



A STUDY OF LEADERSHIP, WORKFORCE ENGAGEMENT, AND SAFETY CULTURE IN HEALTHCARE ORGANISATIONS USING IHI'S FRAMEWORK

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Abstract

The purpose article is to study the connection that occurs between leadership, worker engagement, and safety culture within healthcare organisations. The paradigm that was created by the Institute for Healthcare Improvement (IHI) is used in this investigation. It is necessary to have strong leadership in order to accomplish the goal of setting the values, vision, and strategies that are accountable for driving quality care and patient safety. The individuals who hold positions of authority are the ones who are accountable for the establishment of an environment that puts a high value on safety and fosters the engagement of employees. involved workers are more likely to be motivated, productive, and driven to never-ending improvement, all of which contribute to a culture that prioritises safety and transparency. Employees who are involved in their job are more likely to be interested in their work. The IHI framework lays a large focus on the need of a solid safety culture that is established on trust, accountability, and open communication. This is because the IHI framework recognises that reduced risks and improved patient outcomes are directly related to the presence of such a culture.

Keywords: Leadership, Workforce Engagement, Safety Culture, Healthcare Organisations

Introduction

Over the course of the year 2020, the Institute for Healthcare Improvement (IHI) and the Agency for Healthcare Research and Quality (AHRQ) together presented the National Action Plan to Advance Patient Safety to the general public. It was found, with the use of this framework, that there are four pillars that are crucial to the construction of a safer environment for health care. These pillars include culture, leadership, and governance; patient and family participation; learning systems; and worker safety. A portion of the research that was published on PSNet in 2023 that pertains to two of these components—namely, the culture of patient safety and the culture of worker safety—is discussed in this Year in Review Perspective for 2023. Organisational culture may be defined as the collected attitudes, norms, and perceptions of a group of people that work together. This is the most fundamental level of the concept. The interactions that workers have on a daily basis with one another and with managers are the most essential component in establishing the culture of an organisation. This is the case despite the fact that there is little doubt that some parts of culture are influenced by the regulations that are in place within the business. The degree to which teams are able to effectively collaborate with one another, the degree to

which leadership and managers are supportive of patient and workforce safety, the manner in which staff members report incidents and near misses, and the strategies that teams and leaders employ in response to incidents are all factors that contribute to the culture of patient and worker safety in healthcare organisations. It has been demonstrated that a robust patient and worker safety culture may significantly improve a variety of patient outcomes, such as a reduction in the number of instances of surgical site infections, falls, and prescription errors. The results for patients are significantly improved as a result of this particular component. In situations where there is a robust culture of patient safety, patients have reported having more positive experiences with the treatment they get. In addition to the specific health consequences that individuals experience, this information is also included.

Psychological Safety And Employee Voice

According to the number of articles that were published on PSNet in 2023, the concepts of psychological safety and employee voice were the themes that were addressed the most frequently in the field of safety culture. Both of these concepts are concerned with the degree to which employees feel appreciated and at ease when they are able to speak their minds and express their emotions, concerns, and views without fear of repercussions. In a system that is dedicated to patient safety, this may imply that a healthcare worker (HCW) raises concerns about a patient's safety with their colleagues or superiors. Take, for instance, the case of an HCW who fails to record a contraindication while writing a medication or who fails to wash their hands before administering a therapy. It is possible to express concerns either before or after an incident has occurred, and these concerns may pertain to the actions of the individual who is expressing the issue or to the actions of their teammates.

Individual Factors

At the most fundamental level, the personality of a person may have an effect on their tendency to speak up in any given circumstance. To provide one example, persons who are more extroverted are more likely to speak out than people who are more introverted. At the moment, there is a limited amount of study that is being conducted, although it is starting to be examined, that establishes a connection between particular personality traits and psychological safety and employee voice. According to the findings of a thorough study that was carried out in the previous year, prosocial motives, dominant traits, competence, and self-efficacy were shown to be factors that impact speaking-up behaviour at individuals. Within the context of another qualitative inquiry, it was discovered that the participants' views of psychological safety were significantly, but weakly, connected with their emotional stability and the degree to which they engaged in abstract thought.

Leadership and Organizational Factors

This brings us to the final category of factors that have been shown to have an effect on psychological safety and employee voice. These factors include leadership and the company as a whole. The National Action Plan to Advance Patient Safety underlined the necessity of this component and mandated that governing boards understand the importance of safety, take part in safety efforts, and cultivate a culture that prioritises safety. The one During the year 2023, PSNet carried out research on this topic, which comprised CEOs and unit managers operating at a variety of different levels of leadership.

