



Stress, Coping Strategies and Job Satisfaction of Primary School Teachers throughout the Ofsted Inspection

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ABSTRACT

Research suggests that inspections by the Office for Standards in Education (Ofsted) may cause stress among primary school teachers (Chaplain, 2001). Studies show that both coping skills and job satisfaction affect the stress experienced during an inspection. This study aimed to explore the associations between these variables and to examine which of them best predict teachers' inspection-related stress.

Data was collected from 90 primary school teachers by online self-report questionnaires. Factor Analysis divided stress into job stress and role ambiguity, and divided coping skills into positive and negative coping skills. Job satisfaction was negatively correlated with job stress and role ambiguity, but positively correlated with positive coping skills. Role ambiguity was directly correlated with negative coping skills and negatively correlated with positive coping skills. Negative coping skills and job satisfaction were the better predictor of role ambiguity $F(2,84) = 18.73, p < .001$. Surprisingly positive coping skills and role ambiguity were predictors of job satisfaction $F(2,85)=18.63 p<.001$

This study shows the importance of negative coping skills and job satisfaction when assessing stress of Ofsted. Furthermore, both positive coping skills and role ambiguity should be acknowledged when looking at job satisfaction of primary school teachers.

KEY WORDS:	OFSTED	STRESS	COPING STRATEGIES	JOB SATISFACTION	PRIMARY SCHOOL TEACHERS
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Introduction

There was great concern over educational standards in England during the 1980s and a sequence of changes began in English state-funded schools (Rosenthal, 2004). In 1992, the Office for Standards in Education (Ofsted) was created, and charged with keeping the Secretary of State informed about the quality of education provided by schools, and ensuring the national curriculum was followed (Gray & Gardner, 1999); the following year, under the 1993 Education Act, inspections started.

Methodology of the Ofsted Inspection

Whilst the most common feature of inspections are lesson observations there are many other elements to the school visit: the study of school documents; interviews with school leaders, teachers and occasionally parents; and the completion of questionnaires, by parents, prior to the inspection.

In order for the collection of evidence to be precise and comparable, Ofsted devised a handbook for the use of all inspectors and teachers during the school visit (Fidler, et al., 1998); this ensures that teachers understand the conditions in which their performance will be measured (Elkins & Elliotts, 2004). The handbook has been revised over the years with the intention of taking various criticisms into account, and to reflect social, economic and political factors affecting both education and the wider society (Baxter, 2013).

The latest version, promoted by the coalition government elected in 2010, was published in January 2012. This has created new challenges for the teaching profession as the new framework demands increased involvement of teachers in the inspection process (Baxter, 2013). Elkins & Elliotts (2004) believe that the revision of the handbook has seen a paradigm shift from a focus on pupils to a greater 'scrutiny' of teachers.

During a school inspection, a school's strong and weak points are systematically vetted, and the level of education quality and compliance with statutory regulations is assessed (De Wolf & Janssens, 2007). Following the school visit, both written and verbal feedback is provided and rated from 1 (outstanding) to 4 (Inadequate). The results are published to inform the governors and parents about the quality of the education provided.

By publicising the results, Ofsted believes it will be able to influence school policy and performance, and thereby contribute to an improvement in the quality of education (De Wolf & Janssens, 2007). However, many teachers believe this to be 'naming' and 'shaming' of failing schools. Scanlon (2001) found that many teachers felt the process publicly humiliated them. However, Ofsted (2012) states that at the heart of the inspection process is the promotion of rigorous means by which a school is enabled to evaluate its own performance, thus enhancing its capacity to improve.

There has been a growing amount of research on the methods used by Ofsted and the emotional impact on teachers. A large proportion of schools do consider the inspection process as a necessary accountability mechanism which has won general acceptance by teachers (Ferguson et al, 2000). Conversely there has also

been a considerable amount of criticism from educationalists, and many published surveys that suggest a less than satisfactory experience for schools. However, this may relate to head teachers' perceptions that inspections are primarily about accountability rather than development (Plowright, 2007). This idea is further supported by Chapman's (2001) study: seventy per cent of teachers believed the main aim of Ofsted was to make schools accountable for their actions, although fifty per cent of teachers did express the opinion that the inspection was a useful tool for improvement.

Reliability of Ofsted Inspection

Lesson observations during the inspection should be an important means of influencing classroom practice (Chapman, 2001). Inspectors try to provide constructive feedback, and to identify areas which need improvement. However, researchers believe this method has its limitations. Fitz-Gibbon (1998) argues that without strong evidence of inter-inspector reliability, classroom judgements are subjective and methodologically flawed.

The effectiveness of the way in which schools are judged - and especially those with disadvantaged catchments - has been criticised. Johnson (1999) argues that the background of the students should be taken into account before inspection. He believes that children from families with a history of unemployment may be less likely to appreciate the importance of education, or to achieve educational success. Therefore, to judge school effectiveness by criteria defined independently of the socio-economic context is highly problematic (Perryman, 2006).

The Department for Education itself seems to support this idea;

'Children with higher levels of emotional, behavioural, social.... well-being...have higher levels of academic achievement... both concurrently and in later years'.

Ofsted has acknowledged this weakness within its inspection process and has stated in its 2012 framework that the socio economic background of a school must be taken into consideration. However, the nature of such social deprivation is only outlined in Ofsted's summary of the characteristics of each school, but the basis on which schools in deprived areas are judged remains the same as that for schools in areas of high social economic status and social privilege.

Stress

It has been estimated that seventy per cent of an inspector's time is spent on classroom observation. This is clearly a potential for causing stress to teachers, and ought to be examined (Cullingford, 1999).

Stress and occupational stress can occur at any time in an individual's life. It is often experienced as the feeling of being under too much pressure from demands experienced in the environment that affect how an individual functions at work or outside work (McGowan et al, 2006).

Teaching is already seen as a stressful career without the added pressure of an inspection (Fidler et al., 1998). Stress experienced by teachers during the school inspection can jeopardise the validity and reliability of the inspection (De Wolf & Janssens, 2007). Brown et al (2000) found that the stress and anxiety experienced

for only a few hours during classroom observation seem to have a detrimental effect on teachers.

Changes to the Ofsted framework may create anxieties and stress for teachers. For example, Ofsted declared that schools could only be rated as 'good' as long as all teaching found in the school was graded 'good'. This may make teachers feel accountable for the whole school's grading, and leave them feeling deprived of control and inadequate within their work environment. More generally, Ofsted's policies and procedures can be seen as implying a low level of trust in the professionalism and competence of teachers (Day, 2012), and this has a pervasive effect on teachers' emotional responses to the inspection regime.

The negative emotional impact of inspection on teachers can lead to overwork, which in turn can cause further stress. Teachers often find themselves working long hours at home to the detriment of their families in order to meet deadlines for the arrival of Ofsted. Additionally, this heavy work load of teachers has been found to be the most intense source of stress (Williams & Gersch, 2004) and may lead to burnout syndrome, a chronic response to stressful work in conditions involving high levels of interpersonal contact (Mikolajczak, et al., 2007).

Much research over the past decade has emphasized the negative effects of stress. But it should also be said that stress has been seen as having some positive effects on teachers' performance. Perryman (2007), for example, argues that without some form of pressure, workers can lack drive and creativity; if stress is negotiated properly it can enhance job performance and maintain motivation, and may thus be linked both to positive emotions and the reskilling of individuals.

