



## How Transformational Leadership and Organizational Culture Affect Health Worker Performance? A Literature Review

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### ABSTRACT

Health personnel must maintain their performance in delivering health care due to their numerous responsibilities. Health care professionals' performance is affected by transformational leadership and organizational culture. Identify and summarize studies on the impact of transformational leadership and organizational culture on the performance of hospitalized health professionals. This study is a literature review that was conducted by searching publications published between 2011 and 2021 in the electronic databases Pubmed, Emerald, Google Scholar, JMMR, and Scopus that met the inclusion criteria. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidance is used in the review process. Eleven papers demonstrate the impact of transformational leadership on health worker performance, while eleven publications demonstrate the impact of corporate culture on health worker performance. Implication, transformational leadership and organizational culture have a large and favorable impact on health professionals' performance. will raise the standard of healthcare services.

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### ABSTRAK

Banyaknya tugas dari tenaga kesehatan menjadikan seorang tenaga kesehatan perlu menjaga kinerjanya dalam memberikan pelayanan kesehatan. Kepemimpinan transformasional dan budaya organisasi menjadi faktor dalam menjaga dan meningkatkan kinerja tenaga kesehatan. Untuk mengidentifikasi dan mensintesis penelitian tentang pengaruh kepemimpinan transformasional dan budaya organisasi terhadap kinerja tenaga kesehatan di rumah sakit. Penelitian ini merupakan Literature review dengan penelusuran artikel melalui database elektronik Pubmed, Emerald, Google Scholar, JMMR dan Scopus yang diterbitkan dari tahun 2011-2021 dan memenuhi kriteria inklusi. Proses review menggunakan panduan Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Sebelas artikel menunjukkan pengaruh kepemimpinan transformasional terhadap kinerja tenaga kesehatan dan Sebelas artikel menunjukkan pengaruh budaya organisasi terhadap kinerja tenaga kesehatan Artinya, kepemimpinan transformasional dan budaya organisasi memiliki pengaruh yang signifikan dan positif terhadap kinerja tenaga kesehatan. Implikasinya, rumah sakit yang dapat mempertimbangkan kepemimpinan transformasional dan budaya organisasi akan dapat meningkatkan kualitas pelayanan rumah sakitnya.

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## INTRODUCTION

Human resources are critical for hospitals to provide health services. Human resources have a huge impact on a hospital's success. A hospital's performance may be improved by having good human resources in place (Mohammad et al., 2021). In hospitals, one of the human resources is a health worker. A health worker is someone who works at a hospital and provides medical care to patients. Doctors, nurses, pharmacists, lab technicians, and other employees in charge of delivering health services are all considered health workers (Joseph & Joseph, 2016). A nurse is one of the hospital's health workers. A nurse is a person who has finished their nursing education and is qualified to give medical care to other people. Health promotion, illness prevention, and sick care are among the services given. Nurses will provide health services to individuals, families, groups, and the community as a whole (Currie & Carr-Hill, 2013).

A health worker's various responsibilities need that maintain his or her performance in delivering health services. Health employees are expected to perform well when delivering health care since strong performance translates to good hospital service quality (Rowe et al., 2018). A nurse who works in the medical field must also maintain her or his level of performance (Lu & Li, 2021). Nurses who are unable to sustain their current level of performance will be able to lower hospital performance (Zhou et al., 2011). Several things can have an impact on a nurse's performance. Transformational leadership and organizational culture are two aspects that impact nurse performance. Nurse performance is influenced by transformational leadership both directly and indirectly through corporate culture (Hidayah & Fadila, 2019).

Transformational leadership is a type of leadership in which the leader can inspire his or her followers, focus on intellectual stimulation, and consider each member's personality (Bass & Avolio, 1994). In the field of health care, transformational leadership has recently been a hot subject. (Ribeiro et al., 2018) discovered a link between transformational leadership and a health worker's performance in providing health services. In addition, nurses' performance was found to be influenced by transformational leadership (Para-González et al., 2018). Hospitals that employ a transformational leadership style will be able to boost nurse productivity (Fischer, 2016).

Organizational culture, in addition to transformational leadership, has an impact on health worker performance. In order to achieve organizational goals, organizational culture is a set of values and beliefs held by all members of the company (Cameron & Quinn, 1999). The performance of health personnel was shown to be linked to the hospital's organizational culture (Acosta-Prado et al., 2020). Furthermore, organizational culture was discovered to have an impact on nurse performance (Al-Musadieq et al., 2018). A hospital with a healthy organizational culture will be able to improve the performance of nurses, increasing the services offered by nurses (Taboli et al., 2014).

In order to enhance services, hospitals must assess the performance of its health personnel. The hospital's performance will be improved by the performance of good health personnel (Berberoglu, 2018). There has been a significant amount of study on the link between transformational leadership, organizational culture, and health worker performance (Hidayah & Fadila, 2019). The goal of this study was to find and consolidate literature on

the impact of transformational leadership and organizational culture on the performance of hospital health professionals.

## METHOD

### Literature Search Strategy

Through an electronic database, researchers looked for publications on the effects of transformational leadership and organizational culture on the performance of health professionals. Pubmed, Emerald, Google Scholar, JMMR, and Scopus are some of the electronic databases used by researchers. Use advanced search terms like "Transformational Leadership", "Organizational Culture", "Performance", "Nurse" and "Health Worker" to find articles. Publications that explored the effect of transformational leadership and organizational culture on the performance of health professionals, written in English, published in the previous ten years (2011-2021), and utilizing quantitative and qualitative approaches were included in the search for articles. This study did not include systematic review articles or reviews, as well as papers for which complete access was not accessible.

### Article Selection Mechanism

The Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) standards were used to identify papers (Page et al., 2021). There were 4542 articles discovered after searching the database for them. A total of 50 publications were analyzed after the researchers chose titles and abstracts. This study comprised 20 publications based on the whole review procedure.

