and reliance'. This produced about 1,220,000 hits, of which two were selected as being within the inclusion and weight of evidence criteria. The two hits selected included two literature reviews. Google was searched using the search term, 'Forest School case studies'. This produced about 1,080,000 hits, of which four were selected as being within the inclusion and weight of evidence criteria, these were all case studies.

The government website, publications.parliament.uk was searched using the search term 'outdoor education'. This produced 2596 hits, of which one government inquiry report was selected as being within the inclusion and weight of evidence criteria. The Bishop Grosseteste University Worldcat database was searched using the search term 'Forest School'. This produced 28,629 hits, of which nine were selected as being within the inclusion and weight of evidence criteria. The nine hits selected included five books and four literature reviews. Taylor & Francis online journal was searched using the search term 'Forest Schools AND benefits'. This produced 51 hits, of which two were selected as being within the inclusion and weight of evidence criteria. The two hits selected included one research study and one literature review.

Type and amount of literature included

Table 5 shows the types of literature included in the current systematic literature review following screening.

Type of literature	Amount of Literature Type included
Research study	6
Literature review	14
Official information guide	1
Books	5
Grey literature	1
Case Studies	4
	Total: 31

The review process involved a hand-search of books and grey literature and an electronic search using QSR NVivo 10 software, of research studies, literatures reviews, information guides and case studies.

Findings

The evidence from the 31 pieces of literature was categorised into four broad themes (see Table 6).

Source	Theme			
	Improved emotional and social wellbeing	Increased motivation and concentration	Improved awareness and management of risk	Supports physical development and wellbeing
Knight, S. (2011). <i>Forest Schools For All</i> . London: Sage Publications Ltd.	√	√	√	√
Knight, S. (2013). <i>International Perspectives on Forest School</i> . London: Sage Publications Ltd.	√		√	√
Williams-Sieghfredson, J. (2012). <i>Understanding the Danish Forest School Approach - Early Years Education in Practice</i> . New York: Routledge	√		√	√
Knight, S. (2009). <i>Forest Schools and outdoor learning in the early years</i> . London: Sage Publications Ltd.	√	√	√	√
O'Brien, L. (2009). Learning outdoors: The Forest School approach. <i>Education 3-13</i> , 37(1), 45-60	√	√	√	√

Constable, K. (2012). <i>The outdoor classroom Ages 3-7 Using ideas from Forest Schools to enrich learning</i> . New York: Routledge	√		√	√
Swarbrick, N., Eastwood, G., & Tutton, K. (2014). Self-esteem and successful interaction as part of the Forest School project, <i>Support for learning</i> , 19(3), 142-146	√		√	
Maynard, T. (2007). Forest Schools in Great Britain: an initial exploration. <i>Contemporary Issues in Early Childhood</i> , 8(4), 320-331.	√		√	√
Slade, M., Lowery, C., & Bland, K. (2013). Evaluating the impact of Forest Schools: a collaboration between a university and a primary school. <i>Support for learning</i> , 28(2), 66-72.	√		√	
O'Brien, L., & Murray, R. (2006). <i>A marvellous opportunity for children to learn - A participatory evaluation of Forest School in England and Wales</i> . Norwich: HMSO.	√	√	√	√
Massey, S. (2005). The benefits of a Forest School experience for children in the early years. <i>NFER</i> .	√	√	√	
Davis, B., & Waite, S. (2005). Forest Schools: an evaluation of the opportunities and challenges in Early Years Final report January 2005. Plymouth: University of Plymouth.	√		√	√
O'Brien, L., & Murray, R. (2007). Forest School and its impacts on young children: Case Studies in Britain. <i>Urban Forestry & Urban Greening</i> , 6(4), 249-265.	√	√	√	√
Knight, S. (2016). Can Forest School act as a spur to better quality outdoor experiences?	√	√		√
Murray, R. (2003). Forest School Evaluation Project - A study in Wales.	√	√	√	
Murray, R., & O'Brien, L. (2005). Such enthusiasm - a joy to see: An evaluation of Forest School in Britain.	√	√	√	√
Sheerman, B: The House of Commons select Committee on Education and Skills. (2005). <i>Education outside the classroom: Second report of Session 2004-05</i> . London: HMSO.	√		√	√
Proctor, S., Pugh, R., Rickard, E., & Wilson, D. (2016). Does engagement in Forest School influence perceptions of risk, held by children, their parents, and their school staff? <i>Education 3-13</i> .	√		√	√
Harris, F. (2015). The nature of learning at Forest School: Practitioners Perspectives. <i>Education 3-13</i> .	√		√	
Blackwell, S. (2015). Impacts of Long Term Forest School Programmes on Children's Resilience, Confidence and Wellbeing.	√	√	√	√
Kent County Council. (2016). This is our Classroom: A teachers guide to Forest School at Kent Country Parks.	√	√	√	√

RSPB. (2016). Every Child Outdoors - Children in nature, Nature needs children.	✓	✓		✓
Moss, S. (2012). Natural Childhood.	✓	✓		✓
Natural Learning Initiative. (2016). Benefits of connecting children with nature.	✓	✓		✓
Southwell, L. (2014). Using realistic evaluation to evaluate 'Forest School' with young people aged 14-16 with special educational needs.	✓	✓	✓	✓
Andrews, R. (2014). Risk or Benefit: using the outdoors to educate children in the early years. <i>Professional Learning Sabbaticals</i>.	✓	✓	✓	✓
Close, M. (2015). The Forest School Initiative and its perceived impact on children's learning and development: An investigation into the views of children and parents.	✓	✓	✓	✓
Forest Avon Trust. (2016). The benefits of Forest School in early years.	✓			✓
Forest Avon Trust. (2016). The benefits of Forest School for Primary Children.	✓	✓		✓
Horseman, L. (2010). Forest Schools Bradford West - Reflections and Evaluation on Forest School projects 2010.	✓	✓	✓	✓
Herts for Learning. (2015). Engaging Pupils in outdoor learning using a Forest School - Wormley C of E Primary School.	✓		✓	

Discussion

Improved Emotional and social wellbeing

Murray and O'Brien (2005) found that 'children take quite a long time to become familiar and consider Forest School and the routines that go with it, such as getting into the right clothing, travelling to the site, walking to the Forest School area and learning about safety' (p. 35). They explain that the use of frequent and regular sessions in the woodland, rather than a one-off visit, allow children to 'develop a relationship with and understanding of the woodland environment at their own pace,' and that 'over time as the children's confidence grows they become more independent in the free atmosphere of Forest School' (Murray and O'Brien, 2005, p. 36). Part of the role as a Forest School practitioner is to encourage and engage in children's self-initiated/self-led play, while displaying an open-ended attitude, (there is no right or wrong way of doing things), (Norfolk County Council, 2009). By doing this, practitioners teach the children self-reliance (that they are capable of figuring things out and doing things for themselves). It is also important for practitioners to show that they themselves are learning alongside the children through trial and error; emphasising that sometimes things may be difficult or things may go wrong, but that it is normal and is a part of learning. By doing this, practitioners are encouraging self-resilience in the children (the confidence to keep trying).

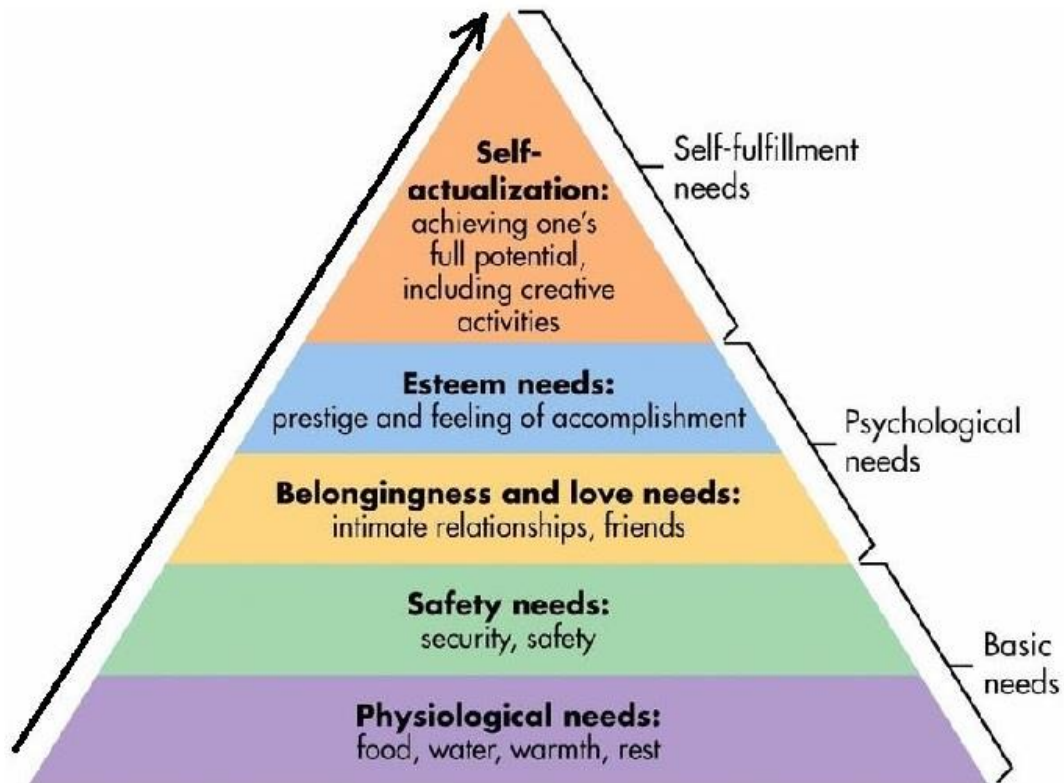
Massey (2005) explains that upon observation Child S enjoyed making shelters but would often ask other children for help by saying, 'Oh! This one is heavy, can you help me?'. Child S is displaying both self-reliance and self-resilience and was confident to try and move something heavy by his/herself. However, despite finding it heavy and difficult, Child S was not discouraged from carrying on and instead appeared happily to ask for help from his/her peers. Massey (2005) reported that all children were observed as having confidence and independence in the Forest School environment which provided them with a sense of success and raised self-esteem, just as was seen in Child S.

Forest Schools have also been perceived to improve the behaviour of children who had displayed negative behaviour and little self-control, in an indoor classroom environment. Murray (2003) states that a number of research methods provided evidence of improved behaviour and self-control in children exposed to Forest School. Murray (2003) explains that Sean learnt to stick-whittle and learnt to channel his anger into this activity, as a means of coping. Gary, who had been experiencing difficulties in school and was a borderline case of exclusion, was also reported to have significantly improved behaviour after a four-week period of participating in Forest School; and had in fact developed a positive attitude towards learning and expressed that he felt at home in the woodland environment (Murray, 2003). It could be surmised from this particular study observation that because Gary felt more at home in the woodland environment, he was more confident to participate in learning and play and therefore did not become distressed or frustrated; such emotions being present could explain his difficult behaviour when in the confines of a classroom. Gary may have been considered to have Social, Emotional and Behavioural difficulties (SEBD) due to his challenging negative behaviour in the classroom, but when placed in an open woodland environment it may be that such symptoms disappear.

Mind (2007) conducted two studies investigating the benefits of the outdoors for mental health and distress. It was found that a significantly large proportion of the 108 individuals who undertook the ecotherapy (therapy in nature), experienced improvements to their mental well-being. For example, in relation to self-esteem, it was found that 90% of respondents had increased self-esteem after a walk in nature, and that 44% of individuals experienced reduced levels of self-esteem following an indoor walk in a shopping mall. If these are the results for adults' emotional wellbeing when exposed to indoor and outdoor environments, it is not a stretch to relate these results to how children may feel in the indoor classroom and when outdoors. Bragg et al. (2015) support this finding in a literature review, reporting that 'overall there is a large body of evidence from published peer-reviewed and grey literature to suggest that contact with a wide range of natural environments can provide multiple benefits for health and wellbeing' (p. 5). The Mental Health Foundation (2016) states that 'the emotional wellbeing of children is just as important as their physical health. Good mental health allows children and young people to develop resilience to cope with whatever life throws at them and grow into well-rounded healthy adults'.

Maslow's (1943) Hierarchy of Needs (Figure 1) supports this statement; that good mental health supports children's learning and development.

Figure 1:



Hierarchy of needs, (teAchnology, 2016)

Maslow theorised that the lower levels must be fulfilled in order for individuals to have motivation for the next level (Allen & Gordon, 2011). The hierarchy of needs indicates that social and esteem needs must be satisfied before learning can take place effectively; both of which have seen to be increasingly achieved in Forest School. As the outdoors appears to have a huge impact on children's overall emotional and social wellbeing, it brings in to question why the outdoors is not being more readily used in mainstream education, and highlights that the mandatory use of Forest School would be highly beneficial.

Increased Motivation and Concentration

The open-ended and long term nature of the Forest School approach provides time and opportunity for children to experiment at their own pace, in achievable steps, free from any pressure to achieve specific outcomes; it supports the development of the 'brain seeking system' (Sunderland, 2006), which allows production of ideas, encourages curiosity, exploration and self-belief/self-efficacy. Knight (2009) suggests that encouragement for the use of natural materials gives children curiosity and in turn, motivation to learn and further their skills and knowledge through exploration and discovery.

At Forest School, children are free to explore and partake in activities of their own interest. Children may include their interest in fairies while exploring small spaces in which fairies could live, or they may include their interest in building and constructing while exploring materials to build a stable shelter. Bredekamp et al. (1992) suggests that 'activities that are based on children's interests provide a motivation for learning' and that by allowing children to fulfil their interests, it can 'foster a love of learning, curiosity, attention and self-direction' (p. 3) in the children. O'Brien (2009) explains that outdoor environments can facilitate children's interests, and that allowing them to explore the natural environment can link into their intrinsic curiosity and motivation.

Concentration is also perceived to be improved after time spent in nature, particularly for children with Attention Deficit Hyperactive Disorder (ADHD) (Faber Taylor et al., 2001). Murray (2003) explains that a child described as having ADHD, who needed a minder in school, was able to channel his energy into activities and helping others at Forest School. Results of a study of children with Attention Deficit Disorder (ADD) by Faber Taylor et al. (2001), revealed that children displayed improved concentration when completing a task after a two minute walk in a city park; they noted that this difference was comparable to the effects achieved with standard ADHD medication. It could be surmised that time in nature is all that is needed to manage ADHD symptoms. Forest School may therefore be a huge benefit to children displaying symptoms of ADHD.

Increased awareness and management of risk

Children want and need to take risks. To do this, children use play to test their limits and to help them deal with challenging situations and activities. Children adapt the way they use the equipment available to them, in order to increase challenge and create more fun and excitement (Ball et al., 2012). Although the EYFS (2012) states that 'support for children to take risks and explore' (p. 2) is needed from practitioners, the interpretation of what consists acceptable risks for children by those working within the EYFS, is very different from the ideas of Forest School. Forest School facilitates children's need for risk and challenge. The Forest School Training company (2016) state that 'the ethos of Forest School is based on a fundamental respect for children and young people and their capacity to instigate, test and maintain curiosity in the world around them'. Forest Schools provide a natural environment that is both stimulating and challenging; the materials and tools, such as knives and saws, used in a Forest School would not usually be seen in a children's educational setting. Children are also encouraged to safely participate in tasks which would ordinarily be seen to be too dangerous, such as lighting and managing fires, and climbing trees. Knight (2009) states that 'an adult could not efficiently dig soil with a plastic spade, and neither can a child' (p. 103). Therefore, Forest Schools aim to teach children to use tools safely and assess the risk involved in all activities; this allows children to build an understanding of their own capabilities and boundaries and to learn how to be safe in a variety of situations.

O'Brien and Murray (2006) reported that research carried out in a Forest School in Shropshire revealed a change in children's understanding and ability to keep themselves safe; one practitioner participating in the research cited the example of Fiona. Fiona initially ignored the rules about moving around the fire, and stepping into the

fire circle (and therefore too close to the flames), and that she had now learnt to approach the fire safely by stepping over the logs from behind to sit down (O'Brien & Murray, 2006). It was also reported that Erin:

is knowledgeable about each week's activity, e.g. splitting wood using a bill hook and how it is done safely or sitting around the fire toasting marshmallows - how to approach the fire and how long to blow on the marshmallow to make sure it is not too hot (O'Brien & Murray, 2006, p. 40).

It was noted that Erin enjoyed tasks and opportunities to use tools. (O'Brien & Murray, 2006).

Knight (2011) explains that at Avocet House Forest School, young boys have shown a positive improvement in their understanding and management of risk, and their ability to keep themselves safe. Knight (2011) reports that 'at the start of each Forest School session, the boys gather at the seating area and discuss what they intend to do during the morning. They also talk about the risks they may encounter and how they will minimise these' (p. 154). This is a huge change for the boys at Avocet House Forest School, who initially had issues with taking risks - making rash and dangerous choices (Knight, 2011).

Elkind (2007) states that play should in no way be risk-free, 'because we learn through experience and we learn through bad experiences. Through failure we learn to cope' (p. 73). Gill (2007) promotes the use of risk and challenge and the benefits it can have on children's play and learning. However, she suggests that children are often denied opportunities for such experiences; Gill promotes a philosophy of resilience which aims to provide a healthy balance between protecting children from genuine risk and providing enabling, stimulating and challenging environments and opportunities, through which children can learn and develop.

Supports physical development and wellbeing

As Forest School involves extensive amounts of physical activity, with opportunities for a wide range of activities, it provides children with opportunity to develop both their fine and gross motor skills. For example, children are taught such skills as whittling sticks, knot-tying and using sticks and branches as tools for writing in the mud and dirt; these activities are excellent for children's development of fine motor skills. Such activities as climbing trees provide opportunities for developing gross motor skills. Knight (2011) explains that 'while the children and young people are making their way around the forest, tackling obstacles, negotiating uneven ground, lifting and carrying heavy wood and logs, they are developing muscle tone and sensory awareness and coordination skills' (p. 85).

Not only do Forest Schools aid physical skills and development, they also support children's physical health and wellbeing. For example, Boseley (2005) indicates that there are around one million obese children in the UK. It could be said that environments which promote the use of extensive physical activity such as a Forest School, would help this issue with obesity in children; as there are links between the time children spend outdoors, physical activity and good health (Collaborating for Health, 2011; Faculty of Public Health, 2010; Godbey, 2009).

Conclusion

The following concluding points are based on the evidence provided by the systematic literature review. There is a common perception that Forest Schools are highly beneficial for children. Perceived benefits include: improved emotional and social wellbeing; increased motivation and concentration; improved awareness and management of risk; and support of physical development and wellbeing. As these benefits are so strongly evident and present within the current research and literature, I argue that it may be beneficial for Forest Schools grow in number within the UK. The current links highlighted between Forest Schools and EYFS suggests that this would be an achievable endeavour.

Incorporating Forest Schools into mandatory mainstream education would be a slow process. A suggestion to begin this process of embedding Forest Schools within national early years education and schools, would be to firstly introduce mandatory assessments for all children; to identify those who have the highest need for the experiences and benefits of a Forest School. This would allow for mainstream education to slowly embrace the use of Forest Schools and would help professionals to build the skills necessary for the addition of this initiative into the curriculum. Children who may have a higher need for Forest School might include: children with ADHD, children with SEBD, children with little access to nature at home, children with a kinaesthetic learning style and children who need further support with their physical development and wellbeing.

However, before this suggestion can be implemented, there is a need for further research into the benefits of Forest Schools for children aged 2-16 years, and for the evidence of such research to be extensively promoted. Organisations such as The Forest School Association, the Forest School Training company, The Forest Avon Trust, and the Forestry Commission England have all contributed to the growing research. I argue that it is essential that this support continues. Research highlighting the benefits of Forest Schools can be promoted to a wide range of audiences including parents, educationalists, and child health professionals, in order to provide a better knowledge and understanding of what Forest Schools are and how they can benefit the children in the UK. Further research is vital in highlighting and promoting the links between Forest Schools and the EYFS curriculum and National Curriculum.

References

Allen, S., & Gordon, P. (2011). *How children learn 4: Thinking on special educational needs and inclusion*. London: Practical Pre-School Books.

Andrews, R. (2014). Risk or Benefit: using the outdoors to educate children in the early years. *Professional Learning Sabbaticals*. Retrieved from <http://www.aitsl.edu.au/docs/default-source/eCollection/risk-or-benefit--using-the-outdoors-to-educate-children-in-the-early-years.pdf?sfvrsn=0>

Blackwell, S. (2015). Impacts of Long Term Forest School Programmes on Children's Resilience, Confidence and Wellbeing. Retrieved from <https://getchildrenoutdoors.files.wordpress.com/2015/06/impacts-of-long-term-forest-schools-programmes-on-childrens-resilience-confidence-and-wellbeing.pdf>

Ball, D., Gill, T., & Spiegel, B. (2012). *Managing risk in Play Provision: Implementation Guide*. London: National Children's Bureau. Retrieved from <http://www.playengland.org.uk/media/172644/managing-risk-in-play-provision.pdf>

Booth, A., Papaioannou, D., & Sutton, A. (2012). *Systematic Approaches to a successful literature review*. London: Sage Publications.

Boseley, S. (2005). Doctors urge action on diabetes. Retrieved from <http://www.theguardian.com/society/2005/jun/23/schools.medicineandhealth>

Bragg, R., & Wood, C., & Barton, J., & Pretty, J. (2015). *Wellbeing benefits from natural environments rich in wildlife*. Essex: The Wildlife Trusts. Retrieved from <http://www.wildlifetrusts.org/sites/default/files/wellbeing-benefits-fr-nat-env-report-290915-final-lo.pdf>

Bredenkamp, S., Knuth, R.A., Kunesch, L.G., & Shulman, D.D. (1992). *What does research say about early years education?* Retrieved from http://www.academicpsychiatry.org/htdocs/Fidlerdocs/Education/Faculty_Development/educational-theory/early-child-ed-research.htm

Bruce, T. (2012). *Early Childcare Practice: Froebel today*. London: Sage publications.

Close, M. (2015). The Forest School Initiative and its perceived impact on children's learning and development: An investigation into the views of children and parents. Retrieved from <http://orca.cf.ac.uk/41186/18/Approved%20Thesis%20-%20Mark%20Close%20-%202019%2001%2015.pdf>

Collaborating for Health. (2011). The benefits of physical activity for health and wellbeing. Retrieved from <http://www.c3health.org/wp-content/uploads/2009/09/C3-review-of-physical-activity-and-health-v-1-20110603.pdf>

Constable, K. (2012). *The outdoor classroom Ages 3-7 Using ideas from Forest Schools to enrich learning*. New York: Routledge.

Cree, J., & McCree, M. (2012). A brief history of Forest School in the UK - Part 2. Cumbria: Horizons, Institute for Outdoor Learning. Retrieved from <http://www.outdoor-learning.org/Portals/0/ForestSchoolAssociation/H62.FSHistoryPt2.pdf>

Davis, B., & Waite, S. (2005). *Forest Schools: an evaluation of the opportunities and challenges in Early Years Final report January 2005*. Plymouth: University of Plymouth. Retrieved from <http://www.oelres.net/wp-content/uploads/2013/08/Forestschoofinalreport2.pdf>

Department for Education. (2014). *Statutory framework for the early years' foundation stage Setting the standards for learning, development and care for children from birth to five*. London: HMSO.