Safety Culture in Nonacute Settings

Safety culture in hospitals has traditionally been the focus of the vast majority of research that have been conducted on safety culture. Nevertheless, in the year 2023, PSNet announced the publication of a number of research that were carried out in non-acute settings, more especially nursing homes. In the year 2023, there was a paucity of research on the topic of safety culture in non-acute settings such as primary care or general medical offices. There has been a rise in the amount of study conducted on the subject of patient safety in nursing homes and long-term care institutions over the course of the past decade. The findings of study conducted in 2023 that focused on the safety cultures of nursing homes provided more proof of this. The most recent AHRQ SOPS Nursing Home Survey found that 54% of nursing home staff rated the safety of their residents as very excellent or exceptional, whereas 67% of hospital personnel rated the same level of safety that their residents experienced.

Objective

1. To evaluate healthcare workers' involvement and how it relates to safety procedures.
2. To investigate how safety culture affects both overall organisational performance and patient outcomes.

Research Design

The study is descriptive using quantitative and qualitative methods. The primary data for quantitative method was collected from health care executives using tools that were developed and standardized by the researcher. Qualitative data from health consumers or patients were collected using semi structured interviews. Overview of the research design of this descriptive study is given below.

Further from the literature review and exploratory study dimensions and items were generated, exhaustive item pool for 3 scales were developed. Validation of the scale was carried out after which the scale was revised and the revised scale was used for a try-out study. Subsequently, the scale was standardized. The standardized final scale was administered to 410 samples.

Results And Discussion

Characteristics of the Sample

The survey was conducted with 410 executives working in Healthcare Organisations Using IHI'S Framework in Kerala. These executives came from hospitals that were either accredited by the NABH or not accredited by the NABH. For the purpose of this study, districts in Kerala that contained at least four NABH facilities were included. In accordance with the data that Krejcie and Morgan (1970) provided, the sample size for a population of one lakh is 383 individuals. Kaiser-Meyer Olkin and Bartlett's Test was utilised in order to conduct an analysis of the sampling adequacy. Hutchenson and Sofronuou (1999) argued that a value index of 0.9 is marvellous, 0.8 is meritorious, 0.7 is middling, 0.6 is mediocre, 0.5 is wretched, and below 0.5 is unacceptable. Kaiser (1974) supports for the acceptance of values that are greater than 0.5.

KMO And Bartlett's Test for Sample Adequacy

Table 1 Bartlett's Test for Sample Adequacy and KMO

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.689
Bartlett's Test of Sphericity	Approx. Chi-Square	703.725
	df	3
	Sig.	.000

As shown in Table 1, the KMO sample adequacy measure has a value of .689, with a significance level of $p=.000$. This value falls within the appropriate range, which is defined as $p<.05$. In contrast to the KMO test, which examines the appropriateness of the sampling, the Bartlett's test of sphericity examines the degree to which variables are related to one another. As demonstrated in Table 1, the test of sphericity is statistically significant at a level of $p=.000$ ($p<.05$).

Demography Of Sample on Gender

Table 2 Gender-based demographics

Gender	Frequency	Percent
Male	241	58.8
Female	169	41.2
Total	410	100.0

The gender distribution of the executives is seen in Table 2. The overall sample consisted of 241 male executives, which accounted for 58.8% of the total, and 169 female executives, which accounted for 41.2% of the total for the sample.

Descriptive Statistics

Before applying the necessary statistical test to classify data analysis among parametric tests for normal data and non-parametric tests for non-normal data, the data were first put through a test to determine whether or not they were normal using the normality test.

Table 3 Normality test for the data

Tests of Normality		
Variables	Kolmogorov-Smirnova	Shapiro-Wilk

	Statistic	df	Sig.	Statistic	df	Sig.
Operational Excellence	.146	410	.000	.908	410	.000
Workforce Engagement	.210	410	.000	.846	410	.000
Safety Culture	.179	410	.000	.862	410	.000

a. Lilliefors Significance Correction

In order to determine whether or not the data should be considered normal, the Kolmogorov-Smirnov and Shapiro-Wilk (Yakir, 2013) test was performed in SPSS. In Table 3, the results of the normality test indicate that the data is not normal, with a significance level of $p=.000$ ($p<.05$).

Table 4 Kurtosis and skewness of the data

Variables	Skewness	Std. Error Skewness	Test of normality	Kurtosis	Std. Error Kurtosis	Test of normality
Operational Excellence	-.362	.121	2.99	-1.306	.240	5.44
High Performance Engagement	-.969	.121	8.01	.415	.240	1.73
Safety Culture	-.721	.121	5.95	-.946	.240	3.94

Table 4.4 displays the values for skewness and kurtosis and may be found here. In the case of a normal distribution, the values of skewness and kurtosis will be either 0 or very close to zero. The skewness numbers that are negative (-.362, -.969, and -.721) suggest that there is skewness, and the kurtosis values (-1.306, -.946, and .415) indicate that there are less extreme outliers.

