Supervisor's Leadership Style, Personnel Empowerment, Engagement, Work–Life Balance, and Job Satisfaction for Personnel Intention to Stay in the Center for Disease Control and Prevention in Henan Province, China

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ABSTRACT

The study aimed to analyze the role of leadership on medical laboratory personnel's empowerment, engagement, work-life balance, job satisfaction, and intention to stay in the Center for Disease Control and Prevention in Henan Province, China. A casual-comparative with retrospective pre-posttest research design and a self-assessed questionnaire was used to gather primary data from 334 medical laboratory personnel at the Disease Control and Prevention Centers in seventeen (17) cities in Henan Province, China. The level of empowerment personnel engagement of medical laboratory is high, work-life balance is "not sure", job satisfaction is slightly dissatisfied/ satisfied. These differs in age, education, and years of service. The strongest predictor of intention to stay of medical laboratory personnel is the level of engagement which is strongly correlated with the perceived leadership of the supervisors.

Keywords: *leadership style, job satisfaction, work-life balance, engagement, personnel's empowerment*

INTRODUCTION

Background and Rationale of the Study

China has emerged as the world's second largest economy in terms of total GDP and growth rate surpassing Japan and the US in 2010 (Sharma, Tejinder, 2017). Some researchers and economists (King, Peter & Zhang, Wei, 2014) (Hout & Michael, 2014) (Sharma, Tejinder, 2017) attributed these economic developments to the leadership styles of political and business leaders, which they characterized as a fusion of Chinese, Japanese, and American leadership styles.

The Chinese government implemented radical changes particularly on promoting public health and wellness, accelerating the implementation of policy for the development of medical and health personnel. The policy hopes to address the high employee turnover resulting in serious shortage of primary medical and health personnel to support the needs of the growing and aging population, the need to improve their work efficiency, and the organizational structure to facilitate equality and equity in public health governance from the national level down to the village level.

Despite China's new medical reform policy that clearly proposes to strengthen the construction of public health service systems, promote the gradual equalization of basic public health services, and improve the prevention and control system for major diseases and emergency public health emergency mechanisms, there is a magnitude of threat on public health and the severe shortage of medical laboratory personnel at all levels is hampering this reform initiatives (Zeng, Guang, 2019) (Wang, Kongliang, 2019). With the recent challenges being faced by CDC and recognizing that the medical and health personnel are an important guarantee for promoting the reform and development of medical and health undertakings and for safeguarding people's health, it is therefore vital to establish empirical evidences on the role of leadership styles on employees' empowerment, engagement, work-life balance, job satisfaction, and intention to stay in the Center for Disease Control and Prevention, before and after the supervisors' training to better understand the behaviors of medical laboratory personnel and to inform policy and decision-making in public health centers in the country.

General Objective of the Study

The study aims to analyze the role of leadership style on medical laboratory personnel's empowerment, engagement, work-life balance, job satisfaction, and intention to stay in the Center for Disease Control and Prevention in Henan Province, China to inform policy and decision making in public health centers in the country.

Specific Objectives

The study sought to achieve the following:

1. Determine the level of empowerment, engagement, work-life balance, and job satisfaction before and after the supervisor's training of the medical laboratory personnel;

2. Determine the leadership style of supervisors before and after their training as perceived by the medical laboratory personnel;

3. Determine the extent of intention to stay of medical laboratory personnel in the center before and after the supervisor's training;

4. Determine whether significant differences exist in the leadership styles of medical laboratory supervisors before and after the training as assessed by the personnel.

5. Determine whether significant differences exist in the personnel level of empowerment, engagement, work-life balance, and job satisfaction before and after the supervisors' training.

6. Determine whether there are significant changes in the medical laboratory personnel intention to stay before and after the supervisors' training.

7. Determine whether significant correlations exist between the supervisors' leadership styles and personnel level of empowerment, engagement, work-life balance, job satisfaction and intention to stay, before and after the supervisors' training.