### Data Extraction

Following the selection of articles, the researchers continued to synthesize articles using the following format: researcher, year, journal of publication, location, study aims, research design, samples, and research outcomes. Figure 1 shows the findings of the article synthesis.

## RESULTS AND DISCUSSION

### Result Characteristic

This research yielded a total of 20 papers. The 20 articles that met the inclusion criteria proceeded to the stage of article synthesis. The publications are grouped into two types of designs: quantitative and qualitative. There are 18 quantitative articles and 2 qualitative articles. The publications in this study were published between 2011 and 2021. The investigations covered in this study were conducted in a variety of nations. Indonesia has five studies, Taiwan has two, South Korea has two, and Portugal, Eastern Turkey, India, Colombia, England, Uganda, China, Brazil, Saudi Arabia, Iran, and Japan each have one. Eight papers were discovered to be conducted in a multicenter research, whereas 12 publications were found to solely focus on one institution. Table 1 shows the details of the articles that were synthesized.

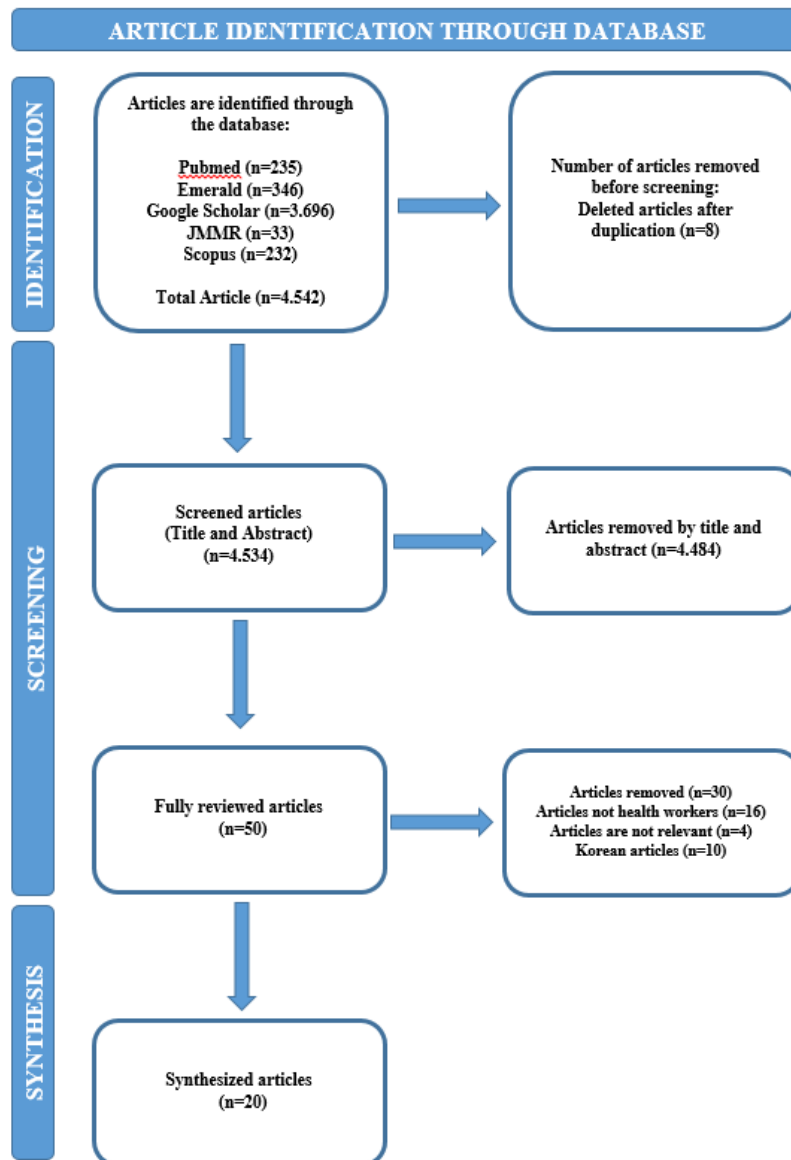


Figure 1. PRISMA Diagram

### Research Instrument

In this study, several instruments were found in each of the articles studied. There are 3 questionnaires used to measure transformational leadership, namely the Multifactor Leadership Questionnaire (Almutairi 2015; Devi 2020; Ferreira et al. 2020; Peng and Tseng 2019; Risambessy et al. 2012; Salanova et al. 2011; Suratno and Ariyanti 2018), 14-item transformational leadership scale (Lai et al. 2020) and 15-transformational leadership items proposed by Rafferty and Griffin (Ribeiro et al. 2018). Organizational culture was measured using 5 questionnaires, namely Organizational citizenship behavior scale by Morrison (Salanova et al. 2011), Satisfactory psychometric properties developed by López et al (Acosta-Prado et al. 2020), Competing Values Framework (CVF) Questionnaire (Jacobs et al. 2013), Tool for Organizational Culture Assessment (Zhou et al. 2011), Modified Park's patient safety culture measurement too (Moon and Jang 2018). Furthermore, the performance of

health workers was measured using 6 questionnaires, namely Nurse's task performance on a three-item scale (Lai et al. 2020), Two-dimensional Role-Based Job Performance Scale (Peng and Tseng 2019), Quality of Nursing Work Life scale ( Suratno and Ariyanti 2018), Korean version of the Practice Environment Scale of the Nursing Work Index (Cha and Sung 2020), 49-Performance items based on the guidelines of the Center for Disease Control and Prevention (CDC) (Moon and Jang 2018) and The organizational performance questionnaire (Taboli et al. 2014). In addition, there are several other questionnaires, namely the Utrecht Work Engagement Scale (Salanova et al. 2011), Scandura and Graen's Seven-item LMX scale, 18-item work engagement scale, Four-item helping behavior scale (Lai et al. 2020), 16 items work engagement from Schaufeli et al.'s, 10-item instrument taken from the International Personality Item Pool (Peng and Tseng 2019). Denison Organizational Culture Survey and The Mirkamali Clinical Governance Questionnaire (Taboli et al. 2014).

