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**IMPACT OF LEADERSHIP STYLE AND
ORGANISATIONAL CULTURE ON THE
PERFORMANCE OF THE NATIONAL
HEALTH SERVICE (NHS) IN THE UNITED
KINGDOM (UK)**

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Abstract

This working paper examines the impact of organizational culture and leadership style on performance in the UK NHS. Fuelled by the publication of the Francis Report (2013), that states during 2005-2008 there were between 400-1,200 unnecessary deaths at a small general hospital in Staffordshire, UK. The major contributing factor being cited as the poor organizational culture. This study introduces moderating factors to evaluate their strength of impact upon culture and leadership style and ultimately organisational performance. A quantitative approach was used for this study and a questionnaire widely distributed, there were no exclusions to participants and all responses were anonymous.

SPSS v.21.0 was the data analysis tool and hypotheses were tested through Pearson correlation, one-way ANOVA, T-testing, and regression analysis to ascertain any significant relationships between the variables and moderating factors impacting organizational performance. Results from the study indicate a strong positive relationship between culture and performance in the UK NHS ($r=0.747$, $p<0.05$), a moderate positive relationship between transactional leadership and performance in the UK NHS ($r=0.542$, $p<0.05$). A strong positive relationship exists between transformational leadership and performance in the UK NHS ($r=0.803$, $p<0.05$). Results also demonstrate varying degrees of positive correlation between moderating factors that also suggest further research is required.

In summary, the findings from this study contribute to both academic and business theory as it stimulates discussions to help identifying areas for improvement that support improving organizational culture so that there is not a repeat of the events that led to the publication of the Francis Report.

Keywords: Healthcare, UK NHS, Performance, Culture, Transformational Leadership, Transactional Leadership, Organizational, Francis Report.

1.0 INTRODUCTION

The publication of the Mid Staffordshire UK NHS Foundation Trust Public Inquiry, in February 2013 (Francis Report, 2013) raised concerns surrounding unnecessary deaths at a small Staffordshire general hospital during 2005-2008. During this time between 400 and 1200 deaths were found to have occurred citing the main contributing factor as being a poor organizational culture.

As a result of the publication of such scandalous findings, the Kings Fund and the UK NHS Centre for Creative Leadership commissioned research into how to positively affect organizational culture change. The result was the creation of the Organizational Culture and Leadership Programme in 2015 (Kilbane et al., 2020).

Andaya and Abocejo (2019) describe a successful organization as a reflection of excellent leadership. Dum Dum et al. (2013) directly correlates leadership style to attitudes and behaviors and, in turn positively affecting culture.

The Chartered Management Institute in the UK (2003) define culture as “an organizations personality and character, made up of shared values, beliefs, and assumptions about how people should behave and interact, how decisions should be made, and work activities carried out.”

Understanding the culture of an organization improves engagement, retention of staff and associated costs and shows a positive relationship between culture and performance (Story, 2009).

Scott et al. (2003., p. 131) states that “meaningful improvements in the UK NHS require fundamental shifts in culture.”

The UK NHS demonstrate performance through a Minimum Data Set in a new Combined Performance Summary split into Urgent & Emergency Care, Planned Care, Cancer, and Mental Health Services (NHS England, 2022). This is how the UK NHS are performance managed across the different providers of NHS funded services.

1.1 Research problem

The objective of this study is to examine public organisations that deliver UK NHS services to establish whether there is a perceived problem with organizational culture and/or leadership styles that are preventing organizations for delivering performance improvements to deliver first class patient services.

The UK NHS Healthcare Leadership Model (HLM) is the current tool (as at 2024) used to define and develop future leaders. COVID-19 prevented a review of this model in 2023 and it is proposed that this model is no longer effective in today's climate and that it presents a gap in future development and progression in the UK NHS.

The most common leadership styles understood, although with a limited understanding in some areas, are transactional and transformational leadership. This paper will attempt to ascertain what impact these leadership styles, and organizational culture, have on performance in the UK NHS.

The researcher uses the definition of performance as proposed by Richards et al. (2009) “comprises the actual outputs or results of an organization as measured against its intended outputs (goals or objectives).” The gap in theory to practice is covered by the leadership that is currently in the system and this research will identify what style of leadership is best placed to improve culture and operational performance, and thereby patient outcomes.

Data was gathered and analysis undertaken to provide a statistical response to the following questions:

- Is there a significant relationship between an awareness of a transactional/transactional leadership style and performance in the UK NHS?
- Is there a significant relationship between an awareness of transformational leadership style and performance in the UK NHS?
- Is there a significant relationship between an awareness of organizational culture and performance in the UK NHS?
- Is there a significant difference in the perception of respondents towards transactional leadership in the UK NHS based on different demographics in the United Kingdom?
- Is there a significant difference in the perception of respondents towards transformational leadership in the UK NHS based on different demographics in the United Kingdom?
- Is there a significant difference in the perception of respondents towards organizational culture in the UK NHS based on different demographics in the United Kingdom?
- Is there a significant difference in the perception of respondents towards UK NHS performance based on different demographics in the United Kingdom?

The essential aim of the study is to determine the extent to which leadership style and organizational culture influences organizational performance in the UK NHS.

The specific objectives of the study are:

- To determine how a transactional leadership style might impact performance in the UK NHS.
- To determine how a transformational leadership style might impact performance in the UK NHS.
- To determine how organizational culture might impact performance in the UK NHS.

- To determine how certain demographic factors might impact transactional leadership within the UK NHS.
- To determine how certain demographic factors might impact transformational leadership within the UK NHS.
- To determine how certain demographic factors might impact organizational culture leadership within the UK NHS.
- To determine whether current UK NHS initiatives are supporting the development of effective leaders and changes in factors that can facilitate improvement in performance.

1.2 Research Methodology

This study was undertaken using a Quantitative methodology. A questionnaire was designed and used and as the research took place in a healthcare environment, which by the nature of the work involved can lend itself to be an emotional place to work, the use of a quantitative approach also ensured a detachment from emotions and any preconceived biases.

Healthcare studies widely use qualitative and quantitative approaches to research. Burns and Grove (2006) state that “qualitative...describe life experiences and give them meaning.”

They also go on to state that quantitative methods “are more formal, objective and systematic in which numerical data is used to obtain information about the world.” The chosen method will guide the study to best achieve the intended goals and objectives (Polit & Beck, 2008).

A cross-sectional study was undertaken to examine a point in time to analyse how the organizational culture and leadership style affects performance in the UK NHS.

This study uses clear, concise questioning that detracts from human feelings and emotions to provide little interpretation of the responses, ie. a positivist approach.

The overall approach to this study is shown in the table below.

Research Philosophy	Research Design	Research Strategy	Time Horizon	Research Population
Positivism	Quantitative using Survey Monkey	Case Study, Questionnaire	Cross Sectional Study	No employee exclusions. Sample size of >153.

Figure 1 – Research methodology (Source: Author, 2024)

For this study ethical agreement was approved from the relevant UK/University authorities and also from the UK NHS Health Research Authority and UK Medical Research Council. Approval was also granted from the SBS Swiss Business School, Zurich.

A confidence level of 95 percent was used during this study as it is considered to be the conventionally accepted boundary for being reasonably certain of outcomes and the universal benchmark for statistical significance (Chan, 2002).

For its ease of use and provision of reliable samples sizes ensuring confidence in results, the sample size was calculated using the Taro Yamane formula (1973), a widely used formula for determining sample size (Anokye, 2020). These results were then checked against an online automated system, Raosoft. There were no exclusions, and all clinical and non-clinical staff were included in this research consisting of a questionnaire, and all nationalities were be included.

Questionnaires used the 7-point Likert Scale to score the variable questions. This scale was used as it provides more choice for answers from recipients and also provides more granular, accurate feedback.

Statistically, Analysis of Variance (one-way ANOVA) was used to compare variances across the mean of the different variables/groups. The product, or f value/ratio allowed the researcher to determine whether the Null hypothesis was rejected or supported. If comparing two groups sample t test and Mann-Whitney non-parametric was also used where relevant.

The one-way ANOVA dependent variable is performance whilst the independent variables are organizational culture, and leadership style.