Dixey, R. (1999). Keeping children safe: The effect on parent's daily lives and psychological well-being. *Journal of Health Psychology*, 1, pp. 45-57.

Early Education. (2012). *Development Matters in the Early Years Foundation Stage (EYFS)*. London: Early Education.

Elkind, D. (2007). *The power of play: How imaginative, spontaneous activities lead to healthier and happier children*. Cambridge: Da Capo Lifelong Books.

Faber Taylor, A., Kuo, F.E., & Sullivan, W.C. (2001). Coping with ADD: the surprising connection to green play settings. *Environment and Behaviour*, 33(1), 49-63.

Faculty of Public Health. (2010). Great Outdoors: How our natural Health service uses green space to improve wellbeing - Briefing statement. Retrieved from http://www.fph.org.uk/uploads/bs_great_outdoors.pdf

Finkel, D.L., & Arney, W.R. (1995). *Educating for freedom: the paradox of pedagogy*. New Brunswick, NJ: Rutgers University Press.

Forest Avon Trust. (2016). The benefits of Forest School for Primary Children. Retrieved from http://forestofavontrust.org/wp-content/uploads/2013/12/forest_school_for_primary-aged_children.pdf

Forest Avon Trust. (2016). The benefits of Forest School in early years. Retrieved from http://forestofavontrust.org/wp-content/uploads/2013/12/forest_school_for_early_years.pdf

Forest School Association. (2016). Full principles and criteria for good practice. Retrieved from <http://www.forestschoollassociation.org/full-principles-and-criteria-for-good-practice/>

Forest Research. (2016). Background. Retrieved from <http://www.forestry.gov.uk/fr/urgc-7eegh7>

Gill, T. (2007). *No Fear: Growing up in a risk averse society*. London: Calouste Gulbenkian Foundation.

Godbey, G. (2009). Outdoor recreation, health and wellness - Understanding and enhancing the relationship. Retrieved from <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-09-21.pdf>

Gough, D. (2007). Weight of evidence: a framework for the appraisal of the quality and relevance of evidence. In J. Furling, A. Oancea (Eds.) *Applied & practice based research*. Special edition of *Research Papers in Education*, 22(2), 213-228.

Harris, F. (2015). The nature of learning at Forest School: Practitioners Perspectives. *Education 3-13*. Retrieved from <http://www.tandfonline-com.bishopg.idm.oclc.org/loi/rett20#.VyoGQiYUVMs>

Herts for Learning. (2015). Engaging Pupils in outdoor learning using a Forest School - Wormley C of E Primary School. Retrieved from https://www.hertsforlearning.co.uk/sites/default/files/user_uploads/10_excellence/closing_gaps/documents/Wormley%20forest%20school.pdf

Horseman, L. (2010). Forest Schools Bradford West - Reflections and Evaluation on Forest School projects 2010. Retrieved from <http://kindlingplayandtraining.co.uk/wp-content/uploads/2011/08/Bradford-West-Forest-Schools-Reflections-and-Evaluation.pdf>

Jesson, J.K., Matheson, L., & Lacey, F.M. (2011). *Doing your literature review. Traditional and Systematic Techniques*. London: Sage Publications.

Kent County Council. (2016). This is our Classroom: A teachers' guide to Forest School at Kent Country Parks. Retrieved from <https://shareweb.kent.gov.uk/Documents/leisure-and-culture/countryside-and-coast/country-parks/A%20Teacher's%20Guide%20to%20Forest%20School.pdf>

Knight, S. (2009). *Forest Schools and outdoor learning in the early years*. London: Sage Publications Ltd.

Knight, S. (2011). *Forest Schools For All*. London: Sage Publications Ltd.

Knight, S. (2013). *International Perspectives on Forest School*. London: Sage Publications Ltd.

Knight, S. (2016). Can Forest School act as a spur to better quality outdoor experiences? Retrieved from <http://www.tactyc.org.uk/pdfs/Reflection-Knight.pdf>

Louv, R., & Charles, C. (2009). Children's nature deficit: what we know - and don't know. Retrieved from <https://www.childrenandnature.org/wp-content/uploads/2015/04/CNNEvidenceoftheDeficit.pdf>

Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-96. Retrieved from <http://psychclassics.yorku.ca/Maslow/motivation.htm>

Massey, S. (2005). The benefits of a Forest School experience for children in the early years. *NFER*. Retrieved from http://www.nfer.ac.uk/nfer/pre_pdf_files/05_33_06.pdf

Maynard, T. (2007). Forest Schools in Great Britain: an initial exploration. *Contemporary Issues in Early Childhood*, 8(4), 320-331. Retrieved from <http://cie.sagepub.com/content/8/4/320.full.pdf+html>

Mind. (2007). *Ecotherapy: The green agenda for mental health. Mind week report*. London: Mind. Retrieved from <https://www.mind.org.uk/media/273470/ecotherapy.pdf>

Moss, S. (2012). Natural Childhood. Retrieved from <https://www.nationaltrust.org.uk/documents/read-our-natural-childhood-report.pdf>

Murray, R. (2003). Forest School Evaluation Project - A study in Wales. Retrieved from [http://www.forestry.gov.uk/pdf/For estSchoolWalesReport.pdf/\\$FILE/ForestSchoolWalesReport.pdf](http://www.forestry.gov.uk/pdf/For estSchoolWalesReport.pdf/$FILE/ForestSchoolWalesReport.pdf)

Murray, R., & O'Brien, L. (2005). Such enthusiasm - a joy to see: An evaluation of Forest School in Britain. Retrieved from [http://www.forestry.gov.uk/pdf/For estSchoolWalesReport.pdf/\\$FILE/ForestSchoolWalesReport.pdf](http://www.forestry.gov.uk/pdf/For estSchoolWalesReport.pdf/$FILE/ForestSchoolWalesReport.pdf)

Natural Learning Initiative. (2016). Benefits of connecting children with nature. Retrieved from https://naturalearning.org/sites/default/files/Benefits%20of%20Connecting%20Children%20with%20Nature_InfoSheet.pdf

Norfolk County Council. (2009). Forest School - A guide for practitioners' information pack. Retrieved from <http://www.langley.bham.sch.uk/pdfs/forest-guide.pdf>

O'Brien, L. (2009). Learning outdoors: The Forest School approach. *Education 3-13*, 37(1), 45-60.

O'Brien, L., & Murray, R. (2006). *A marvellous opportunity for children to learn - A participatory evaluation of Forest School in England and Wales*. Norwich: HMSO.

O'Brien, L., & Murray, R. (2007). Forest School and its impacts on young children: Case Studies in Britain. *Urban Forestry & Urban Greening*, 6(4), 249-265. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1618866707000301>

Ofsted. (2014). Great Wood Farm Early Years Centre. Retrieved from reports.ofsted.gov.uk/provider/files/2508077/urn/EY102587.pdf

Ofsted. (2014). Reflections Nursery. Retrieved from <http://reports.ofsted.gov.uk/inspection-reports/find-inspection-report/provider/CARE/EY343114>

Ofsted. (2015). Forest View Primary School. Retrieved from <http://reports.ofsted.gov.uk/inspection-reports/find-inspection-report/provider/ELS/139150>

Pound, L. (2006). *How children learn: From Montessori to Vygotsky*. London: Practical Pre-School Books.

Pound, L. (2009). *How children learn 3 Contemporary thinking and theorists: An overview of contemporary educational and psychological theorists*. London: Practical Pre-School Books.

Royal Society for the Protection of Birds (RSPB). (2016). Every Child Outdoors - Children in nature, Nature needs children. Retrieved from https://www.rspb.org.uk/Images/everychildoutdoors_tcm9-259689.pdf

Savey, A., Cain, T., Garner, J., Jones, T., Kynaston, E., Mould, K., Nicholson, L., Proctor, S., Pugh, R., Rickard, E., & Wilson, D. (2016). Does engagement in Forest School influence perceptions of risk, held by children, their parents, and their school staff? *Education 3-13*. Retrieved from <http://www.tandfonline.com.bishopg.idm.oclc.org/loi/rett20#.VyoGQiYUVMs>

Sheerman, B: The House of Commons select Committee on Education and Skills. (2005). *Education outside the classroom: Second report of Session 2004-05*. London: HMSO. Retrieved from http://www.educationscotland.gov.uk/Images/Education%20outside%20Classroom_tcm4-391163.pdf

Slade, M., Lowery, C., & Bland, K. (2013). Evaluating the impact of Forest Schools: a collaboration between a university and a primary school. *Support for learning, 28*(2), 66-72. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/1467-9604.12020/abstract>

Southwell, L. (2014). Using realistic evaluation to evaluate 'Forest School' with young people aged 14-16 with special educational needs. Retrieved from <http://eprints.nottingham.ac.uk/27690/1/LS%20DAEP%20Ethesis.pdf>

Sunderland, M. (2006). *The science of Parenting*. New York: D.K. Publishing.

Swarbrick, N., Eastwood, G., & Tutton, K. (2014). Self-esteem and successful interaction as part of the Forest School project, *Support for learning, 19*(3), 142-146.

teAchnology (Illustrator). (2016). What is Maslow's Hierarchy of Needs? [online Image]. Retrieved from <http://www.teach-nology.com/tutorials/teaching/whatareneeds.html>

The Forest School training company. (2016). Ethos. Retrieved from <http://www.forestschooltraining.co.uk/ethos/>

The Iona School. (2016). Curriculum. Retrieved from <http://www.theionaschool.org.uk/about-us/curriculum>

The Mental Health foundation. (2016). *Children and young people*. Retrieved from <https://www.mentalhealth.org.uk/a-to-z/c/children-and-young-people>

Williams-Sieghfredson, J. (2012). *Understanding the Danish Forest School Approach - Early Years Education in Practice*. New York: Routledge.

Slither down the snake of success: The link between synthetic phonics and reading attainment

Kate Kent

Abstract

This project investigates the effectiveness of synthetic phonics for the reading attainment of four to five year olds. The mixed method case study took place in a small rural school. The effectiveness of synthetic phonics was examined through semi-structured interviews with three phonics teachers, and by examination of documentation consisting of the school's OFSTED report and a Point to Point evaluation of the reading process of 62 pupils in Reception. Results suggest that synthetic phonics programmes have a positive effect on the reading attainment of four to five year olds and can be used to narrow the reading attainment gap between genders. The results further highlight the effectiveness of school generated phonics teacher training, whilst raising concern as to the current government policies in relation to phonics assessment.

Introduction

This research project investigates the effectiveness of teaching synthetic phonics programmes in relation to the reading attainment of four to five year olds. Ehri, Nunes, Stahl and Willows (2002) provide a comprehensive definition of what a synthetic phonics programme consists of, which forms the basis for this research project. Ehri et al. (2002) propose that synthetic phonics programs teach children 'systematically and sequentially the correspondences between graphemes and phonemes of the language and how to apply them to decode unfamiliar words by sounding them out and blending them' (p. 124). As the terms 'synthetic phonics' and 'systematic, synthetic phonics' are used interchangeably, it should be emphasised that there is no difference between the programmes (Ehri et al., 2002, pp. 123-124).

The Rose Review, an 'Independent review of the teaching of early reading' (2006) highlighted the concept of teaching children to read through the use of a synthetic phonics programme, acknowledging it as the most effective method of teaching children to read. The Rose Review (2006) proposed that synthetic phonics 'offers the vast majority of beginners the best route to becoming skilled readers' (p. 19). Following the Rose Review (2006), the Department for Education (DfE) (2010) published documentation of core criteria consisting of key features which they deemed as essential in the delivery of an effective systematic, synthetic phonic teaching programme. Within this criteria emphasis was placed on the concept of phonics as a 'body of knowledge and skills about how the alphabet works' rather than a range of 'optional methods or strategies for teaching children how to read' (DfE, 2010, p. 2). The document outlined the expectation that the majority of children will be capable of undergoing a phonics programme by the age of five, and would benefit from it (DfE, 2010). The DfE (2010) further suggest that if the phonics programme is of a high quality, it will 'by design, map incremental progression in phonics knowledge and skills' therefore enabling teachers to 'track children's progress; assess for further learning and identify incipient difficulties' (p. 3).

Despite the DfE (2010) initially suggesting that phonics programmes which met these core criteria would allow for teachers to track their pupils' progress in phonics through formative assessment, their recent introduction of phonics screening tests for all pupils in Year One (who attend a maintained school) contradicts this. The DfE (2015) state that these tests will confirm 'whether individual pupils have learnt phonics decoding to an appropriate standard' (p. 14), a concept which they initially believed was achievable through the use of an effective systematic, synthetic phonics teaching programme alone. As a consequence of this recent development, the effectiveness of phonics in regards to reading attainment has been brought into question.

Furthermore, Stuart (2006) suggests that currently 'the available research evidence is insufficient to allow reliable judgements of the relative effectiveness of implementing different approaches to systematic structured phonics teaching' (p. 11). With consideration to this, it is crucial that previous research into the effectiveness of phonics teaching on reading attainment is examined in order to assess the credibility of phonics teaching for reading attainment. Therefore, coupled with existing literature, this research project aims to further investigate the effectiveness of synthetic phonics in relation to the reading attainment of four to five year olds. The research was carried out in a primary school, situated in a rural area, rated as 'outstanding' by the Office for Standards in Education (Ofsted) and is regarded as providing effective phonics learning (Ofsted, 2014). The following section will review a range of literature which investigates the effectiveness of synthetic phonics for reading attainment.

Literature Review

This review examines research undertaken into the effectiveness of synthetic phonics on reading attainment. Despite limited published research on the topic, this review aims to find themes within the research with consideration to criticisms.

The Rose Review's recommendations were based upon the findings of the Clackmannanshire study conducted by Johnston and Watson (2005), which was a longitudinal study that examined the effectiveness of synthetic phonics for students' reading and spelling attainment. Their main objective was to evaluate the effectiveness of synthetic phonics against other methods of phonics instruction; these methods were standard analytical phonics and an analytical phonics programme which included systematic phonemic awareness (Johnston & Watson, 2005). The present study served as a follow-up to the research undertaken by Johnston and Watson, (2005) who found that their original findings lacked validity due to uncontrollable variables which could have affected the accuracy of their results.

Johnston and Watson's study (2005) was carried out over a seven-year period, and consisted of 300 participants aged five to six years old. The participants were divided into three groups, each of which was taught one of the three aforementioned phonics programmes. Prior to the study, all participants undertook reading and

phonological skills tests to evaluate the level at which the participants were already working, and to ensure the validity of any findings. These tests showed that all participants were working at the same level on all tests apart from a 'letter knowledge test' in which the participants within the analytic phonics group achieved a higher level (Johnston & Watson, 2005). After the first year of the study, participants retook the tests in order to evaluate their progress. The participants who were exposed to a synthetic phonics programme were not only reading seven months ahead of their chronological age, but they were also capable of reading words seven months ahead of the participants who had been exposed to the other two methods of phonics instruction.

These findings indicate the positive long-term effects that synthetic phonics programmes can have on children's reading attainment in comparison to that of other phonics programmes used. However, the limited validity of the Clackmannanshire study was recognised by Johnston and Watson (2011) themselves as a result of methodological discrepancies relating to the months in which participants' progress was assessed and recorded. For example, within the sixth year of the study, those undergoing the analytic phonics programme were tested in June and even as late as November the following year, whereas those undergoing the synthetic phonics programme undertook their assessments as early as March (Johnston & Watson, 2011). Further criticisms were made by Wyse and Goswami (2008) in relation to methodological flaws within the study, stating that 'this is not an optimal research design for exploring the research question of whether synthetic phonics methods are superior to analytical methods' (p. 696). However, regardless of the methodological flaws, which largely refer to the eight-month gap between assessments, it could be argued the Johnston and Watson (2005) were still accurate in reporting that the participants of the synthetic phonics programme achieved significantly better in their reading attainment. The study therefore attested to the effectiveness of the teaching of synthetic phonics for reading attainment.

Johnston and Watson's (2005) findings are supported by those of Weeks and Ozols (2010), whose longitudinal study reported the effects of synthetic phonics on reading ability in young children of Southern Australia. Their broad sample group consisted of 257 Reception students from ten different primary schools, their ages ranging from four years six months to six years four months. On entry to Reception, the phonological awareness of all participants was assessed. The participants were taught using the Jolly Phonics programme (a synthetic approach to phonics) through Reception and Year 1. Their progress was monitored through curriculum-based measures at the end of each term, and participants were formally assessed at the end of the academic year. The reading results of the participants at the end of Reception (2010), after one year of Jolly Phonics teaching, demonstrated significant progress in their reading attainment, with 90.3% being deemed as statistically above the level expected for their age. A proportion of participants (54.4%) were more than one year above their chronological reading age (Weeks & Ozols, 2012). These results were echoed in their findings when participants had been exposed to a second year of the Jolly Phonics programme, which resulted in 90.2% of participants achieving levels that were statistically above their expected chronological reading age. Furthermore, the reading abilities of 60.3% of participants were found to be more than one year in advance of their chronological age.

Although Weeks and Ozols (2012) conclude that synthetic phonics programmes have a positive effect on reading attainment, as with the Johnston and Watson study (2005) there are limitations. As Weeks and Ozols' (2012) study took place over two years, with the participants' results at the end of both years resonating one another, this study could be regarded as creditable. However, as the study took place in Australia, the findings are culturally specific due to the curriculum, testing, and age-related expectations. Furthermore, 40 of the participants did not complete the second year of the study due to either moving school, missing the reading test or dropping out of the study (Weeks & Ozols, 2012). As a result, consideration should be given to the reliability of the study.

Gender and synthetic phonics

Within both of the aforementioned studies, their findings commented on the effects synthetic phonics had on reading attainment according to the participant's gender. The results of the study by Johnston and Watson (2005) showed that the girls who had participated in the teaching of an analytical phonics programme had a significantly inferior level of reading ability in comparison to girls who participated in the teaching of a synthetic phonic programme. Their findings also showed that the boys' reading comprehension was ahead of that of the girls from the age of seven to eight through to 11 to 12. These findings contrast those of international study involving 35 participating countries, conducted by Mullis, Martin, Gonzalez and Kennedy (2003), which found that boys' comprehension skills tend to be significantly behind those of girls. The inconsistency between the two studies findings highlights the complexity that exists when attempting to make correlations between reading comprehension and gender. With consideration to this, it could be argued that findings within the study conducted by Johnston & Watson (2005) are anomalous, as their participant sample was small in comparison that of Mullis et al. (2003).

In addition, the findings of Weeks and Ozols (2012) showed that the average reading age for females was 14.2 months above their chronological age. This result was significantly higher than the average reading age of their male participants', which was 12 months above their chronological reading age at the end of the first year of the study. The gap narrowed within the second year of the study, with the reading ages of females and males being on average 15.8 months and 13.8 months ahead of their chronological ages, respectively. Although the female participants tended to be significantly further ahead with their reading, this clearly demonstrates that the male participants also benefited from synthetic phonics instruction (Weeks & Ozols, 2012, p.4).

The case against synthetic phonics

Although synthetic phonics is accepted widely as the most effective method of teaching children to read (DfE, 2010; Jolliffe, Waugh & Carss, 2012; Rose, 2006), some educationalists still hold criticisms regarding the reliability of research into synthetic phonics and question its effectiveness in teaching children to read. Clark (2013) argues that there is not enough research into phonics to suggest which approach is more effective. Evidence in support of Clark's (2013) argument is provided by Torgerson, Brooks and Hall (2006), whose findings

showed that there was no statistical difference in the reading attainment of participants who undertook a synthetic phonics programme, in comparison to those who undertook an analytic phonics programme. Furthermore, the National Association for the Teaching of English (NATE) (2013) conducted a survey to seek teachers' perspectives on the teaching of phonics. Of their participating teachers, 67% agreed that phonics should not be taught using one method alone, and suggested that a variety of different methods should be used to teach children to decode words. This demonstrates that professionals within education are not convinced that synthetic phonics is the most effective way of teaching children to read.

This review has exposed opposing views regarding the effectiveness of synthetic phonics, and has evaluated the available evidence, which highlights the need for further research. This paper will examine further the effectiveness of synthetic phonics for reading attainment specifically for four to five year olds building on existing research.

Methodology

This mixed method case study uses both quantitative and qualitative methods of data collection. Denscombe (2008) favours this method of research design, suggesting that the method can 'increase accuracy of data, overcome weakness and bias of single approaches whilst enabling the researcher to develop analysis and build on original data' (p. 272). Research effectiveness is subject to the research design, and in the case of this study it is essential to gain detailed insight from the practitioner's perspective. Therefore, interviews were necessary. Qualitative studies are often criticised for being too subjective, but the decision to incorporate documentation into the research provided a quantifiable comparison between the two sets of data.

Interviews are widely recognised as effective methods of data collection (Bell, 1999; Cohen, Manion & Morrison, 2000; Seidman, 1998) due to their adaptability. They tend to allow for richer data collection in comparison to other data collection tools, such as questionnaires, making it possible to measure a participant's 'knowledge, values and attitudes' (Cohen et al., 2000, p. 411). However, Borg (1981) suggests that a main limitation of interviews is bias, stating that:

Eagerness of the respondent to please the interviewer...or the tendency of the interviewer to seek out the answers to support his preconceived notion are but a few of the factors that may contribute to biasing of data obtained from the interview (p. 87).

In addition to this limitation, Bell (1999) recognises that both the planning and conducting of interviews is extremely time-consuming, and recommends that this is considered in the early stages of planning the research project.

In an attempt to eliminate any potential bias and to ensure the collection of adequate data, detailed consideration was taken given to the interview schedule. A semi-structured interview consisting of open-ended

questions was considered most fitting. The flexibility of open-ended questions allowed for the development of the respondents' answers and the clarification of any misunderstanding (Cohen et al., 2000, p. 416). Prior to carrying out the research, the interview was piloted in order to eradicate any leading questions, which could otherwise bias responses. Along with carefully formatted questioning and the opportunity to ask for clarification, participants were given as much time as required to answer the questions being asked. These procedures help to ensure reliability and validity in the data collection (Cohen et al., 2000).

All interviews were conducted in a small room within the school which was rarely used, helping to reduce interruption and to ensure continuity among the interviews. The interviews were recorded using a tape recorder, and transcribed. Cohen et al. (2000) states that 'audiotape recordings are selective and therefore often original data from the encounter is lost'. He further suggests that 'frequently it is the non-verbal communication which gives the more information than verbal communication' (p. 426). The potential loss of data could be overcome through the use of video recording rather than audio recording however due to time constraints that was not possible for this research project. However, all verbally communicated information was noted in the transcripts to ensure that analysis of data was reliable.

Before conducting the interviews, the participants were informed of the process they were to engage in and it was explained how their participation contributed to the research. All participants were made aware of their right to withdraw from the interviews at any time and were not under any obligation to participate (BERA, 2011).

