

Scotland's Teachers: Working Conditions and Wellbeing

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This work was conducted as an independent study into teachers in Scotland's wellbeing. Dr Ravalier is not employed by EIS, and the findings are completely independent of any organisations.

The views expressed are those of the authors alone.

About us

This report is being put together by Dr Jermaine Ravalier and Dr Joe Walsh of Bath Spa University.

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Dr Walsh is a lecturer of psychology at Bath Spa University. His primary field of expertise concerns how we communicate pain to other people around us, and factors which can affect this communication. Alongside this, he has expertise in stress and wellbeing, and the impact of sex and gender on cognition.

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Aims & Executive Summary

Background & Aims

There is no doubt that chronic stress, caused by workplace working conditions, can cause employees to become ill. Indeed, chronic work stress has been related to physiological health complaints such as cardiovascular disease, and psychological complaints such as increased depressive symptomology and burnout. In the UK workplace stress is the biggest cause of long-term sickness absence (that which lasts 4 weeks or more), and is second to only cold and flu with respect to short term sickness absences. Stress is therefore costly not only for the employee, but also has a knock on effect on employing organisations, costing approximately £800 per individual employed in many sectors.

The education sector in particular in the UK has among the highest levels of sickness absence of all employment sectors. Indeed, while it is often discussed that teaching is a high-stress occupation, particularly within rapidly changing political and financial environments, working conditions for Scottish teachers which may lead to stress have not been widely investigated in an academic and objective manner. The aims of this project are therefore as follows:

1. To investigate levels of stress in Scottish teachers and lecturers, and how these differ across job roles.
2. To investigate the 'working conditions' experienced by Scottish teachers.
3. To investigate frequency of negative parental and student behaviour, and levels of job satisfaction and turnover intentions in Scottish teachers.
4. To demonstrate the influence that working conditions, parental behaviour, and student behaviour are having on levels of stress, job satisfaction, and turnover intentions in Scottish teachers.

Findings

This project found that working conditions that teachers in Scotland are exposed to are, irrespective of job role, extremely poor. The only exception to this is the measure named 'peer support', or the amount of help and support from colleagues, which scores relatively well across all groups other than college lecturers. Therefore teachers have high levels of demands, poor control over how they perform their, poor support from management, at times strained relationships at work, a poor understanding of their role in an organisation, and are exposed to a lot of organisational change without any consultation. Furthermore, on average teachers work at a minimum 11 hours more than they are contracted to each week, the majority of dissatisfied in their role, and over 40% are planning on leaving the job in the next 18 months. Finally, both primary and secondary teachers are exposed to high levels of poor student behaviour, and approximately 40% of primary teachers are exposed to negative parental behaviour either online or on school premises at least once a month.

Overall however, we found that the one working condition which consistently led to greater stress, reduced job satisfaction, and intentions to leave the job, was that of demands. Indeed, analyses of descriptive comments provided by respondents also demonstrates this. In particular, this was exemplified by teachers in Scotland having too many administrative expectations and not enough preparation time, as well as a lack of managerial support mechanisms for dealing with poor student and parental behaviour. Additionally constant changes to the curriculum increased the demands associated with planning and teaching, and large class sizes in addition to a lack of class and student support all proved particularly stressful.

We conclude that there is a clear need to improve the working conditions which Scottish teachers are exposed to. Without doing so, increased stress and reduced job satisfaction are likely to lead to a number of negative outcomes, such as poorer teacher 'performance' and a large proportion of teachers in Scotland wanting to leave the job. As such, immediate focus needs to be placed upon reducing the demands that teachers in Scotland are placed under. Over the short term this would reduce many of the issues described above. Over the medium to long term, emphasis needs to be placed upon the training and recruitment of more classroom support staff, as well as ensuring that the curriculum is stable without the introduction of numerous initiatives throughout each school year.

1. Literature Review: Background to the Problem

It is widely known that working conditions can have an impact on employee health and wellbeing. These working conditions therefore need to be considered across various occupations and job roles in order to determine areas for improvement within these job roles. Education staff in the UK face a number of difficult working conditions due to their job role, pupil behaviour, and parental behaviour. This project will determine what working conditions are like for education staff in the UK, and whether these conditions are linked to the experience of stress.

1.1 Workplace Stress & Health

It is now accepted that workplace stress can negatively impact employee physiological and psychological health. For example, the INTERHEART studies (Rosengren et al., 2004) demonstrated that chronic psychological stressors were very strongly linked to the development of coronary heart disease. Similarly, Segerstrom and Miller (2004) demonstrated that periods of chronic stress can depress the immune system. Furthermore chronic work stress is related to subjective outcomes such as insomnia (Clint et al., 2008) and musculoskeletal pain (Palliser, 2005) among others.

In 2004, the UK Health and Safety Executive released a set of 'management standards' which identify working conditions which have the potential to negatively impact employee well-being. These seven factors (demands, control, peer support, management support, relationships, role, and change) and the associated indicator survey tool have been used to assess the psychosocial working conditions in public and private organisations since release. For example Houdmont, Kerr and Randall (2012) measured psychosocial well-being in the police, Ravalier, McVicar and Munn-Giddings (2014) used the Management Standards Indicator Tool (MSIT) with a sample of public-sector workers, and Houdmont et al. (2013) within a mix of public and private organisations. These psychosocial working conditions are examples of everyday stressors – those which are present continuously or repeatedly over a prolonged period of time. Many argue that these everyday stressors are responsible for most stress-related absences (Chandola, Brunner and Marmot, 2006), even in roles replete with acute stressors such as exposure to death (Houdmont, Kerr and Randall, 2012).

