

The background features a decorative graphic consisting of three overlapping blue circles of varying sizes, arranged in a diagonal line from the top right towards the bottom right. Two thin, light blue lines intersect at the top left, forming a large triangular shape that frames the central text area.

Outcomes of Staff Engagement in the NHS: A trust level analysis

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Contents

Executive Summary.....2

1. Background3

2. Methods4

3. Quality of Services as an outcome of Employee Engagement6

4. Quality of Financial Management as an outcome of Employee Engagement8

5. Absenteeism as an outcome of Employee Engagement10

6. Patient Mortality as an outcome of Employee Engagement12

7. Patient Satisfaction as an outcome of Employee Engagement14

8. Conclusion.....16

Executive Summary

Several studies have highlighted the importance of Employee Engagement and the effect it has on individuals' attitudes and reactions in the workplace¹. This has been identified by the governing bodies of the NHS, and the NHS Constitution explicitly states the intention of empowering and engaging staff to become involved in both key decisions that affect them and in decisions regarding potential improvements to the service they provide².

This report investigates and analyses the links between NHS employee engagement and performance. Essentially, the main objective is to go beyond individual employees' reactions into analysing the effect employee engagement has on organisational level outcomes - that is on trust performance. In order to achieve this, measures of employee engagement 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 trust performance measures were taken during the same period or earlier than the staff survey that measured 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.

The primary measure of engagement in the study is an Overall Engagement index, which is a composite score of three facets of engagement, namely Staff Advocacy, Motivation and Involvement. These were investigated in relation to a number of trust performance measures; particularly the Annual Health Check ratings of Quality of Services and Quality of Financial Management, Absenteeism, Patient Satisfaction, and Patient Mortality.

Results indicate that all of the engagement facets are related to the Quality of Services provided by the trusts, with higher engagement being associated to better Quality of Services. Similarly, high average trust scores on all of the engagement constructs are associated to lower Absenteeism. Further, higher Overall Engagement, Staff Advocacy and Involvement are associated with better Quality of Financial Management by the trusts as well as higher Patient Satisfaction. Finally, trusts where staff report high Advocacy tend to have lower Patient Mortality rates than trusts where Staff Advocacy is low.

It is difficult to draw definite conclusions from the findings as causality cannot be confidently assumed. Nevertheless, the strong associations between staff engagement and trust performance highlight the salience of engagement in the context of the NHS and indicate that policies and practices need to be directed towards encouraging and stimulating engagement.

¹ Robertson-Smith, G. & Markwick, C. (2009). *Employee Engagement: A review of current thinking*. Institute for employment studies, Brighton, UK

² Department of Health (2010). *The NHS Constitution: NHS belongs to us all*. Crown Copyright, UK

1. Background

- 1.1. The report '*Staff Engagement in the NHS: A Multilevel Analysis*'³ looked at the causes and outcomes of employee engagement for NHS staff overall. The findings detailed in the report show significant relationships between Employee Engagement and the individual level predictors that were considered (appraisal, team working, satisfaction with the quality of one's work etc). Additionally, positive relationships were found with possible outcomes of Engagement, such as work-related stress, general health and well-being, and attending work while feeling unwell (presenteeism).
- 1.2. The objective of this report is to investigate the effect of Engagement on trusts' performance, rather than individual employee outcomes. Explicitly linking Employee Engagement in trusts to objective performance indicators is of critical importance, as it contributes towards the argument that investing resources and effort to encourage and facilitate engagement is of direct interest to the NHS and the overall population of NHS service users.
- 1.3. The availability of engagement data from the 2009 Staff Survey and of a wide range of trust performance data from several sources provides us with a unique opportunity to establish a link between engagement and organisational outcomes. Past research has indicated that such links exist and should not be neglected⁴, though causality is still to be established.
- 1.4. In precise terms, the present report aims to investigate the link between Overall Engagement, Staff Advocacy, Motivation and Involvement in trusts to the following trust performance indicators: Quality of Services, Quality of Financial Management, Absenteeism, Patient Satisfaction, and Hospital Standardised Mortality. *Staff Advocacy* refers to the extent to which NHS employees are willing to recommend their trust as a place to work or receive treatment. *Motivation* is an indicator of the extent to which employees look forward to going to work, and are enthusiastic and absorbed in their jobs. Finally, *Involvement* is a measure of employees' ability to contribute toward improvements at work.
- 1.5. Since this performance data was collected for the same period or earlier to the survey data collection of Engagement measures we are not able to make inferences about causality of the relationships under study. Further research will be conducted when