8. Determine which among the independent variables can predict the personnel intention to stay in the CDC.

Hypotheses of the Study

Based on the assumed relationships of the study variables as shown above, the following are the hypotheses of this study:

H_{a3}: No significant difference exists in the medical laboratory personnel intention to stay at CDC before and after the supervisors' training.

H_{04}: No significant correlations exist between the supervisors' leadership style and the medical laboratory personnel level of empowerment, engagement, work-life balance, job satisfaction before and after the supervisors' training.

H_{05}: The medical laboratory personnel level of empowerment,

engagement, work-life balance, and job satisfaction are not significantly related to the extent of their intention to stay.

H_{06}: None of the independent variables can predict medical laboratory personnel intention to stay at CDC.

Theoretical Framework of the Study

The theory clarifies the logic why people have relationships with each other and specifies the suitable time for beginning and ending of the relationships. It also highlighted that personal relationships are along with its costs and rewards (Mustapha et al., 2010).

The theory supposes that good deeds should be paid back and that when people receive benefits from others, they would later feel responsible and then repay through effort and loyalty (Mossholder et al., 2005). It is also to say that when employees feel that more benefits are provided by the organization, the more likely they feel responsible, and they intend to stay with the organization. This is because most relationships are made up of a certain amount of give-and-take, but this does not mean that they are always equal.

Conceptual Framework of the Study

From the theoretical perspective presented above, it is assumed in this study that there are three groups of variables that could explain the intention behavior of a personnel based on a set of possible alternative behaviors.
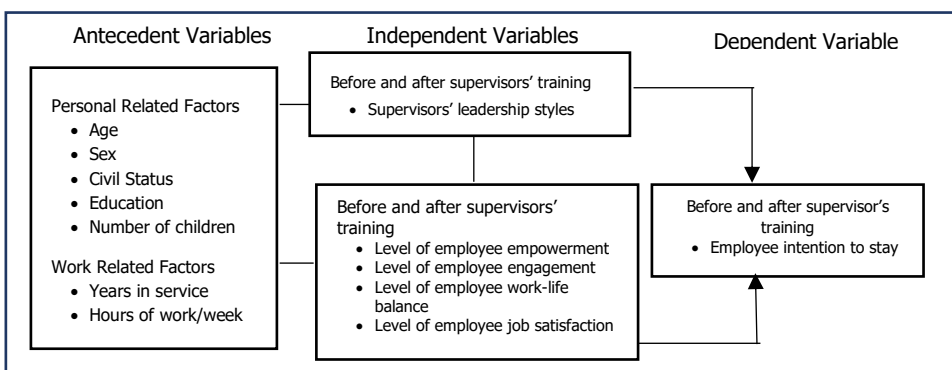

Figure 1. Conceptual Framework of the Study

Definition of Terms

Employee empowerment. In this study, it refers to the level of employee's power, authority, responsibility, resources, and freedom to make decisions and solve work related problems. It will be measured by determining the level of agreement or disagreement of the respondents in the given statements on employee empowerment using a 5-point Likert Scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree/agree, 4 = agree, 5= strongly agree.(Choi et al., 2016).

Work-life Balance. In this study, it refers to the individual perception that work and non-work activities are compatible and promote growth in accordance with an individual's current life priorities. It will be measured by determining the respondents' level of agreement or disagreement on the statements on work-life balance using a 5-point Likert Scale where 1-strongly disagree, 2-disagree, 3-slightly disagree/agree, 4-agree, 5-strongly agree.

Employee engagement. It refers to an employee's emotional commitment to care about their work and their company and use discretionary effort to achieve the organizational goals(Kevin Kruse, 2012). This study will be measured by determining the level of agreement or disagreement on the statements on work engagement particularly before and after the training of your supervisor using a 5-point Likert Scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree/agree, 4 = agree, 5= strongly agree.

Employee job satisfaction. It refers to whether employees are happy, contented and fulfilling their desires and needs at work (Sageer et al., 2012). This study will be measured by determining the level of agreement or disagreement of the respondent in the statements on employee satisfaction using a 5-point Likert Scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree/agree, 4 = agree, 5 = strongly agree.