1.2 Stress & Organisational Outcomes

The effects of stress therefore not only impact the individual, but have knock-on effects on organisations. The mean number of days lost across all UK organisations due to stress in 2016 was approximately 24 per employee per episode, equating to 11.7 million working days lost in the UK (Health and Safety Executive [HSE], n.d.), although this figure is higher in the public sector compared to private organisations (Chartered Institute of Personnel Development [CIPD], 2016). Indeed, the 2016 Labour Force Survey (HSE, 2016) suggested that those working in education had the third highest incidence of sickness absence due to stress of all occupations recorded. Stress is therefore the number one cause of long term sickness absence (greater than 4 weeks) among public sector employees, and second only to colds/flu in short term absence (CIPD, 2016). Stress is also related to increased turnover intentions (Tziner et al., 2015) and 'presenteeism' (i.e. attending work when sick; Johns, 2010), among numerous other negative outcomes.

1.2.1 Stress, Job Satisfaction and Turnover Intentions

Job satisfaction is defined as an attitude that an employee has toward work, or emotional state, which occurs due to the experience of positive or negative events at work (Hayes et al., 2013). Satisfaction is a well-known outcomes of workplace stress – greater stress has been clearly related to lower satisfaction and vice versa (e.g. Collie et al., 2012). Turnover intentions are also a well-known outcome of stress in the workplace. As such, turnover intentions relate to an individual's voluntary intention to leave their profession (Griffeth et al., 2000). Importantly, however, turnover *intentions* are a strong predictor of actual attrition, making turnover intentions an important predictor of the future state of any particular workforce (Griffeth et al., 2000).

1.3 Stress in Teaching

Teaching is widely cited as one of the most stressful occupations to be employed in. Indeed it is often argued that UK secondary school teachers have high levels of work stress (Johnson et al., 2005), with this stress leading to increased turnover intentions, sickness absence, decreased motivation (Percy, 2015), and poorer student behaviour and academic performance (Robertson and Dunsmuir, 2013). Additionally public funding cuts and increasing pressures have led to strikes across the educational sector in the UK (Adams and Halliday, 2016), and more educators considering leaving the profession than ever before (Lightfoot, 2016). However, the working conditions of teachers in Scotland have not been investigated.

One further working condition which is specifically related to teaching is that of pupil behaviour. According to Marsh (2015), 25% of teacher consider leaving the profession due to poor student behaviour, and more than half have experienced aggressive pupil behaviour in the past year (Barker, 2014). However, this has not been widely investigated in the academic literature, and it is not clear whether pupil behaviour or working conditions are most impactful on teacher health and wellbeing. Similarly, while there is anecdotal evidence that poor parental behaviour toward education staff is on the increase and subsequently impacts the job that education staff perform, how this then affects wellbeing and how wide-spread this issue is unknown.

To summarise therefore, working conditions can lead to negative health in employees and subsequently negatively impact the organisation, and it is widely accepted that working in education can be an extremely stressful occupation. However, there are very few (if any) wide-ranging studies which have sought to investigate sources of workplace stress in Scottish teaching staff.

Aims and Objectives

1. To investigate levels of stress in Scottish teachers and lecturers, and how these differ across job roles.
2. To investigate the 'working conditions' experienced by Scottish teachers.
3. To investigate frequency of negative parental and student behaviour, and levels of job satisfaction and turnover intentions in Scottish teachers.
4. To demonstrate the influence that working conditions, parental behaviour, and student behaviour are having on levels of stress, job satisfaction, and turnover intentions in Scottish teachers.

2. What We Did & How

This large-scale survey study seeks to investigate working conditions, stress, and stress-related outcomes in a nationally representative sample of Scottish teachers. In order to do this we worked with the Education Institute for Scotland (EIS) to distribute this online survey to its teaching members. Additionally, with a similar approach having been undertaken with English teachers in January 2017, a comparison of Scottish and English teacher working conditions, and stress can be made.

Overall therefore this project investigates a large range of the stressors present in teaching, including working conditions, student behaviour, and parental behaviour, and how these things influence stress and related outcomes

2.1 Working Conditions

Working conditions, or psychosocial hazards, were assessed via the Health and Safety Executive's management standards ([see here for more information](#)). These management standards assume that there are seven areas of the workplace (or working conditions/psychosocial hazards) which, if left in an unacceptable level over an extended (chronic) period of time, can lead to negative stress-related outcomes. In order to measure these working conditions, we used the HSE's management standards indicator tool (MSIT). This was originally a 35-question questionnaire which measures levels of each of these seven working conditions, with the HSE also providing benchmark scores, which demonstrate whether working conditions are acceptable or not.

This project used a shorter 25-item version of the MSIT questionnaire tool. This tool, originally conceptualised by Edwards and Webster (2012), has been shown to be as reliable as the longer 35-item tool, with the added value of being quicker to complete. The 25-item tool has previously been used with social workers (Ravalier, 2017), care and support workers (Ravalier, 2017), and numerous other public and private sector employees and organisations (Edwards and Webster, 2012).

2.2 Stress, Job Satisfaction, and Turnover Intentions

These are the three 'outcome' measures used within this project. They are known as outcome measures because previous research has demonstrated that the greater negative working conditions employees are exposed to, the more likely they are to experience stress, worsened job satisfaction, and greater intentions to leave the role. Firstly, stress was measured using the four-item version of the perceived stress scale (PSS) on which higher scoring equates to greater stress (Cohen et al., 1983). The PSS asks respondents to state how often in the previous month they had experienced stressful situations, with answers given on a scale from [0] never to [4] often.