³ Admasachew & Dawson (2010). *Staff Engagement in the NHS: A Multilevel Analysis*, Aston University

⁴ Corporate Leadership Council (2004). *Driving Performance and Retention Through Employee Engagement*, Lloyd Morgan, Corporate Executive Board

performance data for later periods becomes available – this will allow for the assessment of the extent to which Employee Engagement directly results in higher trust performance.

2. Methods

- 2.1 Data from the NHS Staff Survey 2009 on Employee Engagement was used to investigate the suggested relationships.
- 2.2 Four Engagement indicators were used in the analysis. These were Overall Engagement, which was computed as a composite score of three sub-dimensions of engagement, namely Staff Advocacy (Key Finding 36 in the NHS staff survey reports), Motivation (KF37) and Involvement (KF33).
- 2.3 The aim of the analysis was to link the engagement scores of the employees of each trust to the trusts' performance outcomes. For this purpose we aggregated the Engagement data at the trust level, that is, we computed the mean score on the four Engagement indicators for each trust, and investigated the relationships of these 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 Rate (2008-2009). It must be noted that all the outcome data were collected before or at the same period as the Employee Engagement data.
- 2.5 The statistical technique used for the analysis of the above relationships is multiple regression analysis. Several trust characteristics were included in the analysis as control variables, as these are often related to outcomes. By taking into account the effect these have on the outcomes, we are able to have a better indication of the effect of the Engagement indicators on the outcomes. The control variables for the present analysis were: trust location (London vs. other), trust size, and trust type and teaching status (acute teaching, acute non-teaching, PCT teaching, PCT non-teaching, mental health teaching, mental health non-teaching and ambulance).
- 2.6 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 Engagement

- 3.1. As demonstrated on Table 2, Overall Engagement, as well as its component parts, is significantly associated with the Quality of Services provided by the NHS trusts. The positive direction of the relationships indicates that the higher Employee Engagement is within a trust, the more likely this trust is to provide services that are perceived to be of high quality by the patients
- 3.2. Graphs 2A-2D show the level of service quality for trusts in three categories; those with a low, medium and high mean score on each engagement indicator. As is evident from the graphs, the relationships of Overall Engagement and its constructs with Quality of services are linear, apart from the Involvement constructs. This could be due to the fact that the control variables were not taken into account in the graphical depiction of the associations; that is, the variation in the Quality of Services which is accounted for by the location, size and type of the trusts is not accounted for in the graphs from the effect of the engagement scores.

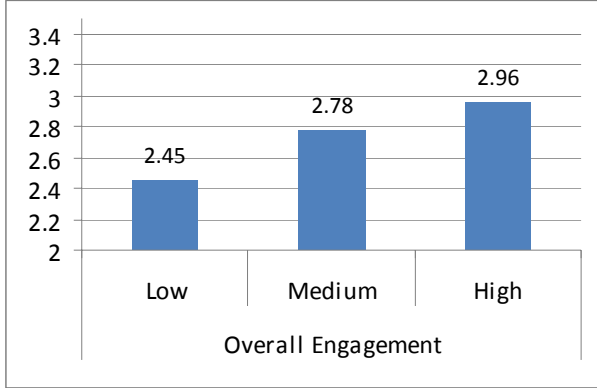
Table 2: Engagement and its constructs as predictors of Quality of Services