Researchers have argued that stress is a part of life which cannot be avoided, and its beneficial effects should not be overlooked. If a stressful situation is resolved positively, for example, by an outstanding inspection report, then positive emotions will be prominent (McGowan et al., 2006).

Coping

Coping strategies are known to make a difference to the impact of stress (Steptoe, 1991). Lazarus and Folkman (1984) state the concept of coping to be:

'A constantly changing cognitive and behavioural effort to manage specific external/or internal demands that are appraised as taxing or exceeding the resources of the person' (p141)

Coping strategies can be divided into two categories: direct; and indirect. Direct coping strategies often work in the long term and involve the individual adopting strategies to deal with the stress directly, for example, working late in order to meet a deadline. An indirect coping strategy is often only short term. The individual will avoid the situation and find a different way of alleviating stress, for example, going to the gym (Williams & Gersch, 2004)

Gersch (1996) found a number of strategies to be useful for teachers coping with stress: listing and prioritising work; having a sympathetic adult to share problems with; and engaging in leisure activities. Williams and Gersch (2007) discovered that teacher support groups were helpful for primary school teachers before and after the Ofsted inspection. In addition, Brimblecombe et al (1995) found that

teachers were becoming more professionally resourceful, and were developing strategies that alleviated potential stressors during the Ofsted inspection.

Research has shown that using appropriate coping mechanism can produce desirable consequences for teachers, which may lessen the negative effects associated with stress (Mujtaba & Reiss, 2013) However, in order to implement appropriate strategies for primary school teachers during the Ofsted inspection, the factors which cause stress during the inspection need to be fully understood (Williams and Gersch, 2007).

Coping strategies used by teachers have been well documented in the literature, although Chan (1999) discovered that research on teachers' job-related coping behaviour has been neglected. This has been further supported by Green and Ross (1996) who believe that research has failed to fully understand the strategies used by teachers.

Job satisfaction

Job satisfaction indicates the overall quality of an individual's experience at work (Kalleberg & Losocco, 1983). Currently, teachers are leaving the profession at a high rate (VanMaele & VanHoutte, 2012), so assessing and understanding job satisfaction among teachers is a pressing matter. It is apparent that primary school teachers are increasingly feeling inadequate in the face of rising expectations and the greater responsibilities placed upon them (Brown et al., 2002). Thus, it is vital that educationalists understand the emotional effects these additional pressures may cause, as they seem bound to have a detrimental effect on teacher motivation and performance, which may decrease overall job satisfaction, and result in more teachers leaving the profession (Nias, 1996).

Present Study

It seems from the literature that the stress of Ofsted inspections, job satisfaction and coping skills used during Ofsted inspections have been studied in isolation. This study is therefore going to look at the relationship between these variables on primary school teachers throughout the Ofsted inspection process.

Therefore, the present study may provide clearer information about the following relationships:

H1: There will be a positive correlation between stress and coping strategies.

H2: There will be a negative correlation between stress of and job satisfaction.

H3: There will be a positive correlation between coping skills and job satisfaction.

As previous literature has suggested that job satisfaction and coping strategies have a relationship with stress, the present study will examine whether these relationships have an effect when used in combination rather than individually.

H4: Job satisfaction and coping strategies would be better predictors of stress during the Ofsted inspection when used in combination.

This study may help educationalists to understand what variables predict stress during an Ofsted inspection.

Methodology

Design

This correlational study collected data from participants using an online self-report questionnaire. The measures within the questionnaire explored relationships between stress, coping skills and job satisfaction throughout the Ofsted process.

Participants

An opportunity internet sample of Primary school teachers were recruited via a website called Teachers' Talk (www.teacherstalk.co.uk). Additionally, the survey was posted on Facebook where primary school teachers were asked to participate and then pass the survey on to their colleagues, thus creating a snowball effect.

Ninety primary school teachers participated in the study: 14.44% male and 85.56% female. Although Green (2001) states the acceptable minimum sample size for this study should be 107 (104 + number of variables), this was not achieved due to time limits and difficulties gaining access to the participant pool.

Materials

Questionnaires were uploaded onto the hosting website, Survey Monkey (www.surveymokey.com), where a monthly subscription of £24 was paid. Once all data was collected, Survey Monkey converted the information into an Excel spreadsheet, and this was transferred to SPSS 19.0.

Measures

Initially demographic details were collected: gender; whether they had any experience of an Ofsted inspection; how long ago had they experienced an Ofsted inspection; how long had they been teaching for; and what age group they taught (Appendix 4).

From among the vast array of published instruments for assessing teacher stress, the revised Teacher Stress Inventory (TSI), developed by Schutz & Long (1988) was chosen owing to its good reliability and validity. The TSI has thirty six items; however, only certain items were selected as appropriate for this study; and they were used to create the eighteen item, four facet, measure for stress.

In order to create the labels for the facets, themes from Chapman's (2002) and Jeffrey and Woods' (1996) studies were used as their semi-structured interviews delved into teachers' views of the inspection process. Two themes were chosen from Chapman's (2002) study as factors relating to stress: reactions and responses to the inspection process; and importance of leadership during the Ofsted inspection. Furthermore, two themes were selected from Jeffrey and Wood's (1996) study which were believed to be associated with stress: loss of harmony; and confusion.

As the TSI was formulated in the United States of America, the language used was sometimes not appropriate for the United Kingdom (UK), and therefore the terminology was changed where necessary to match UK educational usage. Also,

as the TSI was designed to evaluate teacher stress in a general way, the items were reworded to relate specifically to Ofsted; for example:

Original Item	Revised Item for Study
I feel constant pressure from others to improve the quality of my work.	I feel constant pressure from Ofsted to improve the quality of my work.

The amount of time which is demanded from participants from a study can be considerable. The larger the demand, the less likely participants will commit to a study (Carver, 1997). As the sample for this study is primary school teachers, the work demands on their free time are already high. Therefore, it would not be appropriate to have a questionnaire that took thirty minutes to complete. To make it easier for participants to complete the questionnaire quickly this study employed a single item measure (SIM) using bipolar response scales (Woods & Hampson, 2005).

The reworded items from the TSI were summarised into a short description, which attempted to encapsulate the meaning across the items; these abbreviated scales save on testing time and avoid participant boredom and fatigue (Woods & Hampson, 2005). The negative summarised statements formed one pole of one facet, and the positive summarised statements formed the opposing pole of the same facet (Appendix 5).

For Example:

Positive and negative of leadership facet.	Summary to Form Item.
Positive <ul style="list-style-type: none"> ○ I can rely upon my manager. ○ My manager always listens to me. 	I am someone who thinks it pointless to discuss matters about the inspection with my manager as s (he) never has time to discuss my concerns, and would never provide support for me from the external body.
Negative <ul style="list-style-type: none"> ○ My manager never has time to listen to me. ○ My manager never supports me. 	I am someone who can rely upon my manager to support me from the inspection body and they also listen to my worries about inspection during school time.

This example shows that the negative pole relates to not having good leadership in school during an Ofsted inspection, whereas the positive pole relates to having good leadership.