Duffy (1999) recognises documentation to be an extremely useful data collecting tool for checking the reliability of evidence gathered from interviews. The two types of documentation used within this research project are referred to as inadvertent sources meaning their original purpose was not for this research (Duffy, 1999). Duffy (1999) suggests that inadvertent sources are generally reliable as 'they were produced for a contemporary practical purpose' however she also warns not to dismiss the fact that the sources have originally been used to deceive someone. The documentation that was used to inform the study consisted of the school's Ofsted report, and a Point to Point Evaluation of the reading level of all children in the school's Reception classes. The Point to Point Evaluation is an assessment which all children on entry to Reception were subject to (September). It involves the assessment of children against eight criteria, and a professional judgement by the practitioner of whether or not they were capable of achieving the criteria. This resulted in a baseline score for each child. The children were re-assessed against the same criteria at the end of December and their new score was compared to their baseline score and to their age-related expectation.

Before and throughout the research, ethical procedures have been followed, in compliance with the British Ethical Guidelines for Educational Research BERA (2011) and the Bishop Grosseteste University (BGU) Ethical Research Policy (2014). Before research was undertaken, informed consent was given by the participants and by the institution involved (BERA, 2011). Participants were informed that in the written report, the institution

where the research was undertaken would be referred to as 'placement', to ensure anonymity, and that the participants themselves would be referred to as 'Participant A, B or C' in order to ensure their anonymity. Participants were also informed that the data collected would remain confidential (Data Protection Act, 1988) and would be destroyed once it had been analysed. It was also stressed that the research may be used as a secondary use of data collection, as BGU obtains the right to publish the research in their in-house journal – *educationUndergraduate* (BGU, 2014).

Results and Analysis of findings

Teachers' perspective on synthetic phonics

A recurrent theme in the interviews was the sense that participants felt that synthetic phonics was essential for reading attainment, and that they regarded it as a high priority within their school as a consequence. Participant C stated 'phonics is a high priority in our school because without learning phonics the children would not be able to read'. There was an overall consensus amongst all participants that a synthetic phonics programme is needed to aid children's reading development, which aligns with the views of Johnston and Watson (2005) and Weeks and Ozols (2012). In order to gain a deeper insight as to why the participants supported the use of phonics, they were asked specifically what their views were on synthetic phonics for the children's reading attainment. Participant A stated that 'a phonics programme is essential, as the majority of children read through phonics; a minority read through memory and therefore their phonics level may be low but their reading level high'. Here the participant is recognising the view of Wyse and Goswami (2008, pp. 696-701) that children use multiple methods to read, and that the case for using alternative methods to that of synthetic phonics may therefore be valid. Despite this, the majority of children in this study's setting learn to read through phonics, and therefore it can be argued that phonics has a direct impact on their reading attainment. This is supported by the data collected from the Point to Point evaluation which showed that on entry to Reception the average reading assessment score for all children (n=62) was 3, yet after being exposed to four months of synthetic phonics, the average score for all children was 6.3. Given that the expected progress of all children from September to December is +1 point, according to the Point to Point evaluation, the improvement of 3.3 points for these children was considerably above expectations. These findings are supported by comments from the school's Ofsted (2014) report, which stated that 'most pupils make the progress expected of them, with many exceeding this' (p. 7). According to NATE (2013), the majority of teachers believe that phonics should not be taught using just one method. However, the general consensus among the participants within this study was that the 'Letters and Sounds' programme is effective enough to use alone, a belief that Ofsted and the statistics from the Point to Point evaluation clearly support in relation to this setting.

Phonics teacher training

Interviews with participants highlighted their beliefs that training which focuses on practice is essential in order to deliver an effective synthetic phonics programme. All participants mentioned that they initially received one day of Centre for British Teachers (CfBT) training, followed by ongoing training during staff meetings. The participants' training experiences are comparable to those reported of the wider teaching profession. In their survey of 445 teachers, Hodgson, Buttle, Gibbons and Robinson (2013), found that 80.4% of those teaching in Infant schools had received phonics training, with the most common provider being the local authority, closely followed by self- or school-generated training. Yet in the survey conducted by Hodgson et al. (2013), some participants did not find this to be an adequate amount of training and subsequently felt they 'lacked knowledge of the principle and practice of synthetic phonics, and that more training is needed' (p. 15).

All participants in the present study expressed concerns about the lack of phonics training they received when training at university. Participant B stated that 'when I was at university, I had a one-hour lecture on phonics and that was it'. Torgerson et al. (2006) suggest that an increase in available evidence for the benefits of synthetic, systematic phonics, 'implies that learning to use synthetic, systematic phonics in a judicious balance with other elements should form as part of every literacy teacher's training' (p. 3). In relation to the present study, the aforementioned evidence of children's progress in reading attainment support the participants' own beliefs that their training was sufficient for them to deliver effective phonics instruction. Their positive attitude could also be due to the observation, recorded in the school's Ofsted report (2014), that 'training is precisely tailored to need and therefore, all staff acquire expertise' (p. 4).

The Year One phonics screening tests

The quality of training for assessment within the setting, and the use of assessment for learning, is also highlighted in the findings. The school's Ofsted report (2014) states that 'the early year's leader has trained other adults extremely well in the accurate use of systems to assess children's progress' (p. 7). Ofsted (2014) also recognise that 'teachers assess pupils' work accurately and use this information to help them improve' (p. 6). The findings from the school's Point to Point evaluation indicate that such ongoing assessment is valued by the participants. However, they do not value the Year One screening tests introduced by the DfE (2015), as they feel that the Point to Point Evaluation already provides them with adequate information. When interviewed Participant A stated: 'My honest opinion is it is a waste of time. You should know where your children are at, so you don't need a test to tell you what children are working at phase five and those who aren't'. The argument based on these small-scale findings is that a school is able to implement effective systems when left to make professional judgements about the type of formative assessment used.

Reaching age-related expectation

The Point to Point evaluation showed that the average score for all children on entry to Reception was below the age-related expectation by 3 points. By December, after participation in a synthetic phonics programme, the gap had narrowed, and the average score was just 0.7 points below the age-related expectation. This topic was broached within the interviews, in which participants were asked if there was any provision for children who were not reaching their age related expectation. Participant A that 'there are four different phonics sets: the high ability set, the middle ability set and two lower sets which each consist of a maximum of eight students'. Participant A further explained that the ability grouping did not detract from the phonics programme: the groups were only differentiated by having smaller numbers in the lower ability groups and a slower pace of learning. The impact on the children who scored the lowest points at the start of the year is recognised in the school's Ofsted (2014) report, which stated that 'when leaving Reception, the vast majority of children are working at the level expected of them. They are therefore well prepared for their next stage of their education in Year 1' (p. 7). The findings of the present study indicate the value of synthetic phonics in raising the reading attainment of even the lower ability readers. These findings support those of Johnston and Watson (2005) and Weeks and Ozols (2012), whose findings also showed that synthetic phonics programmes, help children either read or exceed their age-related expectation.

Gender and synthetic phonics

The research conducted by both Johnston and Watson (2005) and Weeks and Ozols (2012) indicted that the effectiveness of synthetic phonics programmes for children's reading attainment may be dependent on their gender. Interviews conducted with the phonics teaching staff revealed that on the basis on their day-to-day practice they had not recognised any gender differences in relation to the effectiveness of synthetic phonics for reading attainment. Data from the Point to Point evaluation of the Reception children contradicted this. On entry to Reception, the average reading assessment score for boys (n=29) was 2.8, whereas for girls (n=33) the average reading assessment score was 3.5. Yet when the children were assessed again in December, having been exposed to four months of synthetic phonics instruction, their scores reflected that the 'Letters and Sounds' programme had positively affected the reading attainment of both genders. Furthermore, the programme had a greater impact on the reading attainment of boys, whose average score had improved by 3.2 points, whereas the average score of the girls had improved by 2.8. These findings contradict an earlier report by Ofsted that 'in 2013, standards in reading for girls were slightly below that of boys in the academy'. Due to the effective phonics instruction in 2014, Ofsted stated that 'the inspection evidence shows no discernible difference now' (p. 7).

These findings contradict those of Mullis et al. (2003), but align with Johnston and Watson's (2005) conclusion that boys benefited significantly more from synthetic phonics programmes than girls. In addition, these findings support those of Weeks and Ozols (2012), who demonstrated that a synthetic phonics programme can narrow the gap between the reading attainment of boys and girls.

Conclusion and implications

Interviews with the participants and documentary evidence indicate that synthetic phonics has a positive effect on the reading attainment of four to five year old children in this particular school setting. Analysis of the documentary evidence further suggests that synthetic phonics programmes can narrow the reading attainment gap between boys and girls, even though this was not identified by interview participants. In addition to this, documentary evidence in the form of an Ofsted report (2014) and the responses of participants during interviews highlighted the effectiveness of school-generated phonics teaching training, which gave teachers within the school the confidence to put into practice the principles of teaching phonics. The findings also suggest that schools should be left to use their own professional judgement to select the system of phonics assessment that they find most appropriate for their setting and for the needs of the children within it.

It should be emphasised that this is a small-scale study and that generalisations cannot be confidently drawn from the conclusions. Furthermore, the findings are limited to the reliability of the answers given by the participants and the documentation used. As the assessment scores are reliant on accurate input from the Reception teacher, the reported scores may be inaccurate if the teacher has unintentionally misjudged the capability of a child against the assessment criteria. Furthermore, potential participant bias should be noted in relation to the interviews.

Finally, the findings within the study support previous research into the effectiveness of synthetic phonics for reading attainment. However, as with previous research, the findings of this study do not address the effectiveness of synthetic phonics for children's reading comprehension skills, a criticism that has been made by some educationalists (Stannard 2006; Wyse & Styles 2007). Therefore, this research project identifies an opportunity for further research to be undertaken addressing the impact synthetic phonics has on reading comprehension.

References

Bell, J. (1999). *Doing your research project*. Buckingham: Open University Press.

British Educational Research Association (BERA). (2011). *Ethical Guidelines for Educational Research*. London: British Educational Research Association. Retrieved from <http://content.yudu.com/Library/A2xnp5/Bera/resources/index.htm?referrerUrl=http://free.yudu.com/item/details/2023387/Bera>

Bishop Grosseteste University. (BGU). (2014). *Research Ethics Policy*. Lincoln: Bishop Grosseteste University.

Borg, W. (1981). *Applying educational research*. New York: Longman.

- Clark, M. (2013). The phonics check for children in Year 1: unresolved issues of its value and validity after two years. *Educational Journal*, 1(177). Retrieved from <http://www.tactyc.org.uk/pdfs/Margaret%20Clark.pdf>
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. London: RoutledgeFalmer.
- Data Protection Act. (1988). London: HMSO.
- Denscombe, M. (2008). Communities of Practice: A Research Paradigm for the Mixed Methods Approach. *Journal of Mixed Methods Research*, 2(3), 270-283. <http://dx.doi.org/10.1177/1558689808316807>
- Department for Education. (2010). *Phonics teaching materials: core criteria and self-assessment*. London: Department for Education.
- Department for Education. (2015). *Phonics screening Check Evaluation: Research report*. London: National Foundation for Educational Research.
- Duffy, B. (1999). The Analysis of Documentary Evidence. In J. Bell, *Doing Your Research Project* (3rd ed.). Buckingham[England]: Open University Press.
- Ehri, L., Nunes, S., Stahl, S., & Willows, D. (2002). Systematic Phonics Instruction Helps Students Learn to Read: Evidence from the National Reading Panel's Meta-Analysis. *Review of Educational Research*, 71(3), 393-447. <http://dx.doi.org/10.3102/00346543071003393>
- Hodgson, J., Buttle, H., Gibbons, D., & Robinson, J. (2013). *Phonics instruction and early reading: professional views from the classroom*. Sheffield: The National Association for the Teaching of English. Retrieved from https://www.nate.org.uk/cmsfiles/papers/Phonics_and_early_reading.pdf
- Johnston, R., & Watson, J. (2011). *Long-term effects of synthetic versus analytic phonics teaching on the reading and spelling ability of 10 year old boys and girls*. Hull: Springer. Retrieved from http://www2.hull.ac.uk/science/pdf/johnston_etal.pdf
- Johnston, R., & Watson, J. (2005). *The effects of synthetic phonics teaching on reading and spelling attainment*. Edinburgh: Scottish Executive Education Department. Retrieved from <http://www.gov.scot/Resource/Doc/36496/0023582.pdf>
- Jolliffe, W., Waugh, D., & Carss, A. (2012). *Teaching systematic synthetic phonics in primary schools*. Exeter: Learning Matters.
- Mullis, I., Martin, M., Gonzalez, E., & Kennedy, A. (2003). *PIRLS 2001 International Report*. Boston: Boston College. Retrieved from http://timss.bc.edu/pirls2001i/pdf/p1_ir_book.pdf
- National Association for the Teaching of English (NATE). (2013). *Phonics instruction and early reading*. Sheffield: The National Association of the Teaching of English.
- Office for Standards in Education (Ofsted). (2014). *Placement*. Manchester: The Office for Standards in Education, Children's Services and Skills.
- Rose, J. (2006). *Independent review of the teaching of early reading*. Nottingham: DfES. Retrieved from <http://webarchive.nationalarchives.gov.uk/20100526143644/http://standards.dcsf.gov.uk/phonics/report.pdf>
- Seidman, I. (1998). *Interviewing as qualitative research*. New York: Teachers College Press.
- Stannard, J. (2006). Keeping Phonics in Perspective. In M. Lewis & S. Ellis, *Phonics* (1st ed.). London: Paul Chapman Publishing.
- Stuart, M. (2006). Teaching Read: why start with systematic phonics teaching? *Psychology of Education Review*, 30(2).

Torgerson, C., Brooks, G., & Hall, J. (2006). *A Systematic Review of the Research Literature on the Use of Phonics in Teaching of Reading and Spelling*. Sheffield: Department for Education and Skills. Retrieved from <https://czone.eastsussex.gov.uk/sites/gtp/library/core/english/Documents/phonics/A%20Systematic%20Review%20of%20the%20Research%20Literature%20on%20the%20Use%20of%20Phonics%20in%20the%20Teaching%20of%20Reading%20and%20Spelling.pdf>

Weeks, A. & Ozols, J. (2012). *SPELD(SA) Longitudinal Study of the Effects on Reading and Spelling of a Synthetic Phonics and Systematic Spelling and Grammar Program*. Kensington: The Specific Learning Difficulties Association of South Australia. Retrieved from <http://auspeld.org.au/wp-content/uploads/2012/07/2012studySA.pdf>

Wyse, D., & Goswami, U. (2008). Synthetic phonics and the teaching of reading. *British Educational Research Journal*, 34(6), 691-710. <http://dx.doi.org/10.1080/01411920802268912>

Wyse, D., & Styles, M. (2007). Synthetic phonics and the teaching of reading: the debate surrounding England's 'Rose Report'. *Literacy*, 41(1), 35-42. <http://dx.doi.org/10.1111/j.1467-9345.2007.00455.x>

Is the app evaluation rubric developed by Weng and Taber-Doughty (2015) an effective system for educators to select the most appropriate apps for children with Special Educational Needs in the United Kingdom?

Alex Liddle

Abstract

Since its conception in 2010, the Apple iPad has surged in popularity with professionals working with children with Special Educational Needs, in both mainstream and special education settings. As a form of assistive technology boasting inclusivity, adaptability and acceptability, the use of the Apple iPad raises the issue of the unrestricted development of iOS applications. In the West Coast of America in 2015, Weng and Taber-Doughty devised an app evaluation rubric designed to determine the effectiveness of individual apps that regard children with cognitive and physical disabilities as their target audience. However, no study into the effectiveness of similar rubrics has been conducted in the United Kingdom, and research is extremely limited into their use in mainstream education. This small-scale study was designed to determine whether the same rubric (Weng and Taber-Doughty, 2015) can be used effectively to evaluate apps in the UK. After exploring the app subject to the evaluation, six teachers, one head teacher and two teaching assistants from a mainstream primary school were asked to use the rubric to evaluate an app before completing a post-test questionnaire in order to evaluate its efficiency, comment on strengths and limitations as well as providing suggestions for adaptation. The post-test questionnaire asked participants to respond to 11 Likert scale statements with opportunities for them to comment on their responses. In addition to this, five open-ended questions were also asked. This generated quantitative data with qualitative data adding meaning and context to the statistics which emerged from initial analysis. The findings suggest that, with adaptations, this rubric is suitable for use in the United Kingdom. Two recommendations emerge from this study: (i) that app evaluation processes are researched in greater detail in the UK in order to obtain a variety of empirical data; and (ii) that the extensive time taken to complete the rubric is taken into consideration for further development.

Introduction

Before the mid-twentieth century, it was common practice for different children to receive different types of education. This resulted in a clear separation between 'mainstream' schooling and 'special education' (Armstrong et al., 2010). However, educators and policy-makers have since 'taken increasing responsibility for educating groups previously excluded from society' (Reynolds, 1989, as cited in Fredrickson & Cline, 2009, p. 69). People now live in an era in which a new 'paradigm of integrated education for children with special educational needs (SEN) exists, based on philosophical foundations, ethical values' (Stacic & Bagon, 2014, p. 223) and a belief in the ethos 'success for all' drives much in education policy. The perception that inadequate models 'constrain educational possibilities by imposing different systems of schooling on those who are in some sense believed to be 'abnormal'' (Shamir & Margalit, 2011, p. 280) has resulted in a plethora of enabling individuals to access learning. As a result of this, educators and researchers alike have found themselves challenged to devise more effective and diverse tools in order to provide children with SEN with greater opportunities to acquire academic skills while preparing themselves for adulthood, and successful integration into society (National Association of Special Educational Needs (NASEN), 2009). Research has demonstrated that new technologies can increase the progress made by typically developing children academically, as well as in

other areas of daily life (Goodwin, 2008; Ralph, 2006; Synder 2002; Valmont, 2000), as well as promising to facilitate the inclusion of children with SEN into modern society (Florian, 2003; Hetzroni & Shrieber, 2004).

Ever since the early years of the Digital Revolution, a variety of assistive technologies have been introduced to the market that have been used with positive results to support development in a range of skills including communication, social skills and academic and functional skills (Pennington, 2010). However, one common barrier to their effectiveness is the feeling that there is a lack of social acceptance for these heavy and often impractical devices (Parette & Scherer, 2004).

Following its introduction to the market in 2010, the Apple iPad tablet has rapidly increased in popularity and application with children with special needs (Herbert, 2010). It is an appealing tool to students, educators, clinicians, and parents due to its affordability, accessibility and versatility (Douglas et al., 2012; Newton & Dell, 2011). Little empirical evidence is currently available to validate the effects of these devices when used to encourage academic and social development, although schools, parents and students are investing vast amounts of time in engaging with certain applications (apps) that may or may not be an efficient tool in promoting and supporting learning and progress (Hager, 2010). Therefore, an effective yet efficient evaluation tool is required in order to acquire an informative, overall view of an app so that the benefits to children with disabilities can be explored. A literature review was undertaken to cultivate a greater understanding of the development of assistive technology since its conception in order to consider the importance of an app evaluation system, so that a concise research question and methodology could be identified.

Literature Review

As defined by the Foundation for Assistive Technology (FAST) in 2001, assistive technology (AT) is any product or service designed to enable independence for disabled and older people. When referring specifically to an AT device, this can mean any 'piece of equipment that is used to increase, maintain or improve functional capabilities of individuals with disabilities' (Alper & Raharinarina, 2006, p. 47), ranging from simple (e.g. adapted spoons and switches) to complex (e.g. computers, augmentative communication systems, environmental control devices and electronic wheelchairs) (Wilcox, Guimond, Campbell & Weintraub Moore, 2006, p. 34).

As explained by Phillips and Zhao (1993), AT devices have created a medium of communication, participation and inclusion that allows those with disabilities to re-imagine their potential in the world, creating significant opportunities to be served in natural environments. During the 23 years since Phillips and Zhao formulated this opinion however, the digital age has progressed immensely with many devices and systems being developed for social, employment and academic purposes.

Despite the empirical evidence that confirms the value of AT, in practice there are barriers to the extent of its effectiveness (Parette & Scherer, 2004; Phillips & Zhao, 1993). Whilst various assistive technologies have been used with positive empirical results to support students' communication, social skills, behavioural development, and academic and functional skills (Ayres et al., 2013; Pennington, 2010; Wilcox et al., 2006), limitations such as 'AT abandonment' (Alper & Raharinirina, 2006), call the effectiveness of such devices in to question. Reasons for AT abandonment include: social stigma associated with the device, the cost of the device, and the limitations of adaptability (Pennington, 2010).

Regardless of the initial success of AT devices, handheld tablet devices - namely the Apple iPad - have exploded into the education sector not only in the UK, but across the world (Ayres, Mechling, & Sansosti, 2013; Grant, 2013; Renn, 2014), and have re-directed the development of assistive technology. In 2014 the charity Tablets 4 Schools (Clarke & Svanaes 2014) published a study reporting that almost 70% of schools in the UK use tablet computers, a figure that appears staggeringly high, particularly considering that the report was published just four years after the conception of the Apple iPad. Whilst just over 21% of the schools in the country were surveyed at the time - a reasonably representative sample size, due to the nature of the Apple iPad's popularity - it is more than likely that this percentage has now increased.

As noted previously, AT abandonment stems from a lack of social acceptance or changes in a user's functional capabilities (Phillips & Zhao, 1993). Using Augmented Alternative Communication (AAC) devices as an example, in the early days of their conception in the 1950s and throughout the remainder of the twentieth century and beyond they have been criticised alongside other AT devices for the negative attention that they draw towards an individual (Parette & Scherer, 2004; Todis, 1996), isolating many people who are 'different' from the vast majority of society. This is an area of particular strength for the Apple iPad: as an immensely popular, attractive and universally accepted device (Grant, 2013), the Apple iPad can be used discretely by users (Renn, 2014). Whilst researchers such as Newton and Dell (2011) are keen to insist that AT devices should not be selected based on their level of social acceptance, it is impossible to understand the inner feelings of the users of this type of technology without being restricted to it as individuals (Todis, 1996). Concern over their public perception or the perception of others is enough to present a significant barrier to the usage of AT devices (Renn, 2014). Apple iPads in this instance are therefore capable of reducing this stress through increasing the social acceptance of assistive technology and decreasing the stigmatisation that often surrounds it (McNaughton and Light, 2013).

Furthermore, Apple (n.d.) claim on their website that their technology can provide great learning tools for all learning abilities as a result of assistive features inherent within the Apple iPad functionality which have 'changed the learning landscape for students with special needs' (n.d.). Moreover, after sampling the vast majority of AAC devices commercially available in America, Bryant et al. (2012) concluded that the most effective device over time was the Jabbla Zingui Plus, costing \$4,995 (£3,448). In comparison to the Apple iPad Air 2, the

most recent Apple release in the UK retailing at approximately £420 (Tesco Direct, 2016). Taking into consideration the restrictions on school budgets and the average disposable income in the UK; £224.50 per month (Loddington, 2013), there is almost no doubt that schools, mainstream in particular, will be drawn to the Apple iPad to assist children with communication needs (Rushby, 2012) over an AAC device. Due to its ability to store multiple apps and data, the adaptability of the Apple iPad enables children with SEN to complete tasks and solve problems using a wide variety of different apps more efficiently (Grant, 2013). In contrast with alternative AT devices, the vast majority are designed for one single primary purpose, such as communication (Parette & Scherer, 2004). Therefore, as a user's physical or cognitive abilities change over time, many devices are not easily adaptable to different functions or functional levels (Phillips & Zhao, 1993).