	Quality of Services Unstandardised Beta Coefficient			
	(R ² =.233)	(R ² =.255)	(R ² =.124)	(R ² =.179)
Location (London)	-.293**	-.247**	-.196	-.294**
Trust Size	.000	.000	.000	.000
Acute/ Teaching	-.034***	-.225	.104	.264
Acute/ Non-Teaching	-.116***	-.292*	-.056	.184
PCT/ Teaching	-.712	-.716***	-.650**	-.624**
PCT/ Non-Teaching	-.577	-.563***	-.498***	-.526***
Ambulance	-.056	-.554*	-.922***	.510
Mental Health/ Teaching	.340	.317	.288	.313
Overall Engagement	2.887***			
Staff Advocacy		1.607***		
Motivation			1.177*	
Involvement				2.497***

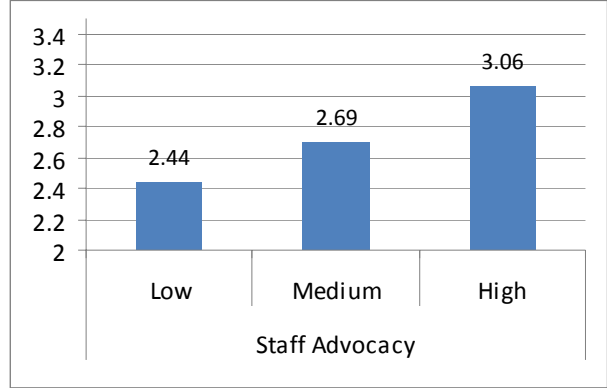
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Quality of Services (2008-2009) Mean Score

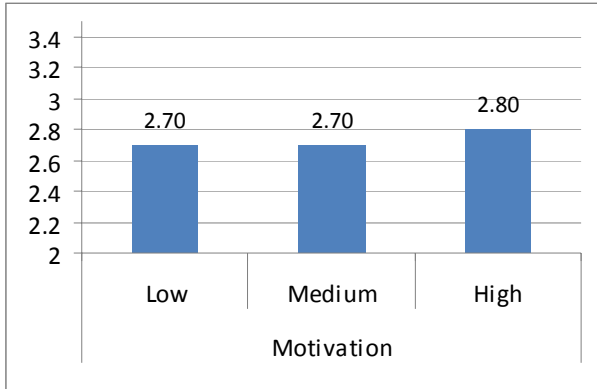
Graph 2A



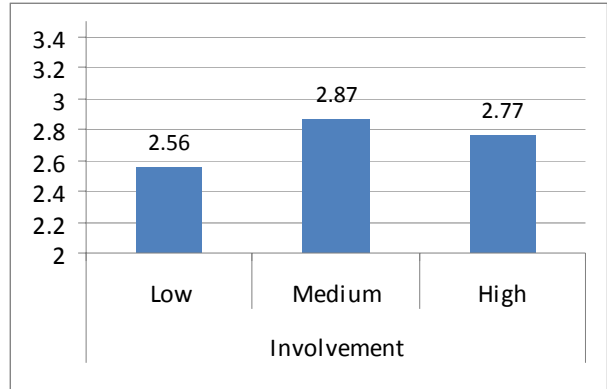
Graph 2B



Graph 2C



Graph 2D



4. Quality of Financial Management as an outcome of Employee Engagement

- 4.1. Table 3 shows the relationships of engagement and its constructs with the trusts' Quality of Financial Management score. The relationships are positive for all predictors, and are significant for the Overall Engagement, Staff Advocacy and Involvement variables. The positive direction of the relationships indicates that higher scores on these engagement constructs within a trust are associated with better financial performance, in terms of the trust's quality of financial management.
- 4.2. Graphs 3A-3C demonstrate the nature of the relationships of the three engagement indicators to the trusts' Quality of financial management for low, medium and high levels of engagement. The graph for Involvement does not follow the pattern suggested by the results of the analysis, again possibly due to the fact that the control variables are not taken into account in the graphical depiction of the relationships.

