Employee Health and Well-being in the NHS: A Trust Level Analysis

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Executive Summary

This report discusses employee Health, Well-being and Presenteeism (working while feeling unwell) in the NHS. The three concepts are highly interrelated and relevant in the context of organisational performance.

The primary aim of the reported analysis and discussion is the investigation of links between NHS employee Health, Well-being and Presenteeism and performance. This report goes beyond individual employees' reactions into analysing the effect employee Health, Well-being and Presenteeism has on organisational level outcomes - that is on trust performance. In order to achieve this, measures of employee Health, Well-being and Presenteeism from the NHS Staff Survey were averaged for each trust. These were then assessed in terms of their relationships to objective trust performance measures that were collected from several sources other than the NHS Staff Survey. It must be noted that the outcomes were measured before or for the same period as employee engagement. It is therefore not possible to infer that employee engagement is the direct cause of these outcomes, but investigating the nature and the strength of these relationships is still of much interest in evaluating the importance of employee engagement in the NHS.

Employee Health and Well-being and Presenteeism were investigated in relation to a number of trust performance measures; particularly Quality of Services, Quality of Financial Management, Absenteeism, Patient Satisfaction, and Patient Mortality.

Results indicate that several of the Health and Well-being and Presenteeism indicators associated with poorer Quality of Services, poorer Quality of Financial Management, higher Absenteeism, and lower Patient Satisfaction. Patient Mortality was not found to be significantly associated with any of the indicators.

It is difficult to draw definite conclusions from the findings as causality cannot be confidently assumed. Nevertheless, the strong associations between employee Health and Well-being and Presenteeism and trust performance contribute to the argument that organisational practices which benefit employee Health and Well-being and discourage Presenteeism might benefit in terms of performance.

1. Background

1.1. Employee Health and Well-being has been repeatedly recognised as a crucial factor in organisational functioning and performance, resulting in several studies focusing on both predictors as well as outcomes. Manning *et al.* (1996) have empirically demonstrated that the cost of employee health care is dependent on the employee's amount of work-related stress and strain[1]. Similar findings are reported in another study in healthcare settings that investigated the effect of job satisfaction and work load on health, as well as the effect of health on performance, on a sample of nurses[2]. The same argument is further reinforced in a recent study by Ilies *et al.* (2010) which established that there is a link between workload and emotional distress, physical health and daily well-being[3].

1.2. The importance of employee Health and Well-being has not been neglected in the NHS. A comprehensive review by Dr Steven Boorman in 2009 has highlighted the importance of staff Health and Well-being in terms of several outcomes, such as the capacity of staff to deliver improvements in patient care as well as levels of absenteeism due to physical and mental health[4]. Several case studies are presented in the review which demonstrate that some positive organisational interventions can help improve the Health and Well-being of trust employees and yield positive organisational outcomes, such as a decrease in health-related absences.

1.3. Presenteeism is a relatively newly introduced concept that is closely related to Health and Well-being of employees, as it refers to attendance of work when one is feeling unwell. According to Johns (2009), *'presenteeism is showing up to work when one is ill and the decrement in productivity that follows from this practice. On a continuum, presenteeism stands between full work engagement and absenteeism'*[5]. Apart from the links of Presenteeism to Health and Well-being, it has been proposed that preseneteeism has an impact on both on-the-job productivity as well as costs[6]. Aronsson (2000) has studied

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[1] Manning, M.R., Jackson, C.N., & Fusilier, M.R. (1996). *Occupational stress, social support and the costs of health care.* Academy of Management Journal, 39, pp. 738-750
[2] Fox, M.L., Dwyer, D.J., & Ganster, D.C. (1993). *Effects of stressful job demands and control on physiological and attitudinal outcomes in hospital setting.* Academy of Management Journal, 36, pp. 289-318
[3] Ilies, R., Dimotakis, N., & de Pater, I.E. (2010). *Psychological and physiological reactions to high workloads: Implications for well-being.* Personnel Psychology, 63, 407-436
[4] Boorman, S. (2009). *NHS health and well-being – Final report.* Department of Health, Crown Copyright, UK
[5] Johns, G. (2009). *Absenteeism or presenteeism? Attendance dynamics and employee well-being.* In S. Cartwright, & C.L. Cooper (Eds.), The Oxford Handbook of Organizational Well-being (pp. 7-30). Oxford: Oxford University Press
[6] Schultz, A.B., Chen, C.Y., & Edington, A.A. (2009). *The cost and impact of health conditions on presenteeism to employers: A review of the literature.* Pharmacoeconomics, 27, pp. 365-378

Presenteeism on a large scale across several professions in Sweden, and found that the highest presenteeism is in the care and welfare, and education sectors[7].

