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Predicting healthcare leaders' readiness to lead the implementation of change

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A key challenge facing healthcare leaders is how to implement changes successfully. For change to occur in healthcare, leaders must be proactive, and they must have an ability to adapt to new policies and practices. Data from 105 healthcare leaders were used to address the question of to what extent leadership style, leader efficacy, seniority, and gender predict healthcare leaders' readiness to lead change. The healthcare leaders were panel members of Centiment, an online survey research company that specializes in surveying hard-to-reach participants. A correlation analysis using Spearman's rho tested the relationship between leadership style and leader efficacy, and multiple regression analyses predicted the readiness of healthcare leaders in leading the implementation of change. The results of the multiple regression analysis show that transformational leadership and leader efficacy are statistically significant in change implementation. However, the results also reveal that transactional and passive leadership, seniority, and gender are not statistically significance. The results suggest that seniority does not moderate the relationship between the leadership styles and organizational readiness for implementing change, and gender does not moderate the interaction between leader efficacy and organizational readiness for implementing change. Healthcare leaders can use the results of this study to mitigate the rate of failure while implementing change.

Key words: Organizational change, transformational leadership, transactional leadership, passive-avoidant leadership, leader efficacy, organizational readiness for implementing change, healthcare leadership.

INTRODUCTION

The U.S. Centers for Medicare and Medicaid Services reported in 2017 that Americans spent $3.5 trillion on healthcare (17.9% of gross domestic product) and projected that this number would increase to $6.0 trillion 2027 (Centers for Medicare and Medicaid Services, 2019). Increasing healthcare costs have caused a number of problems within the healthcare industry in the United States, and this issue demands attention from healthcare leaders. Healthcare organizations must implement effective change management strategies to improve the quality of care for patients with a view toward providing benefits and value for them (Nielsen et al., 2020). Innovations or changes in technology are necessary to improve the quality of care for patients, which can help to keep the healthcare costs down (Nagy, 2017). The general problem that this study focuses on is

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the high rate of failure of organizational change (Harrison-Blount et al., 2019). Researchers have consistently asserted that approximately 70% of organizational changes are not successful (Jones-Schenk, 2019), and effective leadership is critical to the success of an organization (Nagendra and Faroogui, 2016). However, organizational change initiatives have failed because of leadership shortcomings (Predișcan et al., 2016). Organizations may not employ an appropriate change model, and leaders may not possess the right leadership style to implement successful change initiatives (Lumbers, 2018). In addition, leaders may not have effective leader efficacy skills to steer the successful implementation of a change project (Bayraktar and Jiménez, 2020).

However, it is not clear whether there is a predictive relationship between leadership style, leader efficacy, and readiness to implement a change. This is the problem at the center of this paper. The primary purpose of this quantitative research study is to predict healthcare leaders' readiness to lead the implementation of a change while examining the relationship between leadership style and leader efficacy. The secondary purpose of the study is to explore whether seniority and gender moderate the predictive relationship between these variables. This nonexperimental research addresses one primary and two secondary research questions to determine leaders' readiness to head the implementation of change in the healthcare industry. Also, the relationship between seniority and leadership style as well as gender and leader efficacy were analyzed to determine if there is a moderating effect. Seniority was employed to determine if longevity in a position would impact a leader's motivation to implement change. Analyzing whether gender influenced a leader's ability to implement change was a secondary concern. So, the research questions for this study are

(i) PRQ: To what extent do leadership style, leader efficacy, seniority, and gender predict healthcare leaders' readiness to lead change?
(ii) SRQ1: To what extent does seniority moderate leadership style and healthcare leaders' readiness to lead change?
(iii) SRQ2: To what extent does gender moderate leader efficacy and healthcare leaders' readiness to lead change?

This study is significant because it examines the relationship between leadership and organizational change, thus relating two key factors in considerations of how leaders can provide high-quality leadership when they are called to successfully implement a change initiative. This research broadens the discussion on how leadership styles can influence the role of leaders in the organizational change process, which has not been sufficiently explored by past scholarship (Lamm et al., 2016).