We also used individual questions to measure each of job satisfaction, and turnover intentions. Job satisfaction relates to an attitude that employees have toward work which occurs due to positive or negative experiences at work (Hayes et al., 2013). The question asked was "taking everything into consideration, how do you feel about your job as a whole?" (Dolbier et al. 2005), with responses from 1 to 5 demonstrating how satisfied – or not – respondents were. Turnover intentions relates to an individual's voluntary intentions to leave their profession. The question we asked therefore was "are you considering leaving your current job?" (Dolbier et al. 2005), answered either 'yes' or 'no'. If respondents answered 'yes', a follow up question was asked to gauge the length of time they were

aiming at staying in their position: “If yes, how long (in months) do you see yourself staying in your current role?”.

2.3 Student and Parental Behaviour

It is widely assumed that student behaviour is one of the standard stressors associated with teaching. We therefore looked at ‘disrespectful’ student behaviour, which was measured using the ‘Pupil Behaviour Patterns’ (PBP) measure (Friedman, 1995). This disrespect element of the PBP survey contains 11 questions and has been shown to be related to burnout symptoms in teachers (Hasting and Bham, 2003). Higher scoring on this measure equates to worse student behaviour, with individuals responding on a scale from [1] never through to [6] daily.

We also investigated parental behaviour as a stressor which teachers are often exposed to. Although limited, research has demonstrated that negative parental behaviour can be a risk factor for the development of burnout in teachers. In order to measure parental behaviour, we asked two questions about the frequency with which teachers are exposed to negative parental behaviour either online or on school premises. The questions asked therefore were as follows, and were answered by respondents in the same way as the PBP:

“I am subject to derogatory words and/or behaviour from parents in and around school premises”

“I am subject to derogatory words from parents on the internet”

2.4 How to Improve

This question was included in order to allow individuals to provide – briefly and succinctly – the stressors specific to them. These could also be used as examples of specific interventions which need to be undertaken in order to reduce these stressors, as well as allowing individuals to expand on the specific stressors they are exposed to. Therefore one open-ended question was asked here. In particular, the following was asked:

“In one sentence, how would you make the role of a teacher in Scotland less stressful?”

3. Findings

3.1 Demographics: Who Took Part

Of the 4,947 responses we gathered, 826 decided not to respond to each of these demographic questions. As **Table 1** below demonstrates, the average age of all respondents was 44 years of age. However, there was a distinct difference between primary/secondary teachers and other respondents. Primary teachers had an average age of 41 years, and secondary 42 years, which is similar to the national average for Scottish primary and secondary teachers (Scottish Government, 2016). Similarly the gender profile of primary and secondary respondents was 92% female and 65% female for primary and secondary respondents respectively, again reflecting that of the entire Scottish teaching workforce (Scottish Government, 2016). We therefore assume that the sample of primary and secondary teachers in this study is representative of the wider Scottish workforce.

The remaining respondents were generally older than primary and secondary teachers, although across each occupational group the median length of experience was 10 years or greater. Finally, hour disparity represents the difference between number of hours that teaching staff are contracted versus the number that they actual work on an average week. From this, it is clear that school management work on average the greatest number of hours more than they are contracted to.

Table 1: demographic representation of all respondents and separated by job role.

	Mean Age	Gender		Experience (Education)	Experience (Role)	Hour Disparity
		Male	Female			
All Respondents (4957 responses)	44	893 (21.8%)	3192 (77.9%)	10 years +	10 years +	-13.8
Primary Teachers (1661 responses)	41	122 (7.4%)	1517 (92.4%)	10 years +	10 years +	-14.7
Secondary Teachers (1174 responses)	42	402 (34.6%)	757 (65.1%)	10 years +	10 years +	-12.4
College & University (491 responses)	49	219 (45.4%)	260 (53.9%)	10 years +	10 years +	-11.1
Management (506 responses)	45	114 (22.7%)	387 (77.1%)	10 years +	10 years +	-17.4
Other job role (299 responses)	48	34 (11.5%)	261 (88.5%)	10 years +	10 years +	-12.8

*826 respondents did not leave their job role.

3.2 Descriptives: What the Findings Show

Descriptive statistics (or findings) simply describe the findings of a study, often against a benchmark or national average where this information is available, or by describing the prevalence of certain measures. We therefore present levels of psychosocial working conditions and perceived stress against national benchmark measures, as well as levels of job satisfaction and prevalence (and length) of turnover intentions.

3.2.1 Working Conditions

In order to measure psychosocial working conditions, we used the Health and Safety Executive's Management Standards Indicator Tool (MSIT), and measured performance on each of the seven factors measured by the MSIT against a nation-wide benchmark set out by Edwards and Webster (2012). In the Edwards and Webster (2012) project, the researchers worked with hundreds of public

and private sector organisations, and tens of thousands of employees, to find average scoring on each of the seven MSIT factors, and placed scoring into ‘percentiles’. These percentiles demonstrate how respondents in our study (i.e. teachers in Scotland) score against these national benchmarks. As such, if a particular working condition is described as scoring at the ‘5th’ percentile in Table 2 below (e.g. ‘managerial support’ for all responses), this means that scoring is *worse* than 95% of individuals within the Edwards and Webster (2012) project. Alternatively, if a working conditions scores at the 75th percentile (e.g. ‘peer support’ for primary teachers), this means that respondents have scored *better than* 75% of those in the Edwards and Webster (2012) project.

Table 2: Scores on working conditions, and benchmark scores for ‘good performance’, according to Edwards & Webster (2012).