However, at times the TSI did not provide a negative or positive pole for a particular item; therefore the researcher had to reverse the opposite pole of the single item to create polar opposites (Appendix 5) in order to have a bipolar

response scale. This bipolar response scale (1-9) allowed the sample to make a bi-directional judgement of a specific construct (Woods & Hampson, 2005). This was repeated for all constructs of the questionnaire.

The next part of the questionnaire was about teachers' coping strategies throughout the Ofsted inspection. Although there are many different inventories to measure coping, the Brief COPE Inventory (Carver, 1997) was used as it enables the researcher to investigate important coping skills quickly (Carver, 1997) whilst having good internal reliability and good construct validity. This inventory measured coping responses, which appear to be both dysfunctional as well as adaptive responses.

The fourteen facets of this questionnaire used a SIM format with a bipolar response scale. Rewording the items within the facets was essential in order for the teachers to understand the context of the construct.

For Example

Original Item	Reworded Item
I have accepted the reality of the fact that it has happened.	I have accepted the reality that the Ofsted inspection is just something that has to happen.

Like the TSI, many items had to be reversed in order for there to be both the negative and positive extremes for the bipolar response scale (Appendix 6).

The final construct in this study using the SIM is job satisfaction; which only has one facet. This construct was found within the TSI but some items had to be reversed by the researcher so that the bipolar response scale could be used (Appendix 5).

Although long questionnaires allows investigators to look at multiple components, Robins et al (2001) state that single-item measures provide a good balance between practical needs and psychometric requirements. Woods and Hampson (2005) further support this in their study by concluding that the 'SIM offers a reasonable alternative to longer scales, balancing the demands of brevity versus reliability and validity' (p.373).

Procedure

A URL link containing the questionnaire was uploaded onto the websites "Teachers' Talk" and Facebook. If primary school teachers agreed to participate in the study by selecting the URL link, they were directed to the hosting website, Survey Monkey, where the questionnaire could be found.

Ethical Considerations

Prior to the collection of data, participants were provided with a briefing letter (Appendix 2) that contained enough information so that they understood their terms of involvement in the study (King & Horrocks, 2010). It will be clearly noted in the briefing sheet that all data will be anonymous and there will be no way of

linking responses to a particular school. Additionally, it was stated that withdrawal from this study can occur at any time prior to the completion of the questionnaire without having to submit answers. Therefore submission of answers was taken as consent to participate in this study.

Although this sample group is not perceived as vulnerable, a website link which provides counselling information and research for teachers was provided: www.teachersupport.info (Appendix3).

Results

Data for 90 primary school teachers' were collated through Survey Monkey, downloaded to an Excel spreadsheet, coded for analysis, and the coded information transferred to SPSS 19.0

Histograms were plotted for stress and coping skills to check whether these variables were normally distributed. The histograms show that stress is positively skewed and job satisfaction is negatively skewed. However, coping skills appears normally distributed. The histograms can be found below.

Although graphical methods can be a useful indicator of normality, they are not sufficient to provide conclusive evidence that the assumption of normality holds (Razali & Wah, 2011). Therefore the Kolmogorov-Smirnov test for normality was also employed. The results are shown beneath each histogram.

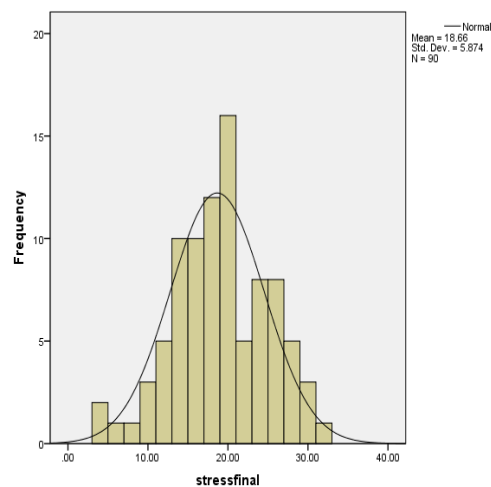


Figure 1: A histogram for the variable stress

Kolmogorov-Smirnov test: stress did not deviate significantly from a normal distribution $D = .08$, $p = .180$.

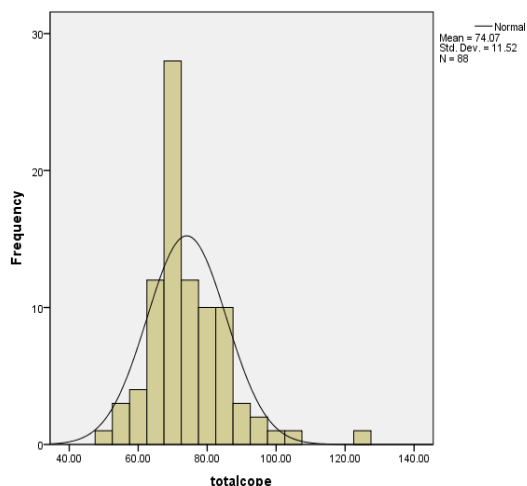


Figure 2: A histogram for the measure coping skills

Kolmogorov-Smirnov tests: coping skills did not deviate significantly from a normal distribution $D = .12$, $p = .005$.

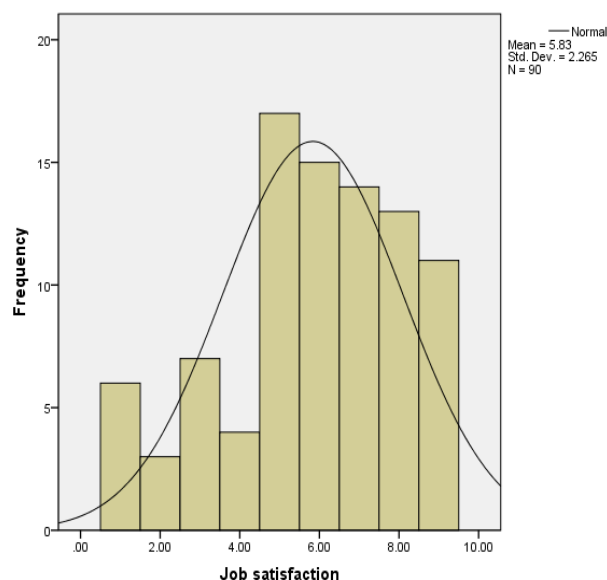


Figure 3: A histogram for the measure job satisfaction

Kolmogorov-Smirnov test: job satisfaction did deviate significantly from a normal distribution $D = .14$, $p < .005$. In order to examine the extent of this non-normality the plotted data was assessed. The Quantile-Quantile (Q-Q) plot can be found below.

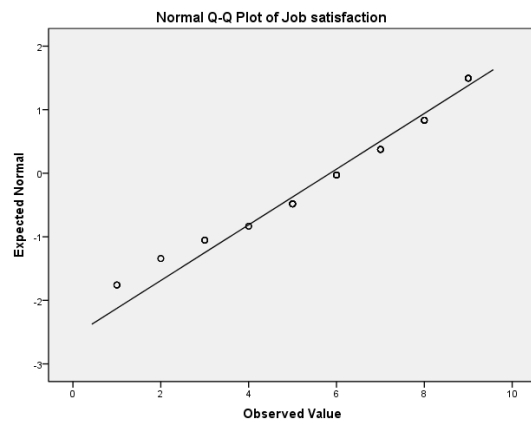


Figure 4: Q-Q plot of job satisfaction scores

The Q-Q plot shows that the majority of the data falls near to the normal distribution line. Though the Kolmogorov-Smirnov test indicates that job satisfaction has a slightly non-normal distribution, it does not depart seriously from normal, as indicated by the value of the kurtosis statistic (-.44) which remains smaller than the criterion of twice the value of its standard error (.51) (Coolican, 2009). Parametric tests could be therefore be used in the analysis, as they are robust enough to withstand minor departures from normality.