1.4. The purpose of the present report is to use data from the 2009 NHS Staff Survey to explore the role of Health and Well-being, as well as Presenteeism and other health related constructs in the NHS at the trust level. That is, to investigate their relationship to several important performance indicators, which are Quality of Services, Quality of Financial Management, Absenteeism, Patient Satisfaction, and Hospital Standardised Mortality.

1.5. In the context of the 2009 NHS Staff survey, Health and Well-being is described as the extent to which physical health and emotional problems have impacted on employees' abilities to perform their work or other daily activities. Presenteeism measures whether employees felt pressure from either their manager or colleagues to attend work when they had not felt well enough to perform their duties. The remaining three indicators were individual questions from the survey closely related to health and well-being. The following individual questions from the staff survey will be considered as well in the analysis: 'Overall, how would you rate your health during the past four weeks?' (Poor Health in last 4 weeks); 'My immediate manager takes a positive interest in my health and well-being' (Agree/ Disagree) (Supervisor Interest in Health); 'In the last three months have you ever come to work despite not feeling well enough to perform your duties?' (Reversed - Not working while feeling unwell).

1.6. As the performance data was collected for the same period or earlier to the Health and Well-being data , we are not able to make inferences about causality of the relationships under study. Further research will be conducted when performance data for later periods becomes available – this will allow for the assessment of the extent to which Health, Well-Being and Presenteeism directly result in higher trust performance.

2. Methods

2.1. Data from the NHS Staff Survey 2009 on employee Health and Well-being and Presenteeism were used to investigate the suggested relationships.

2.2. Two composite indicators were used as measures of General Health and Well-being in the analysis; one depicting Health and Well-being (KF20) and the other Presenteeism (KF30). A further three questions from the survey were analysed in the same manner:

[7] Arosson, G. (2009). *Sick but yet at work: An empirical study of sickness presenteeism.* Journal of Epidemiology and Community Health, 54, pp. 502-509

'Overall, how would you rate your health during the past four weeks?'; 'My immediate manager takes a positive interest in my health and well-being' (Agree/ Disagree); 'In the last three months have you ever come to work despite not feeling well enough to perform your duties?'

2.3. The aim of the analysis was to link the scores on the above variables to the trusts performance outcomes. For this purpose we aggregated the General Health and Well-Being data at the trust level, that is, we computed the mean score on the five indicators for each trust, and investigated their relationships with indicators of trust performance.

2.4. The trust performance indicators that were used in the analysis are: Quality of Services (Annual Health Check 2008-2009), Quality of Financial Management (Annual Health Check 2008-2009), Absenteeism (July-September 2009), Patient Satisfaction (2007-2008), and Hospital Standardised Mortality (2008-2009). It must be noted that all the outcome data were collected before of at the same period as the Health and Well-being data.

2.5. The statistical technique used for the analysis of the above relationships is Multiple Regression Analysis.

2.6. Several trust characteristics were included in the analysis as control variables. By accounting for the effect these have on outcomes, we are able to have a better indication of the effect of the Health and Well-being indicators on the outcomes. The control variables for the present analysis were: trust location (London Vs other), trust size, trust type and teaching status (acute teaching, acute non-teaching, PCT teaching, PCT non-teaching, mental health teaching, mental health non-teaching and ambulance).

2.7. These control variables were entered in the form of 'dummy' variables, since they are categorical in nature. For example, each trust type and teaching status were considered as a single variable. In the case of the 'acute teaching' category a high score (1) indicates that a trust belongs to this category, while a low score (0) indicates that the trust belongs in one of the other categories. A positive association of this variable to an outcome for instance would indicate that trusts in this category tend to score higher on the outcome than trusts in other categories.

