

Original Paper

Associations between Leadership Style and Employee Resistance in a Healthcare Setting

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Abstract

Purpose: Health reform is forcing healthcare administrators to make rapid changes. A tendency to resist change can present problems for the leaders of health care organizations, including the large, not-for profit Catholic healthcare systems. The transformational leadership style has been shown to be positively correlated with change however, the relationship among leadership styles, employees' behaviors, and motivation to change are still not well understood and require further study. Further, although Oreg's Resistance to Change (RTC) approach has been researched in direct patient care areas, RTC research in non-patient settings is lacking.

Methods: This study focused on the relationship of transformational leadership to RTC and if the relationships leaders' have with subordinates' influence change. A customized survey that included the Multifactor Leadership Questionnaire, RTC, and Leader Member Exchange (LMX 7) was emailed to 500 random individuals of various ages and races from three non-patient areas. Thirty leaders (included directors and managers) and 133 raters (those under the direction of a director or manager) responded.

Results: The regression analysis showed a strong correlation between transformational leadership and RTC. Additionally, each of the variables from the LMX 7 section of the survey showed associations indicating the relationship leaders develop with their subordinates and leader transformational scores were positive.

Conclusion: This study may contribute to the awareness of RTC and utilizing transformational leadership style to move change in a positive direction for a healthcare setting.

Keywords

healthcare leadership, not-for-profit hospital, change

1. Introduction

Traditional law was first introduced in 1200 BC., which led to the first documentation of organizational change (Burke, 2011). Today, different approaches and theories are used by healthcare organizations to impact change. Change is often feared in healthcare organizations, which makes it even more difficult to occur. With the fast rate of change among healthcare organizations (Burke, 2011), it is important to discover a way to overcome resistance to it. Healthcare organizations are at risk of losing an average of \$135 million dollars for every \$1 billion invested (Langley, Smallman, Tsoukas, & Van de Ven, 2013). For many years, leaders have served to overcome hurdles and lead organizations toward achievements. Change occurs both in small increments and with leaps and bounds. Change is usually not incremental; it can be nonlinear (Burke, 2011). The health care industry is known for advancements to occur daily; therefore, preparation for change can be complicated at times. Health care usually follows an evolutionary change pattern, which involves organizational strategic planning and careful development; the mission acts as the primary entity making change (Burke, 2011). With change occurring rapidly and with reimbursement driving the healthcare organization to change, a leader's influence remains a factor. According to Al-Swidi (2012), transformational leadership can improve employees' behaviors. There is, however, a gap in the association between a not-for-profit Catholic healthcare organization, transformational leadership, and the ability to motivate people to change.

According to Oreg (2003), four underlining factors are correlated with RTC: (a) routine seeking, (b) emotional reaction to imposed change, (c) short term focus, and (d) cognitive rigidity. Many leaders in healthcare face change; they handle it in different ways, using diverse theories. One such theory is called "transformational leadership", it was founded, in part, by Bass (1999). This type of leadership style has leaders working hand in hand with subordinates to identify the needed change and then creating a vision to guide the change. The founding theorist proposed that transformational leaders exhibited "superior leadership performance" (Bass, 1999, p. 21).

Transformational leadership is commonly practiced in business sectors other than health care, where it has been found to be beneficial. Transformational leadership is also a contributing factor in several vital organizational outcomes when change has been resisted (Seltzer & Bass, 1990). The use of transformational leadership in healthcare departments in a not-for-profit organization is limited. The objective of this research was to acquire a foundation for understanding leadership styles in a not-for-profit Catholic healthcare organization. Many studies on resistance to change have been carried out with those who provide direct care to patients, such as nurses and other care providers. The study examined how leaders in indirect departments—information management, patient financial services, and human resources—manage change. Finally, the research indicated whether, in a not-for-profit, Catholic healthcare organization, if there was a link between (a) how leadership influences employees' behaviors and (b) motivation to change. The purpose of this quantitative study was to determine (a) whether transformational leadership is associated positively with change in a not-for-profit Catholic organization, and (b) whether leadership has an influence on employees' behaviors and motivation to

change.

2. Method

2.1 Study Design

This study utilized three tools that were customized into one questionnaire but were first separately analyzed and then analyzed together. The first section of the questionnaire is the MLQ, focusing only on transformational leadership, which was redesigned (Bass & Avolio, 2003).

The questionnaire was web-based, and respondents were able to retrieve the survey through Mind Garden Transform MLQ 360 online survey. With a confidence level of 95% and a sample size of 500, the percentage was 50%, leaving the confidence interval at 4.38. Five hundred random associates (raters) and 85 random leaders were identified through human resources as current employees based on payroll status. The questionnaire contained a series of multiple-choice questions. The leader had three sections in the survey to answer.

The first section asks about demographics including age, gender, region, and race. The questionnaire consists of 37 questions in two sections. The first section of the questionnaire has 20 questions correlated to the leader and the raters their describing leadership style and focusing on transformational leadership style. Rater/Leader Form composed of 20 questions were valued on a 6-point scale. The scale ranged from Unsure to Frequently, if not always. These 20 questions are what encompass transformational leadership and the identified sources are as follows: Idealized Influence (Attributed), Idealized Influence (Behavior), Inspirational Motivation, Intellectual Stimulations, and Individual Consideration.