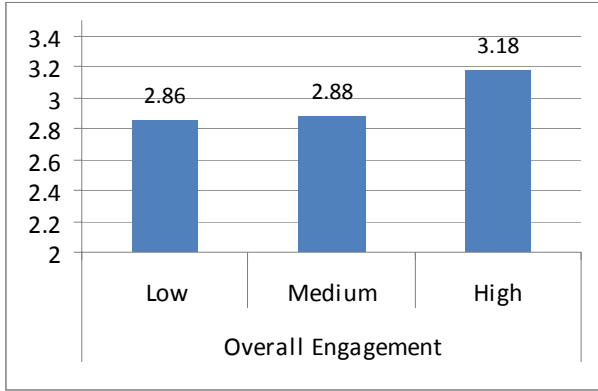
Table 3: Engagement and its constructs as predictors of the Quality of Financial Management

	Quality of Financial Management <i>Unstandardised Beta Coefficient</i>			
	(R ² =.384)	(R ² =.429)	(R ² =.255)	(R ² =.313)
Location (London)	-.318***	-.274**	-.200*	-.308**
Trust Size	.000	.000	.000	.000
Acute/ Teaching	-.308*	-.535***	-.159	-.002
Acute/ Non-Teaching	-.318**	-.524***	-.248*	-.016
PCT/ Teaching	-.913***	-.925***	-.830***	-.817***
PCT/ Non-Teaching	-1.075***	-1.066***	-.975***	-1.015***
Ambulance	.512*	.010	-.466*	.991**
Mental Health/ Teaching	.362	.341	.293	.328
Overall Engagement	3.096***			
Staff Advocacy		1.829***		
Motivation			.783	
Involvement				2.471***

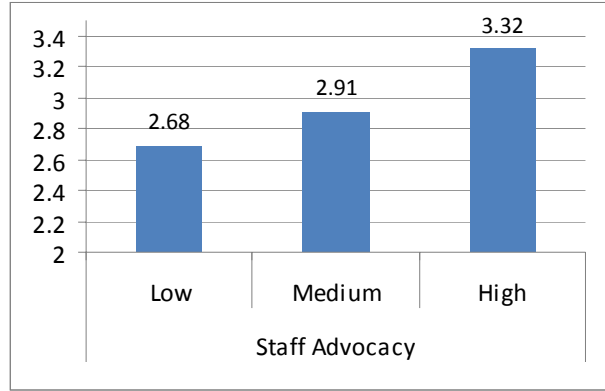
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Quality of Financial Management (2008-2009) Mean Score

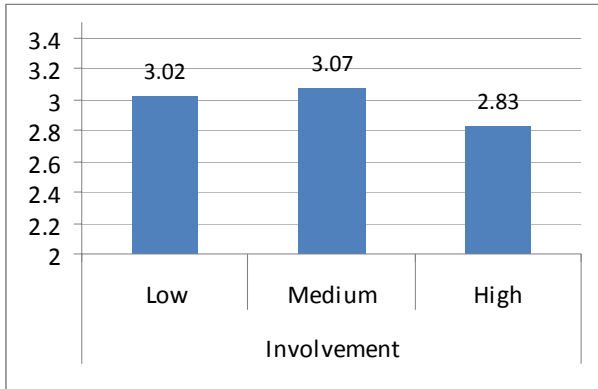
Graph 3A



Graph 3B



Graph 3C



5. Absenteeism as an outcome of Employee Engagement

- 5.1. The results presented in Table 4 indicate that all four engagement indicators are significantly and negatively associated to the trusts' level of Absenteeism. The negative direction of the relationship indicates that absenteeism tends to be lower in trusts where Employee Engagement is higher.
- 5.2. The nature of the relationship remains the same when the control variables are not taken into account, as shown by Graphs 4A-4D. For all engagement indicators, higher Employee Engagement is associated with lower absenteeism. This general tendency appears to be unrelated to trust location, size, type and teaching status.