In order to assess the validity and reliability of the measures used, the construct validity and internal consistency of the measures of stress and of coping skills were examined.

Construct validity refers to how well scores on test items represent the construct they purport to measure (Wade, 1992); internal consistency describes the extent to which all items in a test measure the same trait or characteristic (Tavakol & Dennick, 2011).

(Job satisfaction was a single item measure, which could not yield estimates of internal consistency and construct validity (Nagy, 2002).

Construct Validity Stress

Factor Analysis (FA) was conducted on the items measuring stress. Results are given in the table below.

Table 1: *Principal Component Analysis with Varimax Rotation for Four Item Stress Questionnaire (N=90)*

	Component 1	Component 2	Communality
Loss of Harmony	.87	-.07	.76
Reaction and Responses to the Ofsted inspection	.83	.25	.62
Importance of leadership	-.09	.83	.70
Confusion	.26	.74	.74
Eigenvalues	1.69	1.14	
Percentage variance before rotation	42.17	28.38	
Percentage variance after rotation	37.85	32.70	

Note: Only factors loading above .26 were interpreted

A principal component analysis with orthogonal rotation (Varimax) was conducted on the four item stress questionnaire. Two components have eigenvalues above the Kaiser criterion of 1 and in total these explained 70.55% of the variance amongst the items. Table 1 shows the factor loading after rotation and the main results of the analysis before and after rotation.

Table 1 clearly indicates a dyad between 'Loss of Harmony' and 'Reaction and Responses to the Ofsted inspection' and a second dyad between 'Importance of Leadership' and 'Confusion'. Component one may represent job stress; and component two role ambiguity. These two new components were retained for testing for internal consistency with Cronbach's alpha (CA).

Internal Consistency Stress

CA was conducted on both the two new components: job stress; and role ambiguity. The results can be found in Table 2 below.

Table 2: A table to show Cronbach's alpha on variables: role stress; and job ambiguity

Variable	Number of Items in Variable	Cronbach's Alpha	95% Confidence Interval for Alpha	
			Lower	Upper
Job Stress	2	.65	.47	.77
Role Ambiguity	2	.43	.13	.62

Acceptable value of alpha are between .70 and .95 (Nunnally & Bernstein, 1994; Bland & Altham, 1997; DeVellis , 2003). Table 2 shows that both measures fall below these alpha values. However, the low value of alpha could be due to the small number of items within each measure. Although the original test for stress contained more items, factor analysis revealed that it measured a broader construct. Therefore, for this study, internal consistency has been sacrificed in favour of better construct validity.

Construct Validity Coping Skills

Initially FA was conducted on coping skills by using the Kaiser stopping criterion of all factors with eigenvalues greater than 1. However, this revealed no meaningful structure, which may be a result of the different types of coping skills within the measure. Therefore, the criteria for the FA were changed so that only 1 factor would be extracted. The analysis therefore relies on the investigators judgement (Reville, 2014). The results can be seen in the table below.

Table 3: *Principal Component Analysis for Fourteen Item Coping Skills Questionnaire (N=90)*

	Component 1	Component 2
Active Coping	.06	.00
Planning	.29	.09
Positive Reframing	.52	.27
Acceptance	.63	.39
Humour	.51	.25
Religion	.10	.01
Emotional Support	.57	.32
Instrumental Support	.71	.50
Self – Distraction	.32	.10
Denial	-.24	.06
Venting	-.12	.02
Substance Use	-.43	.19
Behavioural Disengagement	-.39	.15
Self – Blame	-.38	.15
Eigenvalue	2.50	
Percentage variance without rotation	17.81	

A principal Component analysis was conducted on the fourteen item coping questionnaire. The one component in total explained 17.81% of the variance. Although this appears low, factor analysis revealed that copings skills could be divided into coping skills which appear positive and those which are perceived as less useful. In addition, the single item measures with low loadings (for example active coping, planning) are coherent with others within the positive or negative poles respectively. Coping skills were therefore divided into two categories: positive coping skills; and negative coping skills. These were then carried forward as two separate measures for further analysis. The positive coping skills and negative coping skills can be found in the table below.

Table 4: A table to show the positive and negative coping skills

<u>Positive Coping Skills</u>	<u>Negative Coping Skills</u>
<ul style="list-style-type: none"> • Active Coping • Planning • Positive Reframing • Acceptance • Humour • Religion • Emotional Support • Instrumental Support • Self – Distraction 	<ul style="list-style-type: none"> • Denial • Venting • Substance Use • Behavioural Disengagement • Self - Blame

Internal Consistency Coping Skills

CA conducted for the positive and negative coping skills can be found below in Table 5.

Table 5: Cronbach's Alpha (Internal Consistency) for Variables related to Positive Coping Skills and Negative Coping Skills

Variable	Number of Items in Variable	Cronbach's Alpha	95% Confidence Interval for Alpha	
			Lower	Upper
Positive Coping Skills	9	.60	.46	.72
Negative Coping Skills	5	.59	.43	.71

Table 5 shows both values of CA to be below the criterion range of .7 to .95. However, Peterson (1994) argues that values for CA between .5 and .95 are acceptable, which suggests that the measures in table 5 have some internal reliability. Adding more items to the measures would probably increase the internal consistency.

Descriptive statistics

Once it was established that the variable stress had two components - role stress and job ambiguity - and that coping skills could be separated into positive and negative coping skills, histograms were plotted to ensure that the new variables were normally distributed (Appendix 7). In addition, Kolmogorov- Smirnov was conducted to check for normality (Appendix 7). The mean and standard deviations for each variable were calculated. These results can be found in Table 6.

Table 6: Mean (M) and Standard Deviations (SD) of Job Stress, Role Ambiguity, Positive Coping Skills and Negative Coping Skills

Variable	N	M	Overall Mid-Point Measure	SD
Job Stress	90	11.19	10	4.06
Role Ambiguity	90	7.47	10	3.57
Positive Coping Skills	89	51.72	45	9.25
Negative Coping Skills	89	22.47	25	6.78
Job Satisfaction	90	5.83	5	2.26

Note: The numbers (N) within the positive coping skills scale and negative coping skills scale changed due to respondents not answering all questions within the scale.

The overall mid-point of each measure helps with interpreting the mean scores for each variable. For job stress, the mean indicates that the majority of teachers find the Ofsted inspection stressful. However, the mean for role ambiguity shows that on average teachers understand the role of their job and also feel supported during the Ofsted inspection. With regards to coping skills, table 6 displays that on average teachers use positive coping skills more than negative coping skills. Furthermore, teachers have scored job satisfaction just above the mid-point demonstrating that overall teachers are neither particularly dissatisfied nor particularly happy with their job.

