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Healthy teachers, higher marks?

Establishing a link between teacher health & wellbeing,
and student outcomes

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Executive Summary

This literature review undertaken by The Work Foundation in partnership with Teacher Support Network focusses on the relationship between teacher health and wellbeing and student educational outcomes. In the current educational environment where schools are trying to increase student attainment with a diminishing budget, it is essential that schools make the most from their key resource – teachers. Consequently, investigating if there is a link between teacher health and wellbeing and student outcomes is timely.

From an organisational perspective, employee wellbeing is an important factor in quality, performance and productivity. Wellbeing is strongly related to work stress, a key player in employee absence. Consequently, developing and maintaining 'healthy workers' for good quality work, reduced sickness absence and positive performance outcomes is of great importance.

Although a widespread expectation between positive teacher wellbeing and student attainment exists, there is very little direct evidence suggesting that teacher wellbeing has a positive impact on student outcomes:

- Briner and Dewberry (2007) found a statistically significant positive relationship between staff wellbeing and student SAT outcomes; however methodological limitations meant that the causal relationship could not be determined.

- Ostroff (1992) reported a significant link between job satisfaction and performance, but as the study was not longitudinal it was not possible to assign causality.

- Bricheno et al., (2009) stated all the respondents in their interview study reported that teacher wellbeing has an impact on student outcomes, however less than a quarter were able to reference any support for their belief.

Teacher absence is sometimes used as a measure of teacher health and wellbeing, and the use of supply teachers to cover absence can have an impact on student outcomes. A recent report by Estyn (2013) provides a number of reasons for this including: supply teachers not knowing the needs and abilities of the students, setting unchallenging work and having limited time to develop meaningful relationships with students to identify where their strengths and weaknesses lie.

Even though a number of studies have provided evidence that support the widespread expectation, each had methodological limitations. Consequently, there remains a need for further research to be conducted examining whether a causal relationship between teacher wellbeing and student outcomes exists.

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A comparison is drawn with healthcare, a sector which has many similarities to teaching (both involve high professional-to-'client' interaction, have high reported levels of absenteeism and have Government quality standards to reach) and where the relationship between staff health and wellbeing and patient outcomes has been extensively studied, providing stronger causal links between staff health and wellbeing and positive patient outcomes.

Boorman (2009) conducted a thorough review of the health and wellbeing of National Health Service (NHS) staff and found that NHS staff display high levels of sickness absence, with nearly half of these resulting from musculoskeletal disorders and more than a quarter from stress, depression and anxiety. The analysis found a clear relationship between staff health and wellbeing and patient outcomes (based on data sets such as patient satisfaction surveys, infection rate levels and the Annual Health Check ratings).

Since the Boorman (2009) review, workplace guidelines have been developed addressing issues seen as important for NHS staff. In NHS organisations where wellbeing interventions were implemented, improvements in staff health and wellbeing were reported, however little research has directly examined whether the interventions directed at staff also improved patient safety outcomes.

Further evidence suggests that when staff are engaged in developing service improvements, staff were less likely to suffer from work related stress and more likely to report their health and wellbeing highly. Additionally, in NHS organisations where staff engagement was high, patient satisfaction and quality of service were significantly higher, and mortality levels reduced.

As with teaching, sickness absence in the NHS has been reported as particularly high. Research has indicated that the use of temporary staff (particularly agency staff) to cope with sickness absence can have negative implications for patient outcomes. For example, temporary staff may not have the correct departmental experience, may not receive a ward induction or have the necessary (or up to date) training and have no knowledge of the ward environment, delaying patient care. Additionally, temporary staff may add to the already mounting pressures on permanent staff, resulting in added stress and further negative staff morale.

The relatively limited research into teacher wellbeing and student educational outcomes highlights the need for further research in the area to ascertain whether the strong links regarding staff health and wellbeing and patient outcomes in the NHS are replicated in teaching.

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Introduction

The Work Foundation, in partnership with the Teacher Support Network, has undertaken a literature review focussing on the relationship between teacher health and wellbeing and student educational outcomes. The review comes at a time when schools are being asked to improve attainment results with diminishing budgets. This 'do more with less' approach, means that it is essential for schools to make the most out of their most significant resource: their workforce. Additionally, a recent publication by the OECD (2013) found worrying evidence that the UK is falling behind other developed countries in terms of educational achievement. Consequently, there is a need to identify the role of teacher health and wellbeing (among other factors that can have an impact on student outcomes) and what schools, policy makers and other stakeholders can do to improve the situation.

The idea that there could be a relationship between teacher health and wellbeing and student educational outcomes is based on the assumption that a teacher with low health and wellbeing, experiencing high levels of stress or who is ill at work, will not perform to the best of their ability. This could be as a result of different factors. For example, a teacher with low health and wellbeing may lack the energy required to deliver a lesson which effectively pushes children to succeed. A teacher who is ill but at work may find it more difficult to manage poor pupil behaviour, leading to higher levels of disruption for the rest of the class. Additionally, a teacher who is struggling to cope with stress is more likely to be absent from work. It would therefore seem likely that higher levels of teacher health and wellbeing would result in improved student educational outcomes. A teacher with high job satisfaction, positive morale and who is healthy should be more likely to teach lessons which are creative, challenging and effective.

This literature review begins by looking at research which focusses on health and wellbeing and the implications for organisational outcomes in a more general sense. It then focusses on the evidence examining the extent to which teachers are able to influence their students' educational attainment. The report explores research evidence on the relationship between teacher health and wellbeing and student educational outcomes specifically. A discussion focussing on teacher sickness absence and student outcomes follows. Finally, the review will look at research evidence from the healthcare sector, as the setting possesses many similarities with the teaching occupation, highlighting evidence demonstrating a relationship between NHS staff health and wellbeing and patient outcomes. Next steps for further research are discussed.

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Health, Wellbeing and Organisational Outcomes

The health of the working population is vital to the economy and to society, but due to the changing demographics of the workforce, western societies are facing great challenges to maintain economic growth and competiveness. The workforce is ageing; in the UK it has been estimated that by 2024 nearly 50 per cent of the adult population will be 50 and over (DWP, 2007). As a result, the workforce is older, and includes more people living with a long standing health problem or disability from which musculoskeletal disorders (MSDs) and mental health disorders account for more than half of all short and long-term disability.[1]

Ill-health represents a major economic burden for both society and organisations due to increased healthcare costs, losses in productivity and sickness absence. From an organisational perspective, wellbeing is a major factor in quality, performance and productivity and therefore business effectiveness and profit. It has been estimated that the cost of sickness absence alone for UK businesses is nearly £14 billion a year (Vaughan-Jones & Barham, 2009). In addition, it is likely that presenteeism, defined as reduced performance and productivity due to ill-health while at work, could cost employers two to seven times more than absenteeism (Hemp, 2004).