Intention to stay. It refers to an employee's willingness to stay with an organization (Tett & Meyer, 1993). This study will be measured by determining the respondent's level of agreement or disagreement in the statements on intention to stay in the organization using a 5-point Likert Scale where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree/agree, 4 = agree, 5 = strongly agree. These responses were analyzed and transformed into a range of scores where 1.0 – 2.33 means that the medical personnel extent of intention to stay is low, 2.34 – 3.66 means average and 3.67 – 5.0 means high.

Leadership style. Antonakis (Antonakis et al., 2003) defined leadership style as the nature of the influencing process and its resultant outcomes - that occurs between a leader and followers and how this influencing process is explained by the leader's dispositional characteristics and behaviors, follower perceptions and attributions of the leader, and the context in which the influencing process occurs and presented empirical evidence on the three leadership typologies - Transformational, Transactional, and Laissez-Faire. (Newstrom et al., 1993).

A 5-point Likert Scale was used to measure the study variables, where 1-strongly disagree, 2-moderately disagree, 3-slightly disagree/slightly agree, 4-moderately agree, and 5-strongly agree. For Leadership style it was measured using the following scale: 1-Not at all, 2-Once in a while, 3-Sometimes, 4-Fairly often, 5-Frequently, if not always.

The more likely leadership style adopted by the supervisor is determined using the total scores of the respondents where a range 1-35 mean Laissez Fair, 36-70 means transactional and 71-105 means transformational.

Significance of the Study

The results of this study will benefit the following groups of individuals:

Center for Disease Control and Prevention. They will be provided with empirical evidence on the role of leadership styles on employee's empowerment, engagement, work-life balance, job satisfaction, and intention to stay in the organization to inform their plans particularly in enhancing the performance of the center and to effectively manage employee retention.

Managers and Policy Makers. They will be provided with scientific evidence on the leadership style and personnel engagement, empowerment, job satisfaction, and work-life balance, and intention to stay in the organization to inform policy development, implementation and evaluation. They would be able to take appropriate actions to enhance human resource development and performance in the country.

Scope and Limitation

This study will determine the role of leadership style on the medical laboratory personnel level of empowerment, work engagement, work-life balance, job satisfaction and intention to stay in the Center for Disease Control and Prevention in Henan Province, China.

The target population will only include those fulltime medical

laboratory personnel in the Center of Disease Control and Prevention in seventeen cities in Henan Province, China since 2009, that is, before the implementation of the new human resource development program by the government. Since this is a retrospective study, the data that will be gathered will depend on the recall of the respondents.

METHODOLOGY

Research Design

This study is a causal comparative utilizing retrospective research design. It used a self-assessed questionnaire to gather primary data from the respondents who are full-time medical laboratory personnel at the Disease Control and Prevention Centers in seventeen (17) cities in Henan Province, China. Secondary data was also collected such as the existing human resource management policies of the government and those that are specific to the center.

Population and Sample Size

The target population of this study consisted of full-time laboratory personnel who have been working at the Center for Disease Control and Prevention in any of the seventeen cities in Henan Province, China since 2009 to be able to assess the leadership style of their respective supervisors before and after the implementation of the new policy on human resource development program. The total population of medical laboratory personnel during the conduct of the study was 447. To determine the sample size, the following formula was used (Nuankaew & Nuankaew, 2019).

$$n = \frac{N}{1+Ne^2} = \frac{447}{1+447*.03^2} = 319$$

Where:

e = is the desired level of precision (2.5% margin of error),

N - is the population

Sampling Technique

The sample respondents were identified using simple random sampling. To provide an extra list of respondents in case anyone from the 319 selected respondents decided not to participate or continue with the survey, a total of 65 additional respondents were generated as it was expected that a few personnel might not be willing to participate. All the 384 respondents who were given a survey questionnaire participated in the survey. The softcopy of the questionnaire was sent to the respondents using a digital platform and was collated for data processing.