2.0 LITERATURE REVIEW

2.1 Leadership

There are two categories of leadership: transactional and transformational according to Cox (2001). Earlier, Downton (as cited in Barnett et al., 2001) first made the distinction between transactional and transformational leadership styles and this was further developed through work in the political environment by James McGregor Burns in 1978. Academia.edu was the chosen search engine and a title of “leadership styles” revealed many thousands of articles and publications regarding leadership styles that are considered beneficial to organizations but there is variation amongst authors about which are the top styles that are preferred.

Burns (1978) stated transactional leaders exchanged tangible rewards for loyalty of employees to deliver objectives, whilst transformational leaders focused on engaging with employees to focus on their needs and to raise consciousness of specific outcomes and how they might be achieved. This research was further developed by Barnett et al. (2001); Cox (2001); Gellis (2001); Griffin (2003); Judge and Piccolo (2004).

Bass and Avolio (2003) evolved a nine-factor model to define leadership that included idealized influence behavior and attributes, inspirational motivation, individualized consideration, intellectual stimulation, contingent reward, active and passive management by exception and laissez-faire approaches to leadership (Bass et al. 2003).

This study will focus on transactional and transformational leadership styles as these are considered to have the greatest impact on healthcare organizations in the UK. Transactional and Transformational leadership is also easily recognizable with well-defined characteristics.

2.2 Transactional Leadership

According to Kuhnert and Lewis (1987) transactional leadership involves a cost-benefit trade-off between those in leadership positions and those that follow. The followers provide a service in exchange for a benefit for themselves, so the leader therefore possesses control in the relationship (Yuki & Van Fleet, 1992).

Control, outcomes, and ultimately performance, is reliant on whether the exchanges are high or low value in the relationship. This work by Yuki and Fleet (1992) follows on from earlier studies by Graen et al., (1982). Their work studies the impact of the high or low value exchanges on turnover of employees and hence overall performance.

In a transactional leadership relationship goals and objectives are identified and clarified by the leader then communicated to the individual or team to organise tasks to ensure the organizational objectives are met (Bass, 1974, p. 341).

Burns, an early pioneer of defining leadership styles, states that transactional leadership does not “bind leaders and followers together in a mutual and continuing pursuit of a higher purpose” (Burns, 1978, p. 20). Transactional leadership is not seen as a joint venture with common aims but merely as a process of bargaining for the interests of those undertaking tasks and activities (Burns, 1978, p. 425).

To support those that work in the healthcare sector the leadership style needs to be more supportive and collaborative in order to fulfil the psychological contract employees enter into when they join the sector. The researcher’s view is supported by Patrick and Priscilla (2019) and Taylor and Teklab (2004).

A contrasting view is held by Kuhnert (1994) who suggests the relationship is focused on motivation of the employees by rewards and penalties.

The researcher suggests potential risks of following a purely transactional leadership style is that the relationship may fall apart once the agreed goals are achieved and the rewards have been shared amongst employees, maintaining focus and direction will be somewhat diminished. In addition, the reliance on such a hierarchal organizational system where the assumption is that employees are happy working under such a rigid chain of command may misinterpret the contract for achieving objectives.

According to Hay (2006) transactional leadership is based on the behavioral assumption that people are motivated by money and reward and therefore this behavior can be controlled and is predictable. This view is shared somewhat by Bass (2014) where he states behavior is controllable through the form of task-orientated transactions and the focus is on short term goals where bargaining is key to achievement.

2.3 Transformational Leadership

According to Bass (1990) transformational leadership occurs:

“When leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir employees to look beyond their own self-interest for the good of the group.” (Bass, 1990, pp. 19-31).

Bass (2004) challenged, and developed further, Burns’ conception of transactional and transformational leadership in that he suggests they are separate concepts and that the demonstration of characteristics of both typifies a good leader (Judge & Piccolo, 2004, p. 755). Leithwood, (as cited in Cashin et al., 2000, p.1) suggests that transformational leadership must be grounded in moral foundations. This gives rise to the suggestion that leaders exhibiting transformational characteristics develop personal commitment amongst followers to select and organise goals and objectives for the benefit of the organization.

Barbuto (2005); Leithwood and Jantzi (2000); Spreitzer, Perttula and Xin (2005) concur with this view and suggest a higher level of commitment can lead to greater performance and productivity.

Transformational leadership requires leaders to engage with followers and to see people holistically rather than just an employee. They encourage self-reflection of values and beliefs by themselves and their followers which in turn raises each other's achievements, morality and motivations to new levels that could not have been perceived before (Barnett, 2003; Chekwa, 2001, Crawford, Gould and Scott, 2003).

Factors that impact performance can be grouped into two parts, internal factors, and external factors. Such internal factors are motivation and professional competence, and external factors include culture, leadership, and the use of current technology (Mathias and Jackson, 2015).

A key criticism is one of morality as transformational leadership, albeit considering the whole person, may lead to an abuse of the position by the leader. The transformational leader relies heavily on the motivation and emotions of the follower and therefore the direct input from the leader appealing to the emotions of the follower may lead to an abuse of position and power. Stone, Russell, and Patterson (2003) allude to this in their assessment of transformational leadership and suggest that transformational leaders could exert powerful influence over their followers, and this could lead to manipulation and distrust.

2.4 UK NHS Healthcare Leadership Model (HLM)

The UK NHS Healthcare Leadership Model (2013) was created over several years, and cost in the region of £10 million, by academics and healthcare professionals to reflect the proposed leadership structure at that time, and for the future UK NHS in years to follow. The purpose was to help those that work in health and social care in the UK to become better leaders.

Irrespective of whether individuals worked in a leadership role the model describes what behaviors should be seen in the workplace and it is organized so that it helps everyone develop as a leader. It does not iterate a particular leadership style such as transactional or transformational but proposes that the nature and effect of a positive leadership style can be seen in figure 2.



Figure 2 UK NHS Healthcare Leadership Model: Nature and effect of a positive leadership style (Source: UK NHS, 2023, p. 3)

Dependent upon job roles, an individual may be strong in any, some, or all, of the nine leadership dimensions, which may be appropriate although it may also show some areas that require development or areas that may be a particular strength.

There was initial confusion and controversy over the model as it was considered to have been introduced too soon and only focused on senior management that had been rapidly promoted into senior UK NHS and Chief Executive roles, it did little for those wishing to climb the advancement ladder (Lintern, 2013).

Edmonstone (2013) describes the additional £46 million investment in an UK NHS Leadership Academy as being “based on unrealistic assumptions about leadership and leadership development and therefore will not make a significant difference to leadership in healthcare”.

Edmonstone criticizes the introduction of the leadership model/academy as having five major drawbacks:

- A lack of understanding about what leadership is.
- Too much focus on individual development rather than pure leadership.
- An inaccurate assumption that leadership is context free.
- Lack of focus on capacity, rather too much on competency.
- A top-down hierarchy with probably inaccurate assumptions of how healthcare works at the front line.

2.5 Organizational Culture

To be productive and direct activities to the appropriate individuals and teams, leaders require an understanding of the organizational culture and to be aware of those members that may not be aligned to deliver the organizational goals and objectives. According to Sulastiningtyas and Nilasari (2019) the way the employee comprehends the culture serves as an indication of the rationale for their dedication to the organization. The individual ideally should have values and views that maintain a connection with the organization (Williams, 2013). The existence of such values forms a solid relationship between employee and organization and should be a part of the psychological contract between employee and employer. Within an organization, the collective rules by which it operates define the culture (Kahn, 2005). Khan goes on to say that these rules are formed by behaviors, values, and beliefs. Culture forms how employees operate and expected behaviors and conversely, how individuals expect others to behave towards them. The top level of behaviors are observable (Khan, 2005) although underneath these are values that underlie behaviors and underneath these are assumptions and beliefs that determine the values. According to Martin (2002) deeply held assumptions and beliefs form the culture of an organization.

Sahlins (1985) argues that the culture of an organization is shaped by individual's historical social experiences and the cultural meanings attached to those experiences. So, the researcher is keen to know how one should define and think about culture.

Does one think of culture as a state or moment in time or as a perpetual human process of making sense of shared meanings and interactions that go on all the time? When undertaking an analysis of an organization's culture one should certainly refer to historical data to ascertain any critical defining events that might have had an impact on the journey of the organization. Any shared assumptions derived from common experiences will shape the future culture of the organization.

Schein (1999) suggests that being clear about whether we are trying to influence climate or culture and, how any underlying assumptions aid or restrict cultural change would reduce the confusion.