This issue does draw attention to some of the potential limitations that might occur when using an Apple iPad as a teaching and learning tool to use with SEN children. An initial concern was that the target audience of the device was the mass-market; a product intended to receive huge commercial success (Gartner, 2015). When the benefits of using Apple iPads with special needs children became clear, it was feared that due to the competitive nature of the market it would become subjected to regular feature and marketing changes (Traxler, 2010). The claims made by Traxler were that in a research environment such as special needs technology where the research is ever-changing, it would be 'nonsensical to place so much trust in a device with no evidence of its success' (2010, p. 6). As a Professor of Mobile Learning at Wolverhampton University, Traxler's informed opinions on the matter were considered to be as logical as they were reliable (Young, 2016). Six years on and no less than eight versions of the Apple iPad, the figures alone would suggest that his concern was a legitimate one. However, where the argument becomes interesting is the way in which Apple have reacted to the interest shown by the special education community. After constant updates to their product since its release, the iPad now offers the following features:

Guided Access helps students with autism or other attentions and sensory challenges stay on task... A teacher or therapist can limit an iOS device to stay on one app by disabling the Home button, and even reduce touch input on certain areas of the screen so wandering taps and gestures won't distract from the learning... Speak Skeleton can read children's emails, text messages, web pages and eBooks out loud; including adjustable dialect and speaking rate... For students with print disabilities like dyslexia, it may be easier to speak a thought than to type it. With Dictation, they can reply to an email, make a note, search the web or write a report (Apple, n.d.)

It is clear that in addition to the apps that are available within the iOS App Store (almost all of which receive no support from Apple in terms of development) designed to support those with disabilities, (Renn, 2014), Apple have clearly invested vast amounts of time and money in not only appealing to this group of people (Young, 2016), but also in responding to the needs of specific categories of learning difficulties (Weng & Taber-Doughty, 2015) such as 'dyslexia' and 'autism'. The company prides itself on its innovative accessibility features (Apple, n.d.; Young, 2016) as well as its commitment to ensure that 'every student [can] experience the fun and function of the iPad' (Apple, n.d.).

The popularity of the Apple iPad with parents, schools, mainstream and special education professionals as well as the students themselves highlighted a second, more pertinent concern for researchers. As with all handheld technology and its software (e.g. smart phones, tablets; iOS, Android), as Apple iPad use with children with special needs grows, the number of apps targeting this group of people grows also (Douglas, Wojcik & Thompson, 2012). It is the lack of restrictions and the highly lucrative market that causes concern here; Apple charge only a small annual fee (less than £100; this varies depending on the continent) (Brannan & Ward, 2011) for full access to app development software, allowing anyone, regardless of qualifications or expertise to develop their own app, often with the prospect of lucrative profit margins (Barry, 2012).

In relation to the development of apps for children with SEN, parents, teachers and researchers are able to develop apps based on their own experiences. Douglas et al. (2012) located 508 iOS apps available in America in comparison to 632 in the United Kingdom (Young, 2016) designed to offer support to those children with intellectual and developmental disabilities. The dates of these published figures are significant here; due to the more aggressive nature of American app development, it is likely that the number of SEN apps in America has increased dramatically between 2010 and 2016. When searching for an app on the Apple App Store, results are first sorted by relevance before they are then sorted on popularity (Apple, n.d.), leaving developers to rely solely on the reviews left by users to push them as far up this list as possible. Whilst this is not an act of malicious intent from Apple (Douglas et al., 2012), this method renders the process of differentiating between the highly effective apps that encourage high levels of positive progress from the poorer quality apps, that can often be detrimental to development (Weng & Taber-Doughty, 2015). Furthermore, the relative explosion of the Apple iPad, its apps and its continual impact on the special education sector have made it difficult for researchers to catch up with the demand to evaluate the effectiveness of these apps.

As a result of this dilemma, the American researchers Weng and Taber-Doughty (2015) devised a prototype App Evaluation Rubric in an attempt to ease the pressures on educators to select the appropriate apps for their children. Educators often assume that educational software is of a high quality, released to the market after of formative and summative evaluations (Higgins, Boone & Williams, 2000) ed. As previously noted, this is not the case with applications for handheld technology, hence the need for an informative and concise evaluation tool became clear (Weng & Taber-Doughty, 2015).

Considering that apps are one form of instructional software, general principles for evaluation of multi-media and software programmes for disabled people can be applied (Weng & Taber-Doughty, 2015). These general principles include factors that facilitate learning: increasing attention (interactive, less distracting, and simplified), decreasing cognitive load (a combination of modalities, e.g. auditory, visual), and providing feedback (Deubel, 2003). However, these principles have been criticised when used to evaluate the most modern technology however. Writing for his Tech Knowledge blog, Renn (2014) questions whether these principles have now become outdated. However, by applying this principle to their rubric, Weng and Taber-Doughty (2015) had

set clear expectations of the technology that they were evaluating, providing clarity and reassurance to potential participants.

Whilst this study was conducted in America, the Apple iPad is a device widely believed to support the needs of the disabled and is sold internationally. It is clear however, that there is a significant requirement to develop a system whereby educators and other professionals can evaluate the effectiveness of an app designed to be used with special needs children. In relation to this study, it is of significant importance that the study conducted by Weng and Taber-Doughty (2015) used a sample of solely special education professionals living and working in the West Coast of America. It is also of significance that no study of its kind has yet been conducted in UK, leading to the question: 'Is the app evaluation rubric developed by Weng and Taber-Doughty (2015) an effective system for educators to select the most appropriate apps for children with Special Educational Needs in mainstream education in the United Kingdom?'

Methodology

Research for this study was undertaken during multiple after-school sessions (one session per participant) within a smaller than average mainstream primary school based in Lincolnshire, a setting in which the percentage of children with SEN is approximately 3% higher than the national average. There were a total of nine participants consisting of six teachers, one head teacher and two teaching assistants. Due to the technology focused element of the study, experience with handheld technology was essential; it was due to this that one member of staff decided to rule themselves out of the study.

Whilst a sample size of 30 is considered by most to be the minimum number of cases in order to conduct an analysis of data (Cohen, Manion & Morrison, 2000; Ellison, Barwick & Farrant, 2009), this small sample size suited this small scale study. Weng and Taber-Doughty (2015) sampled 8 practitioners working in a variety of differing roles within special education (p. 46). This study had a similar sample size but the difference was that the participants in this case were mainstream practitioners not those working within special education. This allowed for comparisons to be made between the two studies, as well as an opportunity to evaluate the effectiveness of the app evaluation rubric in a mainstream setting.

Although the research itself took place during single allocated time slots, an initial session was held for all participants in order to clearly communicate the purpose and intentions, research methods and ethicality of the study. This was made possible by the professional relationship between the researcher and the participants, although a printed copy of the relevant information was also supplied. Potentially this pre-existing relationship presents a risk of bias (Cohen et al., 2000) and poses a risk to anonymity (Denscombe, 2010; Thomas, 2009), however, all participants provided written consent once they had been made aware of the steps that were taken

to maintain anonymity. It was also made clear that once the research had begun, it could be a potentially lengthy process, and participants were asked to partake in the process only if they had time (BERA, 2011; BGU, 2014). All participants were also aware that they could withdraw at any time and any data collected would be destroyed. The ethical guidelines published by the British Educational Research Association (BERA) (2011) and Bishop Grosseteste University (BGU) (2013) were maintained throughout the undertaking of research. A Research Ethics Form was completed to confirm that the intentions of the study remained within the guidelines outlined by BERA and BGU, and was subsequently agreed by a representative from BGU.

During the initial session, participants were introduced to the key differences between the research conducted by Weng and Taber-Doughty (2015) and the researcher's own; namely the number of apps that were evaluated using the rubric. Where Weng and Taber-Doughty (2015) asked their participants to evaluate nine different apps, due to time constraints and the limited scale of the research, for this study, only one app was evaluated. This limited the conclusive evidence that could be gathered. However, an insight into the effectiveness of the app evaluation rubric as an educational tool in the UK was still possible, as were recommendations and possible next steps based on the evidence that was available.

Participants were also given 15 minutes to explore and manipulate the app that was due to be evaluated by the rubric, Cricker Docs (Crick Soft, n.d.). This app was selected because of the high regard in which it is held within the special education technology community in the UK for its adaptability to a range of diverse needs (Helsby, 2016). This is an app that is primarily designed to support children with dyslexia, increasing writing productivity and accuracy (Crick Soft, n.d.). Retailing at £24.99 (Apple, n.d.) Cricker Docs (Crick Soft, n.d.) is a relatively expensive app, but is commended for being 'a user friendly app which can be adapted to the needs of a wide range of learners' (Helsby, 2016) and is also curriculum aligned. Features of this app include a range of writing support tools, including spelling support, a suggested word bank and the ability to read text aloud. The price point of the app, highly priced in comparison to other apps of its kind (Bindel, 2016), reiterates the need for an evaluative system to increase the likelihood that expensive apps such as this are a worthwhile investment. Once each practitioner had started to evaluate Cricker Docs (Crick Soft, n.d.) using the app evaluation rubric, they were encouraged to revisit the app.

This study required participants to complete a questionnaire, use the rubric itself and finally, complete a post-test questionnaire. Through using a mixed-methods approach (Denscombe, 2010), both quantitative and qualitative data was acquired. Quantitative data allows the researcher to complete various statistical calculations (Sharp, 2009), using numerical data to ascertain a particular trend. In a study as small as this one, the use of quantitative data within questionnaires can be unreliable (Cohen et al., 2007; Denscombe, 2010); slight variations in data can have a huge impact on statistics, preventing percentages and graphs from displaying a fair representation of the majority. Within the rubric however, statistical data was better suited due to its ability to create an overview of the general viewpoints of all participants. Opinions were asked against

statements presented in a five-point Likert scale (disagree, neutral, agree, not applicable, uncertain) in order to assess trends. Whilst this method is beneficial when determining attitudes and beliefs, it does not allow for true, individual opinions to be expressed (Cohen et al., 2007; Denscombe, 2010). For this reason, an opportunity to add additional comments and expand on responses was provided (Denscombe, 2010; Cohen et al., 2007; Punch, 2014). In turn, this strengthened the validity of the quantitative data; allowing for qualitative evidence to justify responses and determine individual opinions based on the effectiveness of the app. Due to the evaluative nature of the research, qualitative means of generating data relating to opinions based on the strengths, limitations and future suggestions (Thomas, 2009) were used to explore the effectiveness of the rubric.

The rubric developed by Weng and Taber-Doughty (2015) was copied exactly to meet the purpose of the study. Broken down into three sections, the rubric consisted of one page designed to identify information about the app using check boxes; two pages of a five-point Likert Scale questionnaire for evaluating the app itself; and one final page with three open-ended questions, where participants were encouraged to comment on the advantages and disadvantages of the app, as well as any suggestions they had for future development (Weng & Taber-Doughty, 2015, p. 48).

Eight categories were chosen to describe app information including purpose, function, modalities, feedback, data collection and target age. The second section included 28 five-point Likert scale questions to evaluate seven aspects of the app including design features, individualisation, content, usability, feedback and evaluation, support and overall impression. The final section gave participants an opportunity to comment on the strengths, weaknesses and potential development of the app, as well as an opportunity to offer any other details that have not been covered in the rubric.

The procedure conducted by Weng and Taber-Doughty (2015) was followed closely in order to determine how effective the evaluation rubric would truly be in mainstream schools in the UK. However, the post-test questionnaire was adapted slightly to include additional open-ended questions relevant to the purpose of the study. These questions addressed the transferability of this rubric to the UK. The layout of the questionnaire was designed to be simple yet concise in its layout delivering questions in a systematic and logical manner (Bell, 2010). A pilot version of the questionnaire was distributed to fellow students to ensure that ambiguity had been avoided and that the questions were clear (Cohen et al., 2007; Thomas, 2009; Walliman, 2006). Upon reflection, issuing pilot questionnaires was a worthwhile task due to the positive and constructive feedback that was received; this activity presented me with the opportunity to re-evaluate some question choices in order to ensure that they encouraged answers that met the purpose of the study (Thomas, 2009; Wisker, 2009).

The post-test questionnaire was conducted to assess the overall strengths and limitations of the rubric, relevant to the United Kingdom. Again following a five-point Likert scale, three items were to assess format clarity, three

items were to address the content of the rubric, two items were to evaluate the efficiency of using this rubric, and the last three items were to assess the extent to which the rubric can be shared with others. As detailed previously, two questions were added to address efficiency of the rubric in the UK, as well requesting recommendations to improve the suitability for British practitioners. To summarise the process, three open-ended questions were included to evaluate the strengths, limitations and provide future recommendations for revising and improving the rubric.

Analysis and Discussion of Findings

As previously noted within the literature review, an app evaluation rubric has been suggested as a tool designed to evaluate the effectiveness of applications (Douglas et al., 2012; Weng & Taber-Doughty, 2015; Young, 2016) designed for the Apple iPad, in order to ensure that apps designed for children with SEN are providing sufficient support to the varying needs of this group of children (Grant, 2013).

All participants completed the app evaluation rubric for the app, Clicker Docs (CrickSoft, n.d.), and completed the post-test questionnaire. The first three statements sought opinions on the format of the rubric. In order to ensure its efficiency, the rubric must be formatted in a manner that is systematic and logical (Young, 2016). Most of the participants agreed to some extent that the instruction used with the rubric was clear (Table 1). Written feedback explained that the rubric was outlined systematically and was easy to follow. One participant neither agreed nor disagreed with the statement, commenting that a few of the statements were 'too similar to one another, [making the process] feel repetitive at times'.

	<i>Total</i>
Strongly agree	4
Partly agree	3
Neither agree nor disagree	1
Partly disagree	0
Strongly disagree	0

Most of the participants commended the variety of formats in which they could express their opinion; through check boxes, the Likert scale and open-ended responses.

One pertinent issue raised in relation the organisation of the rubric drew attention to the fact that the responses requiring a box to be checked (under the headings 'basic information' and 'design features') did not come with any space to comment (Table 2):

Table 2: Organisation of the rubric was clear and easy to follow	
	<i>Total</i>
Strongly agree	5
Partly agree	2
Neither agree nor disagree	1
Partly disagree	1
Strongly disagree	0

Specifically, the options listed under the sub-heading 'the function of this app is', would be more beneficial to the evaluation if 'details could be added that specifically describe the function of the app'.

All respondents agreed that the terminology was easy to understand (Table 3). Four of the nine practitioners praised the accuracy of the language that was used, claiming that it was 'consistent with the guidance outlined in the [SEN] code of practice'. However, although in agreement with the statement, one participant was concerned that the high quantity of academic terms would be confusing for parents.

Table 3: Terminology was easy to understand	
	<i>Total</i>
Strongly agree	3
Partly agree	5
Neither agree nor disagree	0
Partly disagree	0
Strongly disagree	0

As addressed in the point above, Table 4 addresses confidence in communicating evaluation results with parents; feedback in relation to this was mixed. Two thirds of participants marked that they did feel confident communicating details surrounding app evaluations to parents; however, all but one commented on the potential difficulties that would occur when translating the data from the rubric into an explanation that could be understood by parents.

Table 4: I felt more confident about providing suggestions to parents based on the evaluation results	
	<i>Total</i>
Strongly agree	4
Partly agree	2
Neither agree nor disagree	1
Partly disagree	2
Strongly disagree	0

Weng and Taber-Doughty (2015) recognised this flaw within their own research, adding that regardless of how efficient the rubric proves to be amongst professionals, it is critical that the information gathered from the process can be communicated to parents. The benefit of using Apple iPads is that their portability enables users to access their applications at anytime, anywhere (Grant, 2013). Children with SEN can often benefit from learning in short bursts and at times when stress levels are at a minimum which will not always occur during school hours. This therefore highlights the importance of communicating the results of these app evaluations to parents so that learning opportunities in and outside the formal learning environment and timetabled teaching sessions can be maximised.

Furthermore, this is the only post-test question asked in both this study and that of Weng and Taber-Doughty (2015) where opinion differs significantly. In the American version of the study (Weng & Taber-Doughty, 2015), all eight participants agreed to some degree that they felt more confident in making suggestions to parents based on evaluation results. This is not an easy situation to explain as this could have happened for a variety of reasons; it is quite possible that parents are treated or viewed differently in America in comparison to Britain. Alternatively, this result could suggest differences in levels of confidence felt by teachers in America and the UK. This is of course pure speculation with no foundation of evidence to support either claim. It must also be considered that the sample sizes used in both studies are incredibly small and are in no way representative of a larger population.

In order for a multi-media evaluation for SEN children to be effective, it must be able to account for the varying needs of all children (Higgins et al., 2000). No child has the same needs as another, therefore some technologies, or in this case, apps, will be suitable for some children and not others (Renn, 2014). All except one participant strongly agreed that the rubric covered all functioning of target students (Table 5).

Table 5: Content of the rubric covered all functioning of target students	
	<i>Total</i>
Strongly agree	8
Partly agree	1
Neither agree nor disagree	0
Partly disagree	0
Strongly disagree	0

Almost all written feedback praised the fact that the needs of children had been narrowed down into specific details, with one individual adding that it allows the practitioner to narrow down the uncontainable quantity of apps commercially available to those that are most appropriate for your children, segmenting the range of features so that they detail very specific attributes.

The time required to complete this app evaluation rubric was clearly an issue for just over half of the participants (Table 6). Whilst the extent of opinions varied, all written feedback discussed the disadvantages of the lengthy process, highlighting the fact that only one app was evaluated.

Table 6: Evaluation process was time efficient	
	<i>Total</i>
Strongly agree	0
Partly agree	3
Neither agree nor disagree	2
Partly disagree	4
Strongly disagree	0

As addressed in the literature review, approximately 632 apps designed to support people with disabilities are currently commercially available in the UK (Young, 2016). Whilst many of these apps will be abandoned upon first glance, it is impractical to expect any teacher or teaching assistant to be able to critically evaluate every app that may or may not be suitable to the needs of a particular child. This was expected and is supported by the findings of Weng and Taber-Doughty (2015); they too discovered that this was a major limitation of the rubric in America. This does contradict with some of the points made above however, such as the greatly received attention to detail when considering the needs of all pupils. Douglas, Wojcik and Thompson (2012) suggest that it would be impossible to create a multi-media evaluation tool that considers the needs of all pupils as well as time efficiency; they argue that only one of these two criteria can be met at any one time.

The responses from the open-ended questions yielded generally positive results. Key strengths not previously addressed included the efficiency of the rubric as well as its ability to encourage professionals to think critically

about the appropriateness of an app. Young (2016) is a key supporter of Weng and Taber-Doughty's (2015) rubric, claiming that their attention to detail 'leaves no stone unturned, and enables practitioners to study the true benefits of introducing a particular app into a child's intervention programme' (p. 186).

In contrast, and as has been mentioned in relation to Table 6, the main focus of all participants' opinions on the limitations of the tool is this issue of time efficiency. Gartner (2015) has attempted to ease the anxiety of this, suggesting that, as practitioners become more familiar with app evaluation tools, the process will become quicker until it almost becomes a natural instinct where the quality of an app can be determined within a few short minutes of exploration.

Practitioners were also asked to what extent Weng and Taber-Doughty's (2015) app evaluation can be used in the UK in addition to any adaptations that could improve suitability for the British education sector. One participant chose not to answer this question due to the small scale of the study; there was a concern that honest opinions could not be communicated after evaluating only one app. Aside from this, again, responses were generally similar; most participants could find no issue with this rubric against the standard of education that is set in this country. Some implied that a section on links to the National Curriculum or Special Educational Needs Code of Practice (DfE, 2014) would make the rubric more attractive to practitioners. In the United Kingdom, teachers are accountable for progress made against the statements outlined in the National Curriculum and therefore, would feel more secure if this thought process was encouraged.

Conclusion and Recommendations

Evidence gathered from this research study suggests that a version of the app evaluation rubric developed by Weng and Taber-Doughty (2015) would be widely appreciated by practitioners in the UK seeking to discover the most appropriate apps for children with SEN. However, this is a restricted small scale study, therefore generalisations cannot not be made.

Certain improvements and suggestions have been revealed by the research that may help to improve the efficiency of the rubric in the UK. For example, in terms of the format of the rubric, feedback suggested that a five-point Likert scale is unnecessary; whether someone agrees or strongly agrees with a statement adds little to the overall picture of the evidence gathered. A three-point Likert scale (agree, neutral, disagree) could therefore replace this which should provide the user with a clear cut evaluation of the app, without risking a reduction in efficiency.

This study has also identified the difficulties concerning the communication of conclusions with parents of SEN children. It would not be sufficient to simply hand over a completed rubric with the expectation that a parent will be able to comprehend this information; at almost five pages long the rubric is extensive, yet encourages

deep levels of evaluation. Practitioners will be expected to find an alternative method of communicating this information in a manner that is easily comprehensible; most likely through verbal discussions or written methods, however time consuming.

Leading into the issue of time, as highlighted in the analysis of findings, it must be appreciated that the use of Apple iPads as an assistive device is still an incredibly young concept; very few studies have been conducted where conclusions have been made regarding the most efficient method of evaluation. As with many new educational concepts, it will take time for a sufficient number of published research projects to make any firm conclusions (Higgins et al., 2000). In the not so distant future, it is perhaps likely that special educational app evaluation may be developed by corporate commercial organisations who will evaluate apps on behalf of schools, and provide conclusive evidence as to which programmes will be best suited to children with certain needs, possibly resulting in the translation of such information into a format that can be easily understood by parents without a specialist background in education.

It is clear from the written feedback within the post-test questionnaires that even within a very small sample size, interpretation can vary, regardless of the high level of detail included in the rubric; not one statement was agreed unanimously. However, as reiterated by one participant, the rubric is a multi-purpose tool (Weng & Taber-Doughty, 2015) that could also be used to provide evidence in support of an application for funding, as well as sharing conclusions with parents and other professionals. For the same reasons, it must not be used alone when determining the effectiveness of particular app. If a child is not engaging with the technology or they are reluctant to use the device for educational purposes, it may be more beneficial to temporarily withdraw the software (Young, 2016). This rubric does not replace the skills, expertise or instinct of school practitioners, but can be used with success as an aid to support decision making.

This paper set out to determine the extent to which an app evaluation rubric designed by Weng and Taber-Doughty (2015) is an effective system for educators to select the most appropriate apps for children with SEN. Whilst this small scale study is lacking in reliability, evidence has concluded that with adaptations, the rubric does have a place in the British education sector which is currently under-researched (Herbert, 2010). In order to develop a fundamentally secure understanding of the development of handheld technology in terms of the support it offers to children with disabilities, an opportunity has now been revealed to join the Americans and investigate this issue further.