The health of employees is a major factor in an organisation's performance and competitiveness. Employees in good health can be up to three times as productive as those in poor health; can experience fewer motivational problems; are more resilient to change and they are more likely to be engaged with the business's priorities (Vaughan-Jones & Barham, 2010). In Dame Carol Black's review of the health of Britain's working age population it was calculated that improved workplace health could generate cost savings to the government of over £60 billion – the equivalent of nearly two thirds of the NHS budget for England (Black, 2008).

Wellbeing is strongly connected with work-related stress, and with associated terms such as stress management, stress reduction and stress avoidance. Tyers et al,. (2009) reported that management standards were launched by the UK Health and Safety Executive (HSE, 2004) to address issues of poor health, lowered productivity and increased sickness absence. Their report highlighted six aspects of work which if managed poorly could create stress in the workplace:

- Demands – such as workload and work environment.

- Control – a person's own influence over how their job is carried out.

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[1] www.realising-potential.org/stakeholder-factobox

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- Support – from colleagues, line-manager and organisation.

- Relationships – to reduce conflict and deal with unacceptable behaviour.

- Role – understanding of the job content and expectations.

- Change – how change is managed in the organisation.

The wider concept of promoting wellbeing became a common way to view the subject. There is growing evidence that traditional methods of managing stress in organisations and work were not effective. Costs of ill-health to industry and employers – and therefore to the national economy in terms of absenteeism continued to rise (Hassan et al., 2009).

It has been recognised that improved workplace health has the potential to make a significant contribution to the economy, to public finances and to reducing levels of disease and illness in society (Waddell & Burton, 2006), as well as enhancing organisational productivity and outcomes. There is now a greater awareness of the role of managers in determining wellbeing at work and conducting more research, particularly in the area of "positive psychology", which indicates that factors such as the quality of the working environment and employee engagement are crucial for improving wellbeing of workers.[2] Employers play a key role in helping to protect health and prevent future ill-health of the working population, for example by correctly implementing the NICE Public Health Guidelines (2009), recommending a strategic and coordinated approach to promote an employee's mental health and wellbeing.

Workplace health interventions are more likely to be effective in organisations that promote good quality work (Vaughan-Jones & Barham, 2010). Evidence has shown that being in good quality work is good for your physical and mental health, resulting in better self-esteem and quality of life (Waddell & Burton, 2006). Promoting good quality work involves giving consideration to issues of working practices and job design (Bevan, 2010). According to the MacLeod Review on employee engagement (MacLeod & Clarke,2009) the main factors influencing good quality of work are:

- Leaders who support employees and see where they fit into the bigger organisational picture;

- Effective line managers who respect, develop and reward their staff;

- Consultation that values the voice of employees and listens to their views; and,

- Concerns and relationships based on trust and shared values.

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[2] www.businessballs.com/workplace-wellbeing.htm Accessed on October 28th, 2013

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An employer's attitude to workplace health is likely to depend on the culture of the organisation and their motivation for investment (GCC, 2013). The proportion of workers reporting an illness or an injury varies across sectors, jobs and organisations. The Health and Wellbeing at Work in the UK report (Hassan et al., 2009) showed that working in human health activities, such as a hospital or a medical practice, as opposed to other activities and organisations, increases the likelihood of reporting a work-related illness or injury.

Similarities between the nature of healthcare professionals and the teaching profession which both require high levels of people interaction and good relationships allow us to consider research evidence regarding the health and wellbeing of healthcare staff. This is discussed in detail later in the report. However, the assumption remains that it is likely that improving a teacher's health and wellbeing should result in better educational outcomes for their students.

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Evidence from the education sector

What influence do teachers have on educational attainment?

Teachers are one of the many factors that may be associated with a student's educational attainment. Other factors may be the student's home and family life, the school as a whole, their peers and the classes they are placed in. Therefore, attempting to ascertain the effects that a teacher has on student attainment is very difficult and poses methodological challenges.

Slater et al., (2009) conducted a study in an attempt to test the 'common sense' assumption that pupils will achieve more with an inspirational teacher than with an average or poor one. In their research linking the exam results and prior attainment of 7,000 pupils and their individual teachers, they found considerable variation in teacher effectiveness. The study concluded that teachers do matter; having a good teacher (defined as those within the top quarter of teachers in terms of effectiveness) as opposed to a mediocre or poor teacher (defined as those within the bottom quarter) had a big difference in student exam results, and the authors suggested that raising average teacher quality is a promising direction for public policy. Although the single most important influence on student outcomes was pupil effectiveness, teacher effectiveness was also found to influence student outcomes. The authors highlight that this finding is especially pertinent in terms of redressing the inequalities in attainment between students from 'poor' and 'non-poor' socioeconomic groups, finding that if a poor student had effective teachers and a non-poor student had ineffective teachers for their GCSEs, then their gap in GCSE outcomes would reduce. The findings suggest that teacher effectiveness, which is not usually considered when explaining educational gaps, could have an important role to play in alleviating unequal outcomes and improving student attainment.

Additionally, Slater et al., (2009) found no statistically significant association between teacher effectiveness and teacher gender, age, experience, or education. However, research conducted by The Sutton Trust (2011) found that teacher gender, age, experience and education accounted for 8% of the variation in an individual teachers' level of effectiveness. This leaves much of the variation in teacher effectiveness unexplained. Therefore, the health and wellbeing of teachers may be an additional variable that needs to be taken into account.

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Is there a relationship between teacher health and wellbeing and student attainment?

Despite the limited research showing a clear link between teachers' health and wellbeing and student attainment, there is a widespread expectation that such a relationship exists. The hypothesis is that an ill, stressed teacher with low job satisfaction would be unlikely to perform to the standard of a healthy, unstressed teacher with high job satisfaction. Consequently, students taught by teachers with low health and wellbeing will display poorer educational outcomes. Happier, motivated teachers should lead to happier, motivated students. However, what literature is available to support this hypothesis, and how conclusive is it?