A common goal in organizations is creating a climate of teamwork and openness, but if assumptions around individual social backgrounds and the impact on culture, leadership behaviors and authority for the hierarchy are not considered then this may be a virtual impossibility.

2.6 Edgar Schein's model of organizational culture

According to Schien (1992) culture is defined by three layers or levels of values and assumptions. These are artifacts, espoused values, and shared basic assumptions.

Recent research identifies culture as a single construct (Schein, 1992) whereas Schien shifts to analysis and the distinction of layers of culture.

Schein (1992) defines artefacts as any tangible, evident or verbally identifiable elements in an organization. Examples of such items could be the physical environment, how nice your individual workspace can be made, layout of the department/floor space, acoustics, how nice the view is out of the window and furniture.

Espoused value is how individuals in the organisation see it, or how they think things should be. On questioning, espoused values are what individuals find important and meaningful to them.

The most hidden level of belief and values is shared basic assumptions. So deeply hidden that often they are taken for granted and not spoken about. These will override espoused values when under pressure or when robust command and control comes into force.

In addition to the three layers of culture Schien (1992) also identified three primary types of organizational culture: clan culture, adhocracy culture, and market culture.

A clan culture, predominately people focused within the organization, creates an environment that mirrors a family-like feeling. This creates a highly collaborative working environment where individuals are valued and there is effective, consistent, and concise communication throughout the organization. The flexible nature of a clan culture promotes employee embracement of change, and organizations are action orientated (Powers, 2023).

Although agreeing with this view of Schein, the researcher suggests that although a clan culture sounds like an ideal environment in which to grow and flourish there could be difficulties once the organization starts to grow. The researcher feels that once the organization reaches a certain number of employees it will be at a saturation level with regard to how effective the family orientated culture is to maintain. Once the organization grows larger the adoption of a flat, horizontal leadership structure will cause confusion and the direction of travel of the organization could be compromised.

The researcher feels a clan culture could possibly have two impacts in the UK NHS, either it would not work as a whole system ideology although in isolation it may be ideal for small teams and departments, or it would encourage strength in silos which may hopefully spread and be adopted across the rest of the organization.

Adhocracy culture has its roots in innovation and adaptability with the primary focus on risk taking and innovation. An adhocracy culture is more akin to large business corporations rather than entities in the healthcare sector as the risk appetite is considerably different between the two.

A market culture is primarily focused on competition and growth and, although the researcher initially thought this might not be directly relevant to the UK healthcare sector, some of the fundamental principles do fit with this sector and are actively in use.

Schein's (1994) ideas can be seen as an iceberg, and his model is often referred to as the iceberg model as seen in figure 3.

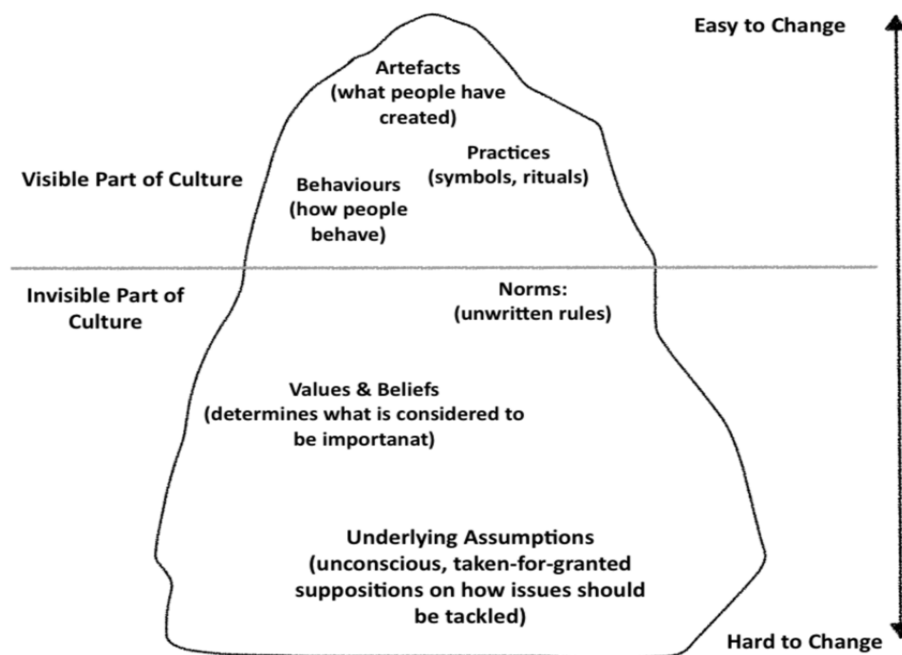


Figure 3 Schein's iceberg model (Source: Manukyan & Papadonikolaki, 2019, p. 31)

The iceberg model shows which areas of culture are easily recognizable and which can be identified that may require changes to, that is the areas above the water line. The area below the water line is less visible and therefore is harder to acknowledge, change or influence.

Around 90 percent of the iceberg is below the water and leaders do not generally see these parts of the culture until it is too late.

Metaphorically, when a ship (the organization) hits an iceberg the part that sinks it is the part below the waterline, therefore relating this to a healthcare organization in the UK NHS, leaders need to understand what is above the waterline, and how this is managed, so that it has a positive impact on what is below the waterline.

What one sees above is reflected in the values, beliefs and assumptions that are built up over time and that are not initially visible.

The researcher suggests that organizational culture is not shaped by the visible elements alone but the inner, or hidden, parts of the factors that determine culture should also be considered to achieve a holistic view of the organizational culture, as this may give rise to the potential leadership style that could work in unison with the cultural characteristics to achieve optimum performance outcomes.

To create an environment that stimulates a positive culture Schein recommends organizations take a proactive approach to really focus on underlying assumptions as this drives the observable behaviors and ultimately organizational decision making.

The attraction and retention of organizational talent is more aligned to a strong and positive culture as it creates a sense of purpose and fosters innovation and creativity. Low morale and a high turnover of staff are a characteristic of poor alignment between employees and the organizational objectives.

Schein (1992) identifies there is confusion in defining culture and this is attributed to the apparent failure to differentiate where culture manifests itself in the organization.

Values are the least visible. Artifacts are the most visible layer of an organization's culture, and these are subsequently manifested via symbols, rituals, language, and physical workspace configurations (Schein, 1992).

In conclusion, Schein argues that culture is developed through the organization undergoing various changes where employees learn from historical experiences, employee attitudes and behaviors and the overall workplace environment.

2.7 UK NHS Performance

One should be aware that performance is but one of the factors that adds value to organizational effectiveness (Venkatraman & Ramanujam, 1986).

Introduced in 2009 but subsequently updated in 2012, the NHS Performance Framework intended to provide a dynamic assessment of the performance of NHS providers against minimum standards presenting a clear definition of success and generating valuable information for providers to take swift action to rectify any shortcomings (UK Department of Health, 2012).

Unfortunately, the publication of the framework was only applicable to those that were not NHS Foundation Trusts and so there was a fragmented approach from day one, something the researcher believes was the downfall of the framework before it really got an opportunity to be embedded. The researcher believes that one of the limitations of the NHS Performance Framework, at its inception, was that it did not provide any guidance on how to respond to poor performance but left it purely to local management to decide based on their local knowledge and resources available.

The researcher also suggests that another limitation was the fact it was purely focused on underperforming entities and did not have any focus on where good performance was identified and perhaps where a process of shared learning would positively impact the underperforming areas.

The NHS Performance Framework (Figure 4) proposed assessment across domains of organizational function:

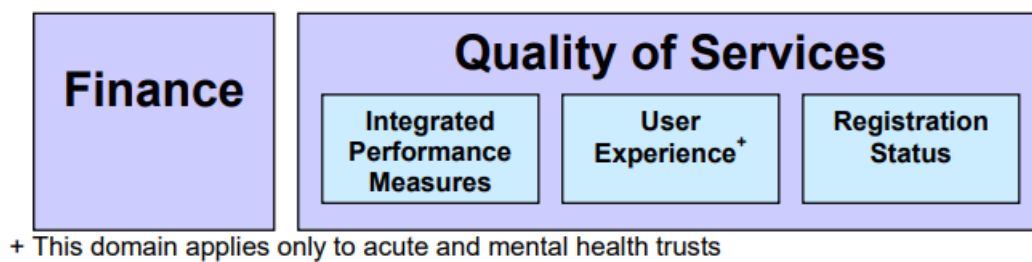


Figure 4 NHS Performance Framework Domains (Source: DoH, 2012, p. 13)

Each domain had weighted indicators and a scoring system to see how performance was against each domain.