MATERIALS AND METHODS

Which leadership style is most effective in leading the implementation of change? This is a key question for healthcare leaders today. Many researchers have successfully integrated the salient aspects of Lewin's change model and Kotter's eight stages into the implementation of organizational change. The level of effectiveness of a leader's change implementation has been found to be connected to the style of leadership employed (transactional, transformational, or passive avoidant). Transactional leaders play a critical role in healthcare; ensuring employees minimize errors, while performing standard tasks for patient care (Fletcher et al., 2019). When organizations are considering changes, a transactional leadership style may be appropriate for the healthcare industry since new medical processes and procedures are seldom introduced.

Transformational leadership is an effective leadership style in most organizations because the leaders who follow this model understand how to inspire followers to go beyond the norm (Apore and Asamoah, 2019). Many researchers have suggested that transformational leadership is the ideal leadership style for dealing with organizational change because the leaders who utilize it understand how to develop others to assume tasks (Busari et al., 2019). Additionally, research has shown that transformational leadership is highly desirable for influencing organizational change in the healthcare industry (Al-Hussami et al., 2018).

In a similar vein, research has also suggested that passive-avoidant leaders are least effective in motivating employees to adopt change. Passive-avoidant leaders tend to offer little support to their employees, treating them with disdain and hindering their grow and development during the organizational change process (Bligh et al., 2018). Passive avoidant leaders do not offer the appropriate level of employee interaction for the demanding healthcare industry (Muddle, 2020). Regardless of leadership style, leaders in the healthcare industry must be decisive and direct in making solid decisions that will reduce costs and enhance the quality of patient care.

Building on Bandura et al. (1999) theory of self-efficacy, leader efficacy is a leader's confidence in his ability to lead others. Leaders must possess the necessary abilities to influence and motivate team members, which are important skills for implementing change effectively (Bayraktar and Jiménez, 2020). Leaders with high efficacy can accomplish organizational change goals because of their ability to overcome barriers. Confusion or uncertainty occurs among employees when leaders cannot articulate the reasons for change (Heckelman, 2017). Establishing the confidence to alleviate confusion is a hallmark of leaders who have keen efficacy skills. The challenge for healthcare leaders is to convince healthcare professionals to overcome uncertainty in adopting change.

Little research has taken place on organizational readiness, especially in the healthcare industry, though this gap in the literature was recently narrowed with the introduction of the organizational readiness for implementing change instrument (Shea et al., 2014). This instrument evolved from Weiner's (2009) theory of organizational readiness for change. Organizational readiness for change is derived from change commitment, which occurs when organizations look to individuals to take active roles in implementing change and change efficacy and when they believe that they can be successful with the change initiative (Vaishnavi et al., 2019; Weiner, 2009).

Using a multiple regression design, this quantitative research study examines the predictive relationship between leadership styles, leader efficacy, and readiness to lead the implementation of change. A quantitative approach allows researchers to collect data

Table 1. Descriptive statistics: healthcare leadership positions.

Healthcare leadership position	Frequency	%
Chief executive officer (CEO)	19	18.10
Chief information officer (CIO)	3	2.86
Chief technical officer (CTO)	7	6.67
Chief nursing information officer/chief medical information officer (CNIO/CMIO)	5	4.76
Vice president, information technology (VP/IT)	6	5.71
Director, information technology (DIR/IT)	22	20.95
Other	43	40.95
Total	105	100.0

without manipulating the predictor variables to predict the outcome of the criterion variable. Additionally, this study evaluates the moderating effect of gender and seniority.

Data were purposively collected for this study from healthcare leaders that operate in various areas of the health industry. The population consisted of healthcare leaders who are members of Centiment's online survey panels. Centiment is an online survey research company that specializes in surveying hard-to-reach healthcare managers and administrators. These members were C-suite officers (CEOs, CIOs, CMIOs, and CNIOs), vice presidents, directors, and managers of information and system technology.

Employing a G*Power v3.1.9.4 with a 95% level of confidence, a statistical power of 80%, and an effect value of .15 with six predictor variables (transformational, transactional, and passive-avoidant leadership styles as well as leader efficacy, seniority, and gender), it was determined that a sample size of 98 participants was needed for the study. Malone et al. (2016) stated that a significance level or α error probability of .05 was appropriate for research, suggesting that there would be a 5% chance for a type I error. Having a statistical power of .80 or above would ensure a high probability of avoiding a type II error (Malone et al., 2016). A type II error occurs when researchers fail to reject a null hypothesis that is false (Hazra and Gogtay, 2016). For example, researchers might fail to detect a predictive relationship when, in fact, there is one. An effect value of .15 was used because the G*Power calculator recommended a sample size sufficient to achieve a normal distribution of data. An effect value less than .15 required a larger sample size, which would have been difficult to obtain with a hard-to-reach target population. An effect value greater than .15 yielded smaller sample sizes, which may have prevented efforts to meet the assumptions and statistical tests of the study.

