



Mediating Effects of Organizational Commitment on The Relationship Between Leadership Behavior and Job Satisfaction of art Teachers in Shenyang, Liaoning Province

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Received January 17, 2023 Revise April 29, 2023 Accepted August 31, 2024

Abstract

The objectives of this research were: 1) to propose a model of mediating effects of organizational commitment relationship between leadership behavior on job satisfaction of art teachers in Shenyang, Liaoning province 2) to evaluate the model fit with the empirical data, and focus to the variables were influenced the job's satisfaction of art teachers. The total population of this study included 564 art teachers from schools of art in Shenyang. A stratified random sampling method was used to sample, totaling 270 person which calculated from G*Power program. The instrument for collecting data was a questionnaire. Descriptive statistics and inferential statistics were used to perform data analysis by using statistical computer software. Research results revealed that: 1. A mediating effects relationship between administrator's leadership behavior and teacher's job satisfaction model fit with the empirical data at statistical significant $p < 0.01$, the value of the full model: Chi-square = 241.98, df = 62, GFI, AGFI, CFI, NFI = 0.95, and SRMR= 0.04. 2. Administrators behavior had a directly influence teacher's job satisfaction and organizational commitment.3. Administrator's leadership behaviors indirectly influence job satisfaction through organizational commitment more than directly to job satisfaction. The Shenyang, Liaoning School District and provincial offices can use this research results for school administrators, as a result of this research, in particular, with personnel bipartisanship, which is a priority in the work of the organization to be accomplished. Administrators must have leadership behavior like as transformational leadership style, which is critical to job engagement/commitment and organization, because this gives people a sense of commitment.

Keywords: Mediating effects, administrators leadership behavior, teacher's job satisfaction, organizational commitment, art school in Shenyang

Introduction

The issue of accountability has continued to cause anxiety and great concern among administrators as well as teachers (Fullan, 2010). Educational institution environments have continued to change at a rapid pace presenting administrators with many new challenges. At the same time, higher expectations and increasing demands on administrators rarely make concession for all the school changes taking place

Administrators are not present daily in the classroom, which means student achievement is not directly affected by the administrator (Wahlstrom & Louis, 2008). In order to influence student achievement, administrators may have to provide an indirect leadership approach. The problem addressed in this study involved the effects of administrator leadership styles on teacher job satisfaction and teacher efficacy. Research indicates that an administrator's leadership style can influence job satisfaction and teaching efforts among school teachers (Grayson & Alvarez, 2008). It is imperative that administrators exhibit strong educational leadership within the school in order to provide the support teachers need to be successful in the classroom.



Leadership is considered as an important element of directing processes. In order to get the things done by others, managers are required to guide and lead different activities. Leadership is the ability to influence others. According to leadership is a process. In this process a person has influence upon a group of persons it helps them in order to achieve the common goals. Leadership style is the general way a leader behaves towards his subordinates for attaining objectives. Transformational leadership and transactional leadership are considered as two major aspects of leadership. Transformational leadership creates positive and valuable changes in the followers. Transformational leader pays attention to transform others to help one another, to encourage, be harmonious and to pay attention to develop organization as a whole.

The support of organization is important for the satisfaction of an employee. Moreover, the behavior and loyalty of the leader and the way employees perceive their superior support them also play a very important role in order to obtain the desired outcomes of work. The organizations which are successful normally have satisfied employees whereas poor job satisfaction can make an organization crippled. Job satisfaction has also a variety of satisfaction facets. Job satisfaction is influenced by many organizational factors ranging from salaries, workplace flexibility, job autonomy, job security and leadership. Within organizations leaders can adopt appropriate leadership styles, and as a result, job satisfaction, productivity and commitment of an employee are affected (Voon, Lo, Ngui, & Ayob, 2011). Job satisfaction of an employee is concerned with the attitude of employee towards his/her job as well as to the organization. Job satisfaction describes employee's attitude towards his work. One does his job well and he also gets reward for his efforts. Job satisfaction leads to recognition, income, promotion and achievement of goals as a result general feelings are fulfilled. It has a good influence on the emotional state of the worker and he has positive attitude towards his work because a satisfied worker is likely to be more loyal, creative and innovative. Job satisfaction is the product of events and conditions that people experience in their jobs.