**Table 1**  
**Review of papers on the impact of transformational leadership and organizational culture on health worker performance.**

No	Researcher/Year/Journal	Study Aims	Research Design/Sample	Data Analysis	Result
1.	(Salanova et al., 2011), Journal of Advance Nursing	Examine the impact of supervisory transformational leadership on nurse performance.	A questionnaire is used in a cross-sectional quantitative method. This research included 280 nurses and 17 supervisors from a Portuguese hospital.	SEM	The results of this study show that transformational leadership has a major impact on nurse performance. Supervisors that can employ a transformational leadership style will be able to improve nurse performance, increasing the efficacy and efficiency of hospital health services.
2.	(Hidayah & Fadila, 2019), Asian Social Work Journal	Proving the impact of transformational leadership on nursing performance, both directly and indirectly via corporate culture and work motivation.	Cross-sectional study design using a quantitative methodology. The participants in this study were 86 nurses from an Indonesian private hospital.	SEM-PLS	Nurse performance is influenced by transformational leadership both directly and indirectly through company culture and work motivation. In order to increase nurse performance, transformational leadership is also vital in the creation of corporate culture and work motivation.
3.	(Lai et al., 2020), SAGE Journals	Exploring the impact of transformational leadership on nurse performance and mutual assistance behavior, as mediated through work engagement.	Three waves of data collecting in a multi-temporal study design. A total of 507 nurses were included in this trial, divided into 44 teams. Nurses are being recruited from two Taiwanese hospitals.	Multi-Level Path Analysis in Mplus 7.4	Nurses' performance and habit of assisting one another are influenced by transformational leadership. One of the factors driving this impact was shown to be nurse work engagement. Leaders that employ transformational leadership styles will be able to maintain and increase the psychological well-being of nurses, allowing them to maintain and improve their performance.
4.	(Peng & Tseng, 2019), The Journals of Psychology	Explores the relationship between transformational leadership and nurse performance mediated by engagement and work awareness.	Using a questionnaire, a quantitative approach is taken. The participants in this study were 234 nurses from a Taiwanese provincial hospital.	Confirmatory Factor Analysis (CFA) on AMOS 7.0	The performance of nurses was shown to be strongly linked to transformational leadership. In link between transformational leadership and performance, job engagement and employee awareness are essential elements. Nursing leaders that employ a transformational leadership style will see an increase in work motivation, self-confidence, and job security, allowing them to enhance nurse performance.
5.	(Ribeiro et al., 2018), International Journal of Productivity and Performance Management	Examine the effect of transformational leadership on employee performance mediated by the affective commitment	Using a questionnaire as a quantitative method. A total of 476 health care employees from a prominent hospital in Eastern Turkey were included in this study.	SEM-AMOS	Employees may feel supported and cared for as a result of transformational leadership, which includes emotional commitment. This will boost employee engagement with the business, resulting in improved employee performance. Employees that work under transformational leadership will be able to grasp the organization's vision and goal, allowing them to perform well.

6.	(Suratno & Ariyanti, 2018), International Journal of Caring Science	Analysing the effects of transformational leadership on nursing service quality.	A questionnaire was used in a quantitative method with a cross- sectional design. This research included 542 nurses from five hospitals in Makassar, Indonesia.	Rho Spearman Corerlation Analysis	The quality of nursing care is directly influenced by transformational leadership. The productivity and performance of nurses are factors in the quality of nursing services. Nurse leaders play a crucial part in the implementation of transformational leadership since they are the ones who will be responsible for increasing performance. Nurse leaders that employ transformational leadership will foster a positive work environment in which nurses' performance will improve.
7.	(Devi, 2020), Indian Journal of Forensic Medicine & Toxicology	Assess the nurse in charge of transformational leadership's expertise, as well as the performance of nurses who have received transformational leadership training.	Pre- and post-testing in a quasi- experimental technique. In this study, 52 nurses at charge of maternity wards in Indian hospitals were used as the sample.	Pre-Post Test Likert Scale	In the health-care system, transformational leadership is a critical issue. According to the findings of the research study, nurses who received transformational leadership training in the maternity unit improved their performance. The quality of maternity nurses' services will improve as a result of their improved performance.
8.	(Acosta-Prado et al., 2020), Frontiers in Psychology	Examining the impact of human resource management on health care professionals' creative performance, as mediated through organizational culture	Explanatory Empirical Study. The participants in this study were 162 health personnel from a Colombian non-profit hospital.	SEM-PLS	Human resource management and organizational culture have a significant impact on health care professionals' performance. This study discovered that organizational culture is a powerful predictor of health employees' creative performance, allowing hospitals to increase the quality of services they give.
9.	(Cha & Sung, 2020), International Journal of Nursing Practice	Knowing the factors that may have an impact on a nurse's performance is essential.	The research is cross-sectional and descriptive research. The participants in this study were 177 nurses who worked as intensive care nurse in a South Korean hospital's Intensive Care Unit.	IBM SPSS 24.0 t-test and ANOVA for analysis of differences in variables  Pearson for the analysis of the relationship between variables  Multiple- Regression to determine the factors that affect performance	Several factors affecting nurse performance were discovered in this study. The study discovered characteristics such as nurse supervisors' rudeness and corporate culture. The nurse manager's rudeness and the patient's family's rudeness were found to have little bearing on the nurse's performance, however, the hospital's organizational culture had a considerable bearing on the nurse's performance. A task-oriented organizational culture was likewise determined to be the optimal organizational culture for increasing nurse performance in this study. Nurses' performance was also shown to be influenced by the duration of their shifts. Nurses who had worked for more than three years performed better than those who had worked for less than three years.
10.	(Jacobs et al., 2013), Social Science & Medicine ELSEVIER	Identifying the link between hospital performance and organizational culture	Quantitative approach using ordered probit and multinomial logit models. The sample in this study were 2,464 nurse managers	ANOVA	A link was discovered between organizational culture and hospital performance. The hospital culture discovered in this study is an organizational culture of the clan type, even