Online surveys are a popular way to collect data for nonexperimental studies (Martinsson et al., 2017). Centiment was selected because of its reputation and experience in surveying respondents that are hard to reach due to their demanding schedules (Centiment Research, 2017). Centiment sent an email invitation to healthcare leaders with a link to the research questionnaire. Centiment had provisions in place for participants to remain anonymous.

The formulation of the research questionnaire was based on three valid and reliable instruments. First, the Multifactor Leadership Questionnaire-Short Version (MLQ-5X), which consists of 45 questions, was used to examine leadership styles (Bass, 1985). Previous researchers using the MLQ-5X reported a Cronbach alpha score higher than .74 (Boyer-Davis, 2018; Bass and Avolio, 2004). Second, the Leader Efficacy Questionnaire (LEQ) presents 22 items to measure a leader's level of confidence (Hannah and Avolio, 2013). The Cronbach's alpha for the LEQ is .92 (Harper, 2016). Third, Shea et al. (2014) expanded Weiner's (2009) Organizational Readiness for Implementing Change (ORIC) assessment to evaluate organizational readiness for change in the healthcare environment. ORIC uses 12 questions to assess organizational readiness for change, by focusing on the change commitment and change efficacy of leaders at various levels (Shea et al., 2014). ORIC has a Cronbach's alpha of 0.77 (Livet et al., 2017).

The demographic attributes of the sample population included gender and seniority. The responses in this section were self-reported. Gender, either male or female, is a nominal unit of measurement. Seniority is interval level data that consists of the number of years a participant has served in a position. Also, participants identified their leadership titles and work locations. Approval was obtained from the University of Phoenix's Institutional Review Board (IRB) before commencing data collection. A pilot study was conducted to test the reliability and validity of the questionnaire. Schachtebeck et al. (2018), in citing Baker (1994), suggested that a sample size of 10-20% is generally acceptable and considered reasonable for conducting a pilot study. There were 12 respondents for the pilot study. The high response rate among the participants suggested that they did not have any problems following the instructions or understanding the questions. The questionnaire was uploaded to SurveyMonkey and transmitted to Centiment. Data were moved from Centiment to SurveyMonkey and eventually to SPSS seamlessly.

Including the 12 responses from the pilot study, there were 239 responses total. However, 122 respondents were disqualified because they refused to consent, self-responded that they did not manage healthcare professionals, or indicated that they work outside the United States. In the end, 105 leaders met the criteria to participate in the study. Centiment collected the data and exported them to SurveyMonkey. Data were uploaded into SPSS Version 25. Tests were conducted to determine whether the data met the four key assumptions of multiple regressions. These assumptions are normality, linear relationship, homoscedasticity, and multicollinearity (Osborne and Waters, 2002). A graphical approach was pursued after the assumptions of normality and linearity violated the numerical tests. Descriptive and inferential statistics were utilized to analyze and interpret the data.

RESULTS

Descriptive statistics were used to describe and explain the data. To this end, frequency distributions, central tendency, and measures of variability were produced. Participants answered demographic questions before responding to the components of the questionnaire that addressed leadership style, leader efficacy, and organizational readiness for implementing change. They were classified as 80% female and 20% male. While all

Table 2. Descriptive statistics: Number of years in leadership.

Number of years in leadership	Frequency	%
<5 years	43	40.95
6-10 years	36	34.29
11-15 years	9	8.57
16-20 years	10	9.52
>20 years	7	6.67
Total	105	100.0

Table 3. Descriptive statistics of variables (excluding demographic variables).