For the success of an organization two factors are fundamental and they are effective leadership and job satisfaction of an employee. Employees who have high job satisfaction do more effort in order to perform their assigned tasks and to pursue the interests of an organization. An organization with employees who have high job satisfaction can retain and attract employees with the skills that it needs (Mosadegh Rad & Yar Mohammadian, 2006). The aim of this study is to find out the relationship between administrators' leadership styles and job satisfaction of college art teachers.

The researcher is an art teacher of the university in Shenyang. The purpose of this study would be investigate leadership behaviors, organizational commitment and job satisfaction in order to advance the understanding of these concepts as well as to comprehend the relationships among them . A model was developed to gain a better understanding of the predictability of organizational commitment and/or job satisfaction based on leadership behavior .The study examined the causal relationships that exist between organizational commitment and job satisfaction in order to determine what direct and/or indirect impact leadership has on each of them . This study sought to ascertain if there is a leadership behavior as perceived by teachers that shows a significant influencing to teacher job satisfaction. Therefore, the researcher is interested in studying and researching it, with the expectation that the result of this matter to propose a guideline for developing quality change administrators' leadership of educational institutions under art schools in Shenyang. And to be able to implement them in a practical manner, providing direct benefits for administrators in considering their leadership style improving or developing oneself to become an effective change leader in management and lead to personal job satisfaction, engagement, organizational commitment and job performant of colleagues in art educational program.



Research Objectives

1. To propose a model of mediating effects of organizational commitment relationship between leadership behavior on job satisfaction of art teachers in Shenyang, Liaoning province.
2. To evaluate the model fit with the empirical data, and focus to the variables were influenced the job's satisfaction of art teachers in Shenyang, Liaoning province.

Research Hypotheses

H 1 :Leadership behaviors directly influence job satisfaction

H 2 :Leadership behaviors directly influence organizational commitment

H 3 :Organizational commitment directly influence job satisfaction

H 4 :Leadership behaviors indirectly influence job satisfaction through organizational commitment.

Scope of the study

Scope of contents

The main contents of this study consisted of the category of administrator's leadership behavior, teacher's organizational commitment, and job satisfaction. These contents were as follow: Five leadership behavior

The contents were developed from Kouzes & Posner (1997) which identified five behaviors or practices associated with transformational leadership (Bass & Avolio, 1990).

1. Challenging the process: involves the leader looking for new innovations in order to change the status quo within an organization.

2. Inspiring a Shared Vision: involves a leader inspiring or motivating employees to work towards a more ideal vision of the organization

3. Enabling others to Act: involves the leaders who enable others to act, work to create an atmosphere of trust and respect in order to build collaborative teams.

4. Modeling the way: involves the leader providing an appropriate and effective example for others to follow

5. Encouraging the heart: involves the leader who encourages the heart recognizes the achievement or contribution of his/her art teachers and provides appropriate rewards in order to motivate them.

Three organizational commitments

This content, researcher was developed from the main concept of Meyer J P, et al (1993). Who developed a set of three scales to measure their three-component model of organizational commitment. They named them the Affective, Normative, and Continuance Commitment.

1. Affective commitment: involves emotional feelings, identification, and involvement with the organization. It is the strong belief and acceptance of the goals and values of the organization.

2. Continuance commitment: defined as the perceived costs associated with leaving the organization. It is the willingness to remain in the organization because of the 'non-transferable investment' already committed such as retirement benefits, relationships with other employees, unique benefits from the organization among others.

3. Normative commitment: the extent the art teacher's belief on the organization and the willingness to make considerable efforts for the benefit of the organization.