			from 470 hospitals in England.			though the clan organizational culture was not determined to be superior to the rational organizational culture. A rational organizational culture would stress competitive elements to enhance the hospital's performance, and it is hoped that a hospital will be able to win the market and please patients as a result of this culture.
11.	(Shumba et al., 2017), BMC Health Services Research	Understanding the impact of organizational culture and work experience on health workers' willingness to leave their positions.	Qualitative approach with interviews. The sample in this study is 23 health workers and 5 health worker managers from 19 health care facilities in Uganda.	<i>Thematic Analysis</i>	<i>Content</i>	The professionalism of health personnel is influenced by organizational culture. A terrible organizational culture, according to this study, leads to poor performance of health worker supervisors, such as not listening to members' comments and being authoritarian. This will result in a decline in job satisfaction and work motivation among health employees, resulting in decreased performance and, ultimately, health workers leaving their jobs.
12.	(Zhou et al., 2011), HSR: Health Services Research	Measuring the perception of organizational culture on hospital performance	Quantitative approach with a questionnaire. The sample in this study were health workers spread over 93 public hospitals in Shanghai, China.		Multivariate analysis	A link was shown between organizational culture and hospital performance in this study. Patients' LOS will be reduced by an organizational culture that emphasizes social responsibility, but this will be actually equivalent to an organizational culture that prioritizes patient happiness. Longer LOS is associated with an organizational culture that prioritizes patient satisfaction. This study also discovered that an organizational culture that prioritizes the development and empowerment of health professionals had no impact on their performance.
13.	(Ferreira et al., 2020), <i>Revista Brasileira de Enfermagem</i>	Knowing the challenges and strategies of nurses in implementing transformational leadership	Interviews were used to explain a qualitative methodology. The participants in this study were 25 nurses from a Brazilian hospital.	<i>Thematic Analysis</i>	<i>Content</i>	According to this study, nurses have obstacles in implementing transformational leadership since hospitals do not push them to become strong leaders. As a result, the nurses were encouraged to be rebellious and disrespectful to their superiors' orders. This is equivalent to the ability of hospitals to give transformational leadership training to managers so that managers may set a positive example for nurses and nurse managers are supposed to communicate effectively with nurses. The presence of effective transformational leadership will increase the performance of nurses and the quality of hospital service.
14.	(Mamik et al., 2020), ARPN Journal of Engineering and Applied Sciences	Investigating the impact of transformational leadership and organizational culture on	Explanatory research. The sample in this study were 89 nurses who served in the maternity ward in a		Path Analysis with SPSS Version 22.0 Program	Transformational leadership has a considerable impact on nurse performance and OCB, according to this study. Organizational culture was shown

	organizational citizenship behavior (OCB) and employee performance.	hospital in East Java, Indonesia			to have a considerable influence on nurses' OCB, but no significant effect on nurses' performance. The nurses' OCB was also found to have a substantial impact on their performance.
15. (Moon & Jang, 2018), Iranian Journal of Public Health	To improve effective and systematic management by looking at various factors that affect a health service	Using a questionnaire, a quantitative approach was applied. In this study, 388 nurses from 16 hospitals in South Korea were included in the sample.	Multivariate Analysis		Organizational elements such as leadership and organizational features were shown to be essential in boosting the efficacy of health care management in this study. Employee performance is significantly influenced by organizational culture. Nurses' attitudes and behaviors might be influenced by the home's beliefs and objectives. To improve nurse performance, leadership support and the development of hospital organizational culture must be addressed.
16. (Almutairi, 2015), International Journal of Business and Management	Understanding the impact of transformational leadership on employee performance, as mediated through organizational commitment.	Descriptive approach and correlation using a questionnaire. The sample in this study were 227 female nurses from 4 hospitals in Saudi Arabia.	<i>Pearson-Correlation</i>		The impact of transformational leadership on nurse performance was discovered in this study. Aside from that, organizational commitment was discovered to have a substantial association with nurse performance. Hospitals are required to be able to apply transformational leadership in order to boost organizational commitment among nurses as well as their performance.
17. (Risambessy et al., 2012), Journal of Basic and Applied Scientific Research	Explain and analyze the relationship between transformational leadership, work motivation, burnout, job satisfaction and employee performance	<i>Explanatory Research using questionnaires, interviews and company documents. The sample in this study were 105 nurses from 6 hospitals in Malang, Indonesia</i>	<i>SEM</i>		This research shows that transformational leadership has a major impact on staff motivation and performance, as well as the prevention of employee burnout. Apart from that, motivation has been discovered to have a strong link to employee performance, work happiness, and the prevention of burnout. Staff burnout was also found to have a detrimental impact on employee performance.
18. (Taboli et al., 2014), Journal of Occupational Health and Epidemiology	Identifying the link between corporate culture, clinical governance, and performance	Using a questionnaire, a quantitative approach was applied. A total of 113 health personnel from a hospital in Mazandaran, Iran, were included in this study.	SEM, Path Analysis, Pearson, SPSS		Organizational culture has a substantial and favorable association with employee performance and clinical governance, according to this study. A healthy organizational culture will guide a hospital toward effective clinical governance, which will improve the performance of hospital staff. In order to establish strong clinical governance and staff performance, hospitals are obliged to think about building organizational culture.
19. (Ukawa et al., 2015), International Journal of Quality in Healthcare	Understanding the impact of organizational culture on hospital performance in terms of antibiotic prophylaxis during surgery	A quantitative technique employing hospital data and a retrospective cross-sectional method. This survey included 4856 health workers from 83 hospitals in Japan.	Multilevel models of various cultural dimensions		The impact of organizational culture on the performance of hospital employees is presented in the study. Hospitals with a strong organizational culture will do well as well. The compliance of health personnel in delivering