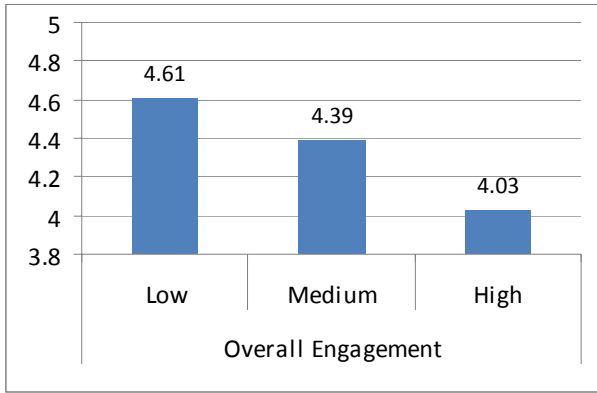
Table 4: Engagement and its constructs as predictors of Absenteeism

	Absenteeism <i>Unstandardised beta coefficient</i>			
	(R ² =.413)	(R ² =.401)	(R ² =.406)	(R ² =.430)
Location (London)	-.713***	-.750***	-.728***	-.660***
Trust Size	.000	.000	.000	.000
Acute/ Teaching	-1.072***	-1.043***	-1.140***	-1.257***
Acute/ Non-Teaching	-1.217***	-1.183***	-1.237***	-1.438***
PCT/ Teaching	-.639***	-.657***	-.634**	-.674***
PCT/ Non-Teaching	-.903***	-.930***	-.911***	-.901***
Ambulance	.061	.368	.367	-.800***
Mental Health/ Teaching	-.614	-.592	-.616	-.623
Overall Engagement	-1.333***			
Staff Advocacy		-.437*		
Motivation			-1.517**	
Involvement				-2.127***

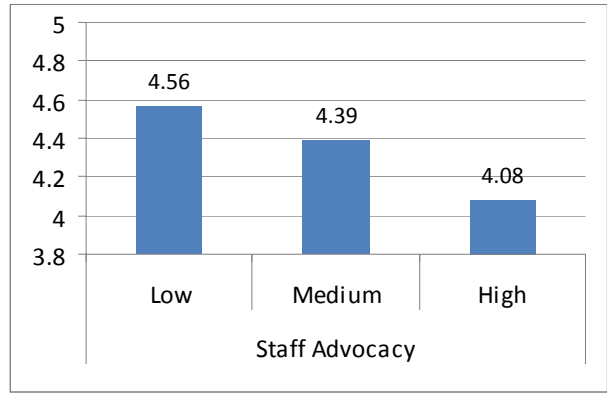
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Absenteeism (July-September 2009) Mean Score