3. Quality of Services as an outcome of Employee Health and Well-being

3.1. Both indicators of Health and Well-being, as well as Presenteeism are significantly related to the Quality of Services provided by the trust (Table 3). The negative direction of the relationship indicates that those trusts where employees feel that health related issues have impacted on their ability to perform in their job and those where employees report high presenteism tend to be scored lower on the Quality of Services they provide.

3.2. This finding is further reinforced by the remaining two significant relationships that suggest trusts where employees have had poor health in the last 4 weeks deliver poorer Quality of Services, while in trusts where employees report that their supervisor shows interest in their health the Quality of Services is better.

3.3. These relationships appear to be somewhat linear in the case of Health and Well-being and Health in the last 4 weeks only (see Graphs 3A and 3C).

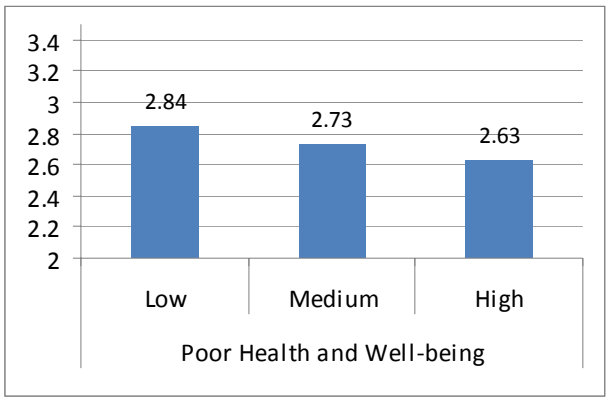
Table 3: Engagement and its constructs as predictors of Quality of Services

	Quality of Services *Unstandardised Beta Coefficient*				
	(R^2=.133)	(R^2=.142)	(R^2=.124)	(R^2=.162)	(R^2=.122)
Location (London)	-.131	-.129	-.213*	-.177*	-.137
Trust Size	-.000	-000	-.000	-000	-.000
Acute/ Teaching	.042	.341	.010	.402*	.107
Acute/ Non-Teaching	-.124	.217	-.149	.243	-.051
PCT/ Teaching	-.631**	-.599**	-.626**	-.537**	-.595**
PCT/ Non-Teaching	-.520***	-.480***	-.487***	-.461***	-.474***
Ambulance	-1.121***	-.565*	-1.167***	.196	-1.001***
Mental Health/ Teaching	.312	.331	.290	.339	.314
Poor Health and Well-being	**-1.918****				
Presenteeism		**-3.908*****			
Poor Health in last 4 weeks			**-.856***		
Supervisor interest in health				**1.803*****	
Not working while feeling unwell					1.930

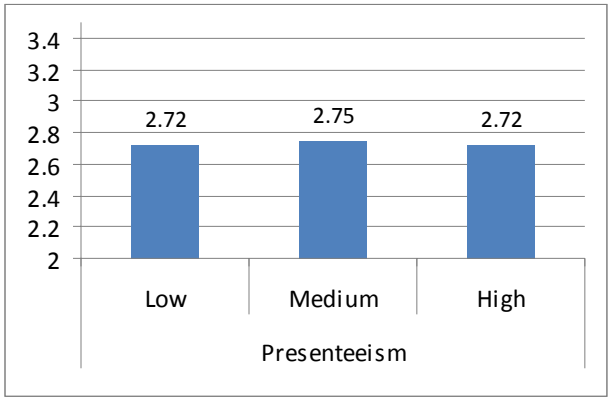
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Quality of Services (2008-2009) Mean Score