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						peri-operative prophylactic antibiotics demonstrated good performance in this research. Hospitals that foster a culture of cooperation and professional growth will see even greater gains in performance.
20.	(Darmayanti, 2019), <i>Jurnal Medicoeticolegal dan Manajemen Rumah Sakit</i>	Knowing the influence of organizational culture, compensation, and career development on nurse performance	A questionnaire is used in a cross-sectional quantitative method. A total of 143 nurses from a hospital in Denpasar, Indonesia were used in this investigation.	SEM-AMOS		It was discovered in this study that organizational culture has a considerable and beneficial impact on nurse performance. Hospitals with a good organizational culture will be able to boost their nurses' productivity. This study discovered that, in addition to organizational culture, salary and career development had a substantial and favorable impact on nurse performance.

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## The Influenced Transformational Leadership on Health Workers Performance

Transformational leadership has a considerable and favorable influence on the performance of health workers, according to the findings of this review's synthesis. There are 11 articles that demonstrate the impact of transformational leadership on nursing performance. Transformational leadership has a significant and positive direct effect on nurse performance (p value 0.031 0.05 and t statistic > 1.96, Direct effect 33.5 percent positive), according to studies (Hidayah & Fadila, 2019). In addition, a study (Lai et al., 2020) found a link between transformative leadership and nurse performance (ab = .04, 95 percent confidence interval [CI] = [0.01, 0.08], p.05). Transformational leadership has a significant and beneficial effect on nurse performance (r = .47, p.01), according to a study (Peng & Tseng, 2019). Transformational leadership was found to have a significant link with nurse performance (r = .310; p.01) in a study by (Ribeiro et al., 2018). (Suratno & Ariyanti, 2018) also discovered that transformational leadership had a substantial impact on nursing service quality (r = .28; p.01), implying that transformational leadership can increase nursing service quality by 28%. In furthermore, a study (Mamik et al., 2020) discovered that transformational leadership has a significant impact on nurse performance (sig.05). Transformational leadership was also found to have a substantial effect on nurse performance (r = 0.894, p 0.01) in a study (Almutairi, 2015). Transformational leadership was also found to have a significant link with nurse performance (t count = 3,100, p = .000) in a study by (Risambessy et al., 2012). In addition to the studies mentioned above, there is an experimental study from (Devi, 2020) that suggests that nurses' performance improves after receiving transformational leadership training. In this evaluation, a qualitative study including 25 nurses from (Ferreira et al., 2020) concluded that transformational leadership improves performance as indicated by improved service quality.

## Factors Linked to Transformational Leadership

Several other elements were discovered to be linked to transformational leadership and health worker effectiveness in this study. According to a study by (Salanova et al., 2011), transformational leadership mediated by work engagement had a substantial impact on nurses' performance [ $v_2(61, N = 280) = 122.86$ ; RMSEA = 0-06; GFI = 0-93; AGFI = 0-90; IFI = 0-97; CFI = 0-97]. Transformational leadership has a considerable impact on nurses' job motivation (p value 0.000 0.05 and t statistic > 1.96 direct effect 15% positive) and hospital organizational culture (p value 0.000 0.05), according to research by (Hidayah & Fadila, 2019). Work motivation mediated by transformational leadership had an indirect influence on nurse performance (p value 0.000 0.05 and t statistic > 1.96, indirect effect 21.3 percent), according to (Hidayah & Fadila, 2019). Transformational leadership was also found to have a substantial link with nurses' work motivation in a private (Risambessy et al., 2012), where transformational leadership was found to have a significant association with nurses' work motivation (t count = 6.537, p = .000). In addition, a study by (Lai et al., 2020) discovered other aspects such as work engagement and helping behavior. Work engagement and helping behavior were found to have an impact on transformational leadership (CI = [0.01, 0.09], p.05). In the proprietary study (Peng & Tseng,

2019), job engagement was also found to have an impact on transformational leadership (r = .36, p.01).

Other characteristics were discovered in this study, including a link between health worker job satisfaction and transformational leadership. Transformational leadership was found to have a significant and negative relationship with health worker job satisfaction (t count = 2,089, p = .037) and transformational leadership was found to have a significant and negative relationship with health worker burnout (t count = -2685, p = .007), according to a study (Risambessy et al., 2012). In the study (Almutairi, 2015), the organizational affective commitment component was also found to have a relationship with transformational leadership (r = .590, p 0.01). Furthermore, it was discovered that work awareness has factors that influence transformational leadership (r = .41, p.01). This factor was discovered in a private study (Peng & Tseng, 2019).

## The Influenced Organizational Culture on the Performance of Health Workers

Organizational culture has a relationship with the performance of health workers, according to the findings of this review's synthesis. Organizational culture has a strong and positive direct effect on nurse performance, according to a study (Hidayah & Fadila, 2019) (p-value 0.003 0.05 and t statistic > 1.96, direct effect 26.3 percent positive). Furthermore, according to (Acosta-Prado et al., 2020), organizational culture has a substantial impact on health workers' innovative performance (t = 5.251; p.001). Organizational culture has a good link with nurse performance, according to a study (Cha & Sung, 2020). Nurse performance was positively correlated with task-oriented organizational culture (r = .209, P = .005) and organizational culture centered on connections among organizational members (r = .195, P = .009). In addition, a study from (Jacobs et al., 2013) discovered that organizational culture had an impact on hospital performance. The performance of a hospital was found to have a strong link with developmental organizational culture (R<sup>2</sup> = .028, P = .0001).