Quality is at the heart of the framework following the work by Lord Darzi (2018) and a clear definition of quality in healthcare was proposed and accepted by the UK NHS. According to Darzi (2018) quality covered safety, patient experience, and effectiveness of care. This definition and associated work are therefore why it underpins the framework.

The limitation this assessment process shows the researcher is that user experience only applies to acute and mental health trusts, one would question why this is the case when user experience is a vital tool to use to form service improvement across the whole system and therefore should include all healthcare providers whatever setting it may be.

All the above systems were now in place to, as far as possible, monitor and report performance in the UK NHS. A further change in delivery of healthcare services occurred in the UK in 2012 with the re-organization nationally of service providers and delivery, this did not help the alignment of monitoring performance. Clinical Commissioning Groups (CCGs) were introduced in 2013 because of the Health and Social Care Act 2012. It reorganised delivery of NHS services in each local area across England, replacing PCTs on the 1st of April 2013.

The overall conclusion of the analysis indicated areas of good performance in health service outcomes when compared to our international colleagues but spending, patient safety and population health all indicated below average performance.

3.0 METHODOLOGY

3.1 Introduction

Allan and Randy (2005) state that when conducting research, the following two criteria should be followed:

1. The methodology should be the most appropriate to achieve the research objectives,
2. The methodology should be easily replicated if similar research was undertaken.

The approach favored for this study is quantitative research using a questionnaire.

The researcher will be using SPSS v.21.0 to complete data analysis for this study.

Regression analysis was used to analyse relationships between one dependent variable and one or more independent variables.

The researcher proposes numerous null hypotheses, and sub hypothesis where appropriate, that will require statistical testing to formulate a response to the research questions.

For completeness, the researcher has also included the alternative hypothesis.

Quantitative data will be collected via a questionnaire. The UK NHS environment, understandably, can be a very emotional place to work, and the use of quantitative research ensures a detachment from emotions and any preconceived biases.

Permission will be sought from any potential respondents, and this is explained in full prior to completing the questionnaire.

The researcher's current organization has successfully used survey monkey in the past to collect data and this has proven an effective method in the past.

Each question provides seven responses in accordance with the Likert Scale methodology. A seven-point Likert scale was used for responses as it provides a stronger correlation with t-test results (Lewis, 1993). and responses range from very strongly disagree through to agree very strongly, with a neutral state being neither agree nor disagree. Participants complete the survey themselves and the researcher is unaware of who has completed which survey as no identifiable data is being collected that can connect the survey to an individual. The data responses will be analysed through an appropriate statistical tool, for example, SPSS v.21.0.

As the chosen method of data collection is through a survey it allows the researcher to compare relationships between variables (Creswell, 2014). The survey design is perhaps the most versatile quantitative method, and this is why it is probably the most used across healthcare, in particular.

The researcher used language in the questionnaire that was easy to understand and led to no ambiguity in what was being asked (Privitera, 2018). The researcher obtained two independent views on the simplicity and effectiveness of the questionnaire prior to publication, from a UK University lecturer and a UK NHS CEO.

Statistical tests under consideration of use are frequencies, proportions, mean, standard deviation, confidence intervals, t-test, one-way ANOVA, correlation, and regression. The appropriateness of each will be considered during the data analysis phase of this research.

A cross sectional time horizon research approach was undertaken for this study and involved collection of data, from a population or sample, at a specific point in time from a diverse group of subjects. It provided a snapshot of characteristics, behaviors, and relationships among the variables in the study.

It has no consideration for changes over time.

The variables for this research are Culture, Leadership Style, and Organizational Performance.

- Independent Variable - Culture
- Independent Variable - Leadership Style
- Dependent Variable - Organizational Performance

There are other variables that will have an impact on the study, and these are the moderating factors. For this study the moderating factors chosen are Age, Length of Service (LoS), Role, Education level and Pay Banding. These were chosen as it is considered these may have the most significant impact on the independent and thus dependent variables.

3.2 Method of data collection

Data for this working paper was collected between February and July 2023, with the data for the case study being collected during August 2023. Separate data was collected for the Pilot Study, Main Study and Case Study but from the same population.

The rationale behind appropriate data collection techniques is to ensure all the relevant information has been included in the research (Sekaran & Bougie, 2016).

The questionnaire was short, quick, and easy to complete with total anonymity. Questions were closed and to the point and connected with each research objective (Bryman & Bell, 2014). This was chosen as the researcher was to obtain information directly from those working in the UK healthcare sector as this particular sector will be directly impacted by any findings/recommendations. In addition, by asking for responses directly from the workforce responses will be more accurate and reliable than other types of data that could have been used. The use of a questionnaire as a tool for gathering primary data is also much quicker than the use of secondary data and it also provides the researcher with firsthand experience and not that written by a third-party researcher.

3.3 Research Population and Sample Size

The researcher conducted the questionnaire within the confines of the healthcare sector in the UK NHS. The chosen locations provided a cross section of roles and seniorities therefore the researcher considered it to be representative of the NHS as an organisation.

The population under consideration by the researcher is relatively small compared to the total employed within the UK NHS. The researcher has taken a sample that has no exclusions and includes all roles and levels within the organization, so in this case the researcher is content a true reflection of responses is applicable.

Yamane (1967) provides a simplified formula to calculate sample sizes. A 95 percent confidence level and $p = .5$ are assumed.

Where n is the sample size, N is the population size, and e is the level of precision.

Sudman (1976) suggests that a minimum of 100 responses is needed in the sample.

As the total number of employees working in the UK NHS is nearing 1.3 million full time equivalents it is considered impractical and time consuming to gather data across all providers and so the researchers target population for this study is spread across three healthcare organizations and an employee count of approximately 250.

Therefore, using Yamane's equation:

Given the chosen population of 250, the sample size can be calculated using the formula:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{250}{1 + 250(0.05)^2}$$

$$n = \frac{250}{1 + 250(0.0025)}$$

$$n = \frac{250}{1 + 0.625}$$

$$n = \frac{250}{1.625}$$

$$n = 153$$

Therefore, in accordance with Sudman (1976) and the result from Yamane's calculation a sample size of at least 153 will be aimed for in this research but if responses are over 100, they will be adequate for data analysis purposes.

3.4 Inclusion and Exclusion Criteria

The researcher has included local healthcare providers that overall provide a wide range of NHS services. It was not necessary to cast the questionnaire wider geographically as a large number of services has been covered for example, maternity services, acute/general hospital, emergency care and community services and general practices. This will allow a broad spectrum of responses to the questionnaire.

It also includes all levels in seniority that will, in turn, include a varied amount of length of service in healthcare provision by individual respondents. The nature of the work due to strict entry requirements means that all respondents were over 18 years of age. Many healthcare professionals work past the statutory retirement age, so no age limit was placed on the potential respondent.

There were no exclusions to completion of the questionnaire as it was advertised widely across various platforms for anyone to complete and a target audience of approximately 250 was considered achievable in the timeframe allocated.

3.5 Pilot Study

A pilot study was undertaken prior to the main study in order to assess the feasibility of the main study and to trial the proposed data gathering methodology and the resulting data analysis (Glatthorn & Joyner, 2005).

The minimum number for a pilot study is 10 as proposed by Fink (2003) as cited in Saunders et al. (2007) although the study obtained responses from 22 individuals, who were different to those used in the main study.

The pilot study allows the researcher to make any amendments or changes required to complete the main study.

The researcher has used Cronbach's Alpha to evaluate the research instrument, i.e., the questionnaire, to assist in evaluating the quality of the tool prior to deploying it fully in the main study.

3.6 Validity and Reliability of Research

Oliver (2010) considers validity to be compulsory for all types of research and suggests it is an extent at which requirements of a research method have been followed during the process of generating research data and analysis to produce findings.

In essence, reliability refers to the extent to which the same answers can be obtained using the same instruments more than one time, or how consistent the results are. If the research results are associated with high levels of reliability, then other researchers should be able to generate the same results using the same research methods.

The researcher used SPSS v.21.0 software to conduct the test. The researcher uses Cronbach Alpha to assess the reliability of the data. Figure 5 shows the overall results for all the items of the study.