Correlations

Pearson's correlation was performed to explore any linear relationships between the scales. The results can be found in Table 7.

Table 7: Pearson Correlation Matrix on Variables: Job stress; Job Ambiguity; Positive Coping Skills; Negative Coping Skills; and Job Satisfaction (N =90)

	Job Satisfaction	Positive Coping Skills	Negative Coping Skills	Job Stress	Role Ambiguity
Job Satisfaction		.34**	-.11	-.29**	-.46**
Positive Coping Skills			.01		-.28**
Negative Coping Skills					.31**
Job Stress		-.18	.10		.18
Role Ambiguity					

*Note: ** Correlation is significant at $p < .001$ (2 – tailed)*

Scatter graphs have been produced to show the overall linear relationships between variables (Appendix 8).

Table 7 shows that job satisfaction and positive coping skills are positively related; job satisfaction is negatively correlated with job stress and role ambiguity. Negative coping skills are directly related to role ambiguity, but positive coping skills are inversely related to it.

However, Cohen's (1988) standardized indexes indicate that the effect sizes are not large. The negative correlation between job stress and job satisfaction shows a small-to-medium effect of $-.29$. When this correlation is squared, to discover the coefficient of determination, it shows that job stress accounted for only 8.41% of the variance of job satisfaction. The positive correlation between positive coping skills and job satisfaction has a medium effect of $.34$, and accounted for 11.56% of the variance in job satisfaction. The strongest relationship was between job satisfaction and role ambiguity with a medium effect of $.46$, showing that these variables have 21.16% of their variance in common. Although these variables

associate with job satisfaction, the coefficients of determination reveals their associations are of different strength.

Finally, table 7 shows that role ambiguity correlates positively with negative coping skills and negatively with positive coping skills. Thus, as role ambiguity increases, more negative coping skills are used, whereas, when teachers have less role ambiguity, positive coping skills are used. Cohen's index reveals that the positive correlation between role ambiguity and negative coping skills has a medium effect size of $-.31$ which accounts for only 9.61% of the variation in role ambiguity. Furthermore, the negative correlation between role ambiguity and positive coping skills has a small effect, $-.28$, so these variables only have 7.85% of their variance in common. Consequently, more than 90% of the variance in role ambiguity must be accounted for by other variables.

Multiple Regression: Job Satisfaction

Although the original focus of this research project was the stress of the Ofsted inspection, the correlations have shown that the variable job satisfaction has an association with role stress, job ambiguity, and positive coping skills. Therefore, in order to see if these variables have more effect on job satisfaction in combination, regression analysis was carried out. The results can be found in table 10. (As there was no significant correlation between negative coping skills and job satisfaction, a regression analysis was not carried out for this measure).

Multiple regression was conducted with $N=88$ people, as not all primary school teachers answered every question. Also, one case was removed as it was believed to strongly affect the regression outcome as assessed by Mahalanobis distance (>15). Because the number of people used for this analysis is different, the mean, standard deviation, and correlations have been recalculated again for this smaller group, and can be found below in table 8 and 9.

Table 8: Mean (M) and Standard Deviations (SD) of Job Stress, Role Ambiguity, Positive Coping Skills and Job Satisfaction (N=88)

Variable	N	M	Overall Mid-Point Measure	SD
Job Stress	88	11.27	10	3.98
Role Ambiguity	88	7.41	10	3.58
Positive Coping Skills	88	52.05	45	8.77
Job Satisfaction	88	5.82	5	2.26

Table 9: Pearson Correlation Matrix on Variables: Job Stress; Job Ambiguity; Positive Coping Skills; and Job Satisfaction (N =88)

	Job Satisfaction	Positive Coping Skills	Job Stress	Role Ambiguity
Job Satisfaction		.42**	-.26**	-.47**
Positive Coping Skills			-.28	-.29
Job Stress	.29			
Role Ambiguity			.19	

Note: ** Correlation is significant at $p < .00$, (one-tailed)

Table 10: Summary of Regression Analysis for predicting Job Satisfaction (N = 88)

Variable	B	β	t	Sig. (p)	R ²	Adj. R ²
Constant (intercept)	1.70				.32	.29
Positive Coping Skills	.03	.28	2.90	.005		
Job Stress	.05	-.11	-1.19	.24		
Role Ambiguity	.06	-.37	-3.85	.000		

The regression model for the prediction of job satisfaction is shown in Table 20. The overall model was significant $F(3,84) = 12.95$, $p < .001$.

The adjusted R^2 of .29 shows that 29% of the variance in job satisfaction is accounted for by positive coping skills, role ambiguity, and job stress. Therefore, these variables are better predictors of job satisfaction in combination than individually. Furthermore, the Cohen's (1988) standardized effect sizes show this to be a small-to-medium effect.

However, table 10 also indicates that role ambiguity and positive coping skills are statistically significant predictors of job satisfaction in the combined equation. This is also demonstrated in table 9 which shows that positive coping skills correlates positively with job satisfaction ($r=.42$) whilst role ambiguity correlates negatively with job satisfaction ($r=-.47$).

As table 10 revealed that job stress is not a significant predictor of job satisfaction ($p=.24$) another regression analysis was conducted for job satisfaction with the variables: role ambiguity; and positive coping skills. The results can be found below in table 11:

Table 11: Summary of Regression Analysis for predicting Job Satisfaction (N = 88)

Variable	B	β	t	Sig. (p)	R^2	Adj. R^2
Constant (intercept)	1.47				.31	.29
Positive Coping Skills	.02	.31	3.28	.002		
Role Ambiguity	.06	-.38	-4.00	.000		

The regression model for the prediction of job satisfaction is shown in table 11. The overall model was significant $F(2, 85) = 18.63, p < .001$. Furthermore, adjusted R^2 shows that 29% of the variance in job satisfaction is due to positive coping skills and job ambiguity. Cohen's (1988) effect size indicates that these two variables are small-to-medium predictors of job satisfaction amongst primary school teachers. Nevertheless, these two variables could be used in the future to predict job satisfaction for primary school teachers. It should be noted, for both these regression models, that the multiple regression may be underpowered due to the small sample size ($N = 88$).

Multiple Regression: Role Ambiguity

The correlations in table 7 revealed that job ambiguity was associated, both positively and negatively, with positive coping skills, negative coping skills and job satisfaction. A multiple regression was therefore calculated to examine these relationships further, and the results can be found in table 14. (Job stress was not included as it did not correlate significantly with role ambiguity).

N was lower ($N = 86$) for this multiple regression as not all individuals answered every question. Also, two cases were removed as it was believed they strongly affected the regression outcome as assessed by Mahalanobis distance (>15). Therefore as the number of people used for this analysis is again different, the mean, standard deviation and correlations have been conducted again and the results can be found below in table 12 and 13.