The second section contained 17 statements concerning a participant's overall beliefs and attitudes about change. The 17-item scale, Dispositional Resistance to Change (RTC), introduced by Oreg (2003) was used to measure resistance to change. The scale identifies four factors: (a) routine seeking, (b) emotional reaction, (c) short-term focus, and (d) cognitive rigidity. The respondents' answered on a 5-point scale from Strongly Disagree to Strongly Agree. Studies by Oreg and colleagues have shown that dispositional RTC affects occupational interests and choices (Oreg et al., 2009). Additionally, Oreg and Sverdlik (2011) demonstrated that the feelings toward the change agent correlated with the relationship between dispositional RTC and resistance towards change, meaning that change was only positive amongst employees who were positively oriented toward the change agent. Therefore, RTC is a valid resource for a resistance of change measurement. Most healthcare organizations are able to initiate change; however, it's the followers' resistance that remains the challenge.

In third section for the rater, respondents answered seven questions pertaining to his or her leader and the contributing variables that are crucial to consider during change. The main focus of LMX-7 is the unique relationship leaders cultivate with their followers (Schyns & Day, 2010). Consequently, the distinctive relationship between a leader and follower is the principal focus of concern. The rewards include better communication, emotional support, and higher roles. The associates (raters) answered

seven questions on a scale from Rarely to Very often.

2.2 Setting and Participants

The population size consists of a random-sized group from three departments containing 500 associates and 85 leaders. Department type were defined as the department category in which each respondents was working as self-reported on the demographic survey. Department type categories included Information Management (including Health Informatics), Human Resources, and Patient Financial Services. The anonymity of participants were protected by non-association of email correspondence and generically labeling of respondents as “Leader” or “Rater”. At the end of the data collection period, 158 respondents had submitted data, 30 leaders and 133 raters. Of the leaders, the data from five leaders were excluded from analysis because their raters did not respond.

2.3 Measures

Quantitative data was collected from the customized MLQ360 online Mind Garden’s Transform™ questionnaire. This questionnaire enabled the researcher to make comparisons by linking leadership characteristics in a not-for-profit Catholic organization at a departmental level and the resistance to change among the employees in each of the three departments. Additionally, the questionnaire focused on (a) the context of employees’ reactions to change and (b) leadership styles in a not-for-profit Catholic organization.

2.4 Data Collection

Three questionnaires were administered. (a) The Multifactor Leadership Questionnaire (MLQ) identified the characteristics of a transformational leader. (b) The Leader–Member Exchange (LMX) has been a successful measurement tool among organizational change researchers because of its contributing variables, which are crucial to consider during change. (c) Most healthcare organizations can initiate change, but followers’ resistance remains the challenge. Oreg’s (2003) 17-item scale, Dispositional Resistance to Change (RTC), was used to measure resistance to change using four factors: (a) routine seeking, (b) emotional reaction, (c) short-term focus, and (d) cognitive rigidity.

Based on answers to the custom MLQ 360 online questionnaire answered the following questions:

- How does leadership dictate changes that are orchestrated today in healthcare?
- What factors provided relevance in understanding change?
- What leadership style influences change in a healthcare organization?

2.5 Statistical Analysis

The integrated data gathered from the 20 questions focusing on transformational leadership were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22.0. To evaluate the correlations and relationships among the variables, ANOVA and Multivariate regression analysis was used. The comparisons of means are included but limited to a significance test of the variables (ttest); a Pearson correlation; the R² statistic, indicating how the independent variables are explained; the adjusted R², indicating the percent in error; a substantial F change to prove if there is a correlation among the variables; and the f statistic, demonstrated by ANOVA set at a .05 confidence level, to see if

there is a variable relationship. In order to determine the frequency of the dependent variable and the standardized residuals, a histogram was used.

Table 1. Demographics of Participants

Characteristics	Frequency	Percent	Cumulative Percent
Gender			
Female	100	65.4	100
Male	53	34.6	100
Age			
18-25	7	4.6	4.6
26-35	18	11.8	16.3
36-45	47	30.7	47.1
46-55	54	35.3	82.4
56-75	27	17.6	100
Department			
Information Management	89	58.2	58.2
Human Resources	26	17.0	75.2
Patient Financial Services	38	24.8	100

3. Result

The purpose of this research was to examine the results of integrated data gathered from the 20 questions on transformational leadership based on the results of the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 2003). Next, was to determine if there was an association between the variables by correlating the results of MLQ and the Dispositional Resistance to Change (RTC), which refers to the 17 questions developed by Oreg (2003). H01 (null hypothesis): There is no difference in the factor structures of the RTC and the MLQ focusing on transformational leadership. This answered the question, whether transformational leadership is associated positively with change in a not-for-profit Catholic organization.

Finally, this research examined the relationship leaders cultivated with followers using the Leader-Member Exchange (LMX); it examined whether it has a significant influence on change. According to H02 (null hypothesis), the relationship leaders have with subordinates does not influence change in a healthcare organization. This answered the second research 2 question, whether leadership has an influence on employees' behaviors and motivation to change. After examining the results of these study areas, the data determined if leadership can facilitate change, which, today, is orchestrated using transformational leadership against resistance to change in healthcare.