Five jobs satisfaction

This content, researcher was developed from the main concept of Spector (1985, 1997) in order



to measure employees' job satisfaction. It consisted of 5 dimensions were

- Pay
- Promotion
- Administrator /Supervisor
- Co-workers
- Nature of work

Conceptual Framework

1. Leadership behavior

These latent variables were developed from Kouzes & Posner (1997) which identified five behaviors or practices associated with transformational leadership (Bass & Avolio, 1990): Challenging the process, Inspiring a shared vision, Enabling others to act, Modeling the way, and Encouraging the heart.

2. Organizational commitments

This content, researcher was developed from the main concept of Meyer J P, et al (1993). who developed a set of three scales to measure their three-component model of organizational commitment. They named them the Affective, Normative, and Continuance Commitment.

3. Jobs satisfaction

This content, researcher was developed from the main concept of Spector (1985, 1997) in order to measure employees' job satisfaction. It consisted of 5 dimensions: Pay, Promotion, Administrator /Supervisor, Co-workers, and Nature of work

The variables that stated above, independent and dependent variables as a conceptual framework guideline to do this research as show in figure 1 as follow:

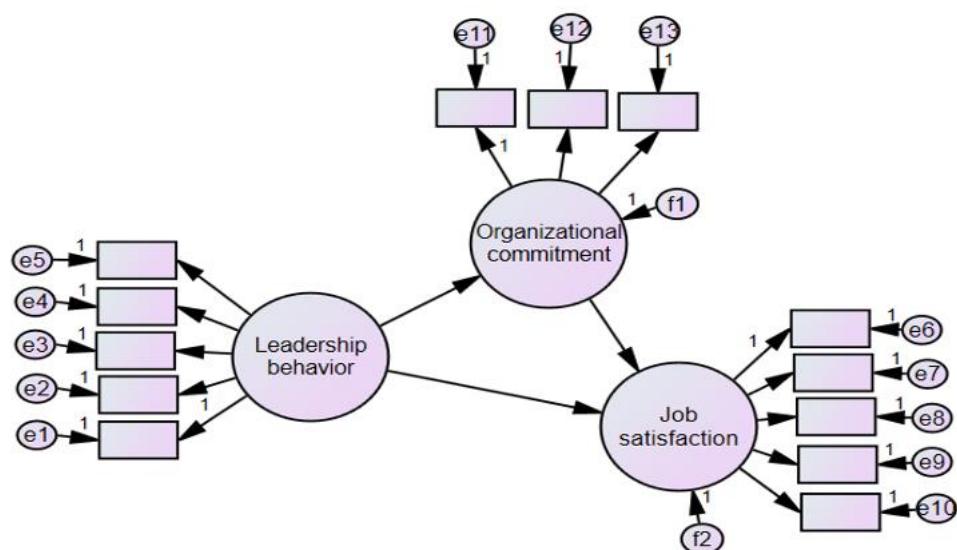


Figure 1 Show the conceptual framework

Research Methodology

Population and Sample Population used in this study was art teachers within seven comprehensive universities of Shenyang, Liaoning province which includes of (1) Shenyang University, (2) Liaoning University, (3) Northeastern University, (4) Shenyang Aerospace University,



(5) Shenyang Jianzhu University, (6) Shenyang Jianzhu university, and (7) Shenyang University of Chemical Technology, total of 564 persons.

In this study, G*Power software was used to determine the sample size, and the specific parameters were set as follows. Effect size $W = 0.35$, α error prob = 0.05, the degrees of freedom = 62, in order to obtain the statistical power of .95 by using the chi-square test. The relationship between the total sample size and the actual power was at least 270 art teachers obtained from proportional stratified sampling method. However,

According to Kelloway (1998) it is generally accepted that a sample of at least 200 completed responses is required to meet the statistical requirements of structural equation modeling for data analysis. He also indicated that some researchers have suggested that a ratio of sample size to estimated parameters should be at least somewhere between 5:1 and 10:1. This helps ensure accuracy of estimates and to ensure proper representation of the target population. As this study had multiple observed variables to define the latent variables, a large sample size was needed. In this study, since there were 13 observed variables, the sample size should be at least somewhere between 65 and 130. For this study, 300 valid questionnaires were obtained, which is much larger than the suggested 130 or 200, including 270 that stated in an initially. This was indicating an acceptable sample size, as show in Figure 2 and Table 2 as follow:

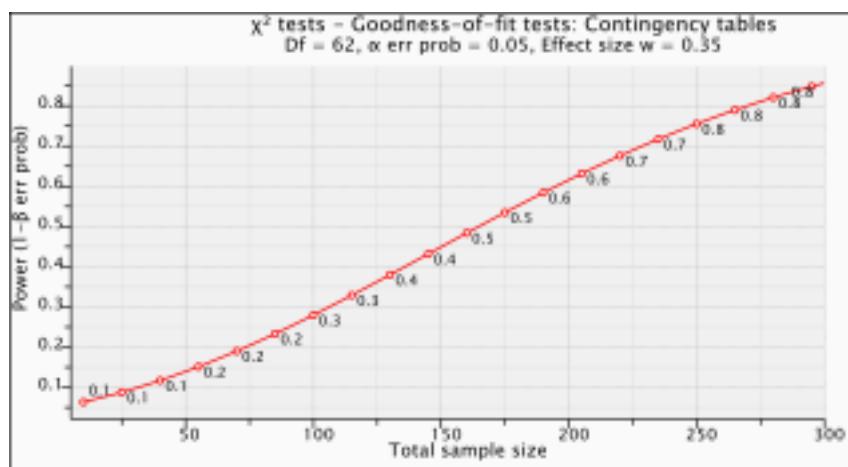


Figure 2. Sample size analysis calculated by G*Power

Table 1 Number of population and sample classified by 7 Public Higher Art Schools in Shenyang, Liaoning Province.

No	University name	Population	Sample
1	Shenyang University	138	66
2	Liaoning University	72	35
3	northeastern University	67	32
4	Shenyang Aerospace University	98	47
5	Shenyang Jianzhu University	69	33
6	Shenyang Ligong University	59	28
7	Shenyang University of Chemical Technology	61	29
	Total	564	270



Data analysis

This research on title “Mediating Effects: Relationship Model Between Leadership Behavior and Job Satisfaction of Art Teachers in Shenyang, Liaoning Province” The objectives of this research were to: (1) propose a model of mediating effects relationship between leadership behavior and job satisfaction of art teachers in Shenyang, Liaoning province, (2) evaluate the model fit with the empirical data, and focus to the variables were influenced the job’s satisfaction of art teachers in Shenyang, Liaoning province. In this research study, the main population used were 564 art teachers, using 270 samples in the study calculated by G*Power program, the researchers increased the sample to 300 respondents in order to fit the research methodology using CFA statistics.

Researcher, therefore, was analyzed the data that obtained and presented the findings into three parts as follows:

Part 1 Description of general information of the respondents

Part 2 Evaluation the sub-model: Leadership behavior, Organizational commitment, and Job satisfaction that specified in the model proposed

Part 3 Hypothesis testing

Part 1 Description of general information of the respondents

Due to the limited space, this part is all about filling in the basic information of the questionnaire, so the form is not displayed, just the conclusion is written, the conclusion is as follows: The results showed that the total number of respondents were 300 persons. In the gender classification of the survey sample, the proportion of male slightly more female, accounting for 63.33% and 36.67% respectively. In terms of age, about 32% not over 45 years old, 56.00% were 46 – 50 years old, and 12.33% were older than 50 years old.

Among the educational degrees of the respondents, 79.00 percent were master degree, 20.67 percent doctoral, and only 0.33 percent post-doctoral. Those with less than 5 years accounted for 1.33%, those with more than 5 years accounted for 76.67%, and those with more than 10 years accounted for 21.67%. Among the respondents who filled in these art schools of Shenyang and familiar with his/her administrator, 80.66% had familiar with for 1-5 years, 12.67 at 6-10 years, others than that more than 10 years.

Part 2 Evaluation the sub-model: Leadership behavior, Organizational commitment, and Job satisfaction that selected in the model.