Instruments

Standardized instruments were adopted in this study. Permission from the authors of these instruments were secured before using it. The instruments were translated to Chinese language and were validated by a Chinese language expert to ensure that its psychometric properties are within acceptable standards. (Please see definition of terms for measurement scales).

Data Gathering Procedure

A letter of permission to conduct the study in seventeen CDC in Henan Province, China will be secured from respective authorities. Informed Consent will also be secured from each of the study participants to ensure that ethical standards in conducting research are considered. In addition, this document and all questionnaires will be submitted for plagiarism test and ethical review by the university Research Ethics Board.

The validated questionnaires will be distributed to the participants and they will be given enough time to answer the questionnaire. All submitted questionnaire will be reviewed for completeness, consistency, and validity.

Data Processing and Analysis

The data collected will be cleaned and then coded. For data analyses, Statistical Package for Social Science (SPSS) version 25 will be used. A quasi-experimental paired t-test or Wilcoxon signed-rank test will be used to determine differences in means of two-category variables, ANOVA or Kruskal-Wallis test for difference of three or more category-variable depending on the results of test of their normality and homogeneity of data. Pearson's correlations or Spearman Rho for test of correlations, and regression modeling to test the predictive ability of predictor variables on the outcome variable.

RESULTS AND DISCUSSIONS

Differences in the Predictor Variables before and after the Supervisor Training

As shown in Table 1, all the variables recorded significant changes in the mean scores after the supervisor's training. The leadership style mean score increased by 9.281 points which means that the leadership style of supervisors as perceived by the medical laboratory personnel has improved although both are still considered under transformational leadership. Empowerment, engagement, work-life balance, and satisfaction increased as well. This means that the level of empowerment, engagement, work-life balance, and job satisfaction were better after the supervisor's training.

Table 1
Difference in the Study Variables before and After the Training (N-334).

Indicators	Mean Before	SD	Mean After	SD	Paired Diff.	T-test	df	Sig	Decision
Leadership Style	79.562	5.000	88.844	5.000	9.281	95.728	333	0.000*	Reject Ho_2
Empowerment	3.636	0.323	4.023	0.331	0.387	43.300	333	0.000*	Reject Ho_2
Engagement	3.757	0.315	4.249	0.265	0.492	38.462	333	0.000*	Reject Ho_2
Work-Life Balance	3.396	0.225	3.615	0.154	0.218	25.007	333	0.000*	Reject Ho_2
Satisfaction	3.231	0.096	3.294	0.082	0.062	18.902	333	0.000*	Reject Ho_2

Statistically significant at 95% level of confidence

Extent of Intention to Stay in CDC of Medical Laboratory Personnel Before and After Training of Supervisors

The fifth objective of this study was to determine the extent of intention to stay of medical laboratory personnel in the Center for Disease Control and Prevention before and after the training of supervisors. The Intention to Stay Instrument developed by Graham (2012) of University of Toronto was used to measure the intent to stay of medical laboratory personnel. Results of the analysis are shown in the following tables.

The data in Table 2 show that the majority of the medical laboratory personnel was "not sure" (mean = 3.088 – 3.189) their intention to stay in the center, before and after the supervisors training which means that they are thinking of staying or leaving the center. However, there is a slight increase in the overall mean score after the supervisors training (mean = 3.189) as compared to the overall

mean score of before the training. When the difference in mean scores of the groups before and after the supervisors training were determined, results show that there is a significant increase in the means score of extent of intention to stay after the supervisors training (t=13.578, df= 333, Sig. = 0.000). The data show that majority of the personnel are not sure of their intention to stay in the center, their intention to stay increased significantly after the supervisors training. These findings lead to the rejection of the null hypothesis (Ho3) that no significant difference exists in the medical laboratory personnel intention to stay at CDC before and after the supervisors' training.

Table 2

Extent of Intention to Stay in CDC Before and After Training of Supervisor of Medical Laboratory Personnel by Age.