The outcomes of this study are intended to help healthcare organizations reach a better understanding

of the transformational leadership style and resistance to change answering the following five questions. How does leadership dictate changes that are orchestrated today using transformational leadership in healthcare with resistance to change? This study demonstrated that there is a strong correlation between transformation leadership and resistance to change. However, after further analysis was conducted using ANOVA and multivariate regression, the adjusted R² remained low, which demonstrated that the best Model 15 Dependent Variable was “I generally consider changes to be a negative thing” with a result of (0.096). Tabachnik and Fidell (2007, p. 123) recommend that”, a regression model with m predictors require a sample size greater than $50 + 8 * m$ for tests of the overall model and a sample size greater than $104 + m$ for evaluating whether a specific predictor has an influence”. The overall sample size was 153. However, when considering the predictor, transformational leadership style, only 25 leaders were evaluated. A low R² value doesn’t necessarily mean a negative thing, according to statistician Jim Frost (2013). Frost (2013) indicated that in some selected fields, it is entirely expected that the R-squared values are low. For example, Field stated, “any field that attempts to predict human perceptions/behaviors, such as psychology, typically has R-squared values lower than 50%. Humans are simply harder to predict than, say, physical processes”. Since this study predicted human perceptions, the low R² scores can be considered relevant. The results of the regression equation is $RTC1 = 2.094 + 0.289 (MLQ4) - 0.298 (MLQ11)$. We can therefore conclude that MLQ 4, I consider each individual as having different needs abilities and aspiration from others and MLQ 11, I act in ways that build others respect for me does have positive results and could assist in to RTC question, I generally consider changes to be a negative thing, to become a positive influential factor. Therefore it can be assumed that the H₀₁ (null hypothesis): There is no difference in the factor structures of the Dispositional Resistance to Change (RTC) and the Multifactor Leadership Questionnaire focusing on transformational leadership can be true.

Research Area 2, the relationship leaders have with subordinates does not influence change in a healthcare organization, provided additional answers to the second hypotheses, H₀₂ (2): There is no relationship between relationships leaders develop with their subordinates and leader transformational scores. This study clearly indicated that there is relationship between relationships leaders develop with their subordinates and leader transformational scores. Utilizing the LMX 7 questionnaire, the total score was calculated for each respondent. Additionally, the MLQ questionnaire consisted of utilizing, the 5 Leadership style scale in consideration were: Individual Consideration, Intellectual Stimulation, Idealized Influence (Behavior), Inspirational Motivation, and Idealized Influence (Attributes) for each of these have been related to transformational leadership style as indicated by Bass et al. (2003) and are the best attributes to evaluate transformational leadership style. Each of the variables indicated a high Pearson’s correlation coefficient. Demonstrating that there is a significant relation between the variables relationships leaders develop with their subordinates and leader transformational scores. Therefore, the hypothesis there is no relationship between relationships leaders develop with their subordinates and leader transformational score can be rejected.

3.1 Hypothesis Tests

Looking at the results from the analysis, it is observed that almost in all the cells have values that represents correlation between variables considered. For the importance of this study, each correlation coefficient was further subjected to significant test in other to identify only the significant correlation coefficients and to avoid misinterpretation of the whole data. Pearson correlation, which can range in size from -1.00 to +1.00. The power of the association of the variables is determined by this test (Gujarati, 2003). A correlation of 0 indicates no relationship, while 1.0 indicates a perfect positive correlation and -1.0 indicates a perfect negative correlation. Table 2 implies that the correlation is significant at $\alpha = 0.05$ for MLQ @ Question 8, “I spend time teaching and coaching resulted higher correlation with RTC questions. MLQ question 4, “Whenever my life forms a stable routine, I look for ways to change it”, is -.175. MLQ question 12, “When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me”, resulted in -.161. MLQ question 16, “Once I’ve come to a conclusion, I’m not likely to change my mind”, resulted -.190. Also MLQ 8 implies that the correlation is significant at $\alpha = 0.01$, and showed higher correlation with RTC 11, “Often, I feel a bit uncomfortable even about changes that may potentially improve my life”, resulted at -.227. In addition to MLQ question 8, a higher correlation resulted at $\alpha = 0.01$ was recognized with MLQ question 11, “I act in ways that build others’ respect for me”, and RTC question, “Often, I feel a bit uncomfortable even about changes that may potentially improve my life.