An organizational culture that focuses on responsibility has a negative relationship to LOS (-4.7925,  $\chi^2$  wald = 6.6219, p = .01), an organizational culture that focuses on patient satisfaction has a positive relationship to LOS (4.7267,  $\chi^2$  wald = 6.8484, p = .001), and organizational culture that focuses on the development of health workers has a positive relationship to hospital performance (Zhou et al., 2011). (Moon & Jang, 2018) findings are consistent with those of earlier studies, which revealed that organizational culture had a direct impact on nurse performance (= .21, P = .007). Organizational culture has a strong influence on nurse performance, according to research from (Ukawa et al., 2015) (p.01), (Taboli et al., 2014) (Chi-Square = 187.56, df = 81, p = .000, RMSEA = .084), and (Darmayanti, 2019) (Chi-Square = 187.56, df = 81, p = .000, RMSEA = .084).

In addition to the aforementioned, other research has shown that organizational culture has little effect on nurse performance. According to a study by (Mamik et al., 2020), organizational culture has no significant impact on nurse performance (sig.05).

## DISCUSSION

Transformational leadership is a type of leadership in which the leader can inspire his or her followers, focus on

intellectual stimulation, and consider each member's personality (Bass & Avolio, 1994). It was discovered in this study that transformational leadership has a link to health worker performance. According to research (Hidayah & Fadila, 2019), transformational leadership has a direct and indirect impact on nursing performance via organizational culture and job motivation. In order to increase nurse performance, transformational leadership is also vital in the creation of corporate culture and work motivation.

Another study (Salanova et al., 2011), demonstrates that transformational leadership has a significant impact on nurse performance. Nurse supervisors who employ a transformational leadership style will be able to improve nurse performance, hence increasing the effectiveness and efficiency of hospital health services. A study by (Mamik et al., 2020) backs up this theory, claiming that transformational leadership has a considerable impact on performance. Leaders that employ transformational leadership styles will be able to maintain and improve the psychological condition of nurses, allowing them to maintain and increase their performance (Lai et al., 2020).

In terms of healthcare quality, transformational leadership will be crucial. The productivity and performance of nurses are factors in the quality of nursing services. Nurse leaders play a crucial part in the implementation of transformational leadership because they are the ones who will be responsible for increasing performance. Nurse leaders that employ transformational leadership will foster a positive work environment in which nurses' performance will improve (Suratno & Ariyanti, 2018). To be able to maximize transformational leadership, health workers will need training in order to build leaders who uphold the transformational leadership style. With transformational leadership training, health workers will be able to increase their performance (Devi, 2020). According to (Ferreira et al., 2020), excellent transformational leadership will increase the performance of nurses and the quality of service provided by hospitals.

The association between transformational leadership and health worker performance was also discovered to be mediated by work engagement (Lai et al., 2020). The ability of health workers to collaborate with hospitals is critical to increasing performance. Nursing leaders that employ a transformational leadership style and prioritize work engagement will see an increase in work motivation, self-confidence, and job security, allowing them to improve nurse performance (Peng & Tseng, 2019). Work involvement will also improve health workers' grasp of the hospital's vision and mission, allowing them to comprehend and carry out organizational goals in each of their roles (Ribeiro et al., 2018).

Other elements, such as organizational commitment, play a role in the link between transformational leadership and health worker effectiveness. Employees may feel supported and cared for as a result of transformational leadership, which includes affective commitment (Ribeiro et al., 2018). This is backed up by research from (Almutairi 2015), which discovered that organizational commitment has a significant impact on nurse performance. Hospitals are expected to be able to apply transformational leadership in order to boost organizational commitment among nurses as well as their performance.

Burnout among healthcare professionals is also a significant element in the relationship between transformational leadership and healthcare worker performance. Work motivation and transformational leadership are inextricably linked. If work motivation can be

improved, the hospital can avoid health professional burnout (Risambessy et al., 2012)

Furthermore, it is linked to the impact of organizational culture on health professional performance. In order to achieve organizational goals, organizational culture is a set of values and beliefs shared by all members of the organization (Cameron & Quinn, 1999). A good organizational culture will guide a hospital toward good clinical governance, which will improve the performance of hospital staff. In order to establish strong clinical governance and staff performance, hospitals are expected to think about developing organizational culture (Taboli et al., 2014).

Organizational culture has a strong and favorable direct influence on nurse performance, according to this review, hence hospitals that can enhance their organizational culture will be able to increase service quality (Acosta-Prado et al., 2020). This is backed up by a study from (Hidayah & Fadila, 2019), which found that organizational culture has a significant and beneficial impact on nurse performance. The professionalism of health personnel is also influenced by organizational culture. According to a study, poor organizational culture leads to poor performance of health worker supervisors, such as not listening to members' comments and being authoritarian. As a result, health care professionals' job satisfaction and motivation will decline, and their performance will suffer as a result (Shumba et al., 2017). (Ukawa et al., 2015) research backs up assertions concerning the impact of corporate culture on performance. The impact of organizational culture on the performance of hospital employees is demonstrated in this study. Hospitals with a strong organizational culture will perform well, resulting in an increase in the hospital's services. Hospitals with a good organizational culture will be able to boost their nurses' productivity (Darmayanti, 2019).