Level of Intention to stay	Before Training		After Training	
	f	%	f	%
High	53	15.9	53	15.9
Unsure	279	83.5	276	82.6
Low	2	0.6	5	1.5
Total	334	100.0	334	100.0
Mean	3.088		3.189	
Standard Deviation	0.411		0.463	
Difference in mean scores	Mean= 0.100, SD = 0.135, t=13.578 df= 333, Sig.= 0.000			

Statistically significant at 5% level (p-value<0.05)
Legend: Low = 1.0 – 2.33;   Not Sure = 2.34 – 3.67;   High = 3.68 – 5.00

Correlations between Independent and Dependent Variables Before and After the Supervisors' Training

All the independent and dependent variables are significantly correlated with each other as shown by the Pearson's r test results and its corresponding p-values. The Zero-order correlations test results show that after the supervisor's training, leadership style has significant moderate positive correlations with empowerment (r=0.581, p-value 0.000) and engagement (r=0.627, p-value = 0.000); has significant negligible positive correlations with work-life balance (r=0.123, p-value = 0.000, p-value =0.000), and significant high negative correlation with job

satisfaction (r=-0.757, p-value =0.000) and significant low positive correlation with intention to stay (r=0.374, p-value =0.000).

Before the supervisor's training, leadership style has significant low positive correlations with empowerment (r=0.369, p-value = 0.000) and intention to stay (r=0.336, p-value = 0.000), significant moderate correlations with work-life balance (r=0.594, p-value = 0.000), significant moderate negative correlation with job satisfaction (r=0.578, p-value= 0.000), and significant high positive correlations with engagement (r=0.837, p-value = 0.000).

When the leadership style after the training was controlled, the results show an increased in the correlations between Empowerment A and Intention A (r =0.901 to r=906), Engagement A and Intention A (r=908 to r=0.933), Work-life balance A and Intention A (r=881 to r=907), Satisfaction A and Intention A (r=0.617 to r=0.551). Based on these findings, there is enough evidence to reject the null hypothesis (H04) that no significant correlations exist between the supervisors' leadership style and the medical laboratory personnel level of empowerment, engagement, work-life balance, job satisfaction before and after the supervisors' training.

The results show that the leadership style, in this case transformational, moderates positively the relationships between the predictor variables and intention to stay. It also shows that leadership style has helped enhance the intention to stay in the CDC of medical personnel.

Table 3

Correlations between Independent and Dependent Variables Before and After the Supervisors Training Controlling for Leadership Style.