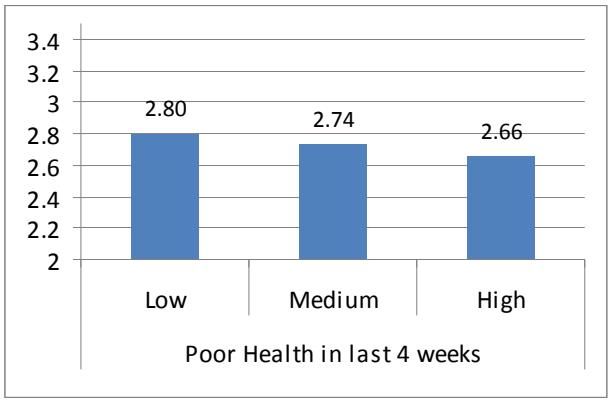
Graph 3A



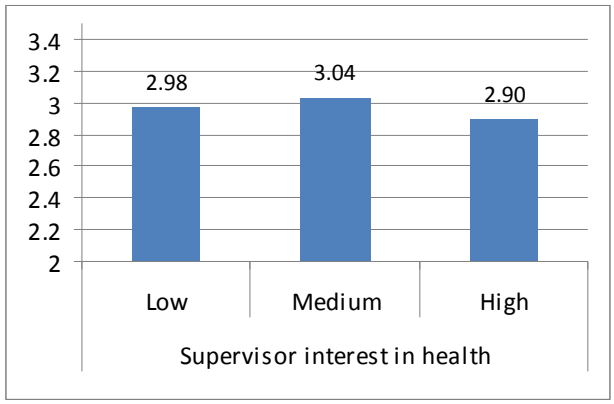
Graph 3B



Graph 3C



Graph 3D



4. Quality of Financial Management as an outcome of Employee Health and Well being

4.1. As shown on Table 4, trusts financial performance in terms of their Quality of Financial Management is negatively associated with presenteeism. This means that trusts will high levels of presenteeism tend to have poorer financial performance as compared to those with low presenteeism.

4.2. Trusts where supervisors show interest in the employees' health tend to perform better in financial terms than trusts where supervisors do not demonstrate interest in the employees' health.

4.3. The nature of these relationships is graphically depicted on Graphs 4A and 4B.

Table 4: Engagement and its constructs as predictors of the Quality of Financial Management

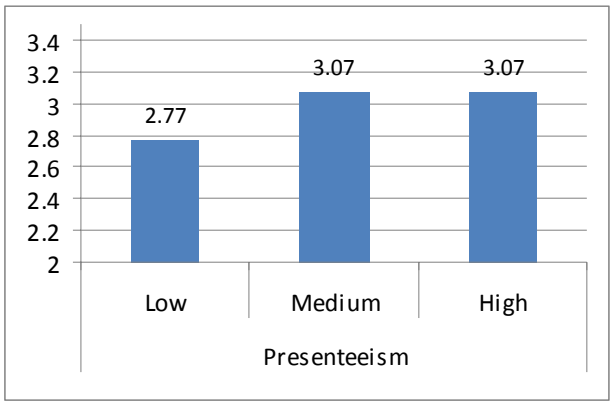
	Quality of Financial Management *Unstandardised Beta Coefficient*				
	(R^2=.257)	(R^2=.264)	(R^2=.252)	(R^2=.291)	(R^2=.250)
Location (London)	-.158	-.154	-.200*	-.191*	-.172
Trust Size	-.000	.000	-.000	.000	-.000
Acute/ Teaching	-.195	.007	-.200	.115	-.155
Acute/ Non-Teaching	-.288*	-.058	-.286*	.024	-.240*
PCT/ Teaching	-.817***	-.796***	-.811***	-.736***	-.801***
PCT/ Non-Teaching	-.986***	-.964***	-.963***	-.951***	-.954***
Ambulance	-.594**	-.213	-.603*	.599	-.540*
Mental Health/ Teaching	.306	.325	.288	.349	.284
Poor Health and Well-being	-1.148				
Presenteeism		**-2.732****			
Poor Health in last 4 meeks			-.384		
Supervisor interest for health				**1.667*****	

Not working while feeling unwell					.367

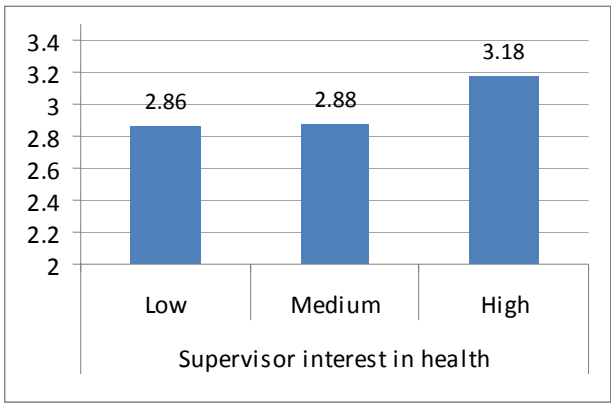
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Quality of Financial Management (2008-2009) Mean Score