Table 2. Correlations between MLQ and RTC Items

Item	RTC1	RTC2	RTC3	RTC4	RTC5	RTC6	RTC7	RTC8	RTC9	RTC10	RTC11	RTC12	RTC13	RTC14	RTC15	RTC16	RTC17
MLQ1	-.139	-.074	.022	-.120	-.098	.051	.045	.004	-.082	-.115	-.094	-.160	-.082	.068	-.062	-.127	.009
MLQ2	-.045	-.078	.052	-.114	-.032	.156	.086	-.014	-.032	-.110	-.085	-.029	-.061	.050	-.084	-.172*	-.083
MLQ3	-.114	-.031	-.022	-.114	-.091	.064	-.005	-.034	-.092	-.113	-.153	-.163*	-.153	.037	-.129	-.143	.011
MLQ4	-.038	-.114	-.044	-.151	-.101	.014	.012	.004	-.010	-.085	-.109	-.108	-.122	-.053	-.165*	-.105	-.073
MLQ5	-.063	-.045	-.002	-.120	-.091	.086	.024	-.031	-.031	-.086	-.093	-.124	-.087	-.020	-.079	-.061	-.010
MLQ6	-.035	-.043	.021	-.096	-.049	.047	-.014	-.050	.006	-.085	-.096	-.087	-.063	.035	-.103	-.164*	-.088
MLQ7	-.080	.005	.042	-.122	-.004	.139	.057	-.019	.016	-.043	-.136	-.075	-.076	.029	-.129	-.162*	-.064
MLQ8	-.128	-.107	-.047	-.175*	-.050	.052	-.014	-.124	-.043	-.122	-.227**	-.161*	-.156	.073	-.122	-.190*	-.086
MLQ9	-.062	.025	-.031	-.155	-.068	.069	.039	-.040	-.059	-.086	-.133	-.119	-.101	.059	-.093	-.087	-.056
MLQ10	-.086	-.021	-.036	-.140	-.116	.070	.004	-.060	-.070	-.147	-.161	-.138	-.112	.069	-.139	-.077	-.079
MLQ11	-.139	-.063	-.083	-.119	-.167*	.027	-.028	-.149	-.124	-.143	-.212**	-.148	-.142	.049	-.137	-.101	-.053
MLQ12	-.125	-.050	.033	-.002	-.063	.109	-.017	-.070	-.110	-.088	-.125	-.082	-.127	.061	-.082	-.064	-.018
MLQ13	-.083	.018	.045	.003	-.077	.022	-.008	-.070	-.061	-.107	-.076	-.046	-.052	.181*	-.008	-.148	.044
MLQ14	-.100	-.013	-.036	-.063	-.100	-.020	-.062	-.159	-.084	-.156	-.195*	-.158	-.197*	.144	-.073	-.114	-.016
MLQ15	-.099	-.077	-.042	-.088	-.124	.005	-.027	-.081	-.097	-.123	-.146	-.150	-.142	-.062	-.181*	-.129	-.072

MLQ16	-.139	-.016	-.041	-.121	-.083	.014	-.055	-.114	-.108	-.135	-.159	-.184*	-.111	.059	-.165*	-.111	-.084
MLQ17	-.157	-.020	-.001	-.109	-.084	-.018	-.050	-.146	-.094	-.136	-.174*	-.167*	-.139	.038	-.173*	-.114	-.038
MLQ18	-.074	-.014	-.041	-.122	-.109	.086	.012	-.066	-.064	-.123	-.168*	-.135	-.096	.018	-.136	-.059	-.034
MLQ19	-.085	-.032	-.019	-.070	-.057	.057	-.008	-.042	-.048	-.106	-.142	-.062	-.101	.023	-.082	-.100	-.040
MLQ20	-.122	-.057	-.030	-.079	-.126	.061	-.022	-.084	-.080	-.137	-.115	-.127	-.113	.008	-.094	-.134	-.004

* $\alpha = 0.05$. ** $\alpha = 0.01$

3.2 Comparison of Means

An analysis of the overall Resistance to Change was performed by comparing the means of Leaders and Raters. The 17 questions from RTC were rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The mean scores of RTC Items Grouped by Leaders and Raters demonstrated a general overall steadiness with no mean averages over 3.84 for the leaders and 4.35 for the raters. The overall mean average for the leaders resulted at 2.54 and the overall mean average for raters resulted at 2.78, thus demonstrating that resistance to change is higher for raters. The mean average for the questions relating to Subscale scores of RTC: Routine seeking: Items 1-5 showed an average of 2.43. Emotional reaction: Items 6-9 provided an average of 2.72. Short-term focus: Items 10-13 gave an average of 2.22. Finally, Cognitive rigidity: Items 14-17 resulted in 3.70. Oreg's (2003) Resistance to Change states the cognitive component of resistance to change, results in "frequency and ease with which people change their minds". With an average mean result of 3.70 between both leaders and raters, individuals in a not-for-profit Catholic healthcare setting, appear to not struggle much with resistance to change. An analysis of overall resistance to change was performed by comparing the mean RTC scores of leaders and raters in Table 3.

Table 3. Mean Comparison of RTC Item Scores Grouped by Leaders and Raters

<i>RTC Item</i>	<i>Min</i>	<i>Max</i>	<i>Leaders Mean</i>	<i>Std. D.</i>	<i>Variance</i>	<i>Min</i>	<i>Max</i>	<i>Raters Mean</i>	<i>Std. D.</i>	<i>Variance</i>	<i>Mean Diff.</i>
1	1	3	1.88	.666	.443	1	6	1.98	1.200	1.440	-0.1
2	1	4	2.64	.907	.823	1	6	3.05	1.348	1.816	-0.41
3	1	4	2.04	.935	.873	1	6	2.11	1.124	1.264	-0.07
4	1	5	2.56	.961	.923	1	6	3.23	1.264	1.598	-0.67
5	1	4	1.96	.889	.790	1	6	1.97	1.034	1.070	-0.01
6	1	6	2.96	1.274	1.623	1	6	2.66	1.307	1.708	0.3
7	1	4	2.64	.907	.823	1	6	2.74	1.275	1.626	-0.1
8	1	6	3.08	1.152	1.327	1	6	3.03	1.334	1.779	0.05
9	1	4	2.36	1.075	1.157	1	6	2.41	1.153	1.330	-0.05