Regarding the second part, because the space is limited, I just briefly stated the conclusions. The models about leadership behavior, organizational commitment and job satisfaction all meet the standards of the detection model. The specific detection scheme and method can refer to the part 3 of the detection research hypothesis.

Part 3 Hypothesis testing

Research Hypotheses of this study were stated as follows:

H 1 :Leadership behaviors directly influence job satisfaction.

H 2 :Leadership behaviors directly influence organizational commitment.

H 3 :Organizational commitment directly influence job satisfaction.

H 4 :Leadership behaviors indirectly influence job satisfaction through organizational commitment.

In order to hypothesis testing, the researcher was proceeded in the following sequence of stages. In terms of the test of three sub-measurements in the previous parts, although they had some



problems that need to be overcome in future research; the three sub measurements had internal validity. That is, they still can be used to test the theoretical relationships proposed in this study.

Screening of Offending Estimates, needs to be assessed first to ensure that the full model is accepted, as shown in Table 2

Table 2 Regression Coefficient Estimate to the Full SEM Model

Parameter	Non-Standardized coefficient	Standard error	T-value	Standardized coefficient	R2
λ_1 : LB1	0.58	0.03	22.75*	0.86	0.74
λ_2 : LB2	0.64	0.03	23.94*	0.89	0.79
λ_3 : LB3	0.62	0.03	25.17*	0.91	0.83
λ_4 : LB4	0.64	0.03	23.95*	0.88	0.77
λ_5 : LB5	0.53	0.04	23.98*	0.89	0.79
λ_6 : OC1	0.68	0.04	15.36*	0.71	0.50
λ_7 : OC2	0.86	0.04	22.98*	0.87	0.76
λ_8 : OC3	0.90	0.04	25.98*	0.92	0.85
λ_9 : JS1	0.58	0.05	9.78*	0.59	0.35
λ_{10} : JS2	0.63	0.05	11.05*	0.65	0.42
λ_{11} : JS3	0.69	0.06	14.96*	0.71	0.50
λ_{12} : JS4	0.68	0.06	11.82*	0.68	0.46
λ_{13} : JS5	0.56	0.05	9.73*	0.60	0.36
γ_1 : LB \rightarrow OC	0.68	0.06	11.83*	0.68	0.46
γ_2 : LB \rightarrow JS	0.35	0.06	5.42*	0.35	0.12
β_1 : OC \rightarrow JS	0.58	0.08	7.36*	0.58	0.34

* $p < 0.05$

Tables 2 show parameter estimates of the full model. In the tables, all regression coefficients performed very well. That is, there were no negative error variances nor any non-significant error variances for any of the variables, no standardized coefficients exceeding or very close to 1.00, and no very large standard errors associated with any of the estimated coefficients. Thus, assessment of the overall model fit could be processed.

Overall Fit measures for the Full Model

Overall fit measures are presented in Table 9.2 as follows:

The Evaluation of Overall Model Fit for Job Satisfaction Overall fit measures are presented in Table 3. The model is evaluated by three separate types of measures absolute fit measures.

Table 3 Shows overall fit measures for the measurement model of satisfaction

Fit indices	Statistic
Chi-square (χ^2) with df = 62	241.98 ($p = 0.00$)
Goodness of fit index (GFI)	0.95
Standardized root means square residual (SRMR)	0.04
Root means square error of approximation (RMSEA)	0.06
Adjusted goodness of fit index (AGFI)	0.95
Comparative fit index (CFI)	0.95
Normed fit index (NFI)	0.95

Absolute and incremental fit measures as shown in Table 9.3, six of seven indices pass the requirement. There are GFI, AGFI, RMSEA, SRMR, CFI, and NFI. The χ^2 value, although statistically significant, indicated an un-acceptance of the model. However, many scholars suggested that this measure is not very important, and need not be necessarily heeded because of the sample size greater than 200 (Hair, et al, 2010). For the incremental fit measures, they performed very well. All measures are far larger than the recommended value of 0.90, indicating a good fit for the model (Diamantopoulos and Siguaw, 2000; Fan & Sivo, 2005; Schumacker & Lomax, 2010; Kelloway (2015)). The result of the measurement model fit for the overall full model of the mediating effects relationship between leadership behavior and job satisfaction of art teachers in Shenyang, Liaoning province, as shows in Figure 3 below.