Graph 4A



Graph 4B



5. Absenteeism as an outcome of Health and Well-being

5.1. As shown in Table 5, high levels of Absenteeism are associated with high levels of presenteeism in trusts.

5.2. Trusts where employees report that their supervisors show an interest in their health tend to have lower absenteeism. Trust where employees do not work when they are feeling unwell, which is in a sense the opposite of presenteeism, tend to have lower overall Absenteeism.

5.3. Graphs 5A-5C indicate that these relationships are rather linear in nature.

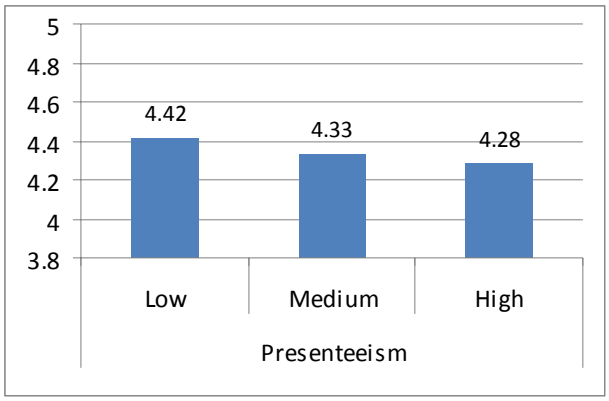
Table 5: Engagement and its constructs as predictors of Absenteeism

	Absenteeism *Unstandardised Beta Coefficient*				
	(R^2=.394)	(R^2=.401)	(R^2=.396)	(R^2=.415)	(R^2=.419)
Location (London)	-.780***	-.790***	-.739***	-.762***	-.822***
Trust Size	.000	.000	.000	.000	.000
Acute/ Teaching	-1.114***	-1.274***	-1.068***	-1.354***	-1.125***
Acute/ Non-Teaching	-1.232***	-1.406***	-1.185***	-1.466***	-1.227***
PCT/ Teaching	-.681***	-.694***	-.676***	-.742***	-.711***
PCT/ Non-Teaching	-.944***	-.949***	-.943***	-.958***	-.927***
Ambulance	.514*	.224	.575*	-.426	.420
Mental Health/ Teaching	-.589	-.621	-.595	-.639	-.687
Poor Health and Well-being	.474				
Presenteeism		**2.303***			
Poor Health in last 4 meeks			.520		
Supervisor interest for health				**-1.359*****	
Not working while feeling unwell					**-3.886*****

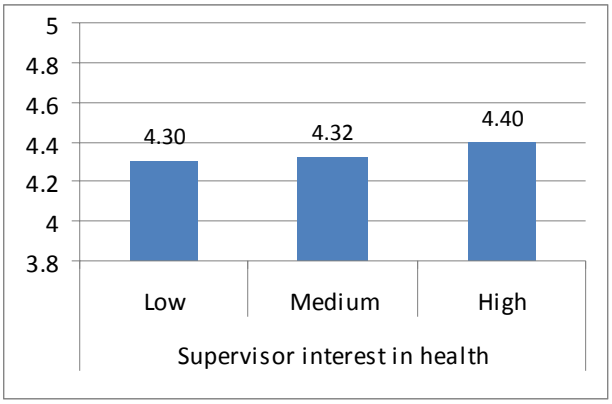
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Absenteeism (July-September 2009) Mean Score