	Demands	Control	Managerial support	Peer support	Relationships	Role	Change
All responses (Percentile)	2.57 (<5 th)	3.19 (10 th)	3.10 (5 th)	3.79 (50 th)	3.96 (10 th)	3.74 (5 th)	2.53 (<5 th)
Primary teacher (Percentile)	2.55 (<5 th)	3.14 (10 th)	3.02 (<5 th)	3.94 (75 th)	4.01 (10 th)	3.73 (5 th)	2.54 (5 th)
Secondary teachers (Percentile)	2.54 (<5 th)	3.18 (10 th)	3.15 (10 th)	3.77 (25 th)	3.84 (5 th)	3.79 (5 th)	2.36 (<5 th)
College (Percentile)	2.68 (<5 th)	3.08 (5 th)	2.84 (<5 th)	3.58 (10 th)	3.91 (5 th)	3.30 (<5 th)	2.29 (<5 th)
Management (Percentile)	2.42 (<5 th)	3.21 (10 th)	3.29 (10 th)	3.80 (50 th)	4.03 (10 th)	4.01 (25 th)	2.93 (25 th)

*It is important to note that the figures here are not of importance per se as they cannot be compared across different working conditions, rather it is important to look at the percentile scoring.

Table 2 above describes the findings of all respondents, and separated by job role, on each of the seven MSIT psychosocial hazards (working conditions), as well as how these score against national averages (i.e. percentile scoring). Results demonstrate that for each working condition, apart from peer support across some job roles, and both role and change for management respondents, scoring was either below the 5th percentile, or at the 5th or 10th percentile. Therefore Scottish teachers, compared to national benchmarks, are exposed to chronically high levels of negative working conditions. Additionally college lecturers had poor levels of peer support (10th percentile).

For management respondents, both understanding of their role within an organisation and the way in which change is communicated scored at the 25th percentile, i.e. better than 25% of benchmark respondents but worse than 75%. The only working condition which was shown to be somewhat positive was that of peer support – primary teachers scored in the 75th percentile, management in the 50th percentile, and secondary teachers in the 25th percentile (although this could be improved too).

Overall therefore, the findings reported here demonstrate that Scottish teachers have chronically poor working conditions, irrespective of their job role.

3.2.2 Stress and Related Outcomes

Table 3 below demonstrates average scoring per job role on perceived stress, levels of job *dissatisfaction*, and prevalence of turnover intentions among Scottish teachers. According to Warttig et al. (2013), average scoring on the PSS-4 in an English sample was 6.11. Scores for Scottish teachers in our project demonstrate an average score of 7.92, much higher than the English sample. This

therefore suggests that levels of perceived stress in Scottish teachers is much higher than the Warttig et al. (2013) sample. Furthermore, over 50% of respondents of each job role (apart from management) were either slightly or extremely dissatisfied in their jobs, indicating that many more Scottish teachers are dissatisfied with their jobs than are satisfied. Furthermore over 40% of Scottish teachers are considering leaving their job role within the next 15 to 19 months. With turnover intentions such as these being a strong predictor of actual attrition (Griffeth et al. 2000), this suggests a large proportion of Scottish teachers and management could be looking at leaving the job in the next 15-19 months. With student behaviour scores (higher scores equate to worse behaviour), results demonstrate that primary and secondary teachers are exposed to much greater frequency of negative student behaviours than either college teachers or school management. Finally, for primary school teachers and school management it is clear that there are unacceptably high levels of poor parental behaviour both online and on school premises. Indeed, over a third of primary teachers and a fifth of management are exposed to poor parental behaviour either online or on school premises at least once a month, with these figures significantly higher than secondary or college teachers.

Table 3: Scores on the three 'outcome' measure – perceived stress, job satisfaction, and turnover intentions, as well as parental and student behaviour – separated by job role.

		All Respondents	Primary	Secondary	College	Management
Perceived Stress (Mean Score)		7.92	8.24	7.56	7.93	7.87
Job Satisfaction	Slightly	1249 (29.3%)	511 (30.8%)	346 (29.5%)	129 (26.9%)	124 (24.5%)
	Extremely	977 (22.9%)	411 (24.8%)	243 (20.7%)	132 (26.9%)	111 (21.9%)
	Total	2226 (52.2%)	922 (55.6%)	589 (50.2%)	261 (53.8%)	235 (46.4%)
Turnover Intentions	% Leave	1846 (43.3%)	696 (42%)	514 (43.8%)	233 (47.5%)	213 (42.2%)
	Average Length	17 months	16 months	18 months	15 months	19 months
Student Behaviour (Mean Score)		39.49	42.69	41.41	28.09	35.77
Parental Behaviour	School Premises*	17.5%	30.2%	10.0%	2.6%	11.7%
	Online*	7.3%	11.1%	2.8%	1.0%	12.1%

*These figures represent the percentage of respondents expressed to negative parental behaviour either online or on school premises at least once a month.

3.3 Inferentials: What the Findings Mean

As well as the description of the findings above, a series of inferential analyses were conducted. Inferential analyses provide evidence as to what it is about the workplace which lead to negative outcomes such as stress, poor job satisfaction and turnover intentions. As such a series of multivariate hierarchical linear regression analyses were conducted. These analyses allow a researcher to tell what factor is most influencing any other factor. Specifically therefore we look at which working conditions (via the MSIT) are leading to stress, lowered job satisfaction, and turnover intentions. As such I will first provide a series of numerical, stats-based descriptions, followed by an easier to understand description.

3.3.1 Working Conditions, Stress & Related Outcomes

Initial regression analysis looked at the impact of working conditions on stress in this Scottish sample of teachers (see Table 4 below). **Overall the numbers in the table (and all other linear regression tables) are not particularly important.** However, the higher the coefficient estimate (B) value, the more of an impact this particular factor has on the outcome measure compared to the others. For

example, in the table above we know that the ‘Demands’ factor is the one which most readily influences stress because its coefficient estimate is the highest out of all of these factors.