10	1	4	2.36	.860	.740	1	5	2.43	.994	.987	-0.07
11	1	4	2.16	.850	.723	1	6	2.25	.988	.976	-0.09
12	1	4	2.28	.792	.627	1	5	2.17	.973	.947	0.11
13	1	4	1.96	.841	.707	1	5	2.05	.955	.911	-0.09
14	2	6	3.52	1.159	1.343	1	6	4.18	1.251	1.566	-0.66
15	1	5	2.76	1.012	1.023	1	6	3.48	1.334	1.779	-0.72
16	1	5	2.76	.970	.940	1	6	3.16	1.226	1.503	-0.4
17	1	5	3.84	.898	.807	1	6	4.35	1.127	1.269	-0.51

3.3 ANOVA Test Results Resistance to Change

A one-way between ANOVA was conducted to compare the resistance to change amongst those in a health care setting. Testing the studies hypotheses employed a variety of approaches. For instance, ANOVA exhibits the F- test which exams the hypothesis utilizing the entire coefficient estimates. Each F-statistic is a ratio of mean squares. The numerator is the mean square for the term. The denominator is chosen such that the expected value of the numerator mean square differs from the expected value of the denominator mean square only by the effect of interest (Gujarati, 2003). The effect for a random term is represented by the variance component of the term. Therefore, a high F statistic indicates a significant effect. All p values were greater than .05, except there was a significant finding with only one dependent variable with resistance to change. The dependent variable: If I were to be informed that there's going to be a significant change regarding the way things are done at work, I would probably feel stressed. The model is significant with P-value $0.039 < \alpha = 0.05$.

In regression, the total sum of squares helps express the total variation of the y's. The regression sum of squares is the variation attributed to the relationship between the x's and y's. The sum of squares of the residual error is the variation attributed to the error. By comparing the regression sum of squares to the total sum of squares, you determine the proportion of the total variation that is explained by the regression model (R², the coefficient of determination). The larger this value is, the better the relationship. The F test tests the hypothesis that all of the coefficients are jointly zero. If the F stat is greater in absolute value than the critical F, then the null hypothesis is rejected in that all of the coefficient estimates are zero. The P (two-tail) test, or significance test, tests for the probability of rejecting a true hypothesis. At the 95% confidence level, if the P value is less than a .05 significance level, the null hypothesis is rejected. The R-squared statistic yields a percentage that represents the amount of the dependent variable that is explained by the independent variables chosen (Gujarati, 2003). Backward elimination, which involves starting with all candidate variables, testing the deletion of each variable using a chosen model comparison criterion, deleting the variable (if any) that improves the model the most by being deleted, and repeating this process until no further improvement is

possible. Table 4 showed the model is significant with $p\text{-value } 0.039 < \alpha = 0.05$ because all $p\text{-values}$ were greater than .05, this test shows that this data provide substantial evidence that individuals are not resistance to change unless change occurred significantly at work.

Table 4. Resistance to Change and Regression Outputs RTC

RTC Item	SS	MS	F	p	df
1	166.992	128	1.333/1.300	1.024	0.441
2	220.920	128	1.767/1.718	1.028	0.437
3	165.488	128	1.902/1.180	1.612	0.062
4	195.504	128	.719/1.677	0.429	0.984
5	128.806	128	1.174/.975	1.204	0.265
6	222.806	128	2.702/1.566	2.702	0.039*
7	196.062	128	1.346/1.566	0.860	0.637
8	208.930	128	1.696/1.621	1.046	0.416
9	174.388	128	1.593/1.320	1.207	0.263
10	131.225	128	1.333/.968	1.376	0.150
11	112.899	128	1.229/.818	1.503	0.095
12	111.581	128	1.039/.841	1.235	0.240
13	109.969	128	1.251/.787	1.591	0.068
14	206.806	128	1.873/1.568	1.195	0.273
15	222.667	128	1.759/1.736	1.013	0.454
16	182.930	128	1.243/1.464	0.849	0.649
17	173.023	128	.881/1.439	0.612	0.896

** $p < 0.05$

3.4 Model Development

RTC 6 was used to determine the final model. The final model was $RTC\ 6 = 1.983 + 0.715(MLQ\ 12) - 0.610(MLQ\ 14)$. Detailed results can be found in Table 5). Table 6 is a table of mean for responses under each subscale (Routine seeking (inclination to adopt routines), Emotional reaction (the amount of stress and uneasiness induced by change), Short-term focus (the extent to which individuals are distracted by the short-term inconveniences associated with change), and Cognitive rigidity (frequency and ease with which people change their minds). It measures alongside the respective standard error. Analysis of variance has been performed on the dataset, and the significant parameters were subjected to post hoc test DMRT (Duncan Multiple Range Test) which brought about the alphabets that has as a superscript on every standard error. The figures at the left are the mean while those at the front are the corresponding standard error. Looking at the superscript on the standard error for each subscale, one

can observe that they are different. This shows that the responses for these scales differ significantly from each other. ANOVA test in Table 7 indicated that the responses on the subscales differs from each other, in other to known which one differs from the other additional test was conducted (post hoc test) making use of Duncan Multiple Range Test which brought about the superscript alphabet on each standard error in Table 8. Cognitive rigidity has the highest mean and its' mean significantly differs from that of other subscales. Emotional reaction also has a mean next to Cognitive rigidity, nevertheless, it differs from cognitive rigidity as well from other subscales. Routine seeking has a mean 3rd in ranking when compared in descending order. Its mean is different from the mean observed for other subscales. And finally, Short-term focus has the lowest mean value. In conclusion, from the result of the analysis, there is a significant difference between the observed means for the subscales.