References

Alper, S., & Raharinirina, S. (2006). Assistive technology for individuals with disabilities: a review and synthesis of the literature. *Journal of Special Education Technology*, 21(2), 47-64.

- Apple. (n.d.). Special Education. Retrieved from <http://www.apple.com/uk/education/special-education/>
- Armstrong, A., Armstrong, D., & Spandagou, I. (2010). *Inclusive education: international policy and practice*. Retrieved from <http://lib.mylibrary.com.bishopg.idm.oclc.org/Open.aspx?id=328917>
- Ayres, K., Mechling, L., & Sansosti, F. J. (2013). The use of mobile technologies to assist with life skills/independence of students with moderate/severe intellectual disability and/or autism spectrum disorders: Considerations for the future of school psychology. *Psychology in the Schools*, 50, 259–271.
- Barry, N. (2012). From app store newbie to £35,000+ in profits. Retrieved from <http://thinktraffic.net/app-store-newbie>
- Bell, Judith. (2010). *Doing Your Research Project*. Maidenhead: Open University Press.
- Bindel, A. (2016). Clicker Docs review. Retrieved from <https://www.commonsemmedia.org/app-reviews/clicker-docs>
- Bishop Grosseteste University (BGU). (2014). Research Ethics Policy and Ethics. Lincoln: BGU.
- Brannan, J., & Ward, B. (2011) *iOS SDK programming a beginners guide*. New York: McGraw-Hill.
- British Educational Research Association (BERA). (2011). *Ethical Guidelines for Educational Research*. Retrieved from <http://content.yudu.com/Library/A2xnp5/Bera/resources/index.htm?referrerUrl=http://free.yudu.com/item/details/2023387/Bera>
- Bryant, B., Seok, S., Ok, M., & Bryant, P. (2012). Individuals with intellectual and/or developmental disabilities use of assistive technology devices in support provision. *Journal of Special Education Technology*, 27(2), 41-57.
- Clarke, B., & Svanaes, S. (2014). Tablets for schools: an updated literature review on the use of tablets in education. Retrieved from <http://www.e-learningfoundation.com/Websites/elearningfoundation/images/PDF%20Documents/T4S-Use-of-Tablets-in-Education.pdf>
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. London: RoutledgeFalmer.
- Crick Soft. (n.d.). Clicker Docs. Retrieved from <http://www.cricksoft.com/uk/products/clicker-apps/clicker-docs.aspx>
- Denscombe, M. (2010). *The Good Research Guide: For Small-Scale Social Research Projects*. Maidenhead: Open University Press.
- Deubel, P. (2003). An investigation of behaviourist and cognitive approaches to instructional multimedia design. *Journal of Educational Multimedia and Hypermedia*, 12(1), 103-115.
- Douglas, K., Wojcik, B., & Thompson, J. (2012). Is there an app for that? *Journal for Special Education Technology*, 27(2), 59-70.
- Ellison, S. L. R., Barwick, V. J., & Farrant, T. (2009). *Practical Statistics for the Analytical Scientist: A Bench Guide*. London: Royal Society of Chemistry.
- Florian, L. (2003). Editorial. *Journal of Research in Special Educational Needs*, 3(3), 139-140.
- Foundation for Assistive Technology. (2001). Definition of AT. Retrieved from <http://www.fastuk.org/about/definitionofat.php>

Friedrickson, N., & Cline, T. (2009). *Special Educational Needs, Inclusion and Diversity*. Maidenhead: Open University Press.

Gartner, A. (2015). Gartner says Apple iOS to dominate the media tablet market through 2015, owning more than half of it for the next three years. Retrieved from <http://www.gartner.com/newsroom/id/%201626414>

Goodwin, M.S. (2008). Enhancing and accelerating the pace of autism research and treatment: the promise of developing innovative technology. *Focus on Autism and Other Developmental Disabilities*, 23(1) 125-128.

Grant, R. (2013). How the iPad can turn teaching special ed 'on its head'. Retrieved from <http://venturebeat.com/2013/10/11/how-the-ipad-can-turn-teaching-special-ed-on-its-head/>

Hager, E. (2010). iPad opens world to a disabled boy. The New York Times. Retrieved from http://www.nytimes.com/2010/10/31/nyregion/31owen.html?_r=3&scp=2&sq=ipad&st=cse&

Helsby, A. (2016). Clicker Docs teacher review. Retrieved from <http://www.educationalappstore.com/app/clicker-docs>

Heppell, S. (1998). Teachers, teaching and technology in the new millennium. Workshop.Heppell.Mobi. Retrieved July 23, 2012, from <http://workshop.heppell.mobi/1998/02/teachers-teaching-andtechnology-in-new.html>

Herbert, M. (2010). The iPad breaking new ground in special education. *District Administration*, 46(10), 16-16.

Hetzroni, O.E., & Shrieber, B. (2004). Word processing as an assistive technology tool for enhancing academic outcomes of students with writing disabilities in the general classroom. *Journal of Learning Disabilities*, 37(2), 143-158.

Higgins, K., Boone, R., & Williams, D. (2000) Evaluating educational software for special education. *Intervention in School and Clinic*, 36, 304-310.

Loddington, A. (2013). Disposable income: 4.5m British adults have less than £10 a month. Retrieved from <http://www.financialreporter.co.uk/finance-news/disposable-income-45m-british-adults-have-less-than-10-a-month.html>

Mathis, J. (2012). The iPad goes back to school. Macworld. Retrieved from <http://www.macworld.com/article/1168447/the-ipad-goesback-to-school.html>

McNaughton, D., & Light, J. (2013). The iPad and mobile technology revolution: Benefits and challenges for individuals who require augmentative and alternative communication. *Augmentative and Alternative Communication*, 29, 107-116.

National Association of Special Educational Needs (NASEN). (2009). About Us. Retrieved from <http://www.nasen.org.uk/about/>

Newton, D. N., & Dell, A. (2011). Mobile devices and students with disabilities: what do best practices tell us? *Journal of Special Education Technology*, 26(3), 47-49.

Parette, H.P., & Scherer, M. (2004). Assistive technology use and stigma. *Education and Training in Developmental Disabilities*, 39(1), 217-226.

Pennington, R. (2010). Computer-assisted instruction for teaching academic skills to students with autism spectrum disorders: a review of literature. *Focus on Autism and Other Developmental Disabilities*, 25(1), 239-248.

- Phillips, B., & Zhao, H. (1993). Predictors of assistive technology abandonment. *Assistive Technology*, 5(1), 36–45.
- Punch, K. (2014). *Introduction to Social Research: Quantitative and Qualitative Approaches* (3rd ed.). London: SAGE Publications Ltd.
- Ralph, S. (2006). Editorial. *Journal of Research in Special Educational Needs*, 6(1), 1-2.
- Renn, C. (2014). How a tablet can help SEN students. Retrieved from <http://techknowledge.org.uk/blog/how-a-tablet-can-help-sen-students/>
- Rushby, N. (2012). Editorial: an agenda for mobile learning. *British Journal of Educational Technology*, 43(3), 355–356.
- Shamir, A., & Margalit, M. (2011). Technology and students with special educational needs: new opportunities and future directions. *European Journal of Special Needs Education*. 26(2), 279-282. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/08856257.2011.593816>
- Sharp, J. (2009). *Success with Your Research Project in Education*. Exeter: Learning Matters.
- Snyder, I. (2002). *Silicon literacies: Communication, innovation and education in the electronic age*. London: Routledge.
- Spooner, W. (2006). *The SEN handbook for trainee teachers, NQTs and TAs*. Retrieved from <http://lib.myilibrary.com.bishopg.idm.oclc.org/Open.aspx?id=494467>
- Starcic, A.I., & Bagon, S. (2014). ICT-supported learning for inclusion of people with special needs: review of seven technology journals 1970-2011. *British Journal of Educational Technology*, 45(2) 202-230.
- Tesco Direct. (2016). iPad Air, 16GB, Wi-Fi & 4G LTE. Retrieved from http://www.tesco.com/direct/ipad-air-16gb-wifi-4g-lte-cellular-space-grey/633-4875.prd?skuld=633-4875&pageLevel=sku&sc_cmp=ppc_sh-_-sh-_-tesco-_-633-4875&gclid=CNvmjs2TxcwCFWMq0wod42QG_g&gclsrc=aw.ds
- Thomas, G. (2009). *How to Do Your Research Project: A Guide for Students in Education and Applied Social Sciences*. London: SAGE Publications Ltd.
- Todis, B. (1996). Tools for the task? Perspectives on assistive technology in educational settings. *Journal of Special Education Technology*, 13(2), 49-61. Retrieved from <http://openurl.ebscohost.com.bishopg.idm.oclc.org/linksvc/linking.aspx?authtype=cookie.ip,athens&issn=0162-6434&volume=13&issue=2&date=1996&atitle=Tools+for+the+Task%3F+Perspectives+on+Assistive+Technology+in+Educational+Settings.&spage=49&aurlast=todis&db=eue>
- Traxler, J. (2010). Will student devices deliver innovation, inclusion, and transformation? *Journal of the Research Center for Educational Technology*, 6(1), 3–15.
- Valmont, W.J. (2000). What do teachers do in technology-rich classrooms? In *Linking Literacy and Technology: A guide for K-8 classrooms*, 160-202.
- Walliman, N. (2006). *Your undergraduate dissertation. The essential guide to success*. London: Sage.
- Weng, P.L., & Taber-Doughty, T. (2015). Developing an app evaluation rubric for practitioners in special education. *Journal of Special Education Technology*, 30(1), 43-58.

Wilcox, J., Guimond, A., Campbell, A., & Weintraub Moore, H. (2006). Provider perspectives on the use of assistive technology for infants and toddlers with disabilities. *Topics in Early Childhood Special Education, 26*(1), 33-49.

Wisker, G. (2009). *Palgrave Study Skills: The Undergraduate Research Handbook*. Basingstoke: Palgrave Macmillan.

Young, K. (2016). Teachers' attitudes to using iPads or tablet computers: implications for developing new skills, pedagogies and school-provided support. *The Association for Educational Communications & Technology, 60*(2), 183-189.

What do upper Key Stage 2 children from a small village primary school perceive to be the benefits and potential challenges of Physical Education lessons?

Joseph Piper

Abstract

This small-scale research project aims to determine the benefits and potential challenges of Physical Education lessons as perceived by thirty upper Key Stage 2 (KS2) children from a small village primary school. A questionnaire was given to all thirty participants and a semi structured focus group interview was conducted with six participants chosen by the class teacher. Participants recognised that PE provides physical benefits, including helping the “heart and muscles stay strong”, and cognitive benefits, such as “transferable skills”. Participants did not recognise any social benefits. They identified that issues such as getting changed, negative behaviour and becoming tired and sweaty posed challenges to participation in PE. However, the key finding from the research was that specially trained high level TAs or coaches are seen as more effective at teaching PE than regular classroom teachers who do not receive this specialist training. Thus, schools should carefully consider how PE is taught and who it is taught by with findings raising questions over the ability of modern day primary teachers to teach the subject effectively as part of a varied curriculum.

Introduction

Contrasting views exist on the merit of Physical Education (PE) as part of the school curriculum. For instance, Capel and Whitehead (2013) point out that for some, PE is of little value to children in modern Britain, and is taught only to rest children’s cognitive faculties in order to help them work more efficiently in the lessons that follow. As a result, its place in the curriculum is increasingly under threat as the government’s focus is now on subject areas such as numeracy and literacy which are seen to lead to higher levels of learning and academic success (Magnotta & Darst, 2015). Conversely, literature published by the UK government outlines the benefits of PE which include: improved physical health, a gateway to participating in sport away from school as part of a healthy, active, balanced, lifestyle (HABL) and continuous opportunities for positive social and cognitive development (DfE, 2014).

This small-scale research project asked ‘*What do upper KS2 children from a small village primary perceive to be the benefits and potential challenges of Physical Education lessons?*’. The research involved the perceptions of thirty KS2 pupils from one mixed gender Year Five class, who self-reported different levels of physical competence and confidence. The project reviews relevant literature, including the key work of Lawrence (2012), Capel and Whitehead (2013), Ericsson and Cederberg (2015) and Koekoek and Knoppers (2015). Consideration is made of the contrast between the findings and the established literature, leading to recommendations for changes in teaching practice.

Literature Review

Physical Health benefits

Chang, Jian, Lin, Zhao, Ho and Juan (2015) express concerns over the recent decline in the physical health of primary school children, describing childhood obesity as a global epidemic. The known risk of childhood obesity is fairly consistent in the literature, with Kim (2012) and Kantor and Giovanucci (2015) reporting similar results. However, these studies were conducted in Taiwan and America, respectively, and so the application of these findings to the UK is potentially limited. Nevertheless, when considering the decline in children's health as part of an increasingly sedentary society (Ericsson & Cederberg, 2015; Kahan & McKenzie 2015; Pickup, Price, Shaughnessy, Spence & Trace, 2008), the importance of PE cannot be dismissed. Indeed, regular participation in PE lessons gives pupils the knowledge of, and helps them experience, a range of physical health benefits (Carnell, Ireland, Mackreth, Moors & van Wely, 2010). These include: a reduced risk of obesity, diabetes, cancer and heart disease as well as increased muscle and bone strength, flexibility and an increased chance of maintaining a healthy weight (Bardaglio, Marasso, Magno, Rabaglietti & Ciairano, 2015; Lubans, Morgan, Cliff, Barnett & Okely, 2010; Williams & Cliffe, 2011).

Säfvenbom, Haugen and Bulie (2015) identify how a positive relationship with PE can result in further involvement in physical activity outside of school. Although it is important to note that findings from research based in Norway may not be transferrable to England, Pickup et al. (2008) and Kim (2012) maintain the same view as Säfvenbom et al. (2015), noting that schools have been increasingly at the centre of promoting physical activity. For some, PE is the only chance to exercise in a meaningful way, whether this is the result of economic pressures, parental concerns or lack of opportunity (Bailey, 2006). Recent research by Ericsson and Cederberg (2015) identified that less than 50% of the children they studied were physically active out of school. Therefore, by giving children the opportunities to develop physical skill, competence and confidence, PE plays a unique, yet pivotal role in the curriculum by acting as a platform for children to participate in sports clubs and teams away from school as part of a HABL (Bignold, 2013; Capel & Whitehead, 2013; Holt & Persse, 2015; Koekoek & Knoppers, 2015).

Social benefits

Pupil interaction is a part of any PE lesson (Barker, Quennerstedt & Annerstedt, 2015) and according to Rivera and Vidoni (2015), PE has an important role in developing socially responsible students. Through semi-structured interviews and video-recorded observations of eight different PE classes, Rivera and Vidoni (2015) developed an in-depth understanding of how PE provides a platform for social interaction between children. Bailey (2005) expressed similar findings, inferring that PE encourages various personal skills such as self-confidence, self-esteem and leadership. Lawrence (2012) supports this, adding that PE incorporates different social roles within

a team through competition, thus decreasing social exclusion and engaging all children despite differing backgrounds.

On the other hand, Koekoek and Knoppers (2015) highlight that not all children have positive social experiences during PE lessons. For some, this has shaped a negative attitude towards participating in future PE lessons and sport outside of school. Using drawings as their method, Koekoek and Knoppers (2015) were able to observe that the presence of peers influenced children's participation and enjoyment of PE, with some negative outcomes. Despite the negative social experiences reported by Koekoek and Knoppers (2015), there is consensus that for most children, PE plays a vital role in encouraging social confidence and lays the foundations for many children to pursue social sporting activities outside of the classroom (Lawrence, 2012) as part of a lifelong HABL (Bailey, 2006).

Cognitive benefits

PE is often perceived to be a subject that lacks educational value and one which threatens children's learning by taking valuable curriculum time that could be spent on subjects such as literacy, science and mathematics (Hardman, 2008; Pringle, 2015). However, findings from the studies of Lawrence (2012) and Ericsson and Cederberg (2015) argue the positive cognitive effects of PE. They suggest that children who take part in regular PE have improved levels of memory, concentration, behaviour and attainment in comparison to those who are less physically active. Likewise, Fedewa and Ahn (2011) report that the subject does not hinder pupils' progress in other subjects and, furthermore, that it has a significantly positive impact on children's cognitive outcomes including improved scores on tests. Bailey (2006) also contends that PE can help develop a positive attitude to learning and contribute to the overall happiness of an individual as it reduces anxiety, depression, tension and stress, thus enabling an increased focus on learning.

Further benefits are suggested by Capel and Whitehead (2013) and Koekoek and Knoppers (2015), who contend that PE helps teachers tackle an overcrowded curriculum by giving children the opportunity to master transferrable, cross-curricular skills including teamwork, co-operation and communication. By reinforcing these skills through a range of differing practical contexts and environments away from the classroom (Magnotta & Darst, 2015; Williams & Cliffe, 2011) PE can engage all children, regardless of ability (Bignold, 2013; Brustad & Vidoni, 2015; Williams & Cliffe, 2011). In addition, learning from other curriculum areas can be reinforced during PE. For example, Lawrence (2012) suggests that an active approach can help the development of knowledge in the schemas and long term memory retention. This knowledge can then be applied to new learning situations, thus benefitting the children's education as a whole.

The challenges posed by PE lessons

Despite the positive benefits discussed above, the Office for Standards in Education (Ofsted) (2013) suggest the need for improvements within the curriculum, claiming that not all pupils have good PE. Koekoek and Knoppers

(2015) second this, arguing that in some schools there is not enough variation of sports for children to be able to successfully develop a range of physical competencies. Similarly, Capel and Whitehead (2013) and Säfvenbom et al. (2015) report that sports currently taught as part of the National Curriculum are not enjoyed by all learners, and yet the emphasis on team sports is an unquestioned aspect of the curriculum. Thus, literature suggests that for increased enjoyment of PE, there needs to be greater flexibility within the curriculum (Bignold, 2013) including opportunities for a variety of unique, independent sports (Säfvenbom et al., 2015). Examples might include: racket sports, table tennis, roller skating, swimming (not available in all schools) and bowls.

An additional problem is that PE is now taught by primary school teachers who have entered the profession lacking adequate subject knowledge, confidence and physical competence to effectively deliver a varied PE curriculum (Hardman, 2008; Pickup et al., 2008). With a lack of knowledge and physical competence, teachers will fail to deviate from traditional sports and limit children's opportunities to experience an effective and inclusive curriculum (Capel & Whitehead, 2013).

Penney and Chandler (2000) also highlight challenges that face non-specialist PE teachers and state there is a lack of adequate support to assist with professional development in PE. In a longitudinal study that compared PE across a range of European countries, McNeill, Boon, Wang, Tan and MacPhail (2009) found similar results to those of Penney and Chandler (2000). McNeill et al. (2009) suggested that nowadays teachers are expected to teach PE with inadequate facilities, equipment and a limited time allocation within the busy curriculum. As a result of such evidence, Petrie (2011) stresses the need for non-specialist teachers to have increased support, or for schools to hire specially trained coaches/staff to deliver the PE curriculum. This way, the curriculum can be delivered by confident staff who have an extensive knowledge of different sports games, and who also have the potential to alter these to suit the needs of all learners, the necessary physical competence to be able to model practical skills to children, and a secure subject related vocabulary to explain learning concepts to children in a way that is easily understood (Petrie, 2011).

Nicaise, Bois, Fairclough, Amorose, and Coggerino (2007) and Bignold (2013) also highlight the role of teachers, emphasising that teacher behaviours and attitudes towards students, including making comparisons between the abilities of children, can dissuade children from enjoying PE. However, based on observations of interactions between 13 PE teachers and 57 pupils across eight schools, Jin (2015) opposes this, arguing instead that a teacher has no direct effect on the children's enjoyment of the lesson and that learning content and location are more important factors. Williams and Cliffe (2011) and Säfvenbom et al. (2015) second this, arguing that contextual factors, including the kit, weather conditions and the way their bodies are portrayed, all dissuade children from participating fully in PE, with a greater effect on girls.

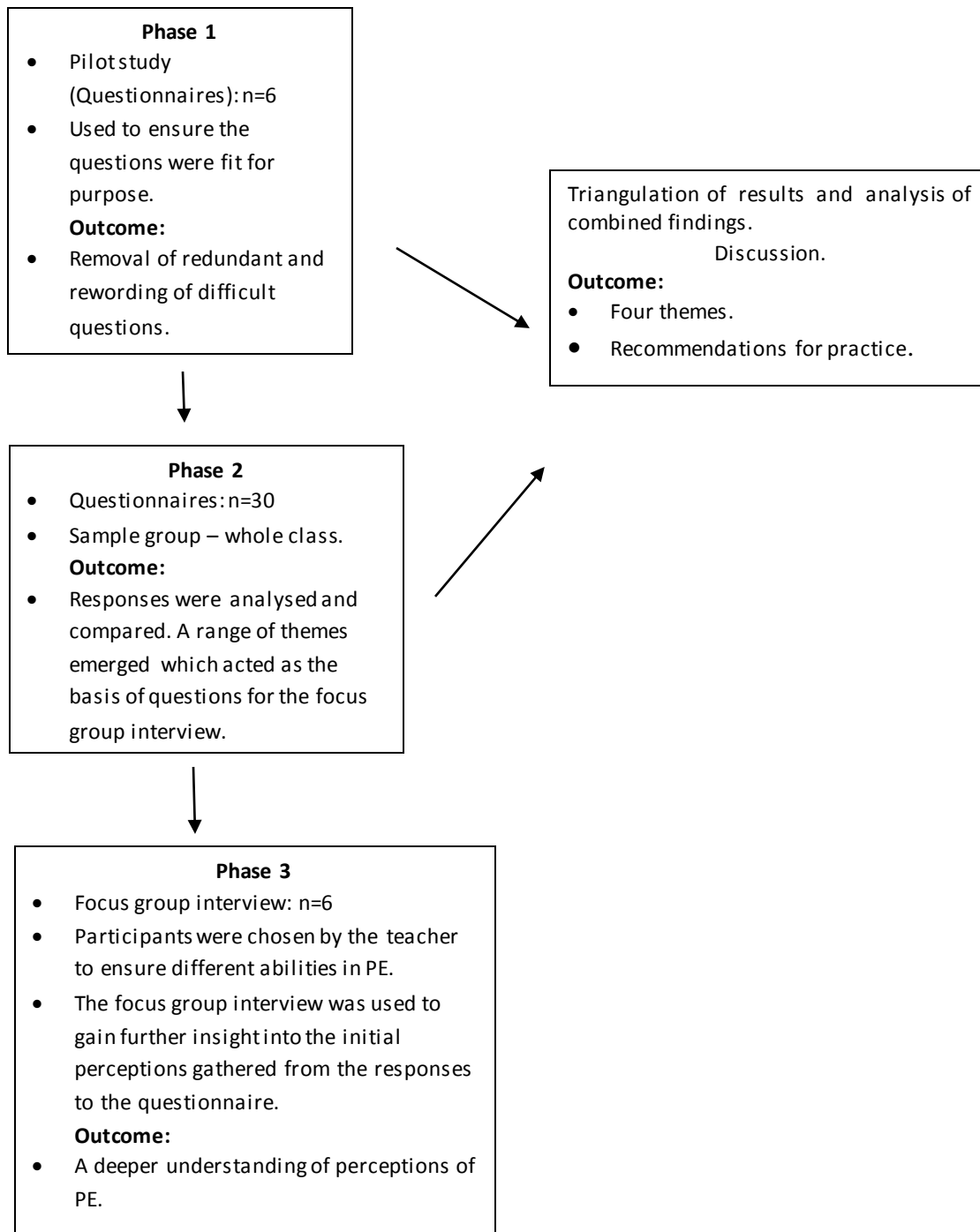
Summary

The findings from the literature review reveal that PE is a valuable subject within the modern curriculum, with some reservations. Firstly, when considering the current health concerns as a result of an increasingly sedentary society, PE plays a vital role in presenting opportunities for children to exercise regularly and in a structured way (Bailey, 2006; Ericsson & Cederberg, 2015). Also, PE can act as a platform for increased involvement in sport outside of school as children are given opportunities to develop physical competence and confidence. Literature also suggests that PE presents opportunities to develop self-confidence as the majority of children can be included through structured competition and team games. Furthermore, PE can have a positive cognitive effect on children by improving levels of memory, concentration, behaviour and attainment (Ericsson & Cederberg, 2015), and by reducing anxiety, depression, tension and stress (Bailey, 2006). Nevertheless, it is important to address the continued need for improvement to ensure all children have enjoyable PE. This means ensuring that all pupils have access to a varied PE curriculum which includes a range of independent and team sports, and that teachers are given either the necessary support to become competent and secure when teaching PE, or that this aspect of the curriculum is delivered by specialist coaching staff.