Variable	Mean	*SD*
Transformational leadership	3.1805	0.66919
Transactional leadership	2.7321	0.71837
Passive-avoidant leadership	0.9131	0.80229
Leader efficacy questionnaire (LEQ)	8.7359	13.17169
Organizational readiness for implementing change (ORIC)	4.0024	0.84420

N = 105.

participants indicated that they manage healthcare professionals, Table 1 reflects that 18.10% (*n* = 19) were CEOs, 2.86% (*n* = 3) were CIOs, 6.67% (*n* = 7) were CTOs, 4.76% (*n* = 5) were CNIO/CMIOs, 5.71% (*n* = 6) were VP/IT, 20.95% (*n* = 22) were DIR/IT, and 40.95% (*n* = 43) were denoted as other. Table 2 indicates the number of years participants spent in their respective positions. Regarding years of service, 43 (40.95%) respondents indicated that they had less than five years of experience. A majority of the participants had more than five years of experience in leadership: 36 (34.29%) with 6-10 years, 9 (8.57%) with 11-15 years, 10 (9.52%) with 16-20 years, and 7 (6.67%) with more than 20 years.

Table 3 depicts the means and standard deviations for leadership styles, leader efficacy, and organizational readiness for implementing change. Transformational (*M* = 3.1805, *SD* = 0.66919) rated as the most used leadership style of the participants, followed by transactional (*M* = 2.7321, *SD* = 0.71837) and then the passive-avoidant style (*M* = 0.9131, *SD* = 0.80229). The Leader Efficacy Questionnaire consists of three dimensions -leader self-regulation, leader action efficacy, and leader mean efficacy- and yielded *M* = 78.7359, *SD* = 13.17169. The mean for organizational readiness for implementing change was *M* = 4.0024 (*SD* = 0.84420).

Multiple regression analysis

Multiple regression was appropriate because the research sought to test the relationship between two predictor and two moderator variables and one criterion variable. The primary research question is to what extent is the leadership style, leader efficacy, seniority, and gender predict healthcare leaders' readiness to lead change?

Moderating variables

Moderator variables are useful in strengthening the relationship between the predictor and criterion variables (Baron and Kenny, 1986). Hayes' Process macro determines the effect of the moderator variables on the relationship between the predictor and criterion variables (Hayes, 2013). Hayes' PROCESS macro Version 3.3 was used in SPSS to run a regression analysis to determine how seniority moderated the relationship between the leadership styles and organizational readiness for implementing change, addressing the first secondary research question. Also, the Hayes PROCESS macro was employed to run regression analyses to determine how gender moderated the relationship between leader efficacy and organizational readiness for implementing change, addressing the second secondary research questions.

The purpose of this study is to examine the relationship between leadership style and leader efficacy in predicting leaders' organizational readiness for implementing change in a healthcare organization by using seniority and gender as moderators. Multiple regression analyses were performed in SPSS 25 to measure the predictive relationship between the variables. It was not clear whether there was a predictive relationship between leadership style, leader efficacy, and readiness to implement a change. Considering all of the variables (transformational, transactional, and passive-avoidant

Table 4. ANOVA table (Predictor, moderating, and criterion variables).

Model		Sum of squares	*Df*	Mean square	*F*	Sig.
	Regression	34.601	6	5.767	14.302	0.000*
1	Residual	39.516	98	0.403		
	Total	74.117	104			

Dependent variable is ORIC. Predictors are constant, gender, transactional, seniority, passive, LEQ, and transformational. p-value < 0.001.

Table 5. Correlation of predictor and criterion variables.

		Transformational leadership	Transactional leadership	Passive-avoidant leadership	LEQ	ORIC
Transformational leadership	Spearman's rho correlation	1.000	0.552**	-0.261	0.621**	0.609**
	Sig. (2-tailed)		0.000	0.007	0.000	0.000
	N	105	105	105	105	105
Transactional leadership	Spearman's rho correlation	0.552**	1.000	0.146	0.520**	0.416**
	Sig. (2-tailed)	0.000		0.137	0.000	0.000
	N	105	105	105	105	105
Passive avoidant leadership	Spearman's rho correlation	-0.261	0.146	1.000	-0.079	-0.084
	Sig. (2-tailed)	0.007	0.137		0.422	0.329
	N	105	105	105	105	105
LEQ	Spearman's rho correlation	0.621**	0.520**	-0.079	1.000	0.591**
	Sig. (2-tailed)	0.000	0.000	0.422		0.000
	N	105	105	105	105	105
ORIC	Spearman's rho correlation	0.609**	0.416**	-0.084	0.591**	1.000
	Sig. (2-tailed)	0.000	0.000	0.392	0.000	-
	N	105	105	105	105	105

**Correlation is significant at the .01 level (2-tailed).

leadership as well as leader efficacy, gender, and seniority), the adjusted R^2 was .434. So, these six predictor variables account for approximately 43.4% of the organizational readiness for implementing change. The ANOVA values, as Table 4 shows, indicate an *F*-ratio of 14.302 with *df* = 6, $p < 0.001$. This value suggests a significant relationship between the predictor variables collectively and organizational readiness to implement a change.