Table 5. Coefficient Standardization Using RTC 6 as the Dependent Variable

<i>Model</i>	<i>Nonstd. Coeff.</i>		<i>Std. Coeff.</i>		<i>Sig.</i>	<i>95% CI Interval for B</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>		<i>Lower Bound</i>	<i>Upper Bound</i>
(Constant)	1.983	0.385		5.145	0	1.219	2.747
MLQ 1	0.021	0.157	0.019	0.132	0.895	-0.29	0.331
MLQ 2	0.234	0.176	0.226	1.325	0.188	-0.116	0.583
MLQ 3	-0.068	0.209	-0.064	-0.324	0.746	-0.481	0.346
MLQ 4	-0.058	0.181	-0.051	-0.32	0.75	-0.417	0.301
MLQ 5	0.167	0.232	0.168	0.723	0.471	-0.292	0.626
MLQ 6	-0.011	0.264	-0.01	-0.04	0.968	-0.533	0.512
MLQ 7	0.406	0.220	0.405	1.846	0.068	-0.03	0.842
MLQ 8	-0.16	0.173	-0.174	-0.922	0.359	-0.503	0.184
MLQ 9	0.318	0.232	0.314	1.372	0.173	-0.142	0.777
MLQ 10	-0.01	0.201	-0.01	-0.051	0.959	-0.408	0.387
MLQ 11	-0.46	0.239	-0.466	-1.924	0.057	-0.933	0.014
MLQ 12	0.715	0.245	0.655	2.918	0.004	0.229	1.2
MLQ 13	0.017	0.155	0.016	0.112	0.911	-0.29	0.324
MLQ 14	-0.61	0.220	-0.605	-2.775	0.007	-1.046	-0.174
MLQ 15	-0.327	0.206	-0.324	-1.583	0.116	-0.736	0.082
MLQ 16	0.034	0.245	0.034	0.138	0.891	-0.452	0.519
MLQ 17	-0.033	0.223	-0.036	-0.148	0.883	-0.475	0.409
MLQ 18	0.069	0.209	0.07	0.331	0.741	-0.345	0.483
MLQ 19	-0.32	0.260	-0.319	-1.233	0.22	-0.836	0.195
MLQ 20	0.251	0.217	0.234	1.156	0.25	-0.179	0.682

Table 6. Mean Comparison for Significant Difference between RTC Subscale Responses

<i>RTC Subscale</i>	<i>Mean ± Std. Err.</i>
Routine seeking	2.43 ± 0.046
Emotional reaction	2.72 ± 0.051
Short - term focus	2.22 ± 0.039
Cognitive rigidity	3.70 ± 0.053

Table 7. ANOVA of Mean Comparison for Significant Difference between RTC Subscale Responses

<i>Comparison</i>	<i>Sum of Sq.</i>	<i>df</i>	<i>Mean Sq.</i>	<i>F</i>	<i>Sig.</i>
Between Groups	802.453	3	267.484	182.465	.000
Within Groups	3807.057	2597	1.466		
Total	4609.509	2600			

Table 8. Duncan Multiple Range Test Output

<i>Subscale</i>	<i>N</i>	<i>Subset for alpha = 0.05</i>			
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Short - term focus	612	2.22			
Routine seeking	765		2.43		
Emotional reaction	612			2.72	
Cognitive rigidity	612				3.7
Sig.		1.000	1.000	1.000	1.000

Note. Means for groups in homogeneous subsets are displayed. Since group sizes are unequal, the harmonic mean of the group sizes was used. Type 1 error levels are not guaranteed.

The regression equation is simpler if variables are standardized so that their means are equal to 0 and standard deviations are equal to 1, for then $b = r$ and $A = 0$. Detailed regression results can be seen in Table 9. From the model summary table, the criteria to be considered is Adjusted R², as it adjusted for any variable added or removed from the model. A total of 20 models were reviewed at the end of the analysis using backward elimination method. Model 15 has the highest Adjusted R², even though the value is 0.069, therefore we are going to consider it as the best model. Table 10 includes detailed information about this model. The Dependent Variable: I generally consider changes to be a negative thing was analyzed against constant MLQ Predictors: I talk optimistically about the future, I spend time teaching and coaching, I specify the importance of having a strong sense of purpose, I consider each individual as having different needs abilities and aspiration from others, I go beyond self-interest for the good of the group, and I act in ways that build others respect for me. Table 11 includes detailed

results. The results of the regression equation is $RTC1 = 2.094 + 0.289 (MLQ4) - 0.298 (MLQ11)$. We can therefore conclude that MLQ4, I consider each individual as having different needs abilities and aspiration from others and MLQ11, I act in ways that build others respect for me does have positive results and could assist in to RTC question, I generally consider changes to be a negative thing, to become a positive influential factor.