One of the most notable pieces of research in recent years focussing on teacher health and wellbeing and student outcomes is the *'Report for Worklife Support on the Relation Between WellBeing and Climate in School and Pupil Performance'* (Dewberry & Briner, 2007, Briner & Dewberry, 2007). The Worklife Support WellBeing study surveyed 24,200 staff in 246 primary and 182 secondary schools about their wellbeing. The online survey looked at three aspects of teacher wellbeing: 1) feeling valued and cared for, 2) feeling overloaded and 3) job stimulation and enjoyment. The report also looked at the average wellbeing of teachers in relation to the Statutory Assessment Tests (SATs) results in primary schools, and the percentage of students achieving level 5 or above at each Key Stage. Dewberry and Briner (2007) found that, after controlling for other relevant variables such as the percentage of absent students, or students with special educational needs, there is a statistically significant positive association between staff wellbeing and SATs results. The report highlights that 8% of variance in SATs results can be attributed to teacher wellbeing. This is an important finding, as unlike other factors such as the social class of students, the rate of pupil absence and the number of children with special educational needs, teacher health and wellbeing may be more amenable to intervention and change.

The report also highlighted an association between teacher health and wellbeing and the 'value-added' measure[3] of student success, providing further evidence that teachers' health and wellbeing is an important contributing factor. Briner and Dewberry (2007) found a statistically significant positive association between an increase in job stimulation and enjoyment and the value added measure. However, a limitation of the study is that the research was unable to clearly establish cause and effect, for example, high levels of student attainment could cause high levels of teacher health and wellbeing. Briner and Dewberry conclude that it is more likely that there is a two-way relationship between these variables. The research indicates that if schools, policy makers and stakeholders want to improve student outcomes then the health and wellbeing of teachers should be considered.

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[3] 'Value added' is a way of measuring an individual student's progress by comparing the progress made by other students with the same or similar prior attainment. It is intended to demonstrate how schools help students. More information on how it is calculated can be found here:
http://www.education.gov.uk/schools/performance/archive/schools_04/sec3b.shtml

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Day et al., (2006) undertook research linking teachers' commitment and resilience to personal identity and effectiveness. The research was based on: biannual interviews with 300 teachers (both primary and secondary school teachers who were representative of the national profile in terms of age, gender and experience) in 75 schools in the UK; two dimensions of effectiveness – perceived effectiveness (relational) and effectiveness as defined by study value added analysis of pupils' progress and attainment (relative). Relative measures of teachers' effectiveness expressed through pupils' attainment were collected through matching baseline test results at the beginning of the year with pupils' national curriculum results at the end. The research found that a teacher's effectiveness was determined by how they were able to manage the interaction between resilience, work-life balance management, commitment and their sense of wellbeing. The report also provided some evidence to suggest that teachers working in challenging socio-economic contexts are more likely to experience greater challenges to their health and wellbeing and by consequence, their resilience, and this leads to risk for long-term teacher effectiveness. There were also differences in long-term effectiveness between primary and secondary schools, with long-term effectiveness for secondary school teachers at greater risk, as primary school teachers are more likely to sustain their commitment.

Ostroff (1992), conducted a study in the US to evaluate the school environment and school effectiveness, based on the assumption that the overall level of satisfaction or the attitudes of employees within organisations is related to organisational performance. It can be hypothesised that organisations with members who were highly satisfied, committed and not highly stressed should have increased positive outcomes, compared to those not satisfied or committed and suffering from stress. In the study of 13,808 teachers from 298 schools around the USA, Ostroff (1992) found a statistically significant relationship between job satisfaction and organisational performance; organisations with more satisfied employees tended to be more effective than organisations with less satisfied employees. Even once the effects for school characteristics (e.g. student: teacher ratios, physical facilities, monetary resources) were accounted for, employee satisfaction still made the largest contribution in explaining most of the organisational performance indices. There was also a strong relationship between an individual's job satisfaction and their intention to quit. However, as the study was not longitudinal, it is not possible to assign causality, despite a strong relationship between wellbeing and effectiveness through job satisfaction.

Research by Caprara et al., (2006) studied over 2000 Italian teachers in 75 junior high schools in Italy over a period of 2 years. Their study focussed on the role of teacher self-efficacy, as previous studies had indicated that a teacher's perceived self-efficacy can influence children's cognitive achievements and success at school. It had also been noted that schools with high-achieving and well-behaved students had teachers who perceived their self-efficacy highly. A structural equation model corroborated their conceptual model – teacher's personal efficacy beliefs affected their job satisfaction and student outcomes and academic achievements, when controlling for previous levels of achievement. Measures could not be linked to individual teachers as the measures were aggregated. However, the model was able to show that aggregated scores of self-efficacy and satisfaction were linked to overall academic achievements.

Bricheno et al., (2009) conducted interviews amongst the 31 stakeholders from the Teacher Support Network Group, non-governmental organisations, academia, government and local authorities. It was striking that all respondents reported that teacher wellbeing would have an impact on student outcomes and the effectiveness of student learning. However, less than a quarter were able to reference research to support this belief, and some also expressed concerns that it would be difficult to empirically support this claim.

In addition to the impact that teachers can have on student attainment, an associated path of research has focussed on the role teachers can have in improving the overall wellbeing of students. St Leger (2004) argued that schools have been viewed by the health sector and the community as an establishment where society's health problems could be solved. This leads to questions concerning whether teachers are solely responsible for educational outcomes, or whether they can influence health and wellbeing outcomes also. Roffey (2012) conducted a teacher wellbeing survey in Australia, finding that 29 percent agreed that attempts to focus on teacher wellbeing also promotes student wellbeing and that a teacher's wellbeing was considered critically relevant for creating a stable environment for students. Speller et al. (2010) stated that there is evidence to suggest that teachers who have received training in health promotion are more likely to be involved in health promotion activities in school. However, a teacher's personal competence, motivation and perception of their role in promoting health and wellbeing can have an effect on the level of health promotion undertaken. In their survey, 96 percent of trainee teachers thought it was important for schools to take a major role in promoting the health of children. The results also stated that teachers can be role models for health, and that they themselves would be able to positively influence their students. The vast majority of those in the study disagreed that teachers would have no influence or that it was not their responsibility to promote positive health and wellbeing to their students.