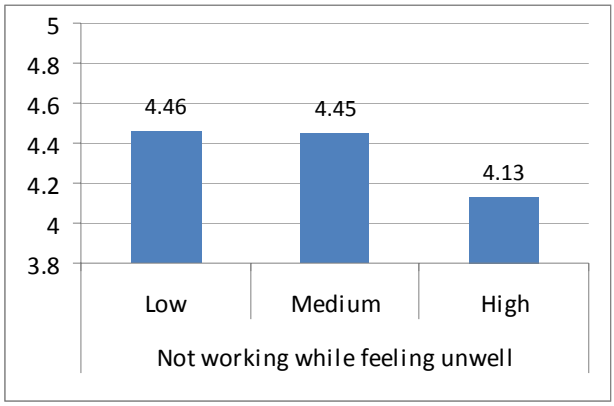
Graph 5A



Graph 5B



Graph 5C



6. Patient Mortality as an outcome of Employee Health and Well-being

6.1. Patient mortality does not appear to be related to any of the Health and Well-being and Presenteeism indicators.

Table 6: Engagement and its constructs as predictors of Patient Mortality

	Patient Mortality *Unstandardised Beta Coefficient*				
	(R^2=.149)	(R^2=.136)	(R^2=.127)	(R^2=.138)	(R^2=.139)
Location (London)	-6.009*	-6.973**	-7.741**	-6.959**	-6.604**
Trust Size	.000	-.001	.000	-.001	.000
Acute/ Teaching	-4.070	-4.187*	-4.273*	-4.274*	-4.134
Poor Health and Well-being	-24.524				
Presenteeism		7.419			
Poor Health in last 4 meeks			-16.111		
Supervisor interest for health				-4.956	
Not working while feeling unwell					19.088

*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

7. Patient Satisfaction as an outcome of Employee Health and Well-being

7.1. As indicated in Table 7, Health and Well-being is significantly associated to trust level Patient Satisfaction. Particularly, trusts where employees report that they were not able to perform their tasks due to poor health tend to have lower overall Patient Satisfaction levels.

7.2. This relationship is demonstrated graphically on Graph 7A.

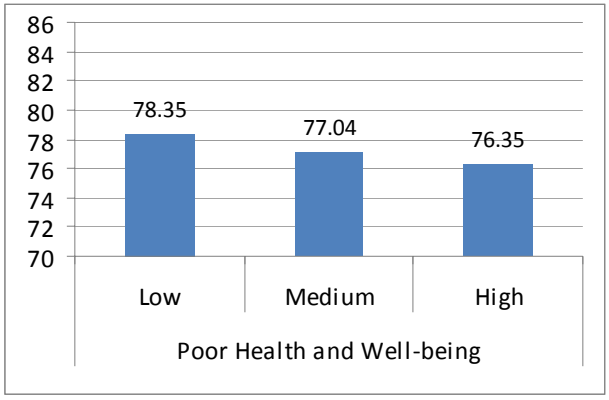
Table 7: Engagement and its constructs as predictors of Patient Satisfaction

	Patient Satisfaction *Unstandardised Beta Coefficient*				
	(R^2=.574)	(R^2=.562)	(R^2=.567)	(R^2=.563)	(R^2=.560)
Location (London)	-3.303***	-3.778***	-4.032***	-3.785***	-3.682***
Trust Size	.000**	.000**	.000**	.000	.000
Acute/ Teaching	1.031	.970	.988	1.036**	1.002**
Specialist Status	12.997***	12.679***	12.928***	12.676***	12.835***
Poor Health and Well-being	**-11.849***				
Presenteeism		-8.261			
Poor Health in last 4 meeks			-5.183		
Supervisor interest for health				2.874	
Not working while feeling unwell					3.358

*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Patient Satisfaction (2007-2008) Mean Score

Graph 7A



8. Conclusion

8.1. The report has presented the associations between employee Health and Well-being, and Presenteeism with several objective trust performance measures.

8.2. Significant relationships were found for many of the investigated associations, indicating that a certain link exists between engagement and performance in the NHS. The only outcome that was not significantly associated to any of the indicators is Patient Mortality.

8.3. Intuitively, it can be argued that employee Health and Well-being, and Presenteeism are contributory factors to certain performance outcomes, though this was not possible to either confirm or disconfirm in the present report. Further analysis of longitudinal data will allow for such inferences in the future.

8.4. Overall, the report highlights that employee Health and Well-being is salient in the NHS, since it is associated in many ways to trust performance. Therefore, trusts can potentially benefit from the introduction of programmes that benefit employees' Health and Well-being, and by actively and explicitly discouraging Presenteeism.