Results indicate that poor levels of demands (i.e. sheer size of workload), control (how much control an individual has over the way in which they do their job), peer support (lack of support from peers within the workplace), strained relationships (negative relationships with peer and management, and at times bullying behaviours), and poor understanding of respondents’ role within their employing organisation each contributed to the experience of stress.

Table 4: results of the regression analysis looking at the effects of working conditions on perceived stress.

Outcome Measure	Significantly Related Factors	Coefficient Estimates	T	P	R ²	Adjusted R ²
Perceived Stress	Demands	-1.44	-25.51	<.001	.31	.31
	Control	-.33	-5.81	<.001		
	Peer Support	-.34	-5.62	<.001		
	Relationships	-.40	-7.95	<.001		
	Role	-.47	-8.17	<.001		

Table 5 below reveals the regression results for both turnover intentions and job satisfaction. As a reminder, turnover intentions are a measure of intentions to leave the current job role, and research has demonstrated that it is a reliable predictor of actual attrition (Griffeth et al. 2000). Results here demonstrate that each of demands, managerial support, peer support, and strained relationships were the working conditions which were leading to greater levels of intentions to leave the job. Secondly job satisfaction relates to an attitude that individuals have toward work, which is ‘caused’ by work its self. We found that demands, control, managerial support, peer support, relationships, and change each contributed to greater levels of negative job satisfaction.

Table 5: regression analysis results from the impact of working conditions on both turnover intentions and job satisfaction.

Outcome Measure	Significantly Related Factors	Coefficient Estimates	T	P	R ²	Adjusted R ²
Turnover Intentions	Demands	.11	11.84	<.001	.17	.17
	Managerial Support	.08	8.23	<.001		
	Peer Support	.01	4.35	<.001		
	Relationships	.01	9.56	<.001		
Job Satisfaction	Demands	.38	15.86	<.001	.36	.36
	Control	.23	8.23	<.001		
	Managerial Support	.25	9.74	<.001		
	Peer Support	.14	5.19	<.001		
	Relationships	.18	8.22	<.001		
	Change	.17	7.03	<.001		

Furthermore, it is worth noting that student behaviour is also related to each of perceived stress, turnover intentions, and job satisfaction. To investigate this we calculated a bivariate (correlational) analysis, which looks at the relationship between two variables (i.e. student behaviour versus stress, then turnover intentions, and then job satisfaction. Results demonstrate that there is a significant ($p < .01$) relationship in each case, demonstrating that as negative student behaviour increases each of stress, turnover intentions, and job satisfaction get worse.

3.3.2 Findings Separated by Job Role

When looking at regression results as separated by job role (see [Appendices 1, 2, and 3](#)), it is clear once again that the amount of demands individuals have in their role is the one working condition which is consistently influencing the experience of stress, turnover intentions, and job satisfaction. Therefore irrespective of job role, or the outcome measure being assessed, the sheer amount of work expected of Scottish teachers is a consistent negative influence on their work and wellbeing.

3.3.3 Scottish vs English Teachers

Table 7 below demonstrates scoring by Scottish and English respondents to measures of working conditions and perceived stress. Note that the number of Scottish respondents was larger than that of English respondents, but these are average scores which should mitigate these differences. The figures in Table 7 which are in bold demonstrate better scoring on each of these measures. As a reminder, higher scoring on each of the management standards measures (i.e. the working conditions) indicates *better* conditions. However, higher perceived stress scores indicate greater stress.

Table 7: Mean scoring on MSIT measure of working conditions for English and Scottish teachers.

	Demands	Control	Managerial support	Peer support	Relationships	Role	Change	Perceived Stress
All Scottish Respondents	2.57	3.19	3.10	3.79	3.96	3.74	2.53	7.92
All English Respondents	2.53	2.82	3.01	3.58	3.94	3.74	2.41	8.54
Scottish Primary	2.55	3.14	3.02	3.94	4.01	3.73	2.54	8.24
English Primary	2.27	2.68	2.88	3.54	4.01	3.61	2.37	9.05
Scottish Secondary	2.54	3.18	3.15	3.77	3.84	3.79	2.36	7.56
English Secondary	2.19	2.79	3.05	3.54	3.91	3.58	2.15	9.04
Scottish College	2.68	3.08	2.84	3.58	3.91	3.30	2.29	7.93
English College	2.77	3.01	2.92	3.58	4.00	3.56	2.30	8.25
Scottish Management	2.42	3.21	3.29	3.80	4.03	4.01	2.93	7.87
English Management	2.87	3.57	3.27	3.63	4.12	4.05	2.93	7.25

In order to test whether these differences are meaningful, we conducted a series of independent samples t-tests. Independent samples t-tests are a statistical measure of whether there is an actual difference between two groups on any given measure. Therefore we have conducted a series of independent samples t-tests to look for differences between English and Scottish teachers and management on each measure of working conditions, in addition to perceived stress.

Results of the t-tests showed that there are significant differences in working conditions and stress levels for English and Scottish teachers. Specifically, results showed that English teachers reported greater job demands ($t(5214)= 31.27, p<0.001$), poorer relationships quality ($t(5214)= 61.29, p<0.001$), and higher perceived stress levels ($t(5214)= 50.64, p<0.001$) than their Scottish counterparts. Conversely, Scottish teachers report significantly higher levels of organisational change ($t(5214)= 3.53, p<0.001$).