Health employees' performance will be influenced by the type of organizational culture they operate in. Clan organizational culture was found to be no better than rational organizational culture in a study. A rational organizational culture would stress competitive elements in order to improve the hospital's performance, and it is hoped that a hospital will be able to win the market and please patients as a result of this culture (Jacobs et al., 2013). In addition to the organizational culture, a social responsibility-focused organizational culture will lower patient LOS. This is in stark contrast to the company culture, which prioritizes patient pleasure. Longer LOS is associated with an organizational culture that prioritizes patient satisfaction. The study also discovered that a corporate culture that prioritizes the development and empowerment of health personnel had no bearing on their performance (Zhou et al., 2011). Based on the forms of organizational culture outlined above, a study shows that when compared to other organizational cultures, developing organizational culture has the greatest significant association to hospital performance. Human resource development will be the focus of a developmental organizational culture (Jacobs et al., 2013). Career development is a development that hospitals can carry out since the career development of health workers has a large and good impact on nursing performance (Darmayanti, 2019).

The relationship between organizational culture and performance also influenced by organizational citizenship behavior (OCB). In a study, it was discovered that organizational culture has a considerable impact on nurses' OCB. Nurses' OCB was also discovered to have a substantial impact on their performance (Mamik et al., 2020).

Organizational culture has a close association with performance, as explained above. This is the polar opposite of a research project. This study shows that corporate culture has little bearing on health care personnel's performance. Health workers' performance is unaffected by organizational culture, hence a hospital's organizational culture will have no bearing on its health employees' performance (Mamik et al., 2020).

### LIMITATION OF THE STUDY

There are still limitations in this study. The literature review research approach used in this study can only give a theoretical perspective, and in actual life, theory and practice might often be extremely different. Then, and only then, does this study concentrate on transformational leadership and organizational culture. Other than transformational leadership and organizational culture, further study is needed to explore the aspects that will affect the performance of health professionals.

### CONCLUSIONS AND SUGGESTIONS

This review shows that transformational leadership has a significant and positive effect on nurse performance. Several factors such as work engagement, work motivation, job satisfaction, burnout, work awareness, helping behavior and self-efficacy have become important factors in the relationship of transformational leadership to employee performance. This review also shows that in general organizational culture has a significant influence on nurse performance. Each type of organizational culture has its own influence on the performance of health workers. Finally, this review proves that in general, transformational leadership and culture have an influence on the performance of health workers. Hospitals that can consider transformational leadership and organizational culture will be able to improve the quality of hospital services

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#### Conflict of Interest Statement

There are no possible conflicts of interest with respect to the authoring and publishing of this work, according to the authors.

### REFERENCES

- Acosta-Prado, J. C., López-Montoya, O. H., Sanchís-Pedregosa, C., & Zárate-Torres, R. A. (2020). Human Resource Management and Innovative Performance in Non-profit Hospitals: The Mediating Effect of Organizational Culture. *Frontiers in Psychology*, *11*, 1422. <https://doi.org/10.3389/fpsyg.2020.01422>
- Al-Musadieq, M., Nurjannah, N., Raharjo, K., Solimun, S., & Achmad Rinaldo Fernandes, A. (2018). The mediating effect of work motivation on the influence of job design and organizational culture against HR performance. *Journal of Management Development*, *37*(6), 452–469. <https://doi.org/10.1108/JMD-07-2017-0239>
- Almutairi, D. O. (2015). The Mediating Effects of Organizational Commitment on the Relationship between Transformational Leadership Style and Job Performance. *International Journal of Business and Management*, *11*(1), 231. <https://doi.org/10.5539/ijbm.v11n1p231>
- Bass, B. M., & Avolio, B. J. (1994). Transformational Leadership And Organizational Culture. *International Journal of Public Administration*, *17*(3–4), 541–554. <https://doi.org/10.1080/01900699408524907>
- Berberoglu, A. (2018). Impact of organizational climate on organizational commitment and perceived organizational performance: Empirical evidence from public hospitals. *BMC Health Services Research*, *18*(1), 399. <https://doi.org/10.1186/s12913-018-3149-z>
- Cameron, K. S., & Quinn, R. (1999). Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework Revised Edition. *Personnel Psychology*, *52*(3), 755–757. [https://doi.org/10.1111/j.1744-6570.2006.00052\\_5.x](https://doi.org/10.1111/j.1744-6570.2006.00052_5.x)
- Cha, C., & Sung, C. (2020). Factors related to nursing performance in South Korean intensive care units. *International Journal of Nursing Practice*, *26*(6). <https://doi.org/10.1111/ijn.12874>
- Currie, E. J., & Carr-Hill, R. A. (2013). What is a nurse? Is there an international consensus?: What is a nurse? *International Nursing Review*, *60*(1), 67–74. <https://doi.org/10.1111/j.1466-7657.2012.00997.x>
- Darmayanti, N. L. (2019). Organizational Culture, Compensation, and Career Development on Nurse Performance with Job Satisfaction as Intervening Variables. *Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit*, *8*(2). <https://doi.org/10.18196/jmmr.8294>
- Devi, S. (2020). Transformational Leadership Educational Bundle for Nursing Supervisors and Nurses in-Charges and its Impact on Clinical Performances of the Nurses in the Labour Room. *Indian Journal of Forensic Medicine & Toxicology*, *14*(4). <https://doi.org/10.37506/ijfmt.v14i4.12226>
- Ferreira, V. B., Amestoy, S. C., Silva, G. T. R. da, Trindade, L. de L., Santos, I. A. R. dos, & Varanda, P. A. G. (2020). Transformational leadership in nursing practice: Challenges and strategies. *Revista Brasileira de Enfermagem*, *73*(6), e20190364. <https://doi.org/10.1590/0034-7167-2019-0364>
- Fischer, S. A. (2016). Transformational leadership in nursing: A concept analysis. *Journal of Advanced Nursing*, *72*(11), 2644–2653. <https://doi.org/10.1111/jan.13049>
- Hidayah, N., & Fadila, E. N. (2019). Transformational Leadership Directly and Indirectly Effect on Nurse Performance: Organizational Cultural as Intervening Variables. *Asian Social Work Journal*, *4*(1), 1–10. <https://doi.org/10.47405/aswj.v4i1.77>