Table 9. Regression Analysis Output Using Backward Elimination Method

<i>Model</i>	<i>R</i>	<i>R</i> ²	<i>Adjusted R</i> ²	<i>Std. Err.</i>
1	.399 ^a	0.159	0.004	1.140
2	.399 ^b	0.159	0.013	1.135
3	.399 ^c	0.159	0.022	1.130
4	.399 ^d	0.159	0.031	1.125
5	.399 ^e	0.159	0.039	1.120
6	.397 ^f	0.158	0.046	1.115
7	.395 ^g	0.156	0.052	1.112
8	.392 ^h	0.153	0.058	1.109
9	.387 ⁱ	0.150	0.062	1.106
10	.382 ^j	0.146	0.066	1.104
11	.370 ^k	0.137	0.064	1.105
12	.358 ^l	0.128	0.062	1.106
13	.350 ^m	0.122	0.064	1.105
14	.341 ⁿ	0.116	0.065	1.104
15	.336 ^o	0.113	0.069	1.102
16	.322 ^p	0.104	0.067	1.103
17	.310 ^q	0.096	0.067	1.103
18	.291 ^r	0.085	0.063	1.106
19	.266 ^s	0.071	0.056	1.110
20	.395 ^t	0.156	0.052	1.112

Table 10. Model 14 ANOVA

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Regression	18.854	6	3.142	2.588	.021 ^p
Residual	148.138	122	1.214		
Total	166.992	128			

Note. Dependent variable was RTC 1. Predictors were MLQ 4 and MLQ 11.

Table 11. Coefficient Standardization

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>			<i>95.0% Confidence Interval for B</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>	<i>Lower Bound</i>	<i>Upper Bound</i>
	2.094	0.291		7.191	0	1.517	2.67
MLQ4	0.289	0.134	0.292	2.148	0.034	0.023	0.555
MLQ8	0.206	0.15	0.237	1.371	0.173	-0.091	0.502
MLQ7	-0.23	0.13	-0.289	-1.774	0.078	-0.487	0.027
MLQ15	0.207	0.186	0.237	1.117	0.266	-0.16	0.575
MLQ9	-0.252	0.175	-0.295	-1.444	0.151	-0.598	0.094
MLQ11	-0.298	0.148	-0.342	-2.014	0.046	-0.592	-0.005

3.5 LMX 7 Data Analysis

To find the answer to H02, There is no relationship between relationships leaders develop with their subordinates and leader transformational scores, the following analyses were conducted. Using the LMX 7 questionnaire, the total score was calculated for each respondent. Additionally, the MLQ questionnaire consisted of using the five leadership style scale in consideration were: Individual Consideration, Intellectual Stimulation, Idealized Influence (Behavior), Inspirational Motivation, and Idealized Influence (Attributes). Each of these have been related to transformational leadership style. The average was then calculated for each of the five scales. This process was done to come up with a concise and valid analysis. Having made these modifications, the variables in question became quantitative and could easily be analyzed using Pearson's correlation coefficient to test for the presence of association among the variables. Below is a list of finding that was gathered using the LMX 7 questionnaire:

1. There is an association between relationships leaders develop with their subordinates and individual consideration with a correlation value of 0.902, $p < .000$. Meaning that the higher the relationship leaders develop with their subordinates, the higher individual consideration.
2. There is an association between relationships leaders develop with their subordinates and Intellectual Stimulation with a correlation value of 0.869, $p < .000$. Which implies the higher the relationship leaders develop with their subordinates, the higher Intellectual Stimulation becomes.
3. Also, there is an association between relationships leaders develop with their subordinates and Idealized Influence (Behavior) with a correlation value of 0.860, $p < .000$. To be interpreted as the higher the relationship leaders develop with their subordinates, the higher Idealized Influence (Behavior).
4. There is an association between relationships leaders develop with their subordinates and Inspirational Motivation with a correlation value of 0.841, $p < .000$. Meaning that the higher the

relationship leaders develop with their subordinates, the higher inspirational Motivation.

5. There is relationship between relationships leaders develop with their subordinates and Idealized Influence (Attribute) with a correlation value of 0.883, $p < .000$. Which implies the higher the relationship leaders develop with their subordinates, the higher Idealized Influence (Attributes) becomes.

Since the hypothesis states that “there is no correlation between relationships leaders develop with their subordinates and leader transformational scores” one can only reject this if there is a significant relation between the variables “relationships leaders develop with their subordinates and leader transformational scores”. From the above table, there is a correlation coefficient between LMX 7 total scores and the Five Leadership style scales in consideration. It is observed that all LMX 7 total scores correlate significantly with all the Five Leadership style scales, we therefor can reject the null hypothesis “there is no relationship between relationships leaders develop with their subordinates and leader transformational scores” and conclude that there is relationship between relationships leaders develop with their subordinates and leader transformational scores. The data can be found in Table 12.

Table 12. Pearson’s Correlation between LMX 7 and MLQ

<i>Leadership Style Subscales</i>		
	<i>N</i>	<i>r</i>
Individual Consideration	126	.902**
Intellectual Stimulation	127	.869**
Idealized Influence (Behavior)	128	.860**
Inspirational Motivation	128	.841**
Idealized Influence (Attributes)	128	.883**

** $p < .001$

4. Discussion

The outcomes of this study are intended to help healthcare organizations reach a better understanding of the transformational leadership style and resistance to change. The study answered the question, how does leadership dictate changes that are orchestrated today using transformational leadership in healthcare with resistance to change? This study demonstrated that there is a strong correlation between transformation leadership and resistance to change.