Reliability of the data	
Cronbach's Alpha	Number of items
0.947	30

Figure 5 - Reliability Statistics (Source: Developed for this research by Author, 2023)

The results show the value of Cronbach's Alpha for all the items included in the study to be 0.947 which indicates the data is highly reliable.

Sekaran and Bougie (2016) propose that inter-item correlation should be greater than 0.50 as this demonstrates internal consistency adequate for the study data.

3.7 Statistical Tests to be performed for this research.

Survey Monkey was used for the collection of quantitative data for this study as this tool has proven its effectiveness in previous studies and is frequently used in healthcare settings (Brink & Wood, 2001).

Statistical tests to be used are correlation analysis, regression analysis, and analysis of variance (one-way ANOVA). This will examine the associations between variables and identify significant predictors. SPSS v.21.0 was the tool used to produce the statistical outcomes. 161 responses were received after the questionnaire was circulated to 250 recipients, making a 64.4 percent return.

3.8 Testing the Hypothesis

Proposed hypotheses are shown at Figure 1, with a conceptual framework at Figure 6.

The researcher uses correlation and regression analysis to evaluate the hypothesis.

One-way ANOVA was used to analyse the difference in the independent variables and the mediator/moderating variables.

The t-test associates the means of the two independent variables to establish whether there is statistical evidence that the related population means are similar or not.

The researcher uses it in this study to determine the differences in terms of age, LoS, role, education and pay band in the UK NHS.

Multiple linear regression predicts the outcome of a particular response variable, and the researcher has applied this method to this research. It will specifically focus on moderating impacts, namely, age, LoS, role, education and pay banding.

Related hypotheses shown in Figure 6 below.

Hypothesis	
H1 ₀	There is no significant relationship between an awareness of transactional leadership and performance in the UK NHS.
H2 ₀	There is no significant relationship between an awareness of transformational leadership and performance in the UK NHS.
H3 ₀	There is no significant relationship between culture and performance in the UK NHS.

H4.1 ₀ There is no significant difference in the perception of a transactional leadership style based on employee age in the UK NHS.
H4.2 ₀ There is no significant difference in the perception of a transformational leadership style based on employee age in the UK NHS.
H4.3 ₀ There is no significant difference in the perception of culture based on employee age in the UK NHS.
H5.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on LoS in the UK NHS.
H5.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on LoS in the UK NHS.
H5.3 ₀ There is no significant difference in the perception towards culture based on LoS in the UK NHS.
H6.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on role in the UK NHS.
H6.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on role in the UK NHS.
H6.3 ₀ There is no significant difference in the perception towards culture based on role in the UK NHS.
H7.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on employee education in the UK NHS.
H7.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on employee education in the UK NHS.
H07.3 There is no significant difference in the perception towards culture based on employee education in the UK NHS.
H8.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on employee pay band in the UK NHS.
H8.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on employee pay band in the UK NHS.
H8.3 ₀ There is no significant difference in the perception towards culture based on employee pay band in the UK NHS.
H9 ₀ There is no effect on the relationship between transactional leadership and performance due to moderating factors in the UK NHS.
H9.1 ₀ There is no effect on the relationship between transactional leadership and performance due to age in the UK NHS.
H9.2 ₀ There is no effect on the relationship between transactional leadership and performance based on employee LoS in the UK NHS.
H9.3 ₀ There is no effect on the relationship between transactional leadership and performance based on employee role in the UK NHS.
H9.4 ₀ There is no effect on the relationship between transactional leadership and performance based on employee education in the UK NHS.

H9.5 ₀ There is no effect on the relationship between transactional leadership and performance based on employee pay band in the UK NHS.
H10 ₀ There is no effect on the relationship between transformational leadership and performance due to moderating factors in the UK NHS.
H10.1 ₀ There is no effect on the relationship between transformational leadership and performance based on employee age in the UK NHS.
H10.2 ₀ There is no effect on the relationship between transformational leadership and performance based on employee LoS in the UK NHS.
H10.3 ₀ There is no effect on the relationship between transformational leadership and performance based on employee role in the UK NHS.
H10.4 ₀ There is no effect on the relationship between transformational leadership and performance based on employee education in the UK NHS.
H10.5 ₀ There is no effect on the relationship between transformational leadership and performance based on employee pay band in the UK NHS.
H11 ₀ There is no effect on the relationship between culture and performance due to moderating factors in the UK NHS.
H11.1 ₀ There is no effect on the relationship between culture and performance based on employee age in the UK NHS.
H11.2 ₀ There is no effect on the relationship between culture and performance based on employee LoS in the UK NHS.
H11.3 ₀ There is no effect on the relationship between culture and performance based on employee role in the UK NHS.
H11.4 ₀ There is no effect on the relationship between culture and performance based on employee education in the UK NHS.
H11.5 ₀ There is no effect on the relationship between culture and performance based on employee pay band in the UK NHS.

Figure 6 - Proposed hypotheses (Source: Developed for this research by Author, 2023)

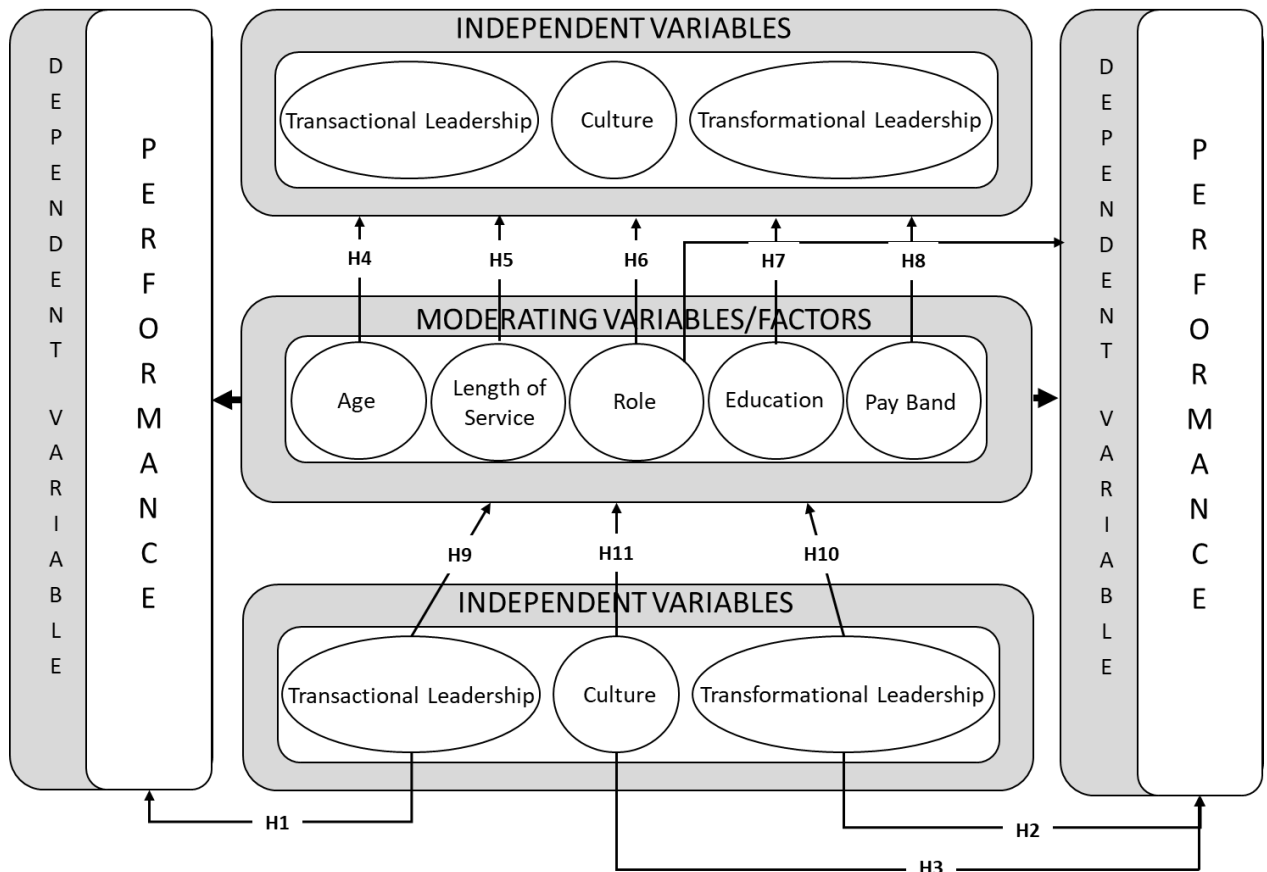


Figure 7 Conceptual Framework with hypotheses (Source: Developed for this research by Author, 2023)

3.9 Ethical Considerations of the study

Any respondent entered the study voluntarily and a consent section was included at the start of the questionnaire confirming that it was totally anonymous, and that no personal data would be stored onto any database or hard drive and that information was only retained as long as required for the study and then it was deleted.