Table 12: Mean (M) and Standard Deviations (SD) of Role Ambiguity, Positive Coping Skills, Negative Coping Skills and Job Satisfaction (N=86)

Variable	N	M	Overall Mid-Point Measure	SD
Role Ambiguity	86	7.49	10	3.57
Positive Coping Skills	86	51.69	45	8.29
Negative Coping Skills	86	22.06	25	6.35
Job Satisfaction	86	5.78	5	2.26

Table 13: Pearson Correlation Matrix on Variables: Role Ambiguity; Positive Coping Skills; and Negative Coping Skills (N =86)

	Role Ambiguity	Positive Coping Skills	Negative Coping Skills	Job Satisfaction
Role Ambiguity		-.25**	.39**	-.45**
Positive Coping Skills			.11	.39**
Negative Coping Skills				.19
Job Satisfaction				

*Note: ** Correlation is significant at $p < .00$, (one-tailed)*

Table 14: Summary of Regression Analysis for predicting Role Ambiguity (N = 86)

Variable	B	β	t	Sig. (p)	R ²	Adj. R ²
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Constant (intercept)	2.51				.30	.28
Positive Coping Skills	.04	-.07	-.66	.51		
Negative Coping Skills	.05	.31	-3.29	.001		
Job Satisfaction	.16	-.37	-3.64	.000		

The regression model for the prediction of role ambiguity is shown in table 14. The overall model was significant, $F(3, 82) = 11.84$, $p < .001$. Adjusted R^2 shows that positive coping skills, negative coping skills and job satisfaction account for 28% of the variance in the variable job ambiguity, therefore, only having a small-to-medium effect. Adjusted R^2 indicates that these three variables have a greater effect on role ambiguity in combination than when individually.

Table 14 shows that the positive coping skills alone are not a significant predictor of job ambiguity ($p = .063$), so multiple regression was conducted to see whether job satisfaction and negative coping skills together were better predictors of job ambiguity. Descriptive statistics and correlations were conducted as $N = 87$ (Appendix 9). The results can be found in table 15.

Table 15: Summary of Regression Analysis for Predicting Role Ambiguity (N = 87)

Variable	B	β	t	Sig. (p)	R^2	Adj. R^2
Constant (intercept)	1.59				.31	.29
Negative Coping Skills	.05	.32	3.46	.001		
Job Satisfaction	.15	-.40	-4.27	.000		

The regression model for the prediction of role ambiguity is shown in table 15. The overall model was significant, $F(2, 84) = 18.73$, $p < .001$. Adjusted R^2 shows that negative coping skills and job satisfaction account for 29% of the variance in role ambiguity, and therefore, have only a small-to-medium effect. Adjusted R^2 indicates that these two variables are better predictors of role ambiguity in

combination than when used individually. However it should be noted that the small sample size (N=86/87) means that the regression analysis is underpowered.

Discussion

The purpose of this study was to investigate stress, coping strategies and job satisfaction of primary school teachers during the Ofsted inspection. It was hypothesised that there would be: a positive correlation between stress and coping strategies (H1); a negative correlation between stress and job satisfaction (H2); and a positive correlation between coping strategies and stress (H3). The study also aimed to investigate whether job satisfaction and coping skills were better predictors of stress when used in combination (H4).

Factor analysis (FA) revealed that stress and coping strategies were much broader concepts than originally assumed. This analysis divided stress into two dyads: role ambiguity (lack of leadership and uncertainty of role); and job stress (workload and conflict). The use of these factors is supported by research, which has identified both as factors relating to teacher's occupational stress (Van Der Doef & Maes, 2002; Kaila & Polychronopoulous, 2009; Koustelios, Theodorakis, & Goulimaris, 2004).

Additionally, FA divided coping strategies into positive and negative coping skills. Although coping strategies are seen as compensatory factors that help maintain health (Billings and Moos, 1984), investigators have discovered that some coping strategies are significantly correlated with high levels of burnout. This implies that the use of certain coping strategies (for example, behavioural disengagement) could be detrimental to an individual's well-being (Chan & Hui, 1995; Griffith, et al., 1994).

As stress and coping strategies were both divided into new components, H1 was only partially supported by this research. The results showed a positive correlation between negative coping skills and role ambiguity, and a negative correlation between positive coping skills and role ambiguity. However, Job stress did not correlate with either group of coping strategies. Although there is little empirical evidence on the association between psychological coping and stress during the Ofsted inspection (Griffith et al., 1999), a study by Woods and Jeffrey (1998) found that teachers deployed four main types of strategies: distancing themselves from the inspection; engaging with the process; staging a performance; and strategically applying measures during inspection; in other words, they used both positive and negative coping. Furthermore, Pisanto et al's (2003) study discovered that job control and support levels contributed to teachers' well-being, which is in line with H1, as the less ambiguity there was within a teacher's role the more were positive coping skills used. Some researchers have suggested that people who accept responsibility are more prone to stress; however there is little evidence to support this (Austin et al., 2005).

In accordance with H2, the relationship between stress (role ambiguity and job stress) and job satisfaction was investigated. This study and the literature supported H2: a negative correlation between both stressors and job satisfaction (Ouston et al., 1996; Ferguson et al., 2000; Chapman, 2002). Although studies

have found heavy work load to be the most intense source of stress (Williams and Gersch, 2004), this study discovered that role ambiguity had a stronger negative relationship with job satisfaction. Some researchers suggest that continual changes in policy and Ofsted practice and procedures create or exacerbate teachers' anxieties and doubts, and increase their feelings of inadequacy, which lowers job satisfaction (Jeffrey & Woods, 1996; Perryman, 2007; Brown et al., 2002).

The current study supported H3, in so far as there was a positive correlation between job satisfaction and positive coping skills. Unfortunately, the majority of research on coping skills and job satisfaction of primary school teachers during the Ofsted inspection has failed to explore this association. However, a positive correlation between job satisfaction and coping skills has been found in other professions such as nursing, which is similar to teaching, in that it delivers a service to families in every social group (Golbasi, 2008; Chung-Kuang et al., 2009). (The causal direction of this relationship remains unclear).

However, H3 was only partially supported, as negative coping skills did not correlate with job satisfaction. Perhaps the absence of a correlation in the present study suggests why the literature does not indicate a relationship between coping skills and job satisfaction during the Ofsted inspection. However, this seems unlikely as such a relationship has been found in other professions.

This study confirms previous research in showing that coping strategies and job satisfaction have an association with stress. Role ambiguity – a form of stress - correlated significantly with coping strategies and job satisfaction; but positive coping skills were found not to be significant predictors of role ambiguity.

Therefore, the researcher wanted to examine whether these variables have an effect, in combination (H4). Negative coping skills and job satisfaction were found to be significant predictors of role ambiguity, $F(2,84) = 18.73$ $p < .001$ thus partially supporting H4. Even though each variable correlates with stress, the results show that in combination these variables are better predictors of stress in Ofsted inspections. Again, the causal direction of the association is not revealed by a regression analysis.

A surprising finding was the pattern of association that job satisfaction had with job stress, role ambiguity and positive coping skills. Job stress was not a significant predictor of job satisfaction, but role ambiguity and positive coping skills were found to be significant predictors of job satisfaction, $F(2, 85) = 18.63$, $p < .001$. Of course, the causal relationships are not made clear in the present analysis, but future studies can use this association to predict job satisfaction of primary school teachers during the Ofsted inspection.