Until the mid-1980s, transactional leadership was considered the primary leadership style utilized in business organizations. Today, many theories and models have influenced current leadership styles that can be applied to the healthcare setting. When considering leadership of healthcare professionals, most theories were not developed in a healthcare setting but were developed for the business setting and then later applied to healthcare (Al-Sawai, 2013). Change in healthcare needs guidance from effective

leadership. Each leader when considering change should focus on the dynamic relationships between the values, culture, capabilities and the organizational context (AlSawai, 2013). Additionally, the leader's growing journey must function with the high level of understanding one's self, creating a positive working environment, and applying organizational awareness. These characteristics are transformational in style and leadership development has undoubtedly reached a serious crossroad in the healthcare setting due to the ever-changing healthcare environment. Findings in the study have been contextual to the theoretical and conceptual framework as appropriately indicated by Bass and his theory of transformational leadership style. Thus, it is the researches hopes that additional studies provide further research that transformational leadership style is beneficial in a healthcare setting when overcoming resistance to change.

5. Study Limitations

A strong correlation exists between transformational leadership and resistance to change. However, after additional analysis utilizing ANOVA and multivariate regression, the adjusted R² remained low. A low R² value is not necessarily negative. Since this study is predicting human perceptions, the low R² scores may still be considered relevant. The overall sample size was 153; however, only 25 leaders were evaluated regarding transformational leadership style. Additionally, the independent and dependent variables in this study were associates' and leaders' opinions rather than their actual behaviors. The study did not verify participation in change management nor did it address actual aspects that frame a person's leadership style. Ultimately, the study measured the values that the individuals ascribed to the respective research areas. Leadership and management are both culturally-constrained. Religion, social customs, politics, values, and the environment can influence leadership and management. The product of working in a healthcare setting is a rapidly changing environment. Thus, the culture of a specific setting may also change. An organization may establish its cultural norms and values, but that does not mean each individual participates. This factor may lead to a bias since culture is sometimes misunderstood in a healthcare setting. To offset this, a randomized sample of 500 was utilized to establish some variance with the answers provided. In contrast, the results might not apply to all healthcare settings because of cultural differences. External factors can also influence leaders and management styles. Economic restraints, specified policies, interventional relations, and climate conditions are just a few of the operational circumstances in which leaders have to operate. Each individual can thrive and function effectively in certain situations. These factors were not evaluated in this research. Therefore, in order to raise the leader's efficiency, changing the situation or perhaps placing the right individual in a given situation can change and predict the needed outcome or result. This study, focused on a Not-for-profit healthcare organization. To ensure validity, the study should be repeated in other healthcare settings.

6. Conclusion

The evidence produced in this study indicates that transformational leadership style can influence resistance to change in a healthcare setting. Furthermore, the quality of relationships leaders create with their subordinates is positively correlated with transformational leadership. Utilizing transformational leadership style as training mechanism could improve the implementation of changes and help leaders function well in a rapidly changing healthcare setting. Leadership and healthcare change management have faced many obstacles and change throughout the years. The tools needed to implement change in a healthcare setting have been researched, but finding a solid solution remains a challenge. This study addressed the ways a leader can mark the course using transformational leadership. Leaders are constantly striving for methods to identify the correct course of action when change is necessary. Just recognizing a need for change is not enough. Leaders need to support the change and work toward the goals of the change. However, as humans, it is natural to have resistance to change (Oreg, 2003). This study provided evidence that transformational leadership is essential when conquering resistance to change. Transformational leadership has characteristics that encompass change. In general, influencing individuals' attitudes, events, behaviors, and choices comes easily to transformational leaders. These leaders are good at switching perspectives. For example, subordinates that value constancy and steadiness may perceive organizational change as a danger and therefore resist it. Whereas individuals that desire stimulation and rejuvenation may interpret it as an opportunity and will more than likely welcome it. Therefore, leaders' values inspire the goals they assign and the outcomes that they will reward (Oreg & Berson, 2009). For instance, leaders that are risk takers and value openness are more than likely to reward followers that exhibit new ideas that are unconventional. Along these same lines, leaders' values form organizational procedures and customs. In other words, by setting the expectation that relate to their value systems, transformational leaders shape employees' attitudes and beliefs. This study showed that a leader's relationship with subordinates does have a cause and effect when influencing change. With the information obtained in this study, it is essential for healthcare organizations to encourage transformational leadership when facing the everyday challenges of healthcare. With the rapidly changing healthcare environment placing more demands on leaders to increase productivity while cutting costs, it is important to know if leaders are maximizing their effectiveness. Many challenges remain ahead for healthcare leaders. This research demonstrated that transformational leadership is significantly correlation with lower resistance to change in a not-for-profit Catholic healthcare setting. If this research can be reproduced in other healthcare settings, then transformational leadership should be implemented across the United States to assist with rapid changes. Transformational leadership has been established as the leadership style that facilitates change (Herold, Fedor, Caldwell, & Liu, 2008). It would be beneficial for healthcare organizations to enforce it.

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