Indicators (N334)	Empowerment r (p-value)	Engagement r (p-value)	Work-Life Bal r (p-value)	Satisfaction r (p-value)	Intention r (p-value)	Decision
		Zero Order (2-tailed)				
Empowerment A		0.948 (0.000)	0.786 (0.000)	-0.728 (0.000)	0.901 (0.000)	Reject Ho$_4$
Empowerment B		0.451(0.000)	0.720 (0.000)	-0.524 (0.000)	0.837 (0.000)	Reject Ho$_5$
Engagement A	0.948 (0.000)		0.774 (0.000)	-0.759 (0.000)	0.908 (0.000)	Reject Ho$_4$
Engagement B	0.451 (0.000)		0.728 (0.000)	-0.530 (0.000)	0.418 (0.000)	Reject Ho$_5$
Work-Life Balance A	0.786 (0.000)	0.774 (0.000)		-0.447 (0.000)	0.881(0.000)	Reject Ho$_4$
Work-Life Balance B	0.720 (0.000)	0.728 (0.000)		-0.592 (0.000)	0.763 (0.000)	Reject Ho$_5$
Satisfaction A	-0.728 (0.000)	-0.759 (0.000)	-0.447 (0.000)		-0.617 (0.000)	Reject Ho$_4$
Satisfaction B	-0.524 (0.000)	-0.530 (0.000)	-0.592 (0.000)		-0.578 (0.000)	Reject Ho$_5$
Intention to Stay A	0.901 (0.000)	0.908 (0.000)	0.881 (0.000)	-0.617 (0.000)		Reject Ho$_4$
Intention to Stay B	0.837 (0.000)	0.418 (0.000)	0.763 (0.000)	-0.578 (0.000)		Reject Ho$_5$
Leadership Style A	0.581 (0.000)	0.627 (0.000)	0.123 (0.000)	-0.757 (0.000)	0.374 (0.000)	Reject Ho$_4$
Leadership Style B	0.369 (0.000)	0.837 (0.000)	0.594 (0.000)	-0.538 (0.000)	0.336 (0.000)	Reject Ho$_5$
		Controlling for Leadership Style (2-tailed)				
Indicators (N334)	Empowerment r (p-value)	Engagement r (p-value)	Work-Life Bal r (p-value)	Satisfaction r (p-value)	Intention r (p-value)	Decision
Empowerment A		0.921 (0.000)	0.885 (0.000)	0.542 (0.000)	0.906 (0.000)	Reject Ho$_4$
Empowerment B		0.281 (0.000)	0.670 (0.000)	-0.416 (0.000)	0.815 (0.000)	Reject Ho$_5$
Engagement A	0.921 (0.000)		0.901 (0.000)	0.558 (0.000)	0.933 (0.000)	Reject Ho$_4$
Engagement B	0.281 (0.000)		0.523 (0.000)	-0.172 (0.000)	0.266 (0.000)	Reject Ho$_5$
Work-Life Balance A	0.885 (0.000)	0.901 (0.000)		0.546 (0.000)	0.907 (0.000)	Reject Ho$_4$
Work-Life Balance B	0.670 (0.000)	0.523 (0.000)		-0.402 (0.000)	0.743 (0.000)	Reject Ho$_5$
Satisfaction A	-0.542 (0.000)	0.558 (0.000)	-0.546 (0.000)		-0.551 (0.000)	Reject Ho$_4$
Satisfaction B	-0.416 (0.000)	-0.172 (0.000)	-0.402 (0.000)		-0.501 (0.000)	Reject Ho$_5$
Intention to Stay A	0.818 (0.000)	0.878 (0.000)	0.833 (0.000)	0.575 (0.000)		Reject Ho$_4$
Intention to Stay B	0.815 (0.000)	0.266 (0.000)	0.743 (0.000)	0.501 (0.000)		Reject Ho$_5$

$p<0.05$

Regression Analysis on the Independent and Dependent Variables after the Training

The final objective of this study is to determine which among the independent variables can predict the personnel intention to stay in the CDC. The regression analysis using the after the training of supervisor's data was performed and the results are shown in Table 36.

The data in Table 3 shows the regression test results after the supervisors training and Table 4 shows the regression test results before the training. As the most relevant data is the after the training, Table 4 shows that the regression model 1 comprising

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the variables empowerment, engagement, work-life balance, and satisfaction recorded the highest regression coefficient (R=0.953, Regression = 47.360, p-value =0.000) as compared to the other models (Model 2-4). The results show that the study variables (engagement, empowerment, work-life balance, and satisfaction) taken together have a 47.36% predictive ability on intention to stay given a transformational leadership style. Moreover, the beta coefficient of the variables included in model 1 shows that the level of engagement has the highest predictive ability (beta = 0.445) followed by the level of work-life balance (beta = 0.404), and level of empowerment (beta = 0.191). However, the level of satisfaction is not a good predictor of intention to stay as reflected by its beta = 0.041, p-value = 0.143. These findings show that there is enough evidence to reject the null hypothesis (Ho6) which states that none of the independent variables can predict

medical laboratory personnel intention to stay at CDC.

The results further show that in every unit change in the level of engagement of medical personnel, there is a 0.445 unit change in their intention to stay in the center given the transformational leadership style of supervisors, while in in work-life balance, there is a corresponding 0.404 unit change in their intention to stay in the center, 0.191 unit change in every unit change in the level of empowerment, and 0.041 unit change in every unit change in the level of satisfaction. This means that the level of personnel work engagement, empowerment, work-life balance, and satisfaction when taken together can be used to estimate the employees' extent of intention to stay in the center. However, when taken independently, only the level of satisfaction is not a good basis for determining the personnel intention to stay.