Ethical approval was applied for and obtained from the UK Health Research Council. In addition, the study complied with the strict UK Data Protection regulations under the General Data Protection Regulations Act of 2018 (GDPR). The study also gained ethical approval from the SBS Swiss Business School.

4.0 RESULTS AND CONCLUSIONS

The researcher reviewed the frequency of responses for each variable (Culture, Leadership Style, and Performance) so that an indication of respondent agreement could be ascertained for each question. The researcher used a seven-point Likert scale for the study questionnaire where 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neither Agree nor Disagree, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree.

The results are presented in figures 24, 25 and 26 for Culture, Leadership Style, and Performance, respectively. The following figures show that most responses agree with carrying degrees of positivity.

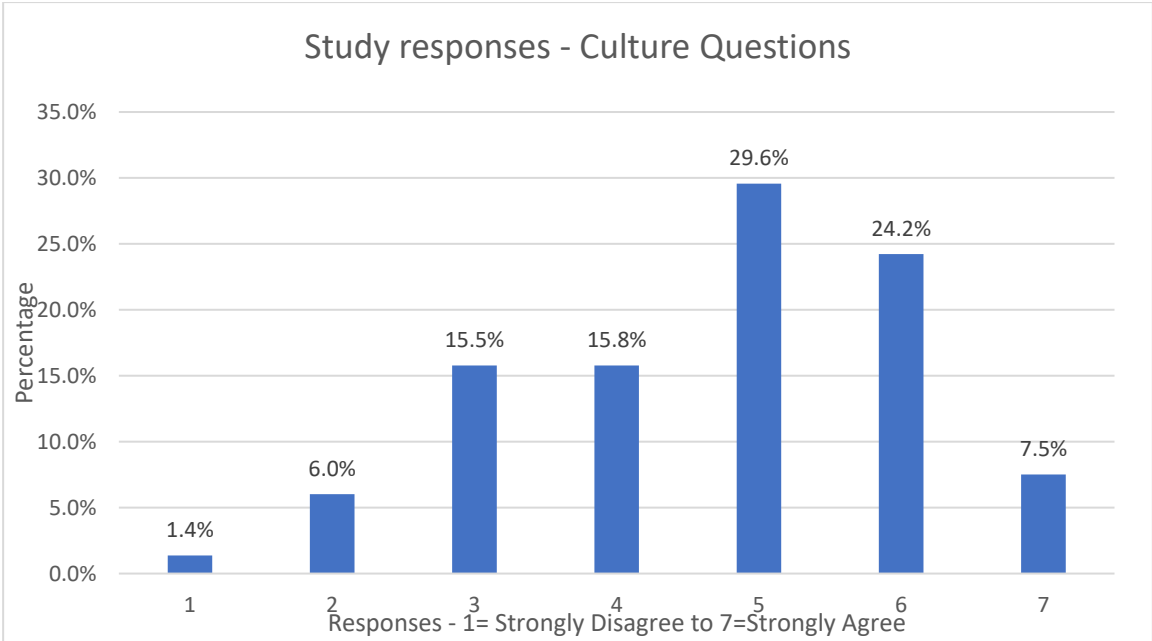


Figure 8 Study responses for all culture questions (Source: Developed for this research by Author, 2023)

The figure shows that 61.3 percent of all responses to the study questions regarding an awareness of culture were favourable, leaving 38.7 percent unfavourable.

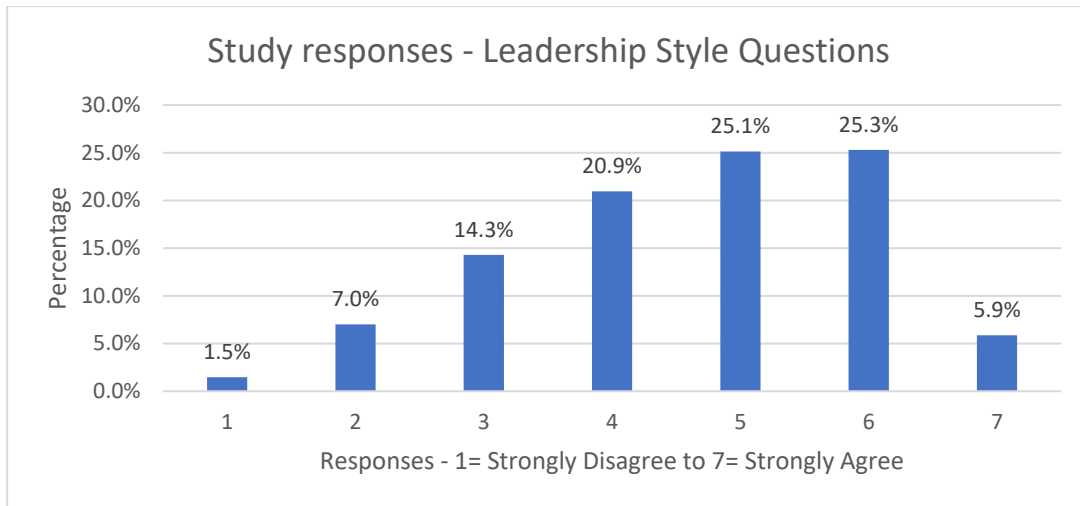


Figure 9 Study responses for all Leadership Style questions (Source: Developed for this research by Author, 2023)

The figure shows that 56.3 percent of responses were favourable. It is of value to note that 20.9 percent of respondents chose to select “neither agree nor disagree” as an option. The researcher is keen to understand why such a large percentage chose this option and the researcher’s theory, based on personal experience, is that employees do not have a large enough awareness of leadership styles for them to be able to make an informed decision. This could be the basis of an additional study to support the researcher’s work.

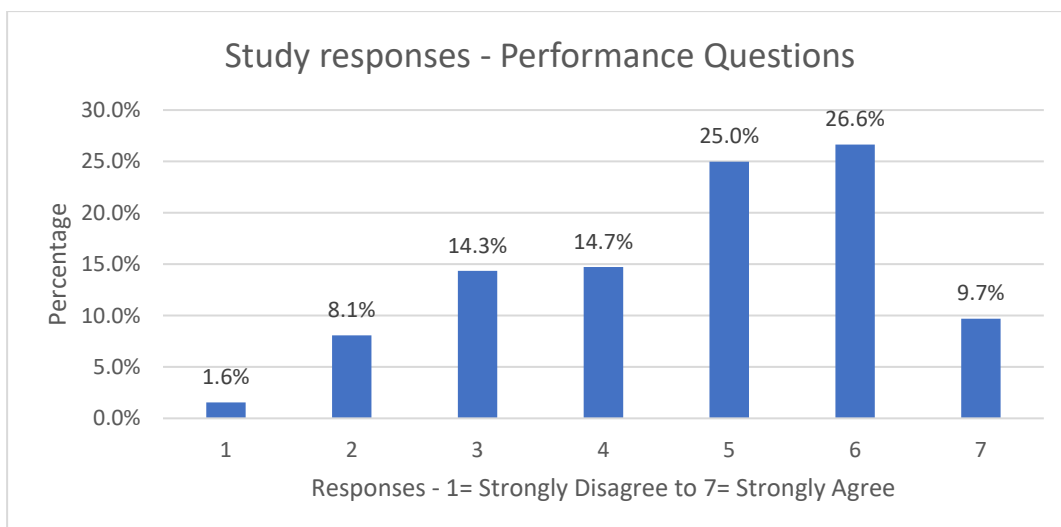


Figure 10 Study responses for all Performance questions (Source: Developed for this research by Author, 2023)

The data shows that 61.3 percent of respondents gave favourable results. The researcher noted that the same percentage of overall favourable responses were given to the Culture questions and with only a small difference in percentage points for each response.