Spearman's rho correlation coefficient was used to determine the statistical impact of the predictor variables on the criterion variable (Kumar et al., 2018). A correlation analysis was performed to assess the strength of the relationship between the research variables. The Spearman's rho correlation was performed using SPSS 25.

As Table 5 shows, transformational leadership had a positive correlation with transactional leadership (r = 0.552, $p < 0.01$), leader efficacy (LEQ; r = 0.621, $p < 0.01$), and organizational readiness for implementing change (ORIC) (r = 0.609, $p < 0.01$). The results suggest that there is a statistically significant relationship between transformational leadership, transactional leadership, leader efficacy, and organizational readiness for implementing change. Transformational leadership has a negative correlation with passive-avoidant leadership (r = -0.261), but there is also a significant relationship since $p < 0.01$, revealing a positive correlation between transactional leadership and all research variables. Transactional leadership does not correlate significantly with passive-avoidant leaders (r = 0.146, $p > 0.05$). Transactional leadership has a positive correlation with LEQ (r = 0.520, $p < 0.01$) and ORIC (r = 0.416, $p < 0.01$). There is a negative correlation between passive-avoidant leadership and LEQ (r = -.079, $p > 0.05$) and ORIC (r = −.084, $p > 0.05$). There is a positive relationship between

Table 6. ANOVA table (transformational, transactional, and passive-avoidant leadership and seniority).

Model		Sum of square	*Df*	Mean square	*F*	Sig.
	Regression	29.098	4	7.275	16.159	0.000[b*]
1	Residual	45.019	100	0.450		
	Total	74.117	104			

Dependent variable is ORIC. Predictors are constant, passive, seniority, transformational, transactional. p-value <0 .001.

Table 7. ANOVA table: ORIC, leader efficacy, and gender.

Model		Sum of squares	*Df*	Mean square	*F*	Sig.
	Regression	30.359	2	15.180	35.383	0.000[b*]
1	Residual	43.758	102	0.429		
	Total	74.117	104			

Dependent variable is ORIC. Predictors are constant, gender, and LEQ. *P-value < 0.001.

LEQ and ORIC, reflecting a significant correlation between LEQ and ORIC (r = .591, p <0.01).

Primary research question

The primary question aims to assess to what extent leadership style, leader efficacy, seniority, and gender predict healthcare leaders' readiness to lead change. The ANOVA test in Table 4 indicates an F-ratio of 14.302 with df = 6, p < 0.01. This value supports the assertion that there is a statistically significant difference between the predictor variables collectively and the criterion variable. The results show that leadership style, leader efficacy, seniority, and gender, when considered together, are statistically significant in predicting healthcare leaders' readiness for implementing change.

Secondary research question 1

The first secondary question assessed to what extent seniority moderated leadership style and healthcare leaders' readiness to lead change. Multiple regression analysis was performed to predict the organizational readiness to implement change based on leadership styles and moderated by seniority. The ANOVA test in Table 6 shows an F-ratio of 16.159 with df = 4, p < 0.001. This value suggests significant differences between transformational, transactional, and passive-avoidant leadership as well as seniority and organizational readiness for implementing change when analyzed collectively. This result suggests that there is a predictive relationship, meaning the three leadership styles and gender is statistically significant in predicting organizational readiness for implementing change.

The Hayes PROCESS macro was used in SPSS to run a regression analysis to determine whether seniority moderated the relationship between the leadership styles and organizational readiness for implementing change. There was no significance in the interaction between leadership styles and seniority when predicting organizational readiness for implementing change. This result suggests that seniority does not moderate the relationship between leadership styles and organizational readiness for implementing change.

Secondary research question 2

The final secondary research question asked to what extent gender moderates leader efficacy and healthcare leaders' readiness to guide organizations through change. Multiple regression was performed to predict the organizational readiness for implementing change based on leader efficacy and moderated by gender. The ANOVA test in Table 7 indicates an F-ratio of 35.383 with df = 2, p < 0.001. This value suggests a significant difference between leader efficacy, gender, and organizational readiness for implementing change. The p-value provides strong evidence that there is a predictive relationship, whereas leader efficacy and gender are statistically significant in predicting organizational readiness for implementing change.