- Jacobs, R., Mannion, R., Davies, H. T. O., Harrison, S., Konteh, F., & Walshe, K. (2013). The relationship between organizational culture and performance in acute hospitals. *Social Science & Medicine*, *76*, 115–125. <https://doi.org/10.1016/j.socscimed.2012.10.014>
- Joseph, B., & Joseph, M. (2016). The health of the healthcare workers. *Indian Journal of Occupational and Environmental Medicine*, *20*(2), 71–72. <https://doi.org/10.4103/0019-5278.197518>
- Lai, F.-Y., Tang, H.-C., Lu, S.-C., Lee, Y.-C., & Lin, C.-C. (2020). Transformational Leadership and Job Performance: The Mediating Role of Work Engagement. *SAGE Open*, *10*(1), 2158244019899085. <https://doi.org/10.1177/2158244019899085>
- Lu, H., & Li, F. (2021). The Dual Effect of Transformational Leadership on Individual- and Team-Level Performance: The Mediation Roles of Motivational Processes. *Frontiers in Psychology*, *12*, 606066. <https://doi.org/10.3389/fpsyg.2021.606066>
- Mamik, M., Luthfiyah, S., Ratifah, R., & Cahyani, T. I. P. (2020). Influence of Transformational Leadership Style and Organizational Culture to Organizational Citizenship Behavior and Employee's Performance in Mothers and Children Hospitals in East Java. *ARPN Journal of Engineering and Applied Sciences*, *15*(2), 529–534. Scopus. <https://doi.org/10.36478/JEASCI.2020.529.534>
- Mohammad, T., Darwish, T. K., Singh, S., & Khassawneh, O. (2021). Human Resource Management and Organisational Performance: The Mediating Role of Social Exchange. *European Management Review*, *18*(1), 125–136. <https://doi.org/10.1111/emre.12421>
- Moon, J. E., & Jang, K. S. (2018). The Performance of Healthcare-associated Infection Control Guideline among Hospital Nurses: A Structural Equation Model. *Iranian Journal of Public Health*, *47*(5), 648–657.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *n71*. <https://doi.org/10.1136/bmj.n71>
- Para-González, L., Jiménez-Jiménez, D., & Martínez-Lorente, A. R. (2018). Exploring the mediating effects between transformational leadership and organizational performance. *Employee Relations*, *40*(2), 412–432. <https://doi.org/10.1108/ER-10-2016-0190>
- Peng, J.-C., & Tseng, M.-M. (2019). Antecedent and Consequence of Nurse Engagement. *The Journal of Psychology*, *153*(3), 342–359. <https://doi.org/10.1080/00223980.2018.1536639>
- Ribeiro, N., Yücel, İ., & Gomes, D. (2018). How transformational leadership predicts employees' affective commitment and performance. *International Journal of Productivity and Performance Management*, *67*(9), 1901–1917. <https://doi.org/10.1108/IJPPM-09-2017-0229>
- Risambessy, A., Risambessy, A., Swasto, B., Thoyib, A., & Astuti, E. S. (2012). *The Influence of Transformational Leadership Style, Motivation, Burnout towards Job Satisfaction and Employee Performance*.
- Rowe, A. K., Labadie, G., Jackson, D., Vivas-Torrealba, C., & Simon, J. (2018). Improving health worker performance: An ongoing challenge for meeting the sustainable development goals. *BMJ*, k2813. <https://doi.org/10.1136/bmj.k2813>
- Salanova, M., Lorente, L., Chambel, M. J., & Martínez, I. M. (2011). Linking transformational leadership to nurses' extra-role performance: The mediating role of self-efficacy and work engagement: Linking transformational leadership to nurses' extra-role performance. *Journal of Advanced Nursing*, *67*(10), 2256–2266. <https://doi.org/10.1111/j.1365-2648.2011.05652.x>
- Shumba, C. S., Kielmann, K., & Witter, S. (2017). Health workers' perceptions of private-not-for-profit health facilities' organizational culture and its influence on retention in Uganda. *BMC Health Services Research*, *17*(1), 809. <https://doi.org/10.1186/s12913-017-2763-5>
- Suratno, K., & Ariyanti, S. (2018). *The Relationship between Transformational Leadership and Quality of Nursing Work Life in Hospital*. Volume 11(3), 1416. <http://dx.doi.org/10.1186/2193-1801-3-25>
- Taboli, H., Dept. of Management, Payam Noor University of Kerman, Kerman, Iran., Ayagh, G., Dept. of Management, Payam Noor University of Kerman, Kerman, Iran., Bastami, R., Dept. of Management, Islamic Azad University of Kerman, Kerman, Iran., Hakimi, I., & Faculty Member, Dept., of Management, Payam Noor University of Kerman, Kerman, Iran. (2014). Modeling the relationship between organizational culture, clinical governance, and organizational performance: A case study of Tamin Ejtemaee hospitals in Mazandaran Province, Iran. *Journal of Occupational Health and Epidemiology*, *3*(4), 197–205. <https://doi.org/10.18869/acadpub.johe.3.4.197>
- Ukawa, N., Tanaka, M., Morishima, T., & Imanaka, Y. (2015). Organizational culture affecting quality of care: Guideline adherence in perioperative antibiotic use. *International Journal for Quality in Health Care*, *27*(1), 37–45. <https://doi.org/10.1093/intqhc/mzu091>
- Zhou, P., Bundorf, K., Chang, J., Huang, J. X., & Xue, D. (2011). Organizational Culture and Its Relationship with Hospital Performance in Public Hospitals in China. *Health Services Research*, *46*(6pt2), 2139–2160. <https://doi.org/10.1111/j.1475-6773.2011.01336.x>