3.4 Teacher’s Comments: Improving Stress

One of the questions asked respondents to describe, in a single sentence, how to make their job role less stressful. We received comments from 4,018 individual respondent, and have assessed a randomly selected sample of 1,000 of these individual comments which led to 1,350 separate descriptions. The comments were then analysed via an approach known as content analysis. This approach essentially counts the number of times that any particular comment or topic is mentioned. The findings (for Scottish teachers only) are presented in the following table. Themes are ordered in terms of the number of mentions. Underlying codes demonstrate specific aspects of teaching that respondents described as the most stressful.

Table 8: outcomes of content analysis from respondent’s comments regarding sources of stress.

Main Theme	No. of Mentions	Underlying Codes	Description
Workload	345	Admin & paperwork	This was the most quoted stressor. Paperwork and associated admin, including over-assessing students, were frequently discussed.
		Preparation Time	Respondents wanted a little less contact time, including having to cover colleagues too frequently, and more protected preparation time. Again this included fewer assessments of students.
		More Staff	Respondents wanted more staff – support and teaching – to help deal with the workload and demands associated with the job role.
Support & Management	355	Management	Respondents wanted greater managerial support on matters such as student and parental behaviour, workplace bullying, and clearer guidance surrounding timescales and expectations.
		Student & Parent Behaviour	Clear LA or school-wide policy on both student and parental behaviour. Management need to adhere to this, with severity of punishment linked to the policy and severity of behaviour.
Change	180	Curriculum	Teachers described the curriculum as being ‘packed’ with too much to cover.
		Change	Respondents described that there were frequent updates and changes from government to curriculum and assessments.
		Appreciation	Respondents wanted greater appreciation of the role and job that they do from parents, employers, and more widely the government.

The Classroom	170	Class Size	Having too many children in each class significantly increased the amount of work that respondents had to do, in particular as it increased the amount of preparation time and admin, and paperwork responsibilities.
		Inclusion	Some respondents questioned the inclusion agenda for the most difficult students. Those with the greatest needs therefore provided the greatest challenge, and thus added the greatest workload.
		Student & Class Support	Class sizes and inclusion agenda could be made less stressful by having greater support. As such for both the most challenging students, as well as the large class sizes, more support in the classroom would help greatly.

3.4.1 Workload

Workload, or the sheer amount of work that was expected of teachers, was the most frequently discussed stress-related theme within this element of the project, and this could be split into three distinct and yet related stressors. First of all the amount of administrative paperwork expected was described as being far too great. This paperwork mainly consisted with keeping up with the over-assessing of students, and having to continuously prove to management and wider government that the work they were doing was successful. Secondly, teachers suggested that they required greater preparation time – this meant less time teaching their own classes, or covering for absent colleagues, and as such more time to be able to prepare ‘excellent’ sessions for their own students. Finally, simply by increasing the number of teachers within a school, workload could be significantly reduced – this would mean less paperwork, less contact time, and more preparation time. Indeed, by improving on these elements of workload teachers would be able to provide much a much greater standard of teaching to their students.

3.4.2 Support & Management

The second most frequently discussed theme was that of support and management, which represented two distinct underlying codes. The first of these codes was managerial support. Respondents wanted greater support from management in a number of areas, such as when dealing with negative behaviour from both students and parents, or when they had experienced bullying from other members of staff (and even to stop being bullied by management themselves). Secondly, teachers discussed the influence that timescales for completion of activities, and expectations that these timescales would be met at extremely short notice, was having. Therefore respondents described that school management would often introduce new initiatives with the expectation that they would be completed in a very short period of time. Furthermore, respondents wanted greater support from management in dealing with poor parent and student behaviour. Therefore where student behaviour policies were in place in schools, teachers wanted these policies to be adhered to strictly and in all cases. They also suggested that similar policies should be developed and implemented regarding parental behaviour both on school premises and off of it (i.e. on social media).

3.4.3 Change

This theme relates to the number of government-led initiatives which are introduced to Scottish teaching, and the frequency at which they are introduced. Teachers therefore described that it was difficult to keep up with these changes, while not understanding the rationale for many of them. Similarly, teachers described the curriculum as already being ‘packed’, but new subjects and

requirements were frequently added. As such, by simplifying the curriculum teachers would be able to focus more easily on teaching key and core concepts, while providing greater flexibility over how the extra-curricular subjects are provided. Furthermore, by allowing teachers a greater say over how the curriculum is taught and provided to students, teachers would feel more appreciated. Similarly, greater appreciation of the job that they do from parents, management, and government would be particularly stress relieving.

3.4.4 The Classroom

The fourth and final main theme to emerge from the data in this project has been titled 'The Classroom' because it relates to the direct, day-to-day teaching of students. Firstly respondents discussed the influence of large class sizes on the job that they perform. As such, having large class sizes influenced many aspects of the teaching role. For example dealing with challenging student behaviour was difficult in large classes, and it also increases the amount of preparation time required for each class, admin associated with increased testing, and related paperwork. Furthermore individuals discussed the difficulties which were associated with inclusion of students with the greatest needs in mainstream schools. In particular students with significant behavioural and/or learning difficulties increased workload for a number of reasons. Finally, respondents discussed the best way to overcome the difficulties experienced within the classroom was to have greater support within the classroom. As such for children with particular behavioural or learning difficulties and in large classes having more support within the classroom teachers would be able to more adequately provide the best teaching that they can.

4. Context: What do these Findings Mean, and What Next?

The results of this project have demonstrated that Scottish teachers are exposed to a wide variety of stressors in terms of working conditions which are contributing to stress, and therefore also means that these teachers have poor levels of job satisfaction and many are looking to leave their job in the next 12-18 months. Indeed, we have demonstrated that compared to a UK benchmark sample Scottish teachers are exposed to poor working conditions which are influencing the job that they do. Additionally over 50% of Scottish teachers are dissatisfied in their job, and over 40% are looking to leave the job over the next 18 months. Furthermore, primary and secondary teachers are frequently exposed to high levels of negative student behaviour.