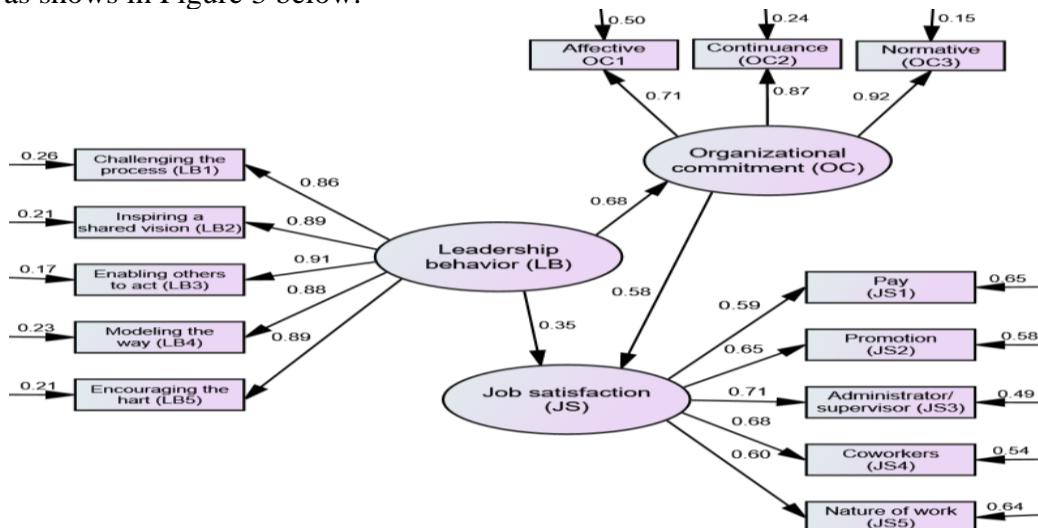


Figure 3 Standardized parameters of the full model.

As a whole, from the data analyzed as shown in Table 9.2 and Figure 3 was indicated that the overall model of mediating effects relationship between leadership behavior and job satisfaction of art teachers in Shenyang, Liaoning province fit with the empirical data. Therefore, the full model could be said to have construct validity and the structural relationship could be assessed to see whether the hypotheses proposed are supported.

Focus at the data analysis results in Table 2, and Figure 3, It were found that the administrator's leadership behavior the most factor loading was LB3: enabling others to act at 0.91 and follows with LB2: inspiring a shared vision; LB5: encouraging the hart at the same 0.89 and LB4: modeling the way at 0.88. And the standardized coefficient value for leadership behavior to job satisfaction (γ_2 : LB \rightarrow JS) was 0.35 with a standard error of 0.06 and a T-value of 5.42 ($p < 0.05$), indicating that the hypothesis "H 1: Leadership behaviors directly influence job satisfaction" is accepted.

The standardized coefficient for leadership behavior to organizational commitment (γ_1 : LB \rightarrow OC) was 0.68, with a standard error of 0.06 and a T-value of 11.83 ($p < 0.05$). This means that leadership behavior has direct effect on organizational commitment. The hypothesis that stated "H 2: Leadership behaviors directly influence organizational commitment" is accepted.

The standardized coefficient for organizational commitment to job satisfaction (β_1 : OC \rightarrow JS) was 0.58, with a standard error of 0.06 and a T-value of 7.36 ($p < 0.05$). This means that organizational commitment has direct effect on job satisfaction. The hypothesis that stated "H 3: Organizational commitment directly influence organizational commitment" is accepted.

And the last, the standardized coefficient for leadership behavior to job satisfaction via the organization commitment was the mediator variable, the indirect effect of 0.39 (0.98×0.58). therefore,



the hypothesis that stated “H 4: Leadership behaviors indirectly influence job satisfaction through organizational commitment” is accepted.