The favourable v. unfavourable responses for all factors are shown in figure 27. Data showing the frequency of all responses was used with an average percentage response for each variable: CU=Culture, LS=Leadership Style and PF=Performance.

The favourable responses represent those that chose either Strongly Agree, Agree or Somewhat Agree. The unfavourable responses represent those that chose either Strongly Disagree, Disagree or Somewhat Disagree.

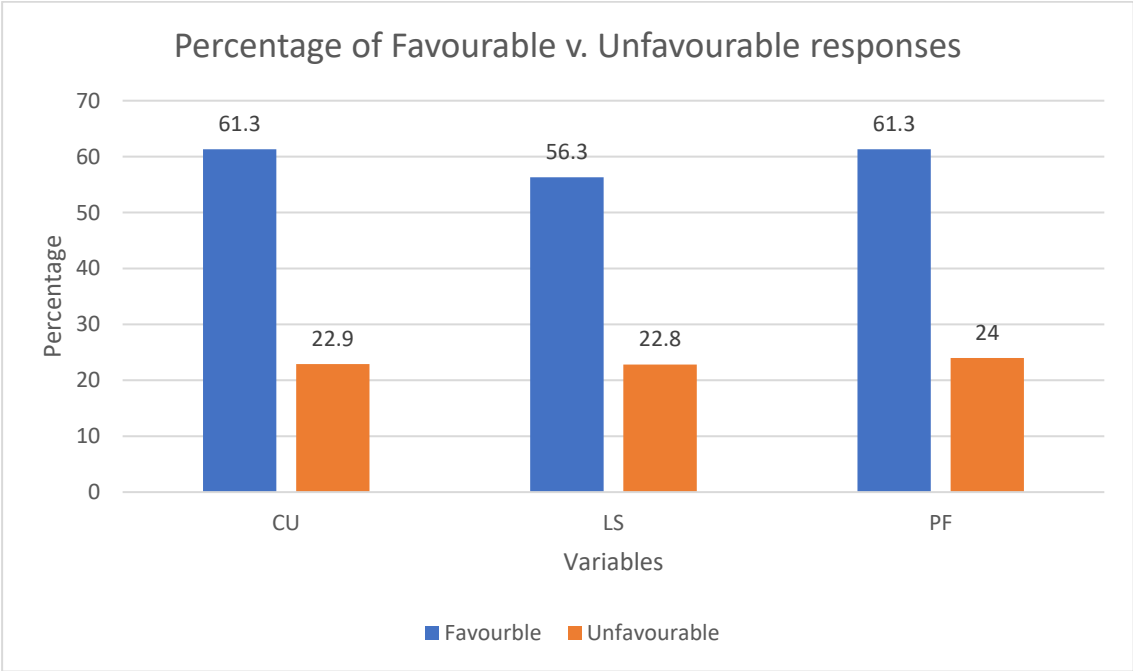


Figure 11 Percentage of favorable v. non-favorable responses (Source: Developed for this research by Author, 2023)

The researcher identifies that the favourable responses are somewhat similar across all three variables, as are the unfavourable responses. It is also useful to note that those respondents choosing to select option 4: Neither Agree nor Disagree is 15.8 percent (CU), 20.9 percent (LS) and 14.7 percent (PF).

The results do indicate that either there was a misunderstanding of the questions posed although the researcher had the questionnaire peer reviewed and accepted by professionals in their field and accepted appropriate to continue with the study, so the researcher is content the questionnaire was a robust document.

An alternative view is that this presents an accurate representation of the respondents which indicates to the researcher that there is ambiguity within the UK NHS around all three variables.

The overall findings of the study show that there is a significant relationship between transactional leadership, transformational leadership, and culture on organizational performance in the UK NHS and so the null hypotheses are rejected.

The work by Specchia et al., (2021) is consistent with the researcher's findings regarding significant relationships between leadership style and performance in the UK NHS.

Data analysed using Pearson correlation, shows there is a moderate positive relationship between an awareness of transactional leadership and performance in the UK NHS ($r=0.542$, $p<0.05$). The same test revealed that there is a strong positive relationship between transformational leadership and performance in the UK NHS ($r=0.803$, $p<0.05$).

Finally, the test for a relationship between culture and performance indicates that there is a strong positive correlation between them ($r=0.747$, $p<0.05$).

The results following data analysis of the moderator factors indicate that there was a positive correlation for all moderating factors, albeit with varying degrees of strength, against the independent variables when assessing the impact on the dependent variable.

The results show that there is a significant difference in the perception of a transactional leadership style based on employee age in the UK NHS. Test results show a Levene value of 0.910, p-value of 0.476 and a subsequent one-way ANOVA test p-value of 0.032, which

together indicate statistically significant evidence to suggest there are differences between some age groups and the perception of a transactional leadership style.

In response to the findings the researcher considers that age and length of service are intrinsically linked and that the perception towards a transactional leadership style and culture can be a grouped explanation.

The results of the one-way ANOVA testing comparing culture with length of service of employees in the UK NHS show a p-value of 0.016 (significant level used <0.05) and an F-value of 5.918, suggesting a significant difference between groups.

A transactional leadership style and a transformational leadership style are not mutually exclusive, and the researcher suggests that a combination of the two is probably the most effective way to enhance leadership capabilities.

The analysis of the results regarding the factors (Age, LoS, role, education and pay banding) indicate that pay banding is the most important factor indicated by respondents (M=4.51, SD=2.463). The next most important factor is age (M=3.43, SD=1.213), followed by education (M=3.39, SD=0.866), LoS (M=3.14, SD=0.828) and the least important factor is role (M=1.31, SD 0.464).

4.1 Results from hypothesis testing

Hypothesis	Decision
H1 ₀ There is no significant relationship between an awareness of transactional leadership and performance in the UK NHS.	Reject
H2 ₀ There is no significant relationship between an awareness of transformational leadership and performance in the UK NHS.	Reject
H3 ₀ There is no significant relationship between culture and performance in the UK NHS.	Reject
H4.1 ₀ There is no significant difference in the perception of a transactional leadership style based on employee age in the UK NHS.	Reject
H4.2 ₀ There is no significant difference in the perception of a transformational leadership style based on employee age in the UK NHS.	Accept
H4.3 ₀ There is no significant difference in the perception of culture based on employee age in the UK NHS.	Accept

H5.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on LoS in the UK NHS.	Accept
H5.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on LoS in the UK NHS.	Accept
H5.3 ₀ There is no significant difference in the perception towards culture based on LoS in the UK NHS.	Reject
H6.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on role in the UK NHS.	Accept
H6.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on role in the UK NHS.	Reject
H6.3 ₀ There is no significant difference in the perception towards culture based on role in the UK NHS.	Accept
H7.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on employee education in the UK NHS.	Accept
H7.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on employee education in the UK NHS.	Accept
H ₀ 7.3 There is no significant difference in the perception towards culture based on employee education in the UK NHS.	Accept
H8.1 ₀ There is no significant difference in the perception towards a transactional leadership style based on employee pay band in the UK NHS.	Accept
H8.2 ₀ There is no significant difference in the perception towards a transformational leadership style based on employee pay band in the UK NHS.	Accept
H8.3 ₀ There is no significant difference in the perception towards culture based on employee pay band in the UK NHS.	Accept
H ₉ ₀ There is no effect on the relationship between transactional leadership and performance due to moderating factors in the UK NHS.	Reject
H9.1 ₀ There is no effect on the relationship between transactional leadership and performance due to age in the UK NHS.	Reject
H9.2 ₀ There is no effect on the relationship between transactional leadership and performance based on employee LoS in the UK NHS.	Reject
H9.3 ₀ There is no effect on the relationship between transactional leadership and performance based on employee role in the UK NHS.	Reject
H9.4 ₀ There is no effect on the relationship between transactional leadership and performance based on employee education in the UK NHS.	Reject
H9.5 ₀ There is no effect on the relationship between transactional leadership and performance based on employee pay band in the UK NHS.	Reject
H ₁₀ ₀ There is no effect on the relationship between transformational leadership and performance due to moderating factors in the UK NHS.	Reject
H10.1 ₀ There is no effect on the relationship between transformational leadership and performance based on employee age in the UK NHS.	Reject
H10.2 ₀ There is no effect on the relationship between transformational leadership and performance based on employee LoS in the UK NHS.	Reject