The Department of Education, Training and Employment (2012) in Queensland developed a learning and wellbeing framework, highlighting that learning and wellbeing are inextricably linked, and that students learn best when their wellbeing is optimised. The framework states that teachers and schools have to be aware that a student's experience at school has a significant impact on their health and wellbeing, and that students identify teachers as having a key influence on their wellbeing. Spilt, Koomen and Thijs (2011) also reported that teachers are important adults in children's scholastic lives, and stated that there is some evidence that teacher wellbeing, at least indirectly, has significant effects on a student's socio-emotional adjustment and their academic performance. Healthy schools programmes have been developed as a way to change health (and wellbeing) or health related behaviours. Research conducted by Warwick, Mooney and Oliver (2009) showed that well-designed, broad-based, whole-school approaches to promoting health and wellbeing can have a positive impact on health related outcomes as well as education related outcomes. Participation in such schemes can create an infrastructure to support the development and implementation of health related activities, in which teachers play an important role.

In summary, a number of studies have provided evidence to suggest that there is a relationship between teacher wellbeing and student outcomes and educational attainment.

There is also evidence to suggest that other factors such as teacher job satisfaction and teacher efficacy can affect student learning outcomes. However, methodological limitations in a number of studies (e.g. studies being cross sectional and not longitudinal) mean that a clear causal link cannot and has not been determined. As Bricheno et al., (2009) highlighted, there is still, therefore, a need for new studies (with appropriate research designs) to examine whether the causal relationship between teacher wellbeing and student outcomes exists. However, research has also suggested that teacher wellbeing and school initiatives designed to encourage student wellbeing can improve student wellbeing, but more research is needed regarding the role of teachers, what effect they have (in relation to other factors) and the link between teacher wellbeing, student wellbeing and educational attainment.

What impact does absence have on student outcomes?

Teacher absence is sometimes used as a measure of teacher health and wellbeing, and the most common reason for teacher absence is ill-health. A report by Teacher Support Cymru (2007) highlighted that teachers in Wales believed they worked in a high stress environment and that the stress had an impact on their health and wellbeing. Most teachers (89% of those in the sample) reported finding their job at least moderately stressful, and 58% considered that excessive stress from the job compromised their physical and/or mental wellbeing. Additionally, 62% of the respondents had considered leaving the profession due to stress or ill-health. Statistics from the Department of Education (2013) found that 55% of teachers had at least one period of sickness absence a year, with an average of 8.1 days lost and a total of 2.2 million school days lost in the 2011-2012 academic year.[4]

Teacher sickness absence can have an impact on student education in a number of ways. An absent teacher will either be replaced by a colleague at the school, or a supply teacher. These replacements will not have the same relationship with the students as the teacher has built up over time. Students will also miss out on the teacher's particular knowledge of their needs and abilities, as well as their progress in the subjects being studied (Estyn, 2013). Additionally, students may find it difficult to form meaningful relationships with other teachers, especially, if they only have them for one day. Supply teachers can also lead to a reduction of instructional intensity (e.g. diverging from curricular activities, showing films etc.) and discontinuity in teaching (changing the routines that students are accustomed to) (Miller et al., 2008). The use of a supply teacher may also lead to additional workloads for other staff members if, for example, they are required to help to cover lessons or provide support to substitute teachers. The implications of teacher absence may be worse if schools have difficulty in recruiting quality supply teachers for subjects with a smaller recruitment pool. The more difficult it is to replace an employee when they are absent, the greater the drop in overall productivity (Nicholson et al., 2006). This is more likely to occur in subjects with a shortage of qualified teachers such as mathematics or physics (Estyn, 2013).

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[4]https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223587/SFR15_2013_Text_withPTR.pdf (accessed on 1st November, 2013)

'The Impact of Teacher Absence' (Estyn, 2013) focusses on the under-researched effects of teacher absence and student outcomes in the UK. The report highlights that in September 2009, a scheme called 'rarely cover' was introduced, meaning that teachers may cover for absent colleagues only rarely and in circumstances that are not foreseeable. However, an outcome of 'rarely cover' has meant a need for increasing involvement of supply teachers. It is estimated that in Wales, just under 10% of all lessons are covered by staff who are not the usual class teacher. The report discusses how teacher absence results in poorer quality lessons, for example: pupils may not receive the support they need as supply teachers do not have enough information about the pupils they are covering (especially less abled pupils), the pace of the lessons is often too slow, expectations are too low and the work set is often undemanding and does not engage the pupils. Additionally, and as a result of the short term nature of the work, supply teachers find it difficult to establish effective working relationships with pupils, and the pupils rarely have a high regard for the staff.

The Estyn (2013) report, also found that in primary and secondary schools, pupils make less progress in developing their skills, knowledge and understanding when the usual class teacher is absent, and the pupils' behaviour is often worse, particularly in secondary schools. The report highlighted that teacher absence affects pupils across the ability range, as less able pupils are less likely to receive the support needed, whilst able pupils cannot advance as the work set is usually not challenging enough. However, staff absence had the greatest impact on pupil outcomes in secondary schools. For example, the report indicated secondary schools often do not cover sixth form lessons for short-term absences, but endeavour to make up the missed work later or deploy key stage 3 subject teachers to cover key stage 4.

Research from the USA can be used to support some of the findings from the Estyn (2013) report in this area. Miller et al., (2008), describe the results of a study examining the causal impact that teacher absence can have on educational outcomes in a large urban district. Teacher absence reduced the mathematical achievement of fourth grade pupils (ages 9-10). However, unplanned absences had a greater effect on student achievement than planned absences, hypothesised to be as a result of last minute (and therefore lower quality) supply teachers recruited as cover. Miller et al., (2008) also argue that the effect of teacher absence may be felt more strongly in low socioeconomic areas, as more students will live in families that lack the resources to compensate for ineffective school–based education. Similarly, a study conducted by Brown & Arnell (2012) looked at pupils' achievement in Grades 3-6 (ages 8-12) to determine if teacher absence had an impact on assessment results. The study reports that teacher absence can be detrimental to a student's education, and their levels of individual attainment. The greater the number of teacher absence days, the lower the student achievement. The report also suggested that teachers should reduce their absence to no more than 10 days a school year in order for students to be effective, and to raise the proficiency level in reading and maths to above 70%.

The Audit Commission (2011) investigated how staff absence was managed, to develop policies regarding better value for money when using supply teachers in schools. Although the report found that nationally teacher sickness absence rates were falling, there were

variations between council areas, and some areas were persistently high. However, there had been little change in spending for supply teachers, and they accounted for 5% of the total spend for teachers. The report highlighted the importance of schools needing to balance the cost of cover with the quality and continuity of teaching and learning for pupils. Similar findings were highlighted by the Wales Audit Office (2013) who reported that arrangements for covering teachers' absence in Wales are not sufficiently managed to support learners' progress or provide the best use of teaching resources. Teacher Support Cymru (2007) suggests that health and wellbeing was still low on the agenda for schools, and that schools should actively support their teachers' wellbeing. The Audit Commission (2011) and Wales Audit Office (2013) seem to support this finding when considering both quality and teaching outcomes, and costs on supply teacher spend.