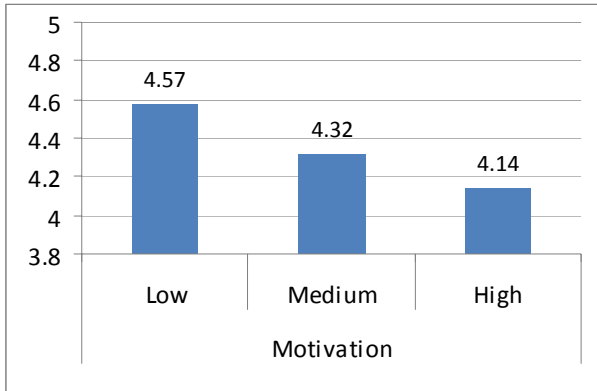
Graph 4A



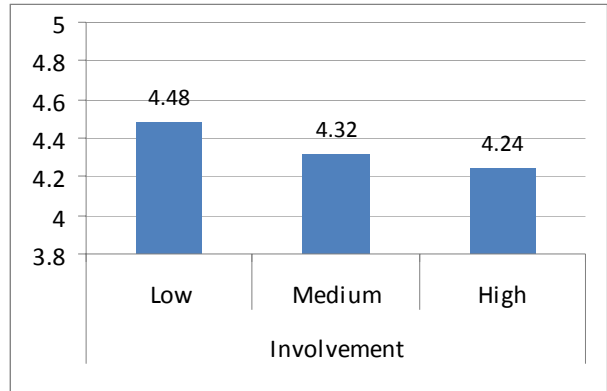
Graph 4B



Graph 4C



Graph 4D



6. Patient Mortality as an outcome of Employee Engagement

- 6.1. Our analysis indicates that Staff Advocacy is the engagement variable that significantly relates to Patient Mortality. The direction of the relationship is negative; that is, higher levels of Staff Advocacy reported by a trust's employees are associated with lower levels of patient mortality. This may be due to the fact that employees who are aware of poorer performance in their trust are less likely to advocate being treated there.
- 6.2. Though the relationship does not appear to be linear, as is evident on Graph 5A, it must be noted that trust location appears to be associated with Mortality rate, and this is not taken into account in the graphical representation of the relationship.

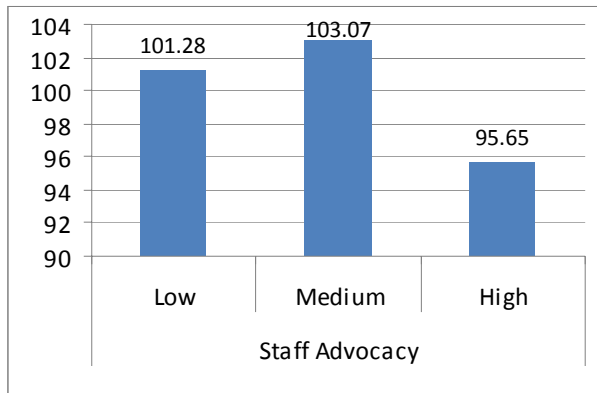
Table 5: Engagement and its constructs as predictors of Patient Mortality

	Patient Mortality Unstandardised Beta Coefficient			
	(R ² =.155)	(R ² =.165)	(R ² =.136)	(R ² =.148)
Location (London)	-6.349**	-6.588**	-7.036**	-6.136**
Trust Size	-.001	-.001	-.001	-.001
Acute/ Teaching	-3.883	-3.704	-4.190*	-3.755
Overall Engagement	-15.655			
Staff Advocacy		-9.921*		
Motivation			.984	
Involvement				-17.769

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

Patient Mortality Rate (2008-2009) Mean Score

Graph 5A



7. Patient Satisfaction as an outcome of Employee Engagement

- 7.1. Three of the engagement indicators are significantly related to Patient Satisfaction. As indicated on Table 6, these are Overall Engagement, Staff Advocacy and Involvement. The relationships are positive in all three cases, meaning that at the trust level higher Employee Engagement is associated with higher Patient Satisfaction.
- 7.2. The direction of the relationships for those three constructs is confirmed by the shape of the respective graphs (Graph 6A, 6B and 6C).

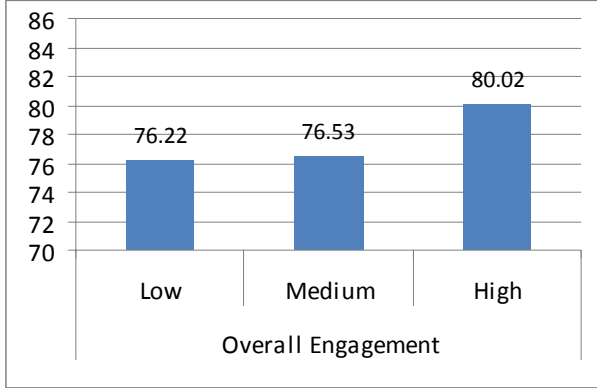
Table 6: Engagement and its constructs as predictors of Patient Satisfaction