H10.3 ₀ There is no effect on the relationship between transformational leadership and performance based on employee role in the UK NHS.	Reject
H10.4 ₀ There is no effect on the relationship between transformational leadership and performance based on employee education in the UK NHS.	Reject
H10.5 ₀ There is no effect on the relationship between transformational leadership and performance based on employee pay band in the UK NHS.	Reject
H11 ₀ There is no effect on the relationship between culture and performance due to moderating factors in the UK NHS.	Reject
H11.1 ₀ There is no effect on the relationship between culture and performance based on employee age in the UK NHS.	Reject
H11.2 ₀ There is no effect on the relationship between culture and performance based on employee LoS in the UK NHS.	Reject
H11.3 ₀ There is no effect on the relationship between culture and performance based on employee role in the UK NHS.	Reject
H11.4 ₀ There is no effect on the relationship between culture and performance based on employee education in the UK NHS.	Reject
H11.5 ₀ There is no effect on the relationship between culture and performance based on employee pay band in the UK NHS.	Reject

Figure 12 - Hypotheses outcomes (Source: Developed for this research by Author, 2023)

The moderating factors/variables for this research are age of employees in the UK NHS, length of service of employees in the UK NHS, role of respondents in the UK NHS, educational qualifications of employees in the UK NHS and pay banding of respondents in the UK NHS. To assess the impact the moderator may have on the independent variables subsequent impact on the dependent variable regression analysis was conducted using SPSS v21.0 and the results are shown in Figure 13.

Dependent variable (DV)	Independent variable (IV)	Moderator (M)	R value with M included	R value with M excluded	Correlation outcome
		Age	1.374	-0.043	Positive & Strong
		LoS	1.176	-0.043	Positive & Weak

PFGROUP	LSTX	Role	0.010	-0.043	Positive & Very Weak
		Education	1.176	-0.043	Positive & Weak
		Pay band	0.775	-0.043	Positive & Moderate
	LSTF	Age	1.484	-0.221	Positive & Strong
		LoS	1.362	-0.221	Positive & Strong
		Role	0.013	-0.221	Positive & Weak
		Education	1.328	-0.221	Positive & Strong
		Pay band	0.810	-0.221	Positive & Moderate
	CUGROUP	Age	1.371	-0.014	Positive & Strong
		LoS	1.247	-0.014	Positive & Strong
		Role	0.003	-0.014	Positive & Very Weak
		Education	1.188	-0.014	Positive & Strong
		Pay band	0.766	-0.014	Positive & Moderate

Figure 13 Moderator results from regression analysis (Source: Developed for this research by Author, 2023)

4.2 Implications of the study

The findings will provide theoretical and empirical foundations for further research. In addition, the findings will support UK, and global, healthcare organizations to review their internal structures and frameworks to identify areas of conflict with regards to their culture, observed leadership styles and how these might align to their organizational goals and objectives.

The findings in this study will support senior leaders in healthcare in the UK NHS in terms of explaining the way of dealing with employees and patients to achieve better outcomes.

The findings will assist senior healthcare professionals to support other individuals and teams in their personal and professional development. This will have a positive impact on staff retention and development and therefore improve performance and patient outcomes.

The findings in this study will also support organizations to examine the relationships further to identify any areas where they may consider improvements need to be made.

The link the study found between culture and LoS, transformational leadership and role and transactional leadership and age will support organizations to examine these relationships further to enable improvements to be made in these areas where appropriate. The results provide a foundation for healthcare managers, and managers from other industry sectors, to examine other demographic factors as well as supporting the future strategic planning process.

The correlation found between certain moderating factors and the strength of impact on a transactional leadership style, a transformational leadership style and culture and therefore the overarching impact on organizational performance is of particular interest to the researcher as these are areas where the researcher sees potential for further study that will show how human factors might impact the IV and DV of this study.

The potential for additional research is huge and if undertaking it one must be conscious of the enormity of the task. Nevertheless, this area has seen considerable study in the past and, with reference to the UK NHS, there is still room for additional work to enable improvements in the delivery of quality services to the patients in the UK NHS and beyond.

4.3 Limitations of the study

The major limitation during this study was one of time. Given the population size of the UK NHS is in the region of 1.3 million employees the researcher would have required considerably more time than the course allowed to gather even a 1 percent sample size.

The use of a single questionnaire was a limiting method of data collection and future research would prompt the researcher to perhaps adopt a mixed method approach where interviews were also used as a qualitative method of data collection. The researcher believes that employee feelings and previous experiences may have an impact on the results and findings. The researcher was also limited by the number of external or contributory factors that were applied to the independent variables. Age, length of service, role, educational attainment and pay band are only some of the factors that might impact perception of leadership style, culture and thereby influencing performance in the UK NHS. The researcher would recommend investigation of additional factors such as age, previous employment experience and perhaps religious beliefs.

4.4 Conclusions

The overall results and findings indicate that external factors such as age, length of service, role, educational attainment and pay banding, do have, to varying degrees, some impact on the independent variables in this study; leadership style and culture, and therefore may influence organizational performance.

The current UK NHS Leadership Model, and its nine dimensions is a tool to be used to review an organization's general leadership ability across colleagues and teams to assist senior managers in assessing leadership capability and capacity. Results from the study questionnaire suggest the general awareness from respondents of the UK NHS Leadership Model, leadership style, whether it be transactional or transformational, is not well understood and so senior leaders may find it a challenge to use the UK NHS Leadership Model in any effective way.

The UK NHS Healthcare Leadership Model (HLM) is no longer effective in today's climate and that it presents a gap in future development and progression in the UK NHS. A review of this model is suggested and additional research to understanding the requirements for the UK NHS now and in the future.

The findings in this research suggest there is a significant relationship between awareness of transactional leadership, transformational leadership and culture when related to performance. This is supported by empirical evidence presented by Avolio and Yammaroni (2013) on the positive relationship between transformational leadership and culture and performance.

Work conducted by Den Hartog et al. (1999) examined how cultural factors might shape effective transformational leadership and stated that attributes, or factors as seen in this study, vary across different cultures and environments. This could be related to different UK NHS organizations and therefore this research could assist senior healthcare leaders in defining requirements in their employees to facilitate improvements in performance.

Leadership styles can, and do shape organizational culture and this, as seen in the results of the statistical analysis for this study, can impact organizational performance. This statement is reinforced in the outcome of research undertaken by Gotsis and Grimani (2018).

To summarize, the results and findings from this research contribute to both academic and business theory as it creates a foundation for discussions to assist in identifying areas for improvement that can subsequently lead to improvements in organizational performance in the UK NHS.

Examples are given below:

- Cultural Transformation: strategies for effectively transforming the culture within UK NHS organizations, particularly in relation to patient-centeredness, collaboration, and innovation.

- **Leadership Development and Succession Planning:** the effectiveness of leadership development programs in the UK NHS and the impact of succession planning on leadership continuity and organizational performance.
- **Leadership Styles and Outcomes:** the relationship between leadership styles (e.g., transformational, transactional) and the impact, positive or negative, on employee engagement, patient outcomes, and organizational performance.
- **Performance Measurement and Accountability:** effectiveness of performance measurement systems and accountability frameworks in driving performance improvement and identifying potential unintended consequences or challenges associated with their implementation.
- **Organizational Resilience:** the role of organizational resilience in addressing challenges, adapting to change, and maintaining high performance in the face of external pressures within the UK NHS.

4.5 Future research recommendations

The researcher is confident that this topic has potential for further areas of study as a result of the findings in this study. These areas are:

- Expand the number of external factors that may impact the perception towards transactional and transformational leadership and see what impact this has on performance.
- Gather qualitative data to establish a better understanding of what employees feel and think about the culture and climate they work in and establish a closer link with improvement of organizational performance.
- Gather data across acute services, mental health services and primary care regarding culture and performance.

- Replicate this study outside of the UK NHS to identify any similarities or differences in care delivery and how this might be influenced by leadership style and organizational culture.
- Conduct a longitudinal study to establish a better understanding of the factors that might impact performance over a longer period of time.
- Develop a tool for measuring effectiveness of distinct types of leadership on culture and performance.

The additional research topics are only limited by the amount of time available to gather data, analyse it and then produce findings and recommendations. The researcher has been positively influenced in completing this study to progress further and develop more research proposals to delve deeper into the psychological and organizational development factors that might impact individual, team and organizational performance as this is the key to delivering first rate, quality care to all our patients.

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