Presenteeism (when an employee comes to work despite the fact that they are either mentally or physically ill and staying at home would be appropriate) is especially common amongst teachers and others in the care, education and health sectors, possibly as a result of the difficulty of finding a replacement when experiencing unexpected or sudden illness (Aronsson et al., 2000; Bergstrom et al., 2009). To the best of our knowledge there has been no research on the relationship between teacher presenteeism and student attainment.

Summary

There is a widespread expectation that a causal link between teacher health and wellbeing and student attainment should exist, but there is limited available evidence to support this. Briner and Dewberry (2007) provide one of the most notable pieces of research focussing on this topic, finding that a significant percentage of variance in examination outcomes could be attributed to teacher health and wellbeing. They concluded that if policy makers want to improve student outcomes, then the health and wellbeing of teachers should be considered. Although other studies have provided similar evidence, methodological limitations have meant that clear causal links cannot be determined, and there is still a need to examine this 'widespread expectation' in greater detail.

Teaching absence is sometimes used as a measure of teacher health and wellbeing, as the most common reason provided for teacher absence is ill-health. The Department for Education (2013) reported that teachers are absent as a result of sickness for an average of 8.1 days a year. Not only can supply teachers be costly for educational authorities, questions have been raised concerning the impact that teacher absence and the consequent use of supply teachers can have for educational outcomes. This has recently been highlighted in a report by Estyn (2013), which demonstrated that poorer quality teaching could occur as a result of limited pupil support, undemanding work being set, and the limited opportunity for supply teachers to understand the need of their pupils. However, presenteeism literature suggests that productivity reduces when an employee attends work when unwell, although the relationship between teacher presenteeism and student attainment is unknown.

As research findings to establish a causal relationship between teacher health and wellbeing and student outcomes are limited, the report now focuses on the healthcare sector which

possesses many similarities with the teaching occupation, and is a sector in which the relationship between health and wellbeing of staff and patient outcomes has been extensively studied.

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Lessons from the healthcare sector

It is the aim of managers to get the best out of their employees, whilst simultaneously maintaining their health, wellbeing and safety (West & Dawson, 2012). In recent years, employee wellbeing has attracted increasing interest (Baptiste, 2008), especially as wellbeing has become increasingly recognised as an important factor in determining organisational success. Briner and Dewberry (2007) tested the assumption that how employees feel about their work (expressed through satisfaction, stress and attitudes towards their jobs) are related to an employee's performance in the teaching profession. However, it is important to investigate whether their findings that positive wellbeing is associated to improved student outcomes can be replicated in other organisational sectors.

The National Health Service (NHS) is the United Kingdom's (UK) largest employer, with 1.4 million employees in England alone (Preece, Williams, Jones, Peel & Roughton, 2012). In the NHS, the health and wellbeing of a member of staff will not only benefit the individual, but it can also be vital for the delivery of high-quality patient care and patient outcomes. Therefore, if health and wellbeing, and associated attitudes such as job satisfaction, organisational commitment and turnover are predictors of key organisational outcomes (such as effectiveness, productivity, innovation), there are many reasons to encourage positive employee attitudes (West and Dawson, 2012) and develop an environment where positive health and wellbeing is promoted. This is especially important in environments such as healthcare, where the wellbeing of employees is likely to directly affect patient outcomes and the quality of patient experience.

In 2008, Dame Carol Black conducted an extensive review of employee health and wellbeing across the UK workforce, entitled *"Working for a healthier tomorrow"*. The report concentrated on reviewing the health and wellbeing of people of working age, whose health had consequences for those often far beyond themselves – including those in the workplace, and those for whom they are working. The aim of the review was to identify factors that improve and maintain health and wellbeing in the workplace to promote 'good health', to reduce the economic costs of ill-health, and to some extent, the resulting implications of worker ill-health for the organisation.

The "*NHS Health and Well-being Review*" (Boorman, 2009), was part of the NHS and Department of Health's response to Dame Carol Black's report. The NHS has the challenge to ensure that healthcare is safe for all (Sandars, 2005), but to do this amidst efficiency saving targets set by the Government. Boorman (2009) stated that the health and wellbeing of the workforce should not be a secondary consideration, but should be at the heart of the mission of the operational approach of the NHS. The review therefore aimed to evaluate the status of employee health and wellbeing across the NHS, identify what recommendations and improvements could be made, and assess whether there were links between workforce wellbeing and key outcomes, such as patient satisfaction and NHS Trust performance.

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Measuring NHS Staff Wellbeing

Based on the responses in the Boorman (2009) survey, staff in the NHS reported that they were quite healthy, stating that they drank in moderation, undertook regular exercise, enjoyed their work (although they found it pressured) and nearly 80% stated that they did not smoke. However, despite reporting this good health, NHS employees display high levels of sickness absence – an average of 10.7 days compares unfavourably with staff in other government departments, and is above the average for the public sector as a whole (9.7 days) (Boorman, 2009). Additionally, the report highlights that NHS sickness levels are not reducing at the same rate as organisations in the private sector. In relation to health and wellbeing in the workplace, the Boorman review (2009) notes that there was a greater propensity for NHS staff to incur work-related illnesses or accidents than other comparative groups of workers. Factors that led to this included the physically and psychologically demanding nature of NHS work, the NHS workforce being diverse in terms of its occupations and skills needed in comparison to other public sector employers, and employees involved in a wide range of activities (e.g. moving and handling patients).

The causes of staff absence were also discussed in the report, with nearly half of all NHS staff absence accounted for by musculoskeletal disorders, and more than a quarter by stress, depression and anxiety. NHS workers reported more work related illnesses due to infectious diseases, stress, depression and anxiety than workers in other sectors. Wallace, Lemaire and Ghali (2009), in their report focussing on physician wellness also stated that workload and the associated fatigue could have negative consequences for physicians, and that the excessive cognitive demands caused by the need to process overwhelming amounts of information for long periods of time, could negatively affect their work health. Excessive workloads and work-related stress lead to a high occurrence of stress and burnout, with reports of physician burnout being estimated as 25-60% (Wallace et al., 2009). Aiken at el., (2012) found that dissatisfied workers resulted in an increased risk of staff absence, but also poor coping responses, such as drinking, smoking and lack of sleep. In the NHS, Boorman (2009) reported stress as being widespread, with those who reported that they were unable to cope with the demands of their job being more stressed than those who were able (twice as much among the survey respondents).