Hayes' PROCESS macro was used in SPSS to run regression analyses to determine how gender moderated the relationship between leader efficacy and organizational readiness for implementing change. The results indicate that a statistically significant relationship exists between leader efficacy and organizational readiness for implementing change. There is no significant relationship between gender and organizational readiness for implementing change. In addition, there is no significance in the interaction between leader efficacy and gender

when predicting organizational readiness for implementing change. Thus, gender does not moderate the relationship between leader efficacy and organizational readiness for implementing change.

DISCUSSION

This study analyzes the effect of transformation, transactional, and passive-avoidant leadership styles and leader efficacy on predicting the readiness of healthcare leaders to lead the implementation of change in the healthcare industry. The results of this study reveal that transformational leadership is appropriate for organizational change. Effective transformational leadership for healthcare leaders is essential for change management initiatives (van Rossum et al., 2016). The findings here also show that transactional leadership is equally as effective for organizational change. However, other researchers have argued that transactional leaders may not actually be effective in promoting change (Boyer-Davis, 2018). Additionally, passive-avoidant leaders are less willing to engage with innovation, which may suggest that these leaders are not particularly interested in implementing organizational change (Deprez and Euwema, 2017). Studies on leadership styles have found that passive-avoidant leadership is the least popular leadership style (Curtis, 2018), which is consistent with the findings of this study.

Additionally, this study suggests that leadership styles and leader efficacy could be used to predict organizational readiness to lead change in the healthcare industry. This research extends the body of knowledge regarding organizational readiness for implementing change by focusing on the organization level. Akande et al. (2019) applied Weiner's (2009) work and concluded that researchers can evaluate organizational readiness for implementing change at an individual, team, or organizational level in the healthcare industry, focusing on individuals' change commitment and efficacy.

Researchers continue to use leadership style and leader efficacy as predictor constructs to address, understand, and analyze problems and issues in healthcare and other industries. In education, for example, a considerable body of work has been produced regarding leadership in school systems. For example, research was conducted to analyze the impact of leadership styles on organizational change in education (Mukhtar and Fook, 2020). Another study examined the impact of leadership efficacy in determining the readiness of school leaders (Abusham, 2018). Organizational readiness for implementing change is a relatively recent development, having only come into use during the last decade; therefore, few studies have employed this construct. Recently, however, organizational readiness for implementing change was used to determine the change commitment and change efficacy of South African educators in implementing a new intervention program (Arthur et al., 2020).

The results reveal that gender did not moderate the relationship between leader efficacy and organizational readiness for implementing change, although gender was an effective moderator variable in other studies (Landay et al., 2019). This indicates that gender did not influence the predictive relationship between the two constructs. However, in evaluating leader efficacy by gender, females scored higher than males on two factors-leader action self-efficacy and leader means self-efficacy (Sebelski, 2017). The findings of this study show that female leaders had a higher level of leader efficacy than males in all three constructs of the LEQ (leader action self-efficacy, leader self-regulation efficacy, and leader means self-efficacy), reflecting that females possess the necessary skills to be effective healthcare leaders and change agents.

The results indicate that seniority did not moderate the relationship between transformational, transactional, and passive-avoidant leadership styles and organizational readiness for implementing change. These leadership styles did not influence the relationship between the predictor and criterion variables. Most of the respondents (75%) self-reported having less than 10 years of seniority. This may be critical, because many of the healthcare leaders in the study have had minimal experience. The seniority of leaders can affect their perspectives when introducing new ideas. As leaders acquire years of experience, they may be reserved in supporting organizational changes. Bernstein et al. (2016) posited in their study that CEOs of a non-profit are more averse to organizational change as they acquire work experience. This finding suggests that healthcare leaders may be receptive to organizational changes in the earlier years of their leadership.

Employee involvement in organizational changes was not the focus of the study at hand, as the researcher was concerned with analyzing the role of the leader. However, employees play a major role in the success or failure of the change process. Organizational changes have been a challenge because of employee resistance (Basyal and Seo, 2017). It is a natural tendency for employees to resist the implementation of new programs, ideas, policies, and processes (Basyal and Seo, 2017). There are many different reasons why employees resist change, including fear of new technology, lack of trust, and uncertainty (Basyal and Seo, 2017). Healthcare professionals become reluctant when they must adopt new technologies (Kumar et al., 2020). Healthcare professionals resist implementing new technology when there are concerns about the privacy and security of patients' medical information (Kumar et al., 2020). The challenge for healthcare leaders is to convince healthcare professionals to overcome uncertainty and concerns about adopting new technology.