Despite the above findings, it is clear from these results that the demands that Scottish teachers face at work (i.e. the sheer amount of workload that is expected of them) are the one working condition which is most influencing their wellbeing, and leading to the various negative outcomes (low satisfaction and high intentions to leave the role) demonstrated in this project. Indeed, both the survey and content analytical results of qualitative comments demonstrated that the amount of admin and paperwork (supplemented by the over-assessment of students) frequent changes within the role, large class sizes, and lack of support within the classroom (all related to workload) are leading to these outcomes. It is also worth noting that while teachers in England report greater levels of demands, more strained relationships, and greater levels of stress than those based in Scotland, Scottish teachers were exposed to greater amounts of change at work, thus again mirroring findings from the qualitative comments provided.

It is clear that there needs to be a consistent and systematic focus on improvement of working conditions for Scottish teachers. However, with so many potential issues to deal with, a staged and focused approach is required.

We suggest that primarily and urgently there needs to be a focus on improving the amount of demands experienced by teachers in Scotland. Indeed, statistical and descriptive results demonstrate that by dealing with these demands in the short-term then job satisfaction will increase and actual attrition away from the job will decrease. As such, we suggest that there are a number of initiatives introduced to education in Scotland which reduces workload – this includes reduction in the amount of administration work (particularly by reducing repetition of paperwork and reducing over-assessment of students), and providing more staff in terms of teachers and associated support staff. This would significantly reduce workload, improve on the associated negative outcomes, and also ensure even greater teaching performance. It is also clear that there should be fewer changes in the role (e.g. to the curriculum or assessment patterns) in which teachers are not consulted.

Following an initial phase there should be subsequent work to improve the other working conditions demonstrated as stressful and leading to poorer satisfaction/attrition rates across the medium term. There should be focus on stability of curriculum and reduction in introducing new initiatives, as well as clear policies developed – and strictly adhered to – for both student **and** parental behaviour.

Overall therefore it is clear that teachers love the actual job that they do – they are teachers because they are dedicated to the teaching of children and young adults, and therefore improving the life chances of these teachers. However, it is clear that the working conditions that Scottish teachers are exposed to are hampering these efforts. Strategies to improve these working conditions, student and parental behaviour, would therefore be of intense benefit to Scottish teachers and their pupils.

References

- Adams, R., & Halliday, J. (2016) One-day teachers' strike closes thousands of schools in England, *Guardian*, 5 July [Online]. Available at <https://www.theguardian.com/education/2016/jul/05/nut-teachers-strike-closes-thousands-schools-england-nicky-morgan>
- Barker, I. (2014), *Majority of teachers have faced aggressive behaviour from pupils with the last year, poll finds*, TES [online]. Available at: <https://www.tes.com/news/school-news/breaking-news/majority-teachers-have-faced-aggressive-behaviour-pupils-within-last>
- Chandola, T., Brunner, E., & Marmot, M. (2006). Chronic stress at work and the metabolic syndrome: prospective study, *British Medical Journal*, doi:10.1136/bmj.38693.435301.80
- Chartered Institute of Personnel Development (2016), *Absence Management 2016* [online]. Available at: https://www.cipd.co.uk/Images/absence-management_2016_tcm18-16360.pdf
- Clint, S., Barry, W., & Alexia, L. (2008), Can Organisational Safety Climate and Occupational Stress Predict Work-Related Driver Fatigue, *Transportation Research Part F: Traffic Psychology and Behaviour*, 11 (6): 418-426
- Cohen, S., Kamarck, T. and Mermelstein, R. (1983), A global measure of perceived stress, *Journal of Health and Social Behaviour*, 24 (4): 385-396
- Collie, R.J., Shapka, J.D. and Perry, N.E. (2012) 'School climate and social-emotional learning: predicting teacher stress, job satisfaction, and teaching efficacy', *Journal of Educational Psychology*, 104, pp. 1189-1204
- Dolbier, C.L., Webster, J.A., McCalister, K.T., Mallon, M.W., & Steinhardt, M.A. (2005). Reliability and validity of a single-item measure of job satisfaction. *American Journal of Health Promotion*. 19(3): 194-198
- Edwards, J.A., & Webster, S. (2012). Psychosocial risk assessment: Measurement invariance of the UK Health and Safety Executive's Management Standards Indicator Tool across public and private sector organizations, *Work & Stress*, 26 (2): 130-142
- Friedman, I.A. (1995). Student behaviour patterns contributing to teacher burnout, *The Journal of Educational Research*, 88 (5): 281-289
- Griffeth, R.W., Hom. P.W. and Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the millennium, *Journal of Management*, 26, 463-488
- Hayes, B., Douglas, C. and Bonner, A. (2013) 'Work environment, job satisfaction, stress and burnout among haemodialysis nurses', *Journal of Nursing Management*, 23 (5), pp. 588-598
- Hastings, R.P., & Bham, M.S. (2003). The relationship between student behaviour patterns and teacher burnout. *School Psychology International*. 24 (1): 115-127
- Hayes, B., Douglas, C. and Bonner, A. (2013) 'Work environment, job satisfaction, stress and burnout among haemodialysis nurses', *Journal of Nursing Management*, 23 (5), pp. 588-598

Health and Safety Executive (HSE), n.d., *Working Days Lost*, [online]. Available at: <http://www.hse.gov.uk/statistics/dayslost.htm>