Methodology

The research design is outlined in full in Figure 1 and was driven by the nature of the research question. This resulted in an exploratory retrospective approach, a methodology which is indicated when views and perceptions about particular life experiences have already been formed (Cohen, Manion & Morrison, 2013). Data collection involved triangulation by using mixed methods, including a questionnaire that incorporated qualitative and quantitative elements (Guthrie, 2010), and a semi structured focus group interview. By gathering quantitative and qualitative data, I was able to obtain a deeper understanding of the children's perceptions of PE (Denscombe, 2010).

Figure 1 – Research Design



Setting

This small scale research project was undertaken in a small village primary school with 30 upper KS2 pupils taken from one mixed gender Year Five class. The school is at the centre of a small village in south west Norfolk with a population of only 2,272 pupils. The school is smaller than the average-sized primary school with 200 pupils across seven classes, each one form entry, from Reception to Year Six. Most children are white British with almost every child speaking English as their first language. The proportion of disabled pupils and those who have special educational needs is above average (Ofsted, 2014, p. 3), whereas those supported by pupil premium is below the national average.

Ethical considerations

The research was conducted in line with ethical guidelines set by Bishop Grosseteste University (2014) and BERA (2016). This included full informed consent of the pupils, achieved by a letter of invitation and full approval from the deputy Head Teacher/Safeguarding officer on behalf of the children. Each child was informed about the purpose of the research and all were made aware that they had the right to refuse to participate and withdraw from the study at any time, in line with Guthrie's (2010) recommendations for conducting research with children. Also, it was made clear to participants that answers would remain anonymous and confidential so that under no circumstance could their answers be linked back to them (Bell & Waters, 2014). To ensure the data remained confidential it was securely locked in a filing cabinet and only the researcher had access to it. As part of the focus group interview, digital voice recorders (DVR) were used to record the children's answers and these were saved in a security protected file on a laptop that only the researcher could access. In addition, on completion of the study, all data was destroyed.

Sample

A strength of the research was that a mixed sample of participants, which comprised boys and girls (n=30) of different ages and different abilities in PE, created the potential for a range of varying responses and perceptions (Cohen, Manion & Morrison, 2013). Nevertheless, it is acknowledged that a sample group of thirty means that findings are tentative and cannot be generalized to other schools (Guthrie, 2010).

The questions and format of the questionnaire were based on that of Lewannick CP School [2015] and on a pre-tested, pre-validated questionnaire taken from Woodfield (2008). The reason behind this was that the questions they raised fitted well with the research question and were consistent with the research focus, with each providing questions based on different areas of PE. Initially, this merged questionnaire was used in a pilot study with six children to ensure the questions were fit for purpose (Cohen, Manion & Morrison, 2013; Denscombe, 2010). The outcome of this was a number of changes to the questionnaire, including the removal of redundant questions, and the rewording of difficult questions.

The thrust of the questionnaire was: reasons why children enjoyed or did not enjoy PE; whether the children felt confident and were treated equally by the teacher; whether they experienced a range of sports; and whether they thought it was an important school subject, and why. The final questionnaire comprised twelve open and closed questions and was given to all 30 participants.

A positive use of questionnaires when working within a limited time frame is that they provide a quick and efficient way of obtaining large amounts of information (Bell & Waters, 2014). Furthermore, questionnaires present findings in a way that is easily managed and analysed (Cohen, Manion & Morrison, 2013). By gathering data in its numerical form it becomes easier to measure, categorise and compare information so that inferences and relationships can be quickly understood. However, a limitation with using quantitative data is that it does not capture a depth of meaning as it does not deal with descriptions (Cohen, Manion & Morrison, 2013).

A second limitation of the research is that the validity of the questionnaires is in part dependent on the truthfulness of an individual's answers. For example, Popper (2004) suggests that respondents may bend the truth to provide answers they think the researcher is looking for, or to show themselves in a good light. Known as the 'Hawthorn effect' Chiesa and Hobbs (2008) suggest that participants are likely to behave differently during research as they are aware that they are being monitored. Also, there is a high possibility that children copy the answers of other children and do not write their own views (Cohen, Manion & Morrison, 2013).

In an effort to further understand the children's perceptions, a qualitative, semi-structured focus group interview was conducted based on the findings from the questionnaires. The interviewees comprised of three Year Five boys and three Year Five girls, of mixed ability in PE, chosen by the class teacher. Through non probability-sampling (Cohen, Manion & Morrison, 2013), there is an increased likelihood for the interview to provide a range of differing perceptions (Bell & Waters, 2014; Guthrie, 2010).

The virtue of using the qualitative interview is that it embellishes the data from the questionnaires, which enables more detail on the thoughts of the children to emerge, thus enabling the researcher to find out participants' perceptions of PE in depth, (Cohen, Manion & Morrison, 2013; Gorard & Taylor, 2004). In addition, unlike the questionnaires, use of the semi-structured focus group interview effectively allows clarification of any misinterpretation or misunderstanding of questions asked and answers given (Cohen et al., 2013). However, a limitation of using a focus group interview is that the answers of interviewees have the potential to be influenced by others in the group. Bell (2010) suggests that too much social interaction can lead to bias as respondents might construct their answers to fit in with other participants, thus raising questions over the validity of responses.

Methods used to analyse and present information

To record findings of the closed questions from the questionnaire, the participants' responses were tallied. Likewise, for the open questions any similar responses were identified and tallied. During the focus group interview DVRs were used to record the participant's responses. By recording the interview, the researcher was able to observe and clearly hear the views of each participant rather than take notes that may not be wholly accurate and lack meaning during future reflection (Wellington, 2000). Also, it allowed clarification of any misinterpretation or misunderstanding of questions asked and answers given (Cohen et al., 2013). The interview was transcribed, which allowed for further analysis of responses post interview.

Results and Analysis

The data from the questionnaire (q) and focus group (fg) interview generated four themes (physical health benefits, cognitive benefits, social benefits and potential challenges to PE lessons), each of which is discussed below. Theme one is the potential health benefits the participants perceived that they gain from PE lessons.

When asked 'why is PE important?' the participants said that PE:

"helps your heart and muscles stay strong" (n=3 q)

"keeps you fit, healthy and active" (n=12 q)

"makes you more athletic" and *"keeps you fit and healthy"* (n=1 fg)

Also, two participants noted the importance of PE as a platform to achieving a healthy lifestyle when saying:

"when we started tennis [at school] I wanted to go and be in a tennis club and then I went in a tennis club [out of school]" (n=1 fg)

"I would do it outside of school because if you like it and are good at it... then yeah I would want to do it because I feel happy and confident" (n=1 fg)

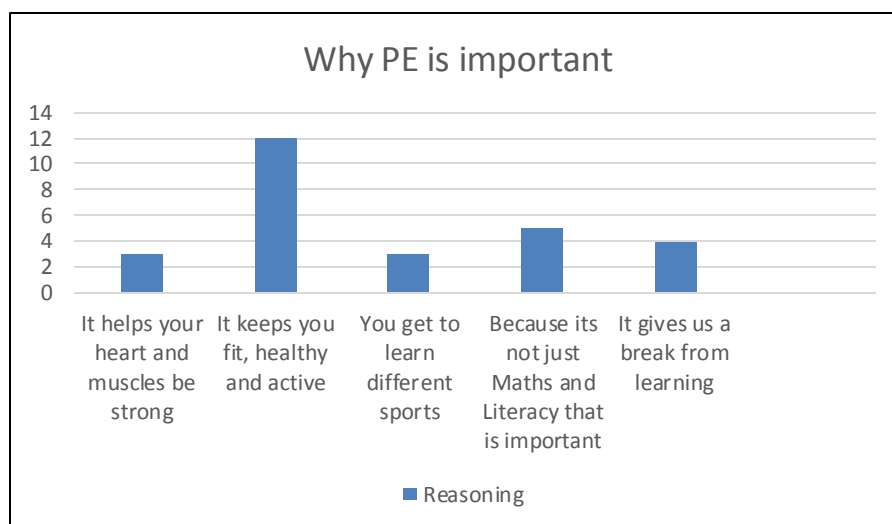


Figure 2: Graph showing reasons given by pupils as to why PE is important.

These responses demonstrate how PE can result in increased participation in non-school sporting activity. Figure 2 illustrates additional reasons pupils gave as to why PE was seen to be important, which includes its ability to provide a break from core subjects and a break from what they regard as learning.

In response to pupils being asked whether other people affect how much they enjoyed PE, the theme that emerged was that PE does not provide social benefits. The reasons for this are quantified and illustrated in Figure 3, and include arguments that children misbehave, and that there is a lack of team work between pupils, and between pupils and the teacher. This is supported by the following statements:

"everyone is being silly and you don't get things done" (n=1 fg).

"my PE teacher gets annoyed as she does not like to lose" (n= 1 fg).

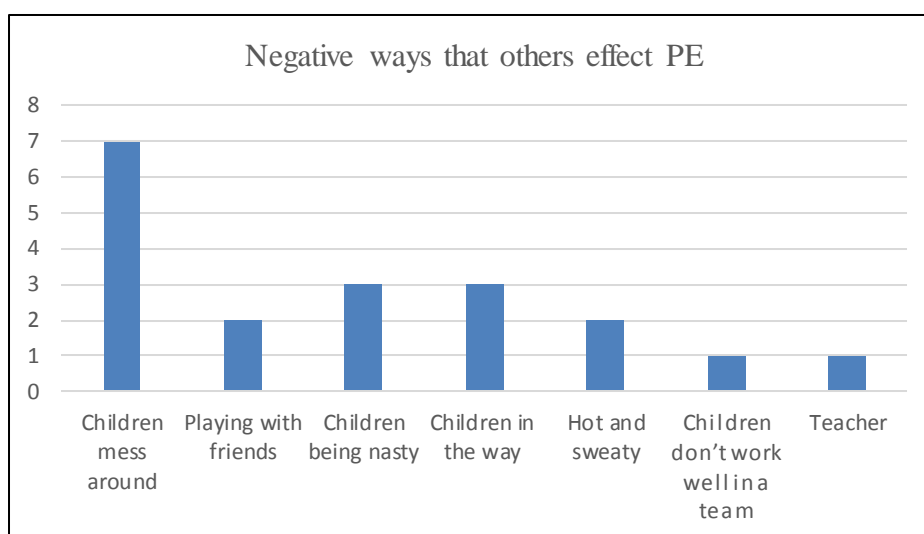


Figure 3: Graph showing the children's views of the negative aspects of PE.

The third theme is that PE provides potential cognitive benefits, such as being able to rest and refocus for core lessons. Participants said that:

"It's not just maths and literacy that's important" (n=5 q)

"it is a break from learning" (n=4 q)

"PE is like a break, but you are still doing learning, just in a fun way" (n=1 fg)

[PE is enjoyable because it is taught in environments] *"outside of the classroom"* (n=1 fg)

Also, during the focus group interview, one child recognised that PE teaches skills that can be *"transferred to other lessons"* thus demonstrating some additional educational value.

The final theme is that of challenges that pupils face when taking part in PE. 22 participants said that there was at least one aspect of PE that they do not enjoy, as illustrated in Figure 4. Reasons include:

"Looking/being tired and sweaty" (n=8 q)

"Having to change into PE kit" (n=13 q)

"Being outdoors" (n=4 q)
"Being active and competitive" (n=3 q)
"A lack of a range of sports [taught]" (n=11 q)
A *"boring"* curriculum (n=1 fg).

One participant also mentioned how they did not enjoy PE because at times those who teach *"make mistakes [when demonstrating] so I don't know what I'm doing"*.

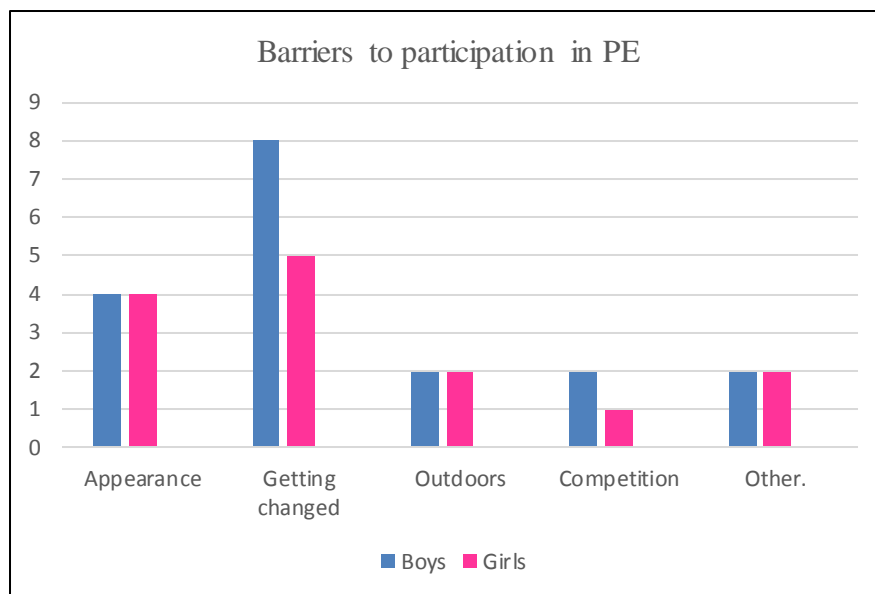


Figure 4: Graph showing the reasons boys and girls in this setting do not like to take part in PE.

Discussion

Physical health benefits

Given that Chang et al. (2015) identified child obesity as a global epidemic, it is encouraging that all participants were able to recognise the positive health benefits that can be provided through PE. Respondents said that regular PE can increase muscle and bone strength and increase athleticism, a finding that is consistent with those of Carnell et al. (2010), Williams and Cliffe (2011) and Bardaglio et al. (2015). The participants also recognised how school sport can act as a platform for developing physical competence and confidence, and can help promote a HABL. As 23 of those asked participated in sports clubs outside of school, the results suggest that sports provision is an important influence in an increasingly sedentary society. These results are in line with the work of Capel and Whitehead (2013), Holt and Persse (2015) and Koekoek and Knoppers (2015) who concur that a positive attitude towards physical activity can be promoted through PE, resulting in an increased participation in sport as part of a HABL.

Social benefits

Barker, Quennerstedt and Annerstedt (2015) and Rivera and Vidoni (2015) argue PE provides a good opportunity to develop socially responsible students. In line with this, Bailey (2005) and Koekoek and Knoppers (2015)

suggest that despite differences in backgrounds, children experience frequent social opportunities that can be applied across a range of differing contexts as a result of engaging in competitive, inclusive sport. Similarly, Lawrence (2012) identified that the competitive aspect of PE incorporates opportunities to take on different social roles within a team, thus decreasing social exclusion and engaging all children. However, this argument is not supported in this study, in which participants explained that the behaviour of other children had a detrimental effect on constructive social development, as a result of a lack of team work and disruption during lesson time. Only one participant from the focus group interview was able to acknowledge how PE *“helps you be a bit more social in teamwork games”*.

Cognitive benefits

Hardman (2008) and Pringle (2015) contend that PE is often perceived to be a subject that lacks educational value. To an extent, the findings from this study contradict this in that the participants recognised that PE helps to both re-energise them for learning core subjects, and provides a rest from core subject lessons. Also, respondents were able to identify how PE can help further develop key cross curricular skills, although the exact nature of these is unclear. However, the participants were unable to acknowledge other cognitive benefits noted by Ericsson and Cederberg (2015) such as improved levels of memory, concentration, behaviour and attainment across the curriculum. Also, participants failed to recognise that effective PE can reduce anxiety, depression, tension and stress, thus enabling an increased focus on learning (Bailey, 2006).

Theme four – potential challenges to PE lessons

Ofsted (DfE, 2013) feel that a good subject knowledge is vital for teachers when delivering effective PE as it maximises children’s enjoyment and can help children develop skills across a range of sports. However, Pickup et al. (2008) contend that nowadays teachers lack the physical competence and subject knowledge required to teach PE effectively and to provide pupils with an enjoyable, varied curriculum. Nicaise et al. (2007) also highlight the role of teachers, arguing that their behaviour towards pupils can affect performance, confidence and motivation. The findings of this study revealed just one criticism of the teacher, which suggests that the majority of the participants were satisfied with the performance of those teaching them. The lessons were delivered by two High Level Teaching Assistants (HLTAs) who were trained to teach PE to all classes. This offers insight into a potential solution for addressing the limitations of Nicaise et al. (2007) and Pickup et al. (2008).

Capel & Whitehead (2013) suggest that a second potential challenge to PE is that the current curriculum content is not enjoyed by all learners and places too much focus on traditional team games, rather than on new or independent activities. Although this argument is supported by twelve participants in this study, the majority argue instead that they are presented with opportunities to develop skills and learn a range of new sports during PE lessons. As part of the questionnaire, the children were asked to name their favourite sport taught during PE. The most popular option was swimming, an independent sport, thus demonstrating the children have access to more than just team sports.

To an extent, the findings illustrate other reasons why children are dissuaded from participating in PE, including the kit, weather conditions and body image. Although these results support the work of Williams and Cliffe (2011), there was no indication in this study that these contextual factors have a more negative effect on the boys than on girls, in contrast to the literature.

Conclusion and recommendations

Findings from this small scale research project are tentative and so cannot be generalised to other schools. However, the findings do reveal that children value PE as a current curriculum subject. Despite living in an increasingly sedentary society, participants were able to recognise the positive effects PE can have on their health, including increased muscle and bone strength. Consistent with the literature, participants were able to recognise how PE can improve physical competence, confidence and provide the platform to a HABL by increasing participation outside of school, such as by joining sports clubs or teams.

Additionally, the participants were able to identify some cognitive benefits provided by PE including the teaching of cross curricular skills that can be applied to other learning contexts, but they failed to note other possible cognitive benefits, such as improved levels of memory, concentration, behaviour and attainment. One other important consideration that was highlighted in this study and in the literature is that there needs to be a variety of sporting activities beyond the traditional team based ball invasion games. However, findings dismissed the potential challenge that children no longer receive a varied PE curriculum, with the majority of participants responding that they had the opportunity to participate in a range of independent and team sports. Participants identified other challenges that prevented children from enjoying PE which included: getting changed, being outdoors and the way they looked and felt during PE. Furthermore, and in contrast to the literature, findings suggest that PE does not provide children with the platform to engage in constructive social development. Instead, participants found that interaction with other children was often negative and had a detrimental effect on their social confidence and development.

The results indicated that a mostly positive response to PE was reported for lessons that were delivered by two high level TAs, who had specialised in PE. Thus, the findings of the current research may be used as an impetus for further school-based research, particularly relating to factors that may have an influence upon teachers' pedagogical confidence and knowledge in relation to PE. With that in mind, it is recommended that schools carefully consider how PE is taught and who it is taught by. Potentially, specially trained high level TAs or coaches may be more effective at teaching PE than regular classroom teachers who do not receive this specialist training. As the literature suggests, this may be because primary school teachers lack the physical competence, confidence, subject knowledge and equipment to deliver successful PE lessons, a varied curriculum and to help children learn a range of independent and team sports.

References

- Bailey, R. (2005). Evaluating the relationship between Physical Education, sport and social inclusion. *Educational Review*, 57(1), 71-90.
- Bailey, R. (2006). Physical Education and Sport in Schools: A Review of Benefits and Outcomes. *Journal of School Health*, 76(8), 397-401.
- Bardaglio, G., Marasso, D., Magno, F., Rabaglietti, E. & Ciairano, S. (2015). Team-teaching in physical education for promoting coordinative motor skills in children: the more you invest the more you get. *Physical Education and Sport Pedagogy*, 20(3), 268-282.
- Barker, D., Quennerstedt, M., & Annerstedt, C. (2015). Learning through group work in Physical Education: a symbolic interactionist approach. *Sport, Education and Society*, 20(5), 604-623.
- Bell, J. (2010). Doing your research project: A guide for first-time researchers in education, health and social science. Buckingham: Open University Press. Retrieved from:
<http://lib.myilibrary.com.bishopg.idm.oclc.org/Open.aspx?id=302868>
- British Educational Research Association (BERA). (2011). *Ethical Guidelines for Educational Research*. London: British Educational Research Association. Retrieved from
<http://content.yudu.com/Library/A2xnp5/Bera/resources/index.htm?referrerUrl=http://free.yudu.com/item/details/2023387/Bera>. Last accessed: 21/04/2016.
- Bignold, W.J. (2013). Developing school students' identity and engagement through lifestyle sports: a case study of unicycling. *Sport, Education and Society*, 18(2), 184-199.
- Bishop Grosseteste University. (2014). Research Ethics Policy. Retrieved from:
<http://bishopg.ac.uk/...Pol.../ResearchEthicsPolicy.pdf>.
- Brustad, R. (2015). Do students' motivational characteristics during physical education predict their leisure time physical activity. *Journal of Physical Education, Recreation and Dance*, 86(5), 53.
- Capel, S. & Whitehead, M. (2013). *Debates in Physical Education*. Oxon: Routledge.
- Carnell, D., Ireland, J., Mackreth, K., Moors, H. & van Wely, S. (2010). *Physical Education*. Essex. Pearson Education Limited.
- Chang, C. J., Jian, D.Y., Lin, M. W., Zhao, J. Z., Ho, L. T., & Juan, C. C. (2015). Evidence in obese children: contribution of hyperlipidemia, obesity-inflammation, and insulin sensitivity. *PLOS*. Retrieved from:
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0125935>
- Chiesa, M., & Hobbs, S. (2008). Making sense of social research: how useful is the Hawthorne Effect?. *European Journal of Social Psychology*, 38(1), 67-74.
- Cohen, L., Manion, L. & Morrison, K. (2013) *Research methods in Education*. New York: Routledge Falmer.
- Denscombe, M. (2010). *The good research guide: For small-scale social research projects*. Maidenhead, England: McGraw-Hill/Open University Press.
- Ericsson, I. & Cederberg, M. (2015). Physical activity and school performance: a survey among students not qualified for upper secondary school. *Physical Education and Sport Pedagogy*, 20(1), 45-66.