In summary, this model studied was consistent fit with the empirical data. The hypotheses that stated overall were accepted. The mediating effects relationship between leadership behavior and job satisfaction of art teachers in high art school in Shenyang was at 0.74, particularly the mediating effects relationship between administrator’s leadership behavior and teacher’s job satisfaction was 0.39.

Discussion

1. Based on objective 1, propose a model of mediating effects relationship between leadership behavior and job satisfaction of art teachers in Shenyang, Liaoning province. In this study, three measurement models were tested, it included a model of leadership behavior, organizational commitment, and job satisfaction. The results demonstrated that most of fit measures indicate an acceptance of the measurement model which shows that the model was valid. Regression coefficients obtained suggest that all of the observed variables in each sub model could validly reflect each construct.

2. Based on objective 2, evaluate the model fit with the empirical data, and focus to the variables were influenced the job’s satisfaction of art teachers in Shenyang, Liaoning province.

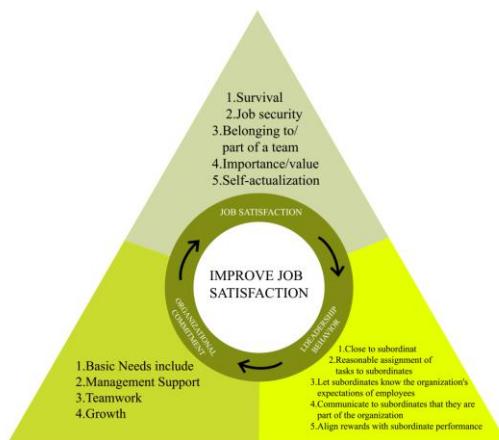


Figure 4 Relationship model between leadership behavior and job satisfaction

The full model in this study was a combination of three measurement models and a structural model. The most important part of the full model is its structural model. The structural model was constructed by the four hypotheses, however, can conclude within the two: proposed that leadership behavior directly influence job satisfaction and indirectly influence it through organizational commitment, next to proposed that organizational commitment directly influences job satisfaction. For the research based on Objective 2 and the specific discussion content, please refer to Figure 4

Conclusion

This study used the quantitative research design. The respondents were more male than female not so much. The average age is 46-50 years old, most of them have a master's degree, more than 5 years of work experience, and familiarity worked with their administrator for at least 5 years. Research Hypotheses of this study were stated as follows:



The main research findings were:

1. Had a mediating effects relationship between administrator's leadership behavior and teacher's job satisfaction. The full model fit with the empirical data with the criterion fit index of Chi-square = 241.98, df = 62, GFI, AGFI, CFI, NFI = 0.95, SRMR= 0.04, and RMSEA = 0.06.
2. Administrators behavior had a directly influence teacher's job satisfaction.
3. Administrator's behavior directly influence teacher's organizational commitment.
4. Teacher's organizational commitment directly influence job satisfaction.
5. Administrator's leadership behaviors indirectly influence job satisfaction through organizational commitment.

To evaluate the model fit with the empirical data, and focus to the variables were influenced the job's satisfaction of art teachers in Shenyang, Liaoning province.

Recommendations

1. The Shenyang, Liaoning School District and provincial offices can use this research results for school administrators, as a result of this research, in particular, with personnel bipartisanship, which is a priority in the work of the organization to be accomplished. Administrators must have leadership behavior like as transformational leadership style , which is critical to job engagement/commitment and organization, because this gives people a sense of commitment.

Office should do the following:

- 1) Inservice training by highly experienced experts in this field.
- 2) Organize art teacher's job satisfaction and organizational commitment an annual survey and report to the organization and everyone to recognize and find way to improve and development.
- 3) Use the results of the survey study according to Item 2 to plan and development projects as appropriate in order for teachers to be satisfied and have a commitment to the organization.

Suggestions for utilization

To advance the organization and help subordinates to bond with the organization. What needs to be done should be in 5 areas. as follows:

1. Administrators must be as close to subordinate as possible. If there's a good supervisor