	Satisfaction Unstandardised Beta Coefficient			
	(R ² =.594)	(R ² =.631)	(R ² =.566)	(R ² =.574)
Location (London)	-4.340***	-4.294***	-3.469***	-4.243***
Trust Size	.000*	.000**	.000*	.000**
Acute/ Teaching	.867	.743	.880	.798
Specialist Status	11.280***	9.915***	12.795***	12.074***
Overall Engagement	10.294***			
Staff Advocacy		7.570***		
Motivation			-6.044	
Involvement				8.870*

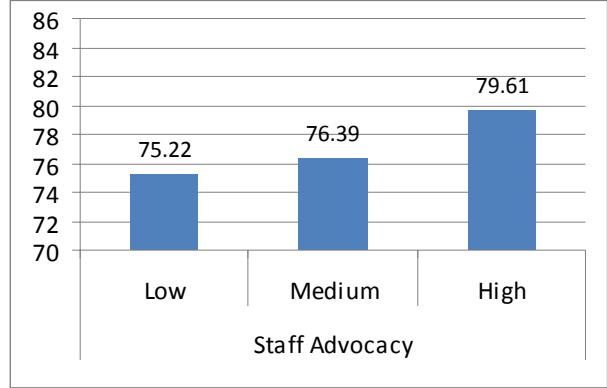
*0.01<p<0.05 ;**0.001<p<0.01;***p<0.001

Patient Satisfaction (2007-2008) Mean Score

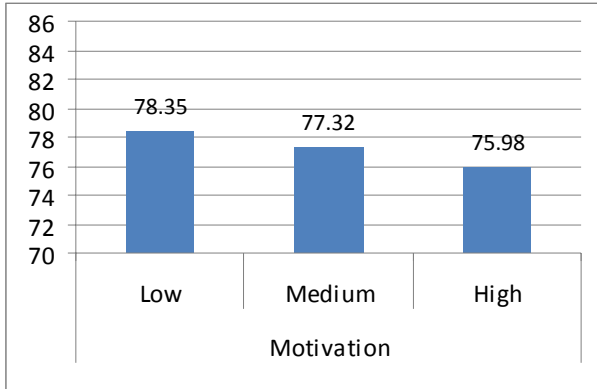
Graph 6A



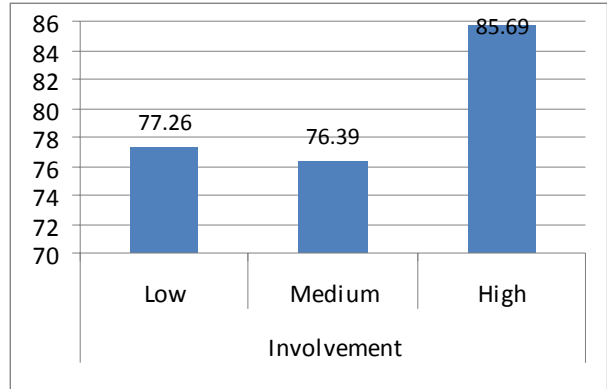
Graph 6B



Graph 6C



Graph 6D



8. Conclusion

- 8.1. The report has presented the associations between trusts' employee Overall Engagement, Staff Advocacy, Motivation and Involvement with several objective trust performance measures.
- 8.2. Significant relationships were found for the majority of the investigated associations, indicating that a certain link exists between engagement and performance in the NHS.
- 8.3. Intuitively, it can be argued that engagement is possibly one of the causes of 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. Conversely, in some cases it is quite possible that what is here considered as the outcome of engagement is indeed its predictor. Particularly, the association between Staff Advocacy and Patient Mortality could indicate that the staff who are aware of the Mortality rates of their trust, or have a general idea of the performance of the trust, are more likely to base their decision to advocate in favour or against their trust as an employer or a place for treatment on their perception of performance.
- 8.5. Overall, the report highlights that Employee Engagement is salient in the NHS, since it is associated in many ways to trust performance. Therefore, trusts where employee engagement is low could use these findings to motivate the implementation of policies and practices that can enhance Employee Engagement.