Table 4

Regression Analysis on the Independent and Dependent Variables Controlling for Transformational Leadership Style (After Training).

Model	R	R^2	Regression	Residual	F Change	Df1/2	Sig	Decision
1	0.953	0.907	47.360	4.835	805.583	4/329	0.000*	Reject Ho6
2	0.908	0.825	43.057	9.139	1564.254	1/332	0.000*	Reject Ho6
3	0.951	0.904	47.171	5.025	1553.615	1/331	0.000*	Reject Ho6
4	0.952	0.907	47.329	4.867	1069.661	1/330	0.001*	Reject Ho6

Model 1	β	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Empowerment	0.234	0.068	0.191	3.453	0.901	0.187	0.001*	Reject Ho6
Engagement	0.558	0.072	0.445	7.718	0.908	0.392	0.000*	Reject Ho6
Work-Life Bal	0.709	0.052	0.404	13.734	0.881	0.604	0.000*	Reject Ho6
Satisfaction	0.167	0.114	0.041	1.467	0.617	0.081	0.143	Accept Ho6

Model 2	β	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Engagement	1.140	0.029	0.908	39.551	0.908	0.908	0.000*	Reject Ho6

Model 3	β	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Engagement	0.709	0.034	0.565	20.977	0.908	0.755	0.000*	Reject Ho6
Work-Life Bal	0.777	0.047	0.443	16.461	0.881	0.671	0.000*	Reject Ho6

Model 4	B	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Engagement	0.518	0.067	0.413	7.722	0.908	0.391	0.000*	Reject Ho6
Work-Life Bal	0.736	0.048	0.420	15.282	0.881	0.644	0.000*	Reject Ho6
Empowerment	0.220	0.067	0.179	3.271	0.901	0.177	0.001*	Reject Ho6

p-value <0.05
Model 1 Predictors: Work-Life Balance, Empowerment, Engagement
Model 2 Predictors: Engagement
Model 3 Predictors: Engagement, Work-Life Balance
Model 4 Predictors: Engagement, Work-Life Balance, Empowerment
Dependent Variable: Intention to Stay

Table 5

Regression Analysis on the Independent and Dependent Variables Controlling for Transformational Leadership Style (Before Training).

Model	R	R^2	Regression	Residual	F Change	Df1/2	Sig	Decision
1	0.882	0.778	48.714	13.913	280.987	4/321	0.000*	Reject Ho1
2	0.836	0.699	43.790	18.837	753.206	1/324	0.000*	Reject Ho1
3	0.864	0.747	46.791	15.836	477.173	1/323	0.000*	Reject Ho1
4	0.874	0.765	47.883	14.744	348.567	1/322	0.000*	Reject Ho1

Model 1	B	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Empowerment	0.715	0.054	0.525	13.168	0.836	0.592	0.001*	Reject Ho6
Engagement	-0.412	0.069	-0.238	5.982	0.377	0.317	0.000*	Reject Ho6
Work-Life Bal	1.359	0.150	0.460	9.083	0.750	0.452	0.000*	Reject Ho6
Satisfaction	0.808	0.184	0.149	4.380	0.564	0.237	0.143	Accept Ho6

Model 2	B	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Empowerment	1.140	0.042	0.836	27.445	0.836	0.836	0.000*	Reject Ho6

Model 3	B	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Empowerment	0.836	0.054	0.613	15.361	0.836	0.650	0.000*	Reject Ho6
Work-Life Bal	0.924	0.118	0.312	7.823	0.750	0.399	0.000*	Reject Ho6

Model 4	B	Std Error	Beta	t-test	Zero Order	Partial	Sig	Decision
Empowerment	0.777	0.054	0.570	14.399	0.836	0.626	0.000*	Reject Ho6
Work-Life Bal	1.422	0.153	0.481	9.288	0.750	0.460	0.000*	Reject Ho6
Engagement	-0.334	0.068	-0.193	-4.883	0.377	-0.263	0.001*	Reject Ho6

p-value <0.05
Model 1 Predictors: Satisfaction, Work-Life Balance, Empowerment, Engagement
Model 2 Predictors: Engagement
Model 3 Predictors: Engagement, Work-Life Balance
Model 4 Predictors: Engagement, Work-Life Balance, Empowerment
Dependent Variable: Intention to Stay

Table 6

Model Fit Controlling for Transformational Leadership Style.