Future Research

It is widely believed that Ofsted inspections cause primary school teachers a lot of stress, but there appears to be a dearth of recent literature. Furthermore, Ofsted continually change its policies and strategies for inspection; indeed, Ofsted's chief inspector has recently proposed yet another change, with more frequent but light-touch visits (OFSTED, 2014). Hence, there is clearly a need for more recent research to be conducted on this topic in order to elucidate the effects on teachers'

morale and performance. In addition, it is clear from this study that future research might usefully seek to clarify the relationship that positive and negative coping strategies have with job satisfaction both during the Ofsted inspection and in teaching generally. While the profession continues to experience high rates of teacher loss, it is vital to understand both how coping skills can increase job satisfaction and how they might assist teachers during Ofsted inspections.

Limitations

A limitation of this study was sample size. Not only would a larger sample size have given this study more statistical power but it would also have provided findings of greater generality.

Using a SIM for job satisfaction is common in research; however, investigators believe it to have limitations. Chaplain (1995) states that by using a SIM teacher's overall sense of satisfaction with the various facets within their work are hidden. Nevertheless, for this study, teacher job satisfaction was being examined generally, and the use of a SIM reduced the demands on data collection and minimised respondent refusal (Bergkvist & Rossiter, 2007).

A final limitation of this study is the use of self-report questionnaires. Although these are widely used in empirical studies, researchers believe that this method risks poor validity and reliability if participants answer questions dishonestly (Lance & Vanderberg, 2009). The use of semi structured interviews with teachers about how the Ofsted inspection affects them might have helped reduced this risk, or at least allowed them to be assessed.

References

- Austin, V., Shah, S., & Muncer, S. (2005) Teacher Stress and Coping Strategies used to Reduce Stress. *Occupational Therapy International*, 12(2), pp. 6380.
- Baxter , J. A. (2013) Professional Inspector or Inspecting Professional? Teachers as Inspectors in a New Regulatory Regime for Education in England. *Cambridge Journal of Education*, 4(43), pp. 467-485.
- Bergkvist, L., & Rossiter, J. R. (2007) The Predictive Validity of Multiple-Item Versus Single-Item Measure of the same Constructs. *Journal of Marketing Research*, 44(12), pp. 175-184.
- Billings , A. G., & Moos, R. H. (1984) Coping, Stress and Social Resources among Adults with Unipolar Depression. *Journal of Personality and Social Psychology*, 46(1), 877-891.
- Bland , J., & Altham , D. (1997) Statistic Notes. *British Medical Journal*, 314(572).
- Brimblecombe, N., Ormston, M., & Shaw, M. (1995) Teachers Perceptions of School Experience: A Stressful Experience. *Cambridge Journal of Education*, 25(1), pp. 53-61.
- Brown, M., Ralph, S., & Brember, I. (2002) Change-Linked Work Related Stress in British Teachers. *Research in Education*, 67, pp. 1-12.
- Brown, M., Rutherford, D., & Boyle, B. (2000) Leadership for School Improvement: The Role of the Head of Department in UK Secondary Schools. *School Effectiveness and School Improvement*, 11(2), pp. 237-258.
- Carver, C. S. (1997) You Want to Measure Coping but your Protocol's Too Long: Consider The Brief COPE. *International Journal of Behavioural Medicine*, 4(1), pp. 92-100.
- Chan, K. W. (1999) *Preservice Teachers development: Focus of Concerns and Perceived Factors of Successful Teaching*. Hong Kong: ICTED.
- Chan, D. W., & Hui, E. K. (1995) Burnout and Coping among Chinese Secondary School Teachers in Hong Kong. *British Journal of Educational Psychology*, 28, pp. 105 - 118.
- Chaplain, R. P. (2001) Stress and Job Satisfaction among Primary Head Teachers: A Question of Balance. *Educational Management Administration and Leadership*, 29, pp. 197 - 206
- Chaplain, R. (1995) Stress and Job satisfaction: A Study of English Primary School Teachers. *Educational Psychology*, 15(4), pp. 473-489.

- Chapman, C. (2002) OFSTED and School Improvement: Teachers' perception of the Inspection Process in Schools Facing Challenging Circumstances. *School Leadership and Management: Formerly School Organisation*, 22(3), pp. 257-272.
- Chapman, C. (2001) Changing Classrooms Through Inspection. *School Leadership and Management: Formerly School Organisation*, 21(1), pp. 59-73.
- Cohen, J. (1988) *Statistical Power Analysis for the Behavioural Sciences*. 2nd ed., Hillsdale NJ: Lawrence Erlbaum.
- Coolican, H. (2009) *Research Methods and Statistics in Psychology*. 5th ed., New York: Routledge.
- Cullingford, C. (1999) *An Inspector Calls. Ofsted and its effect on school standards*. London: Kogan Page Limited.
- D'Agostino, R. B., & Belanger, A. (1990) A Suggestion for Using Powerfil and Informative Tests of Normality. *The American Statistician*, 44(4), pp. 316-321.
- Day, C. (2012) *The Routledge International Handbook of Teachers and School Development*. Oxon: Routledge.
- De Wolf, I. F., & Janssens, J. G. (2007) Effects and Side Effects of Inspections and Accountability in Education: An Overview of Empirical Studies. *Oxford Review of Education*, 33(3), pp. 379-396.
- DeVellis, R. (2003) *Scale Development: Theory and Applications*. CA: Thousand Oaks.
- Education, D. f. (2012) *The Impact of Pupil Behaviour and Wellbeing on Educational Outcomes*, Department for Education. Retrieved 10 20, 2013, from www.education.gov.uk/publications/standard/publicationDetail/page1/DFE-RB253
- Elkins, t., & Elliotts, J. (2004) Competition and Control: The Impact of Government Regulation on Teaching and Learning in English Schools. *Research Papers in Education*, 19(1), pp. 15-30.
- Ferguson, N., Earley, P., Fidler, P., & Ouston, J. (2000) *Improving Schools & Inspection: The self-inspecting school*. 1st ed., London: Paul Chapman.
- Fidler, B., Earley, P., Ouston, J., & Davies, J. (1998) Teacher Gradings and OFSTED Inspections: Help or Hindrance as a Management Tool. *School Leadership and Management: Formerly School Organisation*, 18(2), pp. 257-270.
- Fitz-Gibbon, G. (1998) *Can OFSTED Stay Afloat? Managing Schools Today*.
- Gersch, I. S. (1996) Teachers and People too. *Support for Learning*, 11(4), pp. 165-169.