Fedewa, A. L. and Ahn, S. (2011). The effects of physical activity and physical fitness on children's achievement and cognitive outcomes: a meta-analysis. *Research Quarterly for Exercise and Sport*, 82(3), 521-535.

Gorard, S., & Taylor, C. (2004). *Combining methods in educational and social research*. Maidenhead: Open University Press.

Guthrie, G. (2010). *Basic research methods: an entry to social science research*. New Delhi: SAGE Publications.
Hardman, K. (2008). Physical education in schools: a global perspective. *Kinesiology*, 40(1). Retrieved from: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=39135.

Holt/Hale, A. & Persse, D. (2015). The national Physical Education standards and grade level outcomes: the future of elementary Physical Education. *Journal of Physical Education, Recreation and Dance*, 86(7), 14-16.

Jin, J. (2015) How does a teacher influence student's physical activity in physical education? *Journal of Physical Education, Recreation and Dance*, 86(3), 54.

Kahan, D. L. & McKenzie, T. L. (2015). The potential and reality of Physical Education in controlling overweight and obesity. *American Journal of Public Health*, 105(4), 653-659. Retrieved from: <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302355>.

Kantor, E. D. & Giovanucci E. (2015). Adolescent obesity and inflammation in relation to colorectal cancer risk: recent findings and future implications. *Childhood Obesity*, 11(4), 335-337. Retrieved from: <http://online.liebertpub.com/doi/abs/10.1089/chi.2015.29001.ek?journalCode=chi>.

Kim J. (2012). Are Physical Education-Related State Policies and Schools' Physical Education Requirement Related to Children's Physical Activity and Obesity? *Journal of School Health*, 82(6), 268-276.

Koekoek, J. & Knoppers, A. (2015). The role of perceptions of friendships and peers in learning skills in physical education. *Physical Education and Sport Pedagogy*, 20(3), 231-249.

Lewannick Primary School PE questionnaire. (2015). Retrieved from: <http://lewannick.cornwall.sch.uk/sample-page/sport/pe-pupil-questionnaire/>.

Lawrence, J. (2012). *Teaching primary Physical Education*. London: SAGE publications.

Lubans, D., Morgan, P., Cliff, D., Barnett, L., & Okely, A. (2010). Fundamental Movement Skills in Children and Adolescents: Review of Associated Health Benefits. *Sports Medicine*, 40(12), 1019-1035.

Magnotta, J. & Darst, P. (2015). The common core learning standards: where does Physical Education fit in? *Journal of Physical Education, Recreation and Dance*, 86(2), 8-9.

McNeill, M., Lim, B. S. C., Wang, C. K. J., Tan, W. K. C., & Macphail, A. (2009). Moving towards quality physical education: Physical education provision in Singapore. *European Physical Education Review*, 15(2), 201-223.

Nicaise, V., Bois, J.E., Fairclough, S, J., Amorose, A,J., & Cogerino, G. (2007). Girls' and boys' perceptions of physical education teachers' feedback: effects on performance and psychological responses. *Journal of Sports Sciences*, 25(8), 915-926.

Office for Standards in Education (Ofsted). (2014). Placement Primary School – School Inspection Report. Retrieved from: <http://reports.ofsted.gov.uk/inspection-reports/find-inspection-report/provider/ELS/120870>. Last accessed: 01/01/216.

Penney, D. and Chandler, T. (2000) 'Physical Education: what future(s)?' *Sport, Education and Society*, 5(1), 71–87. Retrieved from: <http://www.tandfonline.com/doi/abs/10.1080/135733200114442>.

Petrie, K. (2011). An Enduring Issue: Who Should Teach Physical Education in New Zealand Primary Schools?. *New Zealand Physical Educator*, 44(1), 12-17.

Pickup, I. & Price, L. (2008). *Teaching Physical Education in the Primary School. A Developmental Approach*. London: Continuum International.

Pickup, I., Price, L., Shaughnessy, J., Spence, J. & Trace, M. (2008) *Learning to Teach Primary PE*. Learning Matters.

Popper, K. R. (2004). *The Logic of Scientific Discovery*. London: Hutchinson.

Pringle, R. (2015). The philosophy of Physical Education. a new perspective. *Sport, Education and Society*, 20(2). 279-282. Retrieved from:

<http://www.tandfonline.com/doi/abs/10.1080/13573322.2014.974730?journalCode=cses20>.

Rivera, A. & Vidoni, C. (2015). Steps to teach appropriate sports and games behaviours through Physical Education. *Journal of Physical Education, Recreation and Dance*, 86(5), 8-13. Retrieved from:

<http://www.tandfonline.com/doi/abs/10.1080/07303084.2015.1022670>.

Säfvenbom, R., Haugen, T., & Bulie, M. (January 01, 2015). Attitudes toward and Motivation for PE. Who Collects the Benefits of the Subject?. *Physical Education and Sport Pedagogy*, 20(6), 629-646. Retrieved from:

<http://www.tandfonline.com/doi/pdf/10.1080/17408989.2014.892063>.

Wellington, J. (2000). *Educational research: contemporary issues and practical approaches*. London: Continuum.

Williams, A. and Cliffe, J (2011). *Primary PE – unlocking the potential*. Open University Press. England.

Woodfield, L.A. (2008) *Young People's Physical Activity, Attitudes Towards Physical Education, And Health Related Fitness*. Unpublished PhD thesis. Coventry University: Coventry.

Awareness of Mental Health Issues within Schools

Emily Kate Spalding

Abstract

Young people experience a pressurised childhood due to mounting expectations in a testing orientated education system and 'round the clock' media exposure. Reports suggest around 10% of 5 to 16 year olds have a clinically diagnosed disorder, and a further 15% suffer less severe problems which put them at risk of developing mental health problems in the future. This small scale study explores the level of support available to both pupils and staff involved in emotional issues and the wellbeing of pupils and general attitudes towards mental health issues. The study was conducted in a small, rural secondary school, with a sample group of 44 pupils and staff. Likert Scale responses to statements about attitudes towards mental health provided quantitative data for the identification of trends. Data were supplemented by interview responses of three staff members in order to construct meaning from the qualitative data evidence. The findings suggest little formal structured support in the school system and low levels of mental and emotional health education. However, both staff and pupils show very positive attitudes to both issues and sufferers, with strong motivation to learn more and embrace sufferers in a normal environment. With well informed and far reaching guidelines released by the government in 2015, this study provides some insight into the cultural and practical issues relating to mental wellbeing for young people and those involved in educational contexts.

Introduction

At a time when society seems busier than ever, and young people in particular are subject to increasing educational pressures as well as pressures exerted by social media, it may be of little surprise that these take their toll on individuals. In the four years December 2010 to December 2014, it is reported that the number of children and young people referred to mental health services more than doubled, with 2,500 waiting for their first outpatient appointment in December 2014 (BBC, 2015a). Recent research by Healthwatch England (Campbell, 2015) identified inadequate support for people with mental illness. Of children and young people aged five to 16, 9.8% have a mental disorder which has been clinically diagnosed (Green et al., 2004; 'NHS choices: Your health, your choices', 2011). More specifically, 5.8% of all children are diagnosed with a conduct disorder, 3.7% with emotional disorders, and 1.5% with hyperkinetic disorders. A further 1.3% suffer from less common disorders which include autistic spectrum and eating disorders. In addition to this group, approximately a further 15% have less severe problems which place them at risk of developing mental health problems in the future (Brown et al., 2012).

Increasing numbers of adolescents (10.4% of boys and 5.9% of girls age five to ten, rising to 12.8% of boys and 9.6% of girls age 11 to 15), and 15 to 16 year olds are suffering depression. Reported numbers appear to have doubled between 1980 and 2000, with 80,000 children and young people suffering by 2005 (YoungMinds, n.d.). As well as the obvious concern for the safety and wellbeing of young sufferers, less known medical risks of heart disease, diabetes and other associated conditions must also be considered. Perceived as not educable prior to

the Warnock Report (Stratford, 1981) sufferers of depression benefit enormously from new attitudes to inclusion.

With the National Service Framework for Children, Young People and Maternity Services identifying that poor mental health in children could result in more complex problems in later life if not addressed during school years (DoH 2004), and with increasing emphasis placed on early intervention and health promotion, it is clear that schools have a large and important role to play in the mental health and emotional wellbeing of young people. This paper aims to explore whether adequate support is generally available in secondary schools, and what attitudes are displayed towards those with mental health issues by Year 10 and 11 pupils, and by teachers.

Literature Review

Historically, children with special educational needs or requirements (SEN) were grouped based on their perceived needs (Frederickson & Cline, 2008, p. 69), with this enforced segregation compounding the negative effect. Stigmatisation and cruel labelling would further reinforce a vulnerable child's loss of confidence and self-image. The 'within-child model' of assessment tended to focus on the deficiencies of the child rather than the learning environment as seen in the social model (Frederickson & Cline, 1995; Goacher et al., 1988). The early 1970s saw a change in concept from that where a child was expected to fit into the school model, dating back to the Education Act 1944, towards that of meeting the child's needs. Provision of suitable care and appropriate funding was called for by the Warnock Report (Stratford, 1981), a seminal report influential in the later Education Act of 1981. This Act of Parliament identified local education authorities (LEA) as responsible for assessing and identifying a child's needs and providing suitable provision for their education.

Subsequently, protection and respect for a child was demanded by the Children's Act 1989 (DoH, 1991), together with a requirement to take account of the child's feelings and wishes. The concept of inclusion as a commitment, and subsequently a legal requirement wherever possible, was introduced with the Education Act 1996 and amended in 2002, which also strengthened the rights of parents. Reynolds suggested that inclusion meant 'taking increasing responsibility for educating groups previously excluded from mainstream society', and viewing social values on disability, together with race, language and ethnicity as key influences on exclusion (Reynolds 1989). Inclusion was described as an instrument for countering these prejudices and biases in schools, and eventually in society, by the United Nations Educational Scientific and Cultural Organisation (UNESCO) in 1994 (UNESCO 1994, p. 11). The principle of inclusion does place pressure and responsibility onto teachers who should be able to expect appropriate initial and ongoing support and professional development in order to fulfil their responsibilities. However, the nature and extent of ongoing support and professional development is reported to be generally very poor at present (UK Parliament, 2015). Surveys in 1997 concluded that most teachers do support inclusion of mental health education when well resourced (Farrell, 1997; Jenkinson, 1997), which

involves teachers, headteachers, Learning Support Assistants (LSA), LEAs and Special Education Needs Coordinators (SENCO).

There is strong evidence to support the benefit of early intervention and preventative approaches (DoE, 2014), particularly the development of problem solving skills and strategies which promote resilience. School interventions in areas such as life skills, coping skills, anti-bullying, and resilience have all proven effective in both the promotion of mental health and identifying sufferers (DoE, 2014; Weare & Nind 2011).

To be able to comply with Section 5 of the Teachers' Standards 2012 Part 1 (DoE, 2012) teachers do need some fundamental knowledge in order to recognise a child with developing depression. Strategies which may help teachers identify a child with a developing problem include data to identify changes such as attendance and attainment, and an effective pastoral system where at least one member of staff knows each child well enough to notice changes in behaviour (DoE, 2014). Strength and Difficulties Questionnaires (SDQs) and Common Assessment Frameworks (CAF) can help identify a suspected problem allowing early intervention (DoE, 2014). Only a medical professional can make a formal diagnosis.

Schools play a crucial role in society by setting the social norms for pupils, including understanding and attitudes towards mental health. In the absence of understanding, bullying, abusive negative labelling and stigma become obstacles to communication crucial to challenging this behaviour (Anti-Bullying Alliance, p.10; Deane & Todd, 1996). Karen Cromety, from the British Association for Counselling and Psychotherapy is on record as stating that mental health education in schools could be described as insufficient to non-existent at the present time with the subject not being compulsory within the PSHE programme, often poorly taught and seen as a time-filler tagged into the curriculum (UK Parliament, 2015; Hunt, 2008).

Where a problem is identified, various options may be considered. Counselling, either school based or external, has been shown to have a positive effect on both emotional wellbeing and capacity to learn (Cooper 2013), allowing most problems to be dealt with in school without the need to refer further external mental health services (UK Parliament, 2015). In-school counselling should be convenient and flexible, while external counselling may avoid the stigma of attending a "special area". Mental health specialists such as the local Children and Adolescent Mental Health Services (CAMHS) team may be able to offer trained adolescent psychologists, a service generally accessed through General Practitioners. However, Children and Adolescent Mental Health Services (CAMHS) are notoriously under resourced, with lead times of up to two years for an initial appointment. Differences occur regionally in the quality of service offered (UK Parliament, 2015). Educational psychologists may be commissioned by the school privately or through the local authority. Cognitive Behavioural Therapy (CBT) is a form of counselling which can effectively challenge thinking and develop self-help strategies. Information and support is available nationally through many organisations such as Young Minds, Place 2 Be, Childline, MindEd, Head Meds, The Sutton Trust, Relate, The Royal College of Psychiatrists, as

well as locally based organisations. The involvement of parents also improves long term effectiveness (Vostanis & Harrington, 1994).

Having a personal interest in mental and emotional health support, it was noticeable while on placement that there appeared to be no formal provision or training towards supporting students, and that curriculum and PSHE time is very limited. New Government guidelines towards mental health and behavioural issues have been issues (DoE, 2015). The aim of this paper is to explore the level of provision for emotional wellbeing issues, both in terms of education and support to sufferers, before the new guidelines take effect. As progress in the provision of support for mental health issues is usually closely linked to people's general attitude towards the subject, and having seen the 2014 Attitudes to Mental Illness Research Report (2014), it was considered that a similar survey on a much smaller scale within a small, rural secondary school would contribute to understanding of the issues at a local level. The use of the five-point Likert Scale and staff interviews to pursue some of the lines of enquiry were influenced by the 2014 Attitudes Report ('Attitudes to Mental Illness 2014 Research Report', 2014).

Methodology

The study was conducted in a small village secondary academy. Initial enquires suggested a small sample size of 30-50 might be expected (Denscombe, 2010), including Year 10 and 11 pupils and some teaching staff. The method of data collection was a self-completion questionnaire and some interviews (Cohen et al., 2007; Denscombe, 2010; Sharp, 2009). Prior to any research and data collection being carried out, approval of the Research Ethics Students Form was given by a Bishop Grosseteste University representative, ensuring all research was conducted within a clear ethical and considerate framework (BERA, 2011; BGU, 2014).

Questionnaires were distributed in a group-administered survey to random members of years 10 and 11, and collected at the end of the lesson period (Denscombe, 2010). Additionally, a number of questionnaires were left with teachers over a five-day period. They were designed to be as clear, easy to follow, and unambiguous as possible to maximise engagement of the participants (Bell, 2010; Thomas, 2009). As mental health is a sensitive topic, the language and layout were framed in ways so as not to offend any participants. A pilot of the questionnaire was conducted with a senior member of staff and fellow pupils before the main study was conducted. (Cohen, et al., 2007; Sharp, 2009; Thomas, 2009). The content was deemed suitable for appropriate and adequate responses.

The front page was the questionnaire requirements, which were reinforced verbally at the time, and articulated a guarantee of participant anonymity and confidentiality (Blaxter et al., 2006; Thomas, 2009). The majority of questions asked the respondents to give their opinions to a series of structured statements and respond using Likert five-point scales, rating from 'strongly disagree' to 'strongly agree' (Cohen et al., 2007; Sharp, 2009;

Thomas, 2009). This was considered an appropriate method of measuring attitudes inspired by the Mentally Ill (CAMI) Scale (Taylor & Dear, 1981) and the Opinions about Mental Illness Scale (Cohen & Struening, 2012). This produced uniform and quantifiable results for easy analysis (Denscombe, 2010; Sharp, 2009), although it did restrict full expression of the respondents' feelings (Cohen et al., 2007; Denscombe, 2010). The quantitative data could be used to identify trends, but a small number of personal interviews were also conducted with staff members to allow fuller, more meaningful responses (Denscombe, 2010; Punch, 2014; Wisker, 2009). All pupils and all but one teacher respondent returned their questionnaires directly, ensuring confidentiality. The one remaining questionnaire was left in a sealed envelope with a senior member of staff. Although not possible on site at school, anonymity was maintained once all the questionnaires were collected (Bell, 2010; BERA, 2011; BGU, 2014; Blaxter et al., 2006), all participants having the right to withdraw if this was not acceptable (BERA, 2011; BGU, 2014).

34 questionnaires were handed out to pupils with all 34 being handed back complete, a 100% response rate. 11 of the 30 questionnaires distributed to teachers were completed, providing a 30% response rate. This was a successful response rate for an impersonal self-completion exercise which often attract low response rates (Blaxter et al., 2006; Grey, 2004). Four members of staff agreed to complete the interview. One member was interviewed directly and three other members of staff asked to take the list of questions away. Two of the three returned their responses, giving an overall return of 75%, which was considered successful.

All questionnaires were received back prior to analysis of data (Bell, 2010). A tally chart was used to collate responses of each group to the questions. Interview responses were considered both in conjunction with the survey results and as an alternative perspective.

Presentation and Analysis of Findings

Questionnaires

Attitudes to mental health

The first part of the questionnaire intended to establish whether respondents viewed mental illness as a serious problem. Each group on the whole disagreed with the statement, overwhelmingly in the case of the teachers, although a small number of pupils in each year group did agree that it is not a serious illness. The question is flawed as 'mental illness' covers a range of illnesses of different degrees of severity, answers from younger respondents depended partially on personal experience rather than well informed opinion.

Table 1: Statement – ‘Mental illness is not a very serious problem’

Mental illness is not a very serious problem					
	Strongly agree	Slightly agree	Neither agree or disagree	Slightly disagree	Strongly disagree
Year 10	0%	7%	7%	33%	53%
Year 11	5%	0%	5%	12%	78%
Teacher	0%	0%	9%	0%	91%

The next two questions explored whether people thought an individual had to be special in some way in order to succumb to mental illness, or whether they regarded it as an illness like any other, which may affect anyone (Table 2). The teachers agreed strongly that anyone could suffer from the illness, but the pupils’ opinions were more divided, particularly Year 10 pupils.

Teaching Times suggests that through mental health education, and by assessing attitudes, a greater understanding of their pupils’ needs and a focus for targeted support could be achieved (Child and Young People’s Health Outcomes Forum, 2012, p. 7; Williams 2015). This report identified that the transition stage between primary and secondary school is the most appropriate time to introduce emotional management to tackle the risk of potential stigma or discrimination between students (Hunt, 2008).

Table 2: Statement – Virtually anyone can have a mental illness

Virtually anyone can have a mental illness					
	Strongly agree	Slightly agree	Neither agree or disagree	Slightly disagree	Strongly disagree
Year 10	27%	20%	33%	13%	7%
Year 11	67%	22%	11%	0%	0%
Teacher	100%	0%	0%	0%	0%

Opinions on whether mental illness is like any other illness (Table 3) were mixed. Whilst 91% (n= 10) of teachers agreed, pupil opinion was very divided. Both year groups had quite a large neutral result, Year 10s were more strongly in favour, whereas the majority of Year 11s showed with the statement. Whether the pupils felt they were just different, or they felt that some or all mental illness is not an illness at all, is difficult to judge from the results. A further supplementary question may have clarified the opinions of pupils.

Table 3: Statement – Mental illness is an illness like any other illness

Mental illness is an illness like any other illness					
	Strongly agree	Slightly agree	Neither agree or disagree	Slightly disagree	Strongly disagree
Year 10	7%	40%	20%	13%	20%
Year 11	11%	17%	22%	11%	39%
Teacher	64%	27%	0%	0%	9%

Tables 4 and 5 explore attitudes to individuals who suffer from mental illness. Both tables demonstrate overwhelming support and respect for people suffering mental health problems, 100% in each case with the teachers. 7% and 6% of Year 10 and 11 pupils respectively disagreed that more tolerance is required and strongly felt sufferers deserved respect. It is possible that Year 10 and 11 pupils felt they were already very tolerant and there was no need for improvement. Teacher responses suggest that they are fully support of inclusive and stigma-free behaviour within their school community (Anti-Bullying Alliance, n.d., p.10).

Table 4: Statement - We need to adapt a far more tolerant attitude towards people with mental illness in our society

We need to adapt a far more tolerant attitude towards people with mental illness in our society					
	Strongly agree	Slightly agree	Neither agree or disagree	Slightly disagree	Strongly disagree
Year 10	60%	26%	7%	0%	7%
Year 11	50%	33%	11%	6%	0%
Teacher	100%	0%	0%	0%	0%

Table 5: Statement – People with mental health illness deserve respect

People with mental health deserve respect					
	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
Year 10	60%	20%	20%	0%	0%
Year 11	83%	17%	0%	0%	0%
Teacher	100%	0%	0%	0%	0%

Better worded as ‘a valuable therapy’, Table 6 indicates that there is support for sufferers of mental illness to be treated and included in the normal life of the general community. This is a really important part of the recovery process, whether it be the wider community, or the school community in the case of young people. Inclusion was an enormous step forward when formalised in the 1996 Education Act (UK Government, 1996). Support for inclusion is strong in each group with between 55% and 91%, although there was 17% slight disagreement in Year 11.

Table 6: Statement – The best therapy for people with mental illness is to be part of a normal community

The best therapy for people with mental illness is to be a part of a normal community					
	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
Year 10	13%	60%	20%	7%	0%
Year 11	22%	33%	28%	17%	0%
Teacher	45.5%	45.5%	9%	0%	0%

The strength of feeling towards learning more about mental health (Table 7) was quite surprising. Although one might hope that most teachers would want to be well informed on the emotional wellbeing of their pupils, of the response of 80% or above selecting ‘strongly agree’ or ‘slightly agree’ in every participant group is noteworthy, and very encouraging in terms of continued progress with inclusion, acceptance and many other issues.

Table 7: Statement – It is important to learn about mental health

	It is important to learn about mental health				
	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
Year 10	47%	33%	13%	7%	0%
Year 11	88%	6%	6%	0%	0%
Teacher	100%	0%	0%	0%	0%

Participants were asked, ‘If you felt you had a mental health problem/ concern, how likely would you be to go to your GP for help?’ (Table 8). It is interesting how many people are either unsure or unlikely to go to their GP, with 13% of Year 10 pupils not even providing a response to this statement. Only 20% of Year 10 pupils, 28% of Year 11 pupils and 54% of teachers said they would be likely to go to their GP. This does raise the question of whether people think they would go direct to mental health professionals, or maybe more likely they think they could ‘weather it’ alone. This suggests a degree of ignorance towards the severity and seriousness of these conditions.