Health and Safety Executive (HSE; 2016), *Work related Stress, Anxiety, and Depression statistics in Great Britain 2016*, [online]. Available at: <http://www.hse.gov.uk/statistics/causdis/stress/stress.pdf?pdf=stress>

Houdmont, J., Kerr, R., & Randall, R. (2012). Organizational psychosocial hazard exposures in UK policing: Management standards indicator tool reference values, *Policing: An International Journal of Police Strategies and Management*, 35 (1): 182-197

Houdmont, J., Randall, R., Kerr, R., & Addley, K. (2013). Psychosocial risk assessment in organizations: Concurrent validity of the brief version of the Management Standards Indicator Tool, *Work & Stress*, 27 (4): 403-412

Johns, G. (2010). Presenteeism in the workplace: A review and research agenda, *Journal of Organizational Behaviour*, 31: 519-542

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005) The experience of work-related stress across occupations, *Journal of Managerial Psychology*, 20: 178-187

Lightfoot, L. (2016) 'Nearly half of England's teachers plan to leave in next five years', *The Guardian*, 22 March [Online]. Available at <https://www.theguardian.com/education/2016/mar/22/teachers-plan-leave-five-years-survey-workload-england>

Marsh, S. (2015), *Five top reasons why people become teachers – and why they quit*, The Guardian [online]. Available at: <https://www.theguardian.com/teacher-network/2015/jan/27/five-top-reasons-teachers-join-and-quit>

Palliser, C.R., Firth, H.M., Feyer, A.M., & Paulin, S.M., 2005. Musculoskeletal Discomfort and Work-Related Stress in New Zealand Dentists, *Work & Stress*, 19 (4): 351-359

Percy, M. (2015) 'Teacher stress levels in England "soaring", data shows', *BBC News*, 17 March [Online]. Available at <http://www.bbc.co.uk/news/education-31921457>

Ravalier, J.M., McVicar, A., & Munn-Giddings, C. (2014). Public service stress and burnout over 12 months, *Occupational Medicine*, 64 (7): 521-523

Ravalier, J.M., Fidalgo, A.R., Morton, R., & Russell, L. (2017). The influence of zero-hours contracts on care worker well-being. *Occupational Medicine*. 67: 344-349

Ravalier, J. (2017). *UK social workers: Working Conditions and Wellbeing* [online]. Available at: http://cdn.basw.co.uk/upload/basw_110738-9.pdf

Robertson, C., & Dunsmuir, S. (2013) Teacher stress and pupil behaviour explored through a rational-emotive behaviour therapy network, *Educational Psychology*, 33 (2): 215-232

Rosengren, A., Hawken, S., Ounpuu, S., Sliwa, K., Zubaid, M., Almahmed, W.A., Blackett, K.N., Sittihomorn, C., Sato, H., & Yusuf, S. (2004) Association of Psychological Risk Factors with Risk of Acute Myocardial Infarction in 11,119 Cases and 13,648 Controls from 52 Countries (the INTERHEART Study): A Case-Control Study, *Lancet*, 364 (9438): 953-962

Scottish Government (2016), *Summary statistics for schools in Scotland* [online]. Available at: <http://www.gov.scot/Resource/0051/00511490.pdf>

Segerstrom, S.C., & Miller, G.E. (2004). Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry, *Psychological Bulletin*, 130 (4): 601-630

Tziner, A., Rabenu, E., Radomski, R., & Belkin, A. (2015). Work stress and turnover intention among hospital physicians: The mediating role of burnout and work satisfaction, *Revisita de Psychologie*, 31 (3): 207-213

Wartigg, S.L., Forshaw, M.J., South, J. and White, A.K. (2013) 'New, normative, English-sample data for the Short Form Perceived Stress Scale', *Journal of Health Psychology*, 18 (12), pp. 1617-1628

Appendix 1: linear regression results for perceived stress separated by job role

Job Role	Significantly Related Factors	Coefficient Estimates	T	P	R ²	Adjusted R ²
Primary	Demands	-1.49	-15.39	<.001	.29	.29
	Relationships	-.34	-4.20	<.001		
	Role	-.40	-3.72	<.001		
Secondary	Demands	-1.37	-12.34	<.001	.35	.35
	Peer Support	-.57	-4.11	<.001		
	Relationships	-.54	-5.53	<.001		
College	Demands	-1.36	-8.59	<.001	.35	.34
	Role	-.62	-3.73	<.001		

Appendix 2: linear regression results for turnover intentions separated by job role

Job Role	Significantly Related Factors	Coefficient Estimates	T	P	R ²	Adjusted R ²
Primary	Demands	.12	7.16	<.001	.17	.17
	Relationships	.07	5.12	<.001		
Secondary	Demands	.07	3.43	.001	.17	.16
	Relationships	.09	4.95	<.001		
College	Demands	.11	3.65	<.001	.15	.13
	Relationships	.10	3.52	<.001		

Appendix 3: linear regression results for job satisfaction separated by job role

Job Role	Significantly Related Factors	Coefficient Estimates	T	P	R ²	Adjusted R ²
Primary	Demands	.46	11.71	<.001	.36	.31
	Control	.19	4.22	<.001		
	Managerial Support	.22	5.00	<.001		
	Peer Support	.15	3.70	<.001		
	Relationships	.18	5.33	<.001		
Secondary	Demands	.33	7.05	<.001	.36	.35
	Control	.25	4.60	<.001		
	Managerial Support	.19	3.82	<.001		
	Peer Support	.21	3.50	<.001		
	Relationships	.17	4.12	<.001		
	Change	.17	3.73	<.001		
College	Demands	.37	5.33	<.001	.37	.36
	Change	.27	3.58	<.001		