- Gray, G., & Gardner, J. (1999) The impact of School Inspection. *Oxford Review of Education*, 25(4), pp. 455-468.
- Green , S. B. (1991) How Many Subjects does it take to do a Regression Analysis. *Multivariate Behavioural Research*, 26, pp. 499-510.
- Green , S. B., & Ross, M. E. (1996) A Theory-Based Measure of Coping Strategies used by Teachers: The Problems in Teaching Scale. *Teaching and Teacher Education*, 12(30), pp. 315-325.
- Golbasi, Z., Kelleci, M., & Dogan, S. (2008) Relationships between Coping Strategies, Individual Characteristics and Job Satisfaction in a sample of Hospital Nurses: Cross-Sectional Questionnaire Survey. *International Journal of Nursing Studies*, 45, pp. 1800-1806.
- Griffith, J., Steptoe, A., & Cropley, M. (1994) An Investigation of Coping Strategies associated with Job Stress in Teachers. *British Journal of Educational Psychology*, 69, pp. 517-531.
- Jeffrey, B., & Woods, P. (1998) *Testing Teachers: The Impact of School Inspections on Primary Teachers* . London : Falmer .
- Jeffrey , B., & Woods, P. (1996) Feeling Deprofessionalised: The Social construction of Emotions during an Ofsted Inspection. *Cambridge Journal of Education*, 26(3), pp. 325-343.
- Johnson, M. (1999) *Failing School, Failing City: The Reality of Inner City Education*. Charlbury: Jon Carpenter.
- Kaila, M., & Polychronopoulous, M. (2009) Teacher's Buronout, Depression, Role Ambiguity and Conflict. *Social Psychology of Education*, 12,pp. 295-314.
- Kalleberg, A. L., & Losocco, K. A. (1983) Aging, Values and Rewards: Explaining Age Differences in Job Satisfaction. *Americcan Sociological Review*, 48, pp. 78-90.
- King, N. & Horrocks, C., (2010) *Interviews in Qualitative Research*. 1st ed., London: SAGE.
- Kokkinos, C. M. (2007) Job Stressors, Personality and Burnout in Primary School Teachers. *British Journal of Educational Psychology*, 77,pp. 229-243.
- Koustelios, A., Theodorakis, N., & Goulimaris, D. (2004) Role Ambiguity, Role conflict and Job satisfaction among Physical Eduaction Teachers in Greece. *International Journal of Educational Management*, 18(2), 87-92.
- Kyriacou, C., & Sutcliffe, J. (1979) Teacher Stress and Satisfaction. *Educational Research*, 21(2), pp. 89-96.
- Lance, C. E., & Vanderberg, R. J. (2009) *Statistical and Methodological Myths and Urban Legends: Doctrine, Verity and Fable in the Organisational and Social Sciences*. Hove : Routledge .

- Lazarus, R. S., & Folkman, S. (1984) *Stress, Appraisal and Coping*. New York : Springer.
- McGowan, J., Gardner, D., & Fletcher, R. (2006) Positive and Negative Affective Outcomes of Occupational Stress. *New Zealand Journal of Psychology*, 35(2).
- Mikolajczak, M., Menil, C., & Luminet, O. (2007) Explaining the Protective Effect of Trait Emotional Intelligence Regarding Occupational Stress: Exploration of Emotional Labour Processes. *Journal of Research in Personality*, 41(5), pp. 1107-1117.
- Mujtaba, T., & Reiss, M. (2013) Factors That Lead to Positive or Negative Stress in Secondary School Teachers of Mathematics and Science. *Oxford Review of Education*, 39(5), pp. 627-648.
- Nagy, M. S. (2002) Using a Single Item measure facet Job Satisfaction. *Journal of Occupational and Organizational psychology*, 75(1), pp. 77 - 86.
- Nias, J. (1996) Thinking about Feeling: The emotions of Teaching. *Cambridge Journal of Education*, 26(3), pp. 293-306.
- Nunnally, J., & Bernstein, L. (1994) *Psychometric Theory*. New York: McGraw - Hill Higher INC.
- OFSTED, (2012) *The Evaluation Schedule for the Inspection of Maintained Schools and Academies*, London: OFSTED.
- OFSTED. (2014, 21 March) *Ofsted Chief Unveils new Blueprint for Inspecting Good and Outstanding Schools*. Retrieved March 26, 2014, from OFSTED: www.ofsted.gov.uk/new/ofsted-chief-unveils-new-blueprint-for-inspecting-good-and-outstanding-schools-0
- Ouston, J., Earley, P., & Fidler, B. (1996) *OFSTED Inspections: The Early Experience*. London: David Fulton.
- Perryman, J. (2006) Panoptic Performativity and School Inspection Regimes: Disciplinary Mechanisms and Life Under Special Measures. *Journal of Educational Policy*, 21(2), pp. 147-161.
- Perryman, J. (2007) Inspection and Emotion. *Cambridge Journal of Education*, 37(2), pp. 173-190.
- Peterson, R. A. (1994) A Meta-Analysis of Cronbach's Coefficients Alpha. *Journal of Consumer Research*, 21, pp. 381-391.
- Plowright, D. (2007) Self-Evaluation and OFSTED Inspection: Developing an Integrative Model of School Improvement . *Educational Management Administration and Leadership*, 3, pp. 373-393.
- Pisanti, R., Garliardi, M. P., Razzino, S., & Bertini, M. (2003) Occupational Stress and Wellness among Italian Secondary School Teachers. *Psychology and Health*, 65, pp. 523-536.

- Razali, N. M., & Wah, Y. B. (2011) Power Comparisons of Shapiro-Wilk, Kolmogoriv-Smirnov, Lilliefors and Anderson-Darling Tests. *Journal of Statistical Modelling and Analytics*, 2(1), pp. 21-33.
- Reville, W. (2014) *An Overview of the Psych Package*. Northwestern University .
- Robins, R. W., Hendin, H. M. & Trzesruewski, K. H., (2001) Measuring Gloabl Self-Esteem: Constuct Validaton of a Single Item Measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychological Bulletin*, 27, pp. 151-161.
- Rosenthal, L. (2004) Do School Inspections Improve School Quality? OFSTED Inspections and School Examination Results in UK. *Economic of Education Review*, 23(2), pp. 143-151.
- Schutz, R. W. & Long, B. C., (1988) Confirmatory Factor Analysis, Validation and Revision of a Teacher Stress Inventory. *Educational and Psychological Measurement*, 48(2), pp. 497-511.
- Step toe, A. (1991) Psychological Coping, Individual Differences and Phsyiological Stress Responses. In C. L. Copper, & R. Payne, *Personality, Individual Differences and Stress* (pp. 45 - 62). Chichester: John Wiley.
- Tavakol, M., & Dennick, R. (2011) Making Sense of Cronbach's Alpha . *International Journal of Medical Education*, pp. 53 - 55.
- Van Der Doef, M., & Maes, S. (2002) Teacher-Specific Quality of Work Versus Generla Quality of Work Assessment: A Comparison of their Validity Regarding Burnout, (Psycho)Somatic Well-being and Job Satisfaction. *Anxiety, Stress & Coping: An Internaltional Journal*, 15(4), pp. 327-344.
- VanMaele, D., & VanHoutte, M. (2012) The Role of Teacher and Faculty Trust in Forming Teachers' Job Satisfaction: Do Years of Experience Make a Difference? *Teaching and Teacher Education*(28), pp. 879-889.
- Wade , D. T. (1992) *Measurment in Neurological Rehabilitation*. 1st ed., Oxford: Oxford University Press.
- Williams , M., & Gersch, I. (2004) Teaching in Mainstream and Special Schools: Are the Stressors Similar or Different. *Journal of Research in Special Educational Needs*, 31(3), pp. 157-162.
- Williams, M., & Gersch, L. (2007) Teaching in Mainstream and Special Schools: Is the Stress Similar or Different. *Oxford Review of Education*, 33(3).
- Woods , S. A., & Hampson, S. E. (2005) Measuring The Big Five with Single Iems Using Bipolar Measures . *European Journal of Personality*, 19, pp. 373-390.
- Yang, X., GE, C., Hu, B., & Chi, T. (2009) Relationship between Quality of Life and Occupational Stress among Teachers. *Public Health*, 123(11), pp. 750-755.