Another measure of staff wellbeing is 'presenteeism', the extent to which staff work when they are not well enough to do so. Over a 4 week period, over 65% of NHS staff reported they had not taken time off work despite feeling ill enough to do so (Boorman, 2009).

Staff Wellbeing and Patient Outcomes

The Boorman review (2009) concluded that, *"all is not completely well with the health and well-being of the NHS workforce"* (page 37). This was viewed as very important for two main reasons: the financial implications for the NHS Trusts as a result of lost productivity and covering staff absence, and secondly the implications for staff performance and the quality of service to patients provided if staff have reduced health and wellbeing.

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Analysis from the Boorman review (2009) showed *"a clear relationship between staff health and well-being and patient satisfaction"* (page 47). For example, patient satisfaction scores in acute Trusts (measured by the Healthcare Commission's 2007 in-patient survey) were higher in Trusts where staff health and wellbeing (in this report measured by stress-levels, turnover intentions, job satisfaction and injury rates) were higher. Staff health and wellbeing was also measured against infection rates (MRSA) (measured in acute Trusts in 2008). The results indicated that Trusts with higher reported staff health and wellbeing reported lower rates of MRSA. However, the reporters did note a sense of caution with this finding, as the causal relationship was not clear (i.e. poor health and wellbeing could lead to staff practices that increase the likelihood of higher infection rates, but it may also be the case that high levels of infection rates could result in low levels of health and wellbeing, especially if this results in increased stress or lower morale in staff).

The review reported a clear relationship between staff health and wellbeing and a Trust's assessment in the Annual Health Check ratings (using the data for 2007-2008). The Annual Health Check ratings are based upon assessments of two parts of the Trust's performance. The first is based upon 'quality of service', which assesses if a Trust had the basics of healthcare right (for example, meeting the Government's 24 core standards of safety, clinical and cost-effectiveness, governance, patient focus, accessible and responsive care, the care environment and public health). Quality of service also includes checking the Trust is making and sustaining improvements in priority areas (assessing that the Trust is performing well against the Government's national priorities for the NHS). The second basis for assessment is 'use of resources', which assesses financial management and monitors how the Trust is managing services effectively. The results indicated that Trusts rated 'poor' in staff health and wellbeing reported lower Annual Health Check ratings. Conversely, Trusts with 'good' scores in health and wellbeing reported higher scores, indicating improved quality of service for patients and improved use of resources.

Results from the Boorman review (2009) have been supported through other studies investigating healthcare staff wellbeing and patient outcomes. For example, Firth-Cozens and Greenhalgh (1997), examined doctors' perceptions of the links between work-related stress and lowered clinical care, finding that work-related stress led to 50% of the participants reporting reduced standards of patient care (displayed through taking shortcuts in care pathways and not following procedures). In the same study, 57% of the participants believed that tiredness, exhaustion or sleep deprivation had a negative impact on patient care, with another 28% reporting that pressures related to being overworked were negatively related to patient outcomes. Shanafelt et al., (2002) investigated the implications for burnout and self-reported patient care in an internal medicine residency programme. The findings stated that 75% of their participants met the criteria for burnout, and these residents had two to three times increased probability of reporting that they had delivered sub-optimum patient care either weekly or monthly. Sub-optimum practices were reported to have included: a failure to fully discuss treatment plans and options and fully answer patient questions and concerns, treatment or medication errors that were not due to lack of knowledge or inexperience and a reduced attentiveness or caring behaviour towards their patients, which has obvious implications for patient quality of service and patient rated satisfaction.

Health and Wellbeing Interventions and Patient Outcomes

As the Boorman review (2009) showed an association between staff health and wellbeing and patient outcomes, it was highlighted that organisations need to work with their staff to provide a healthy, safe and caring work environment where individuals can perform better. The National Institute for Health and Care Excellence (NICE) developed a portfolio of workplace guidance that addressed important issues for NHS staff. The guidelines for workplace health and wellbeing included measures to improve: managing long-term sickness absence and incapacity for work, promoting physical activity, promoting mental wellbeing, promoting smoking cessation, obesity guidance and promoting environments to encourage physical activity. The Health and Work Development Unit (HWDU) at the Royal College of Physicians conducted a national audit of the implementation of NICE guidelines in NHS Trusts in England (2011). Results indicate variations in the level of implementation of the NICE recommendations; 72% of Trusts had prioritised workplace health improvement topics, with mental health of staff most commonly amongst the top three priorities, and obesity the least common. In two-thirds of Trusts health and wellbeing was a regular board item, but Trusts with an overarching strategy or policy for staff health and wellbeing were more likely to have specific policies for workplace health improvements. Importantly, and with reference to patient outcomes, the report concluded that Trusts who implemented the NICE workplace guidelines for improving staff health tended to have a healthier and more productive workforce and better patient outcomes, providing sustained improvements in patient care.

As the HWDU report indicates, wellbeing interventions can improve healthcare staff wellness when implemented. However, there has been very little research directly examining whether the interventions directed at staff health and wellbeing also improve patient care or healthcare outcomes (Wallace, Lemaire & Ghali, 2009). Jones et al., (1988) conducted a study indicating that stress management interventions could be beneficial to both staff and patients in a study focussing on the relationship between stressful workplaces and risks of malpractice in medical departments and hospitals. When stress management interventions were implemented, significant reductions in medication errors and malpractice claims were recorded in 22 hospitals, in comparison to 22 hospitals in the control group whose errors and claims remained unchanged. Wallace et al., (2009) concluded that further research is needed that identifies both individual and organisational health and wellbeing interventions, and that assesses the effects of such interventions on patient care, efficiency and productivity. This is important for supporting the future promotion of staff health and wellbeing programmes.