Table 8: Statement - If you felt you had a mental health problem/concern, how likely would you be to go to your GP for help?

If you felt you had a mental health problem/concern, how likely would you be to go to your GP for help?						
	Very Likely	Quite Unlikely	Unsure if likely or unlikely	Quite Unlikely	Very Unlikely	Unanswered
Year 10	13%	7%	27%	13%	27%	13%
Year 11	28%	0%	11%	50%	11%	0%
Teacher	27%	27%	36%	0%	9%	0%

When asked about talking to friends and family about their mental health (Table 9) 13% of Year 10 and 11% (n=2) of Year 11 pupils did not respond. Interestingly, no teachers said they were very comfortable, and only 18% were comfortable at all about talking to friends and family, with 54% feeling uncomfortable. Each group was quite divided, with the younger group feeling the most comfortable at 53%, reducing to 34% in the Year 11 group.

Table 9: Statement - If you felt you had a mental health problem/concern, how comfortable would you feel talking about it with friends or family?

If you felt you had a mental health problem/concern, how comfortable would you feel talking about it with friends or family?								
	Very un-comfortable	Moderately un-comfortable	Slightly un-comfortable	Neither comfortable nor un-comfortable	Fairly comfortable	Moderately comfortable	Very comfortable	Unanswered
Year 10	7%	13%	13%	0%	13%	13%	27%	13%
Year 11	22%	6%	17%	11%	11%	6%	17%	11%
Teacher	9%	18%	27%	27%	0	18%	0%	0%

The final question addressed the issues of stigma and discrimination (Table 10). Year 10 pupils' responses were quite evenly spread with 66% saying either they experienced 'a little' or 'a lot' of stigma and discrimination:20% did not respond. 89% of Year 11 and 100% of teacher participants believed stigma and discrimination is experienced but those with mental illness.

Table 10: Statement - Do you think people with mental illness experience stigma and discrimination?

Do you think people with mental illness experience stigma and discrimination?				
	Yes- a lot	Yes- a little	No	unanswered
Year 10	33%	33%	13%	20%
Year 11	28%	61%	6%	6%
Teachers	64%	36%	0%	0%

Interview participants (three members of staff) were asked whether they believed that increasing openness within society about mental illness was reflected in how mental health is represented in the classroom context. While one respondent was not sure, the other two gave very positive answers, suggesting more openness, awareness and acceptance of issues. One suggested that stigma still exists but implied to a lesser extent, while the other suggested that teachers were a little more informed on subjects such as self-harm and awareness of their responsibilities within their safeguarding duties. On the same subject, when asked whether growing awareness had changed their own perspectives on mental health issues, each responded positively, suggesting personal contact with pupils that have suffered and their families had increased and informed their own personal

and professional awareness. One respondent suggested this leads to a healthier approach to the subject by everybody.

Support for staff and pupils

One of the main findings of the survey was that there does not appear to be any structured approach towards mental health, either in terms of education to raise awareness and inform the year groups or a well-informed organised support structure provided by the school for pupils with emotional wellbeing issues. Whilst both teachers and pupils felt strongly that it is important to learn about mental health, staff found it difficult to say where it featured in the curriculum, with no participants suggesting that the subject was covered during Personal, Social and Health Education (PSHE). Two staff members felt it is more important for the subject to be embedded in the curriculum generally.

In response to a petition to introduce mental health education to the National Curriculum, the UK Government stated that 94% of secondary schools already teach pupils about mental health and promoting positive mental health through such lessons as PSHE, drama and whole school assemblies (Taggart, Lee, & McDonald, 2015). Whilst schools are free to develop their own approaches depending on their circumstances with mental health support, this unstructured approach to specific guidance places a responsibility on schools and teachers. Schools and teachers have not always been sure what is appropriate to teach and how exactly to approach such a sensitive topic (UK Government and Parliament, 2015) and so a lack of support for education professionals can result in patchy or minimal support and practice.

The support structure as such appeared to rely on the general availability of Form Tutors in an uneducated pastoral role. One trained Special Education Needs Coordinator (SENCO) suggested that Karen Cromety (UK Parliament, 2015) was right in suggesting the mental health education in school is insufficient not only within the curriculum but for teachers within their safeguarding roles. When asked further on the nature of ongoing training, staff seemed completely unaware of any availability, claiming to be forced to rely on experience and intuition when dealing with pupils' emotional problems. This seems to be at variance with the findings of a report conducted for the Nursing Times (Hunt, 2008) which reported a survey of seven teachers from different secondary schools across East Sussex claimed that teachers received ongoing support, additional time made available to teach PSHE and received both support from external agencies and ongoing training. However, a closer look at the body of the report does reveal criticism of the breadth of the PSHE guidelines, the competence of the staff to teach the subject and the manner in which the subject was dropped once covered, rather than remaining in focus as an ongoing concern (Hunt, 2008). The report does mention the lack of ongoing training due to time, cost and resources, but did underline staff enthusiasm and desire for further training (Hunt, 2008). The findings of this study (Table 7) suggest that the recommendations of Hunt's report (2008) apply to this context in which this small-scale study was conducted. Lee et al. (2003) suggest because health promotion falls

heavily onto teachers, it is essential their knowledge of mental health is increased by incorporating it into their teacher training.

Both teachers and pupils proved particularly reticent on the subject of discussing any personal concerns, whether it be with a close friend or family member, or their GP (Tables 8 and 9). In general, Year 10 and 11 pupils appear more likely to discuss their concerns with a friend or family member, whereas teachers would prefer to take their concerns to the GP. Literature suggests that parents are not discussing mental health issues with their children as 45% of parents interviewed for a Department of Health and Time for Change study say they do not discuss mental health with their child because it is “not an issue”, and an even higher 55% do not discuss the topic at all (Parkinson, 2015). With schools appearing to only take action in respect of mental health issues once pupils reach crisis point, it appears that that early intervention strategies are in need of further improvement and attention (Dwivedi, 2004; Hess, Short & Hazel, 2013, p. 4).

Interviews were conducted with three staff as detailed earlier. Data from these interviews provide insight into the levels of support staff experience in their support of pupils presenting with mental health issues and what school wide provision exists for discussion of mental health issues with pupils in taught elements of school life.

When asked how mental health is currently brought into the curriculum, staff answers were in agreement, although hesitant in their responses and a little unsure they were answering correctly. Two respondents thought it was possibly covered in CPC (form time) and the topic was touched on in other subjects such as drama when covering post-traumatic stress disorder in relation to shell shock. One respondent said diseases such as dementia and Parkinson's Disease were touched on in Biology when discussing the breakdown of the nervous system. Another suggestion was that students could choose a related topic as part of a project. However, none suggested any sort of planned approach within the curriculum other than the government's collaboration with PSHE Association's lesson plans to deliver mental health lessons, which is seen as guidelines (UK Government & Parliament, 2015).

When asked whether CPC (form time) is the most effective way to bring mental health education into the classroom, responses varied although there was agreement that this was one way of approaching the subject. Each respondent suggested the subject should be embedded within the curriculum but that the issue of mental health could also be addressed in other ways. One respondent suggested video scenarios, guest speakers and better use of assemblies. Each respondent appeared to feel strongly that more should be done. Although there are videos of such scenarios on BBC Bitesize for teachers to use (BBC, 2016), it is clear that these resources are under-promoted, whilst the PSHE Association is still in too early a stage to prove successful with their 2015 published structured lesson plans (PSHE Association, 2015).

When discussing what support system was in place at the school for pupils beginning to suffer anxiety or mental health issues, two members of staff said that the Form Tutor would often be the first point of contact in a pastoral role. One respondent suggested they would probably know the child as well as any member of staff would, although any teacher could be used as a point of contact. One respondent suggested that there were three or four behavioural staff whose roles might overlap into this area. Each respondent mentioned that one of their Deputy Headteachers is also the Special Educational Needs Coordinator (SENCO) for the school. One of the respondents said there was no counsellor as such on site at the school with another respondent suggesting that the school would have to make contact with the local Children and Adolescent Mental Health Services (CAMHS) team for any sort of trained or specialist help. This finding is similar to that of Adeleman and Taylor's study (2009, p. 26) which suggests that schools are not developing a support system that benefits and enables all students, and highlights in particular how little schools do to prevent further problems for students such as learning, behavioural or emotional problems until the student is at a crisis point.

When discussing if they had taken part in any training for distinguishing mental health issues during the interview, each respondent gave a negative response, one respondent saying they had never heard of any training available. One respondent suggested that as an experienced teacher they were able to recognise unusual behaviour and also acted as a contact for students concerned about their friends. This pastoral role has been cited as an important part of the school support system but does not appear to be strongly promoted.

Despite teachers being trained to notice changes in behaviour in children and signs of abuse, The NFER report (Fletcher-Campbell, Archer, & Tomlinson, 2003) suggests two-thirds of teachers are left feeling they lack appropriate knowledge and training to identify mental health issues in pupils. Half of diagnosable conditions are thought to manifest before the age of 14 and 75% by the age of 21; working in collaboration with parents is therefore vital for a child's support system with teachers being the child's first contact for support within the school environment (Parkinson, 2015). Lucy Russel, the director of media and campaigns at YoungMinds, states the increasing need for mental health support is leaving teachers feeling helpless when it is vital they are informed properly about the warning signs of emerging mental health issues (YoungMinds, 2016). It is the Government's hope that MindEd will help to develop knowledge for teachers and all adults working with children and young people with mental health issues through funding provided by the Department of Health, but it would appear that plans have yet to take effect in schools (UK Government & Parliament, 2015).

When asked whether they agreed that this generation is possibly the most stressed generation, and for suggested contributory factors, the responses were strongly positive and in full agreement. Social media was the first and foremost suggested contributor by each respondent and in particular the twenty-four hours a day, 7 days a week (24/7) nature of its use, allowing no break from its intrusion. Social media exerts an insidious pressure on teenagers to make themselves available 24/7. Pupils can become so emotionally invested in social media that they can develop anxiety problems and seek comfort from social media more frequently than from

their parents as a fifth of secondary pupils in Udorie's study found (2015). The growing pressure of the need to excel with beliefs that failure is not acceptable was also suggested by two of the three respondents. Expectations through relentless testing and having to raise each child to the same level, regardless of ability, being identified specifically adds to the pressure practitioners and young people feel (Meikle, 2015). Lack of family time and money worries at home also contribute to stress and mental illness (Pritchett, 2015).

Limitations of the survey instrument

In retrospect, the study could have focused more closely on the support system. Questioning could have covered more issues and approached issues more directly, which may have produced more useful results. Some questions allowed implied answering rather than specific, accurate responses. An example of successful, direct questioning was on the subject of stress and stigma, which attracted very positive specific responses on the impact of social media together with concerning levels of pressure exerted by the current testing-driven education system on the younger generation and particularly the less resilient. On the subject of stigma, most respondents agreed that stigma was still present in the school environment, although during interview, respondents generally agreed that this situation was improving. According to the Attitudes towards Mental Illness (2014), between 2012 and 2013, 2.8% of the UK population showed an improvement in attitudes, the biggest annual shift in the last decade when the survey was first introduced.

Conclusion and Implications

The survey highlights the lack of two aspects of provision: (i) mental health education and (ii) structured support for pupils with developing emotional wellbeing issues within one particular secondary school. The findings of this small-scale study reflect the wider narrative about mental health, namely that whilst society is more accepting of those who suffer from mental illness, there is little support through curricular and pastoral frameworks for those with mental health issues or illness and little support for professionals who support young people in school contexts at local level (Hunt, 2008; UK Parliament, 2015). Lack of funding, resources and training inhibit and restrict significant improvements that need to be made (Hunt, 2008). The topic of mental health has yet to become part of everyday conversation.

It seems that there is broad agreement that the steps to improving mental health within schools could include the following: (i) training of teachers regarding the identification of signs indicating mental health issues thereby increasing knowledge and confidence; and (ii) training to enable them to discuss mental health within PSHE and through the curriculum with confidence (Lee et al., 2003). Although the want and need for mental health to be a deeper part of the curriculum is currently being clearly voiced by professionals within different areas of education provision, teachers have also sounded a note of caution, that of the timetable capacity and free

curriculum space to add more classroom time for lessons purely about mental health (Hunt, 2008; UK Parliament, 2015).

The government's 2015 guidelines (DoE, 2015) are well informed and make wide ranging suggestions to improve support but with no tied commitments to redirect funding. Given the evidence to support the importance of education and early intervention (Hess, Short & Hazel, 2013), it appears incumbent on schools to develop their own strategies for pupil support and possibly work with other schools to instigate strategies. Therefore, the role of local mental health charities in providing early intervention support and counselling could help prevent many cases reaching CAMHs, who could then concentrate their limited resources on the more severe cases which do develop despite strong early support (Dwivedi, 2004; Hess, Short & Hazel, 2013, p. 4). Although the mental health of young people is currently high on the government's agenda and the public's consciousness, it is clear that there are still a number of improvements that could be made in bringing support to schools and teachers trying to bring mental health into the classroom. A growing awareness within society will surely influence how the topic is taught in the future. Avenues for future research include a similar survey in twelve to twenty-four months to explore the impact of the 2015 guidelines (DoE, 2015) and whether resources were forthcoming as a result of dialogue between professionals, charities and the government and the growing concern amongst the public at large.

References

- Adeleman, H.S., & Taylor, L. (2009). *Mental health in schools: Engaging learners, preventing problems, and improving schools*. Thousand Oaks, CA: Corwin Press.
- Anti-Bullying Alliance. (n.d.). Bullying and mental health: guidance for teachers and other professionals. *Anti-Bullying Alliance*. <http://www.anti-bullyingalliance.org.uk/media/5436/Mental-health-and-bullying-module-FINAL.pdf>
- Attitudes to Mental Illness 2014 Research Report. (2014). Retrieved from https://www.time-to-change.org.uk/sites/default/files/Attitudes_to_mental_illness_2014_report_final_0.pdf
- Australian Bureau of Statistics. (2013). *3303.0- Causes of Death, Australia, 2013*. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0>
- British Broadcasting Corporation (BBC). (2015a). *Mental and emotional health class clips*. Retrieved from <http://www.bbc.co.uk/education/topics/zddj6sg/resources/1>
- British Broadcasting Corporation (BBC). (2015b). Your mental health referrals double in four years. *BBC News*. Retrieved from <http://www.bbc.co.uk/news/uk-wales-31631430>
- Bell, J. (2010). *Doing Your Research Project*. Maidenhead: Open University Press.
- Bishop Grosseteste University (BGU). (2014). *Research Ethics Policy and Ethics*. Retrieved from file:///C:/Users/louise/Downloads/ResearchEthicsPolicy.pdf.
- Blaxter, L., Hughes, C., & Tight, M. (2006). *How to research* (3rd ed.). Maidenhead: Open University Press.

British Educational Research Association (BERA). (2011). *Ethical Guidelines for Educational Research*. Retrieved from <http://content.yudu.com/Library/A2xnp5/Bera/resources/index.htm?referrerUrl=http://free.yudu.com/item/details/2023387/Bera>.

Brown, R.B., Khan, L. & Parsonage, M. (2012). *Delivering effective parenting programmes to transform lives*. Elena Rosa Brown, Lorraine Khan & Michael Parsonage Centre for mental Health.

Cambell, D. (2015). Mental health now area of most public concern within NHS. *The Guardian*. Retrieved from: <http://www.theguardian.com/society/2015/dec/31/mental-health-now-area-of-most-public-concern-within-nhs>

Child and Young People's Health Outcomes Forum. (2012). *Report of the children and young people's health outcomes forum- mental health sub-group*.

Cohen, J., & Struening, E. L. (2012). *Opinions about mental illness scale*. PsycTESTS Dataset. doi:10.1037/t02410-000

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). Abingdon: Routledge.

Cooper, M. (2013). *School-Based Counselling in UK Secondary Schools: A Review and Critical Evaluation*. Glasgow: University of Strathclyde.

Deane, F.P., & Todd, D.M. (1996). Attitudes and intentions to seek professional psychological help for personal problems or suicidal thinking. *Journal of College Student Development*.

Denscombe, M. (2010). *The Good Research Guide: For Small-Scale Social Research Projects*. Maidenhead: Open University Press.

Department for Education. (2012). *Teachers' Standards*. London: Department for Education.

Department for Education. (2015) *Mental health and behaviour in schools*. London: Department for Education.

Department of Health. (1991). *The children act, 1989: Guidance and regulations: V. 6: Children with disabilities*. London: Stationery Office Books.

Department of Health. (2004). *The Mental Health and Psychological Wellbeing of Children and Young People*. Retrieved from www.dh.gov.uk.

Dwivedi, K.N. (2004). Emotion regulation and mental health. In K.N Dived & P.B Harper (Eds.), *Promoting the Emotional Well-Being of Children and Adolescents and Preventing Their Mental Ill Health*. London: Jessica Kingsley.

Farrell, P. (1997). The integration of children with severe learning difficulties: A review of the recent literature. *Journal of Applied Research in Intellectual Disabilities*, 10(1), 1–14. doi:10.1111/j.1468-3148.1997.tb00001.x

Fletcher-Campbell, F., Archer, T., & Tomlinson, K. (2003). The role of the school in supporting the education of children in public care. RESEARCH. Retrieved from <https://www.nfer.ac.uk/publications/CPC01/CPC01.pdf>

Frederickson, N. & Cline, T. (1995). *Assessing the Learning Environment of Children with Special Educational Needs*. London: Educational Psychology Publishing.

Frederickson, N., & Cline, T. (2008). *Special educational needs, inclusion and diversity* (2nd ed.). Maidenhead, Berkshire, England: McGraw-Hill Professional Publishing.

Goacher, B., Evans, J., Welton, J. & Weddell, K. (1988). *Policy and Provision for Special Educational Needs*. London: Cassell.

Gray, D.E. (2004). *Doing Research in the Real World*. London: SAGE Publications Ltd.

Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2004) *Mental health of children and young people in Great Britain*. Office of National Statistics.

Hess, R.S., Short, R.J., & Hazel, C.E. (2013) *Comprehensive children's mental health services in schools and communities: A public health problem-solving model*. United Kingdom: Routledge.

Hunt, S. (2008) Raising awareness of mental health in schoolchildren. *Nursing Times*. 104(25).

Jenkinson, J.C. (1997) *Mainstream or Special? Educating Students with Disabilities*. London: Routledge.

Meikle, J. (2015) Children 'in complete meltdown' over exams. *The Guardian*. Retrieved from: <http://www.theguardian.com/education/2015/jul/04/children-exams-teachers-school-anxiety-nut>

National Health Service (NHS) choices: Your health, your choices. (2011). *Choice Reviews Online*, 48(09), 48–5120–48–5120. doi:10.5860/choice.48-5120

Parkinson, H.J.(2015). Parents- talk to your kids about mental health. Even if it's awkward. *The Guardian*. Retrieved from: <http://www.theguardian.com/commentisfree/2015/dec/01/parents-mental-health-children-depression>

Pritchett, L. (2015). The majority of the world's children are in school. So why aren't they learning? *The Guardian*. Retrieved from: <http://www.theguardian.com/global-development/2015/sep/29/majority-of-world-children-in-school-so-why-arent-they-learning>

Personal, Social and Health Education (PSHE) Association. (2015). *Guidance on preparing to teach about mental health and emotional wellbeing*. Retrieved from: https://pshe-association.org.uk/resources_search_details.aspx?ResourceId=570&Keyword=&SubjectID=0&LevelID=0&ResourceTypeID=3&SuggestedUseID=0

Punch, K. (2014). *Introduction to Social Research: Quantitative and Qualitative Approaches* (3rd ed.). London: SAGE Publications Ltd.

Reynolds, M. (1989) *Knowledge Base for the Beginning Teacher*. Oxford: Pergamon Press.

Sharp, J. (2009). *Success with Your Research Project in Education*. Exeter: Learning Matters.

Stratford, B. (1981). *Children with special educational needs: An overview of the Warnock report*. Nottingham: Nottingham University, School of Education.

Taggart, H., Lee, S., & McDonald, L. (2015). *THE PURSUIT OF HAPPINESS: A NEW AMBITION FOR OUR MENTAL HEALTH A CENTREFORUM COMMISSION*. Retrieved from <http://www.centreforum.org/assets/pubs/headteacher-survey.pdf>

Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7(2), 225–240. doi:10.1093/schbul/7.2.225

Thomas, G. (2009). *How to Do Your Research Project: A Guide for Students in Education and Applied Social Sciences*. London: SAGE Publications Ltd.

Udorie, J. E. (2015, September 17). Social media is harming the mental health of teenagers. The state has to act. *The Guardian*. Retrieved from <http://www.theguardian.com/commentisfree/2015/sep/16/social-media-mental-health-teenagers-government-pshe-lessons>.

UK Government. (1996). *Education Act 1996*. London: UK Government. Retrieved from <http://www.legislation.gov.uk/ukpga/1996/56>

UK Government & Parliament. (2015). *Petition Introduce mental health education to the national curriculum*. Retrieved from <https://petition.parliament.uk/petitions/104545>

UK Parliament. (2015). *Youth select committee 2015: Mental health – 3 July morning session*. Retrieved from <https://youtu.be/plawAmJpMvs>

United Nations Educational Scientific and Cultural Organisation (UNESCO). (1994). *Salamanca Statement on Principles, Policy and Practice in Special Needs Education and a Framework for Action*. Retrieved from http://www.unesco.org/education/pdf/SALAMA_E.PDF

Vostanis, P., & Harrington, R. (1994). Cognitive-behavioural treatment of depressive disorder in child psychiatric patients: Rationale and description of treatment package. *European Journal of Child and Adolescent Psychiatry*.

Weare, K. & Nind, M. (2011). Promoting mental health of children and adolescents through schools and school based interventions: evidence outcomes report of the work package. Three of the Davaprev Project 2011. Retrieved from http://www.regione.veneto.it/c/document_library/get_file?uuid=274c81c5-3846-49e4-89f5-171e91612933&groupId=10793

World Health Organisation (WHO). (1992). *The ICD-10 classification of mental and Behavioural disorders: Clinical description and diagnostic guidelines: Clinical description and diagnostic guidelines*. Geneva: World Health Organization.

Williams, G. (2015). How Measuring Attitudes Can Boost Attainment. *Teaching Times*. Retrieved from: <http://www.teachingtimes.com/articles/attitudinal-surveying-boost-attainment.htm>

Wisker, G. (2009). *Palgrave Study Skills: The Undergraduate Research Handbook*. Basingstoke: Palgrave Macmillan.

YoungMinds (a). (n.d.). *Stigma- A review of the evidence*. London: Young Minds. Retrieved from: <https://www.youngminds.org.uk/assets/0000/1324/stigma-review.pdf>

YoungMinds (b). (2016). *Teachers are not fully equipped to tackle mental health*. Retrieved from: <http://www.youngminds.org.uk/news/blog/3158-teachers-are-not-fully-equipped-to-tackle-mental-health>