Model	R	R^2	Regression	Residual	F Change	Df1/2	Sig	Decision
1	0.953	0.907	47.360	4.835	805.583	4/329	0.000*	Reject Ho_6
2	0.882	0.778	48.714	13.913	280.987	4/321	0.000*	Reject Ho_6

Before Training								
Model 1	**B**	**Std Error**	**Beta**	**t-test**	**Zero Order**	**Partial**	**Sig**	**Decision**
Empowerment	0.234	0.068	0.191	3.453	0.901	0.187	0.001*	Reject Ho_6
Engagement	0.558	0.072	0.445	7.718	0.908	0.392	0.000*	Reject Ho_6
Work-Life Bal	0.709	0.052	0.404	13.734	0.881	0.604	0.000*	Reject Ho_6
Satisfaction	0.167	0.114	0.041	1.467	0.617	0.081	0.143	AcceptHo_6

After the Training								
Model 1	**B**	**Std Error**	**Beta**	**t-test**	**Zero Order**	**Partial**	**Sig**	**Decision**
Empowerment	0.715	0.054	0.525	13.168	0.836	0.592	0.001*	Reject Ho_6
Engagement	-0.412	0.069	-0.238	5.982	0.377	0.317	0.000*	Reject Ho_6
Work-Life Bal	1.359	0.150	0.460	9.083	0.750	0.452	0.000*	Reject Ho_6
Satisfaction	0.808	0.184	0.149	4.380	0.564	0.237	0.143	Accept Ho_6

Conclusions

All the variables recorded significant changes in the mean scores after the supervisor's training. Empowerment, engagement, work-life balance, and satisfaction increased as well. This means that the level of empowerment, engagement, work-life balance, and job satisfaction were better after the supervisor's training. The leadership style was transformational before and enhanced significantly after the training which means that the leadership style of supervisors as perceived by the medical laboratory personnel has improved although both are still considered under transformational leadership.

Recommendations

Considering the major findings and conclusions presented above, the following are recommended:

1. To enhance the medical personnel intention to stay in the center, their level of work engagement should be enhanced through a more engaging work environment and transformational type of leadership.

2. Programs towards enhancing work-life balance should be pursued especially directed to the younger groups, single and with master's

degree as they are more likely to be "unsure" of their intention to stay in the organization and their level of engagement, empowerment, and work-life balance is lower compared to older, married and with college degree.

3. The perceived leadership style is transformational where supervisors are perceived to be concerned about the level of empowerment, engagement, and work-life balance of medical laboratory personnel. It is suggested that to make this leadership style work, the supervisors should not only look at the job performance of personnel but also consider their level of engagement, empowerment, and work-life balance.

4. If the training is intended to enhance the intention to stay of the medical laboratory personnel in the center, there should be training on how to enhance personnel engagement, empowerment, work-life balance, as these are the significant predictors of medical personnel

intention to stay, despite that about 48% of the intention to stay can be directly accounted by these variables.

5. The government should also look at its policy in enhancing the public health services in the center by assessing the quality of work-life balance of the personnel as this variable is by itself found strongly related to other variables such as employee engagement, empowerment, and job satisfaction.

6. It is also recommended to the future researchers that other variables such as organizational culture, commitment, professional advancement, economic, and available external opportunities be considered in the study as there are feedback from the medical personnel that the prevailing culture and available external job opportunities maybe a strong factor that may influence personnel intention to stay in the center.

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