The role of staff engagement: Further research conducted by the HWDU (2012) discussed the barriers and enablers to health and wellbeing, and staff engagement was reported as a key outcome. It was noted that staff should be frequently involved in the planning and development of health and wellbeing initiatives. West and Dawson (2012) have given particular importance to the concept of staff engagement in their research as a result of recent evidence about its implications on employee performance in a number of sectors. Engagement has been used to refer to both a psychological state (involvement,

commitment, attachment) and a performance construct (e.g. pro-social and organisational citizenship behaviour) (West & Dawson, 2012). However, the authors argued that in both cases, the more engaged an employee is, the more likely they will be to display their associated positive behaviours, which will in turn, contribute to the effectiveness of the organisation. NHS Employers adopted a model of engagement proposed by Robinson, Perryman and Hayday (2004) which defined employee engagement as a positive attitude held by an employee towards an organisation, with an engaged employee working to improve their performance in a role for the benefit of the organisation.

A consequence of poor engagement in a role is employee burnout, characterised by an indifferent attitude to work, exhaustion and inefficacy. This has been linked to a variety of negative consequences both for the individual and the organisation, including poor physical health, absence and increased turnover intentions (West & Dawson, 2012). Relatively few studies have been undertaken focussing on engagement in the health service, but the research conducted by West and Dawson (2012) highlights the role of engagement in the health and wellbeing of NHS staff and the implications for patient outcomes. In their study, the authors used NHS staff survey results (which, since 2009 has included specific questions relating to staff engagement) and measured the results against a number of outcomes, including: general employee health and wellbeing, patient satisfaction, patient mortality, Annual Health Check Ratings and infection rates. Results provide evidence linking engagement with the health of staff; staff who reported higher levels of engagement were less likely to be suffering from work-related stress, and more likely to report their health and wellbeing highly. Engaged staff were also less likely to report presenteeism. Staff engagement results were also linked to organisational outcomes. For example, patient satisfaction and quality of service were significantly higher in NHS Trusts with higher levels of staff engagement. High reported levels of Trust staff engagement were also linked to reduced patient mortality (in acute Trusts). This relationship was maintained even when prior mortality rates were taken into consideration. Finally, in Trusts where a high percentage of employees reported being able to contribute towards improvements at work, the level of infection rates had decreased. This then reinforces the value of staff involvement in developing service improvements, and the importance of creating cultures of engagement.

Staff Health and Wellbeing: Indirect Patient Outcomes

As the Boorman review (2009) highlighted, a measure of staff health and wellbeing is staff absence, with levels of absence reported as being particularly high in the NHS. The Boorman review (2009) calculated that the annual direct cost of staff absence was £1.7 billion a year. Improving performance by moving health and wellbeing from 'average' to 'good' in NHS Trusts was associated with creating an extra 840,000 staff days per year and saving direct costs of £137 million a year. Although there will always be an element of sickness absence in organisations, Boorman (2009) highlighted that there does remain scope for reducing current absence rates in the NHS by focussing on the main causes of absence, including musculoskeletal disorders and mental health conditions.

Staff absence provides the NHS with a dilemma. Research has suggested that staff levels on wards need to be maintained to reduce the likelihood of negative patient outcomes and patient care that are associated with poor patient to staff ratios. For example, Aiken et al., (2002) reported that patient mortality increased with poor nurse to patient ratios. A large-scale national survey of nurse staffing levels was conducted in the UK to determine whether the USA results (Aiken et al., 2002) were replicated in the NHS (Rafferty, et al., 2007). Nurse and patient data from 30 NHS hospital trusts were analysed, with results replicating those from the USA; patients in the quartile where staffing levels were most favourable had better outcomes than hospitals with reduced staffing levels.

However, indirect negative effects for patient outcomes have also been highlighted as a result of staff shortages. For example, research has examined the effects of hospital-wide staffing levels and nurse dissatisfaction and burnout, with results indicating that hospitals with higher nurse staffing levels had significantly lower levels of nurse burnout and dissatisfaction (Rafferty et al., 2007). Hospitals with favourable patient to staff ratios are more successful at retaining nurses, as burnout and dissatisfaction are precursors of nurse resignations (Sherward, et al., 2005).

In an attempt to retain suitable staff-to-patient ratios and maintain high levels of patient care outcomes, NHS Trusts have resorted to using temporary staff to cover staff absence. Boorman (2009) reviewed the level of spending on temporary staff, stating that spending on agency staff is closely related to sickness absence and staff turnover. The review states that the average spend on agency staff is 3.85% of the wage bill across all NHS Trusts (resulting in £1.45 billion). The report also calculated average spend on temporary staff in Trusts with poor, average and good staff health and wellbeing, and concluded that even when allowing for costs arising from employing substantive staff to cover for absence rather than agency staff (which cost more per hour), there are very real savings to be made in agency staff spend by tackling health and wellbeing issues (Boorman, 2009: page 45).

However, research has indicated that the use of temporary staff (particularly agency staff), as a way of coping with sickness absence may have an impact on patient quality and care outcomes. For example, it has been argued that temporary staff may not have the relevant experience to work in particular departments or wards (Audit Commission, 2001), and temporary staff may have little understanding of the culture they are placed in, the equipment they use and the relevant staff protocols for providing patient care. However qualified an individual temporary staff may be, they are unlikely to perform their best in an unfamiliar setting (Audit Commission, 2001; FitzGerald & Bonner, 2007). The *'Code of Practice for the Supply of Temporary Staffing'* (Department of Health, 2002) states that all temporary staff should receive an induction when they arrive on their placement to reduce the opportunities of error, however research has indicated that there was no degree of consistency in inductions, and those who had attended them reported their quality as unsatisfactory (Audit Commission, 2001). This could have implications for the level of care that temporary staff are able to provide, with consequent reduced levels of patient care and quality of service.

Temporary staff can also create an extra burden for the permanent staff and teams that they work in, adding to an already pressured and over-worked workforce. Finn and Waring (2006) argued that temporary staff (and flexible staffing practices in general) can have an effect on team stability and create situations where communication errors can occur, especially when temporary staff do not have organisational specific knowledge. Hoque and Kirkpatrick (2008) reported that permanent staff felt under constant demand to socialise and train agency staff, and would often have to take on the tasks that temporary staff were unable to complete, leading to inequitable divisions of task. Bajorek (2013), in a study of the management of temporary staff in UK Emergency Departments found that permanent staff who work alongside temporary staff reported that extra supervision was often required, adding to their already busy workload but also resulting in extra stress, negatively affecting staff morale. Permanent staff discussed having to take time away from their patient list, taking on extra patients or reducing the time spent with each patient to ensure temporary staff were working adequately and that all patients could be seen within the 4 hour waiting time, which had great implications for the quality of service that patients would receive.