Inferential Statistics

All of the statistical tests that are used to derive conclusions and inferences from the data are included in the field of inferential statistics. In this work, the statistical tests of correlational analysis, regression analysis, and significance testing are utilised for the data that does not follow traditional normal distribution.

- **Correlation Analysis**

An analysis of correlation is a statistical test that is used to determine the link between different variables. In this particular investigation, the data was analysed using the nonparametric correlation of Spearman's rank correlation (rs) test. This was done since the data does not follow a normal distribution or do not conform to the normal distribution. The Spearman's rank correlation coefficient will be used to determine the strength of the relationship between the variables as well as the direction in which the relationship is moving. In terms of the relationship between operational excellence and workforce engagement, there is no substantial correlation.

Table 5 Correlational analysis

Variables	Operational Excellence			
	N	df	rs	Significance
Workforce Engagement	410	408	.523**	0.000**

**p<0.01 level (2-tailed)

Detailed information regarding the connection between the dependent variable of operational excellence and the independent variable of workforce engagement is shown in Table 5. A statistically significant correlation coefficient of Spearman's rank is found to be $r_s = .523$, with a p-value of less than .01. The path is going in the right direction, and the connection is sufficiently robust. The substantial result suggests that an increase in the scores of operational excellence will be directly proportional to an increase in the scores of workforce engagement.

Table 6 Correlational analysis

Variables	Operational Excellence			
	N	df	rs	Significance
Safety Culture	410	408	.466**	0.000**

**p<0.01 level (2-tailed).

A representation of the connection between operational excellence and safety culture can be found in Table 6. Both in terms of direction and strength, the link is positive and powerful enough. According to the spearman's rank correlation coefficient, which is $r_s = .466$, and the p-value is less than 0.01, there is a statistically significant association between the scores of operational excellence and Safety Culture. This implies that when Safety Culture rises, operational excellence also increases. The aspects of operational excellence and workforce engagement do not have a substantial relationship with one another.

Table 7 Correlational analysis

Dimensions of Operational Excellence	Workforce Engagement towards Operational Excellence
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	N	df	rs	Significance
Training and Development	410	408	.624	.000
Leadership and Employee Empowerment	410	408	.447	.000
Culture and Values	410	408	.421	.000
Perceived Operational Excellence	410	408	.435	.000
Vanguard Technology	410	408	.410	.000
Lean Health Care	410	408	.257	.000

Data presented in Table 7 illustrates the connection that exists between the various aspects of operational excellence and workforce engagement. An indication of a positive and statistically significant association between the dimension of Training and Development of Operational Excellence and Workforce participation is provided by the spearman's rank correlation coefficient, which is $rs=.624$ and $p=.000<.05$, indicating a positive correlation. Therefore, a change in the level of workforce involvement will unquestionably result in a positive and significant change in the operational excellence dimension of training and development. It is possible to draw the conclusion that workforce engagement has the potential to alter the characteristics of training and development in order to have an effect on operational excellence. A positive statistically significant link exists between the dimension of Leadership and Employee Empowerment of Operational Excellence and Workforce engagement, as indicated by the spearman's rank correlation coefficient $rs=.447$, $p=.000 <.05$, which suggests that there is a positive relationship between these two dimensions. As a result, a shift in workforce engagement will result in a major positive change in leadership and employee empowerment associated with operational excellence.

Conclusions

Healthcare organisations using IHI's framework are complicated and resource-dependent. Quality improvement in this industry is ongoing. Since customers pay for access, availability, and quality, health leaders must encourage managed care professionals. Thus, health care workers' behaviour, attitude, beliefs, and values are crucial, and only effective leadership can empower them. Performance excellence and employee engagement are crucial for this noble profession to elevate to workforce engagement, which includes performance strategies, willingness and commitment, team synergy, performance engagement, and employee motivation, to improve patient outcomes and operational excellence. Capacity planning should include structural changes in rural and urban areas, aspirational impact, medical automation to make doctors' lives easier, medical startups to access markets, custom duties leverage, separate funds for women health entrepreneurs, rural health start-ups, punitive measures, and international benchmarks. For complete initiatives in health-stressed districts, more health indicators should be released, and Chhattisgarh and Brazilian kiosks and health bazaars should raise awareness and provide preventative treatment. Doctors, nurses, and other carers require extensive training.

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