Organizational culture can impact organizational change.

While not addressed in this study, employees must sense that their organization embraces a culture of change. For change to be implemented successfully in the healthcare environment, there must be such a culture, initiated and reinforced by senior leadership (Le-Dao et al., 2020).

Practical recommendations

The results from this study provide a framework for healthcare organizations to implement organizational change by establishing initiatives that will help positively shape and increase the skills of their leaders. To be effective, organizations should establish a strategic plan. A SWOT analysis could help an organization develop an awareness of the factors needed to implement change successfully (Abednego and Syah, 2019). In addition, organizations can consider employing a change management model. Lewin (1947) and Kotter (1996) provided traditional models that are still effective today in implementing organizational change. Also, it is recommended that organizations champion a succession plan, which can ensure stability at all levels of leadership during the change process. Finally, organizations could establish mentorship programs, supporting the development of future leaders and helping to build and develop their leadership competencies.

The results of this study have revealed that healthcare leaders are major players in the organizational change process. Given the importance of their roles, leaders should complete an assessment, such as the MLQ, to determine their leadership style. More specifically, healthcare leaders should try to demonstrate transformational leadership tendencies when looking to implement effective change initiatives (van Rossum et al., 2016). Healthcare leaders should also participate in leadership development programs to hone the competencies that are significant in the change process. Finally, healthcare leaders should serve as change agents with a proclivity toward helping others embrace and adapt new ways of doing things.

Conclusion

This study has explored whether a change might be unsuccessful because of leadership styles, leader efficacy, and organizational readiness for implementing change. Regarding organizational or technology change, earlier research focused on examining the reaction, resistance, and behavior of the employees. This study places the organization and healthcare leaders under a different lens, focusing on their roles during the change process. Healthcare organizations and their leaders can use the results of this study to mitigate the rate of failure when implementing change. Although research has been expanding on all aspects of organizational change, there are still no clear or definitive reasons why change initiatives are unsuccessful. This study suggests that transformational leadership may be paramount for developing the organizational readiness to lead the implementation of change.

LIMITATIONS

There are several limitations that may have affected the outcome and findings of this research. One is the sample size. A sample size that is too small might shift the statistical significance of the study, while a sample size that is too large might affect its feasibility (Malone et al., 2016). The personal reflections and perspectives of the respondents were another limitation. Also, all individuals self-reported their data, so a potential lack of truthfulness in responding to the questionnaire may have limited the research. In addition, the level of self-knowledge of the leaders is another limiting factor. All participants reported that they were leaders of healthcare professionals in a healthcare facility. However, it is possible that healthcare leaders may not know all the factors that might influence their leadership style and leader efficacy.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study presents many opportunities for further research. There does not appear to be any research that integrates leadership style, leader efficacy, and organizational readiness for implementing change in the healthcare industry. Further investigations that could extend these concepts collectively into other industries that are challenged with organizational change would be potentially fruitful.

Also, the current study highlighted the transformational, transactional, and passive-avoidant leadership styles as practiced by healthcare leaders. But healthcare leaders should explore other leadership styles, like democratic, autocratic, and servant. Further research could investigate whether gender moderates the relationship between leadership style and organizational readiness for implementing change and whether seniority moderates the relationship between leader efficacy and organizational readiness for implementing change.

Future researchers should also consider increasing the sample size. A larger sample size could influence the relationship between the predictor and criterion variables, providing more accuracy in predicting organizational readiness to lead change and addressing the issue of generalizability.

Additionally, others could further expand on and explain the research presented here by employing a different research method. A quantitative approach was viable for this study, as the emphasis falls on predicting organizational readiness for implementing change by evaluating leadership style and leader efficacy. However, others could enhance the findings here by employing a

qualitative research method in order to understand the opinions of healthcare leaders on implementing change. Narrative inquiry, for example, would allow researchers to collect personal stories of healthcare leaders during the change process, analyze their experiences, and determine how their experiences might influence their leadership style and leader efficacy.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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