The publication of the Boorman (2009) report led to significant improvements in absence reporting and monitoring. Each Trust was required to develop a response to the Boorman recommendations, the Department of Health developed a set of 'high impact' actions which were intended to guide practice on the ground. Health and wellbeing was made an explicit part of the Quality, Innovation, Production and Prevention (QIPP) agenda – which meant that CEOs had to take it seriously and wellbeing measures in the staff survey were reported on regularly. Additionally, the NHS also reviewed the 'fitness for purpose' of its Occupational Health services and appointed a number of Health and Wellbeing coordinators to be local champions. They also funded a series of 'Pathfinder' projects to support local Health and Wellbeing innovations which could then be more widely disseminated.

Summary

In healthcare, there has been an extensive study of staff health and wellbeing as a result of the Boorman (2009) review. The in-depth study of NHS staff wellbeing highlighted that although staff reported their health and wellbeing positively, levels of staff absenteeism and reports of presenteeism in the NHS were high. The review stated that 80% of staff who responded in the survey believed that the health and wellbeing of staff had an impact on patient care, and showed that organisations which prioritised staff health and wellbeing have improved patient satisfaction rates, lowered infection rates, and achieved higher quality scores and retention rates than those who did not prioritise them. The work undertaken by the HWDU indicates that when interventions to improve staff health and wellbeing are introduced, these have positive implications for both staff health and wellbeing and patient outcomes. Research from healthcare has also provided evidence regarding how patient outcomes can be indirectly affected by staff health and wellbeing. Although using temporary agency staff to cover staff absence is a rational response to ensure that wards have the required patient-to-staff ratio, using temporary staff has been shown to have a negative impact on patient outcomes, especially service quality, as a result of their limited awareness of the work environment and their effect on permanent staff. As has been seen in

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healthcare, the increased understanding of the causes and levels of sickness absence, and the overall level of health and wellbeing in healthcare led to developments in reporting and improving sickness absence rates and raised the awareness of staff health and wellbeing on NHS boards.

This evidence from the healthcare sector is useful when considering implications for teacher health and wellbeing and educational attainment outcomes, as both sectors involve high professional-to-'client' interaction, have high reported levels of absenteeism and have to reach certain quality standards set by Government, who regularly measure performance outcomes.   The education sector can learn from healthcare, to improve its monitoring and understanding of the causes of teacher absence, and develop services that teachers can use to improve their wellbeing and potentially improve student educational outcomes as well.

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Conclusion

The aim of this report was to undertake a literature review to investigate whether there is a relationship between the health and wellbeing of teachers and student educational attainment. This was based on the assumption that when teachers report reduced health and wellbeing, they may not be able to perform to their best ability, which could result in poorer educational outcomes. Literature was reviewed on health and wellbeing in general, on the teaching profession and on the NHS workforce for comparison, to review the relationship between health and wellbeing and 'user' outcomes. A summary of the findings and future steps are now discussed.

The health and wellbeing of the workplace is vital to the economy and to society, but is facing a number of challenges associated with an ageing workforce and more individuals working with long-term health conditions, such as musculoskeletal disorders and mental health conditions. The health of employees is a major factor for organisational productivity, with evidence suggesting that when health and wellbeing is improved, organisational savings will be reported through increased productivity and reduced absenteeism.

When specifically focussing on the health and wellbeing of teachers and educational attainment outcomes, the review of available literature highlights that there is very little evidence suggesting a causal relationship between teacher health and wellbeing and student outcomes. The strongest research evidence comes from the Briner and Dewberry (2007) report, which explored the relationship between school-level teacher wellbeing and school-level pupil performance. The main findings described a positive association with teacher wellbeing and pupil performance, even after controlling for other factors that are known to influence pupil performance. Other literature highlighted a relationship between teacher absence and student performance, however, in these cases the link to health and wellbeing is unclear. The literature review indicates a research gap into evidence regarding the level and causes of teacher wellbeing and its outcomes for both the individual and the organisation.

The relatively limited research into teacher wellbeing contrasts with the wealth of research into the wellbeing of the healthcare workforce, particularly the Boorman review (2009). The review was a large-scale, in-depth study of the health and wellbeing of NHS staff, reporting that NHS staff absence was high (indicating poor health and wellbeing), and this resulted in negative patient outcomes. These results have been replicated in other studies, and have led to the development of health and wellbeing guidelines, which when implemented have been shown to improve staff wellbeing and patient outcomes.

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Next Steps

As a result of the limited evidence regarding the health and wellbeing of the teaching profession, we suggest that further research is necessary to ascertain whether the strong links regarding staff health and wellbeing and patient outcomes in the NHS are replicated in teaching. This is now of increased importance, as the Government and schools are wishing to improve results with diminishing budgets, and as a consequence, it is vital that they should be looking at how they can get the best out of their most significant resource: teachers. Additionally, the OECD has recently published results indicating that UK levels of numeracy and literacy are amongst the lowest in the industrialised world, suggesting that initiatives or methods to improve student attainment outcomes are urgently needed.

The Work Foundation proposes that this research could be undertaken through conducting a staff survey of teachers and teacher assistants (including state, public, private and free schools, in both primary and secondary schools) measuring the current level of teacher wellbeing, what factors contribute to perceptions of teacher wellbeing, and what the consequences of wellbeing are, for both the individual and educational outcomes. Such work could also identify which interventions and practices are most effective in improving staff wellbeing and pupil outcomes, and provide data which can be used to foster further innovation in the future.

Another opportunity for future work is related to a teacher's understanding of health and wellbeing, and the implications this can have for the health and wellbeing of students. This is of particular relevance as childhood levels of both mental health conditions (Tyson, Roberts and Kane, 2009) and obesity (St Leger, 2004) are rising. As St Leger (2004) argued, schools are viewed by the health sector and the community as a place where society's health problems could be solved, and consequently questions can arise whether teachers are not only responsible for educational outcomes, but health and wellbeing outcomes also. Tyson, Roberts and Kane (2004) investigated training programmes for teachers delivered to prevent children internalising problems. Their research found that teachers who undertook training and coaching interventions had improved health and wellbeing. Speller et al., (2010) reported that a majority of teachers thought that schools play an important part in health and wellbeing promotion, although how they are trained to achieve this is still in question. Roffey (2010) states that teacher wellbeing is critically relevant for student wellbeing, especially for creating a stable environment for students. This research leads to hypotheses surrounding the importance of health and wellbeing interventions for both teachers and students, the role of teachers in student health and wellbeing, and whether improved student wellbeing will also lead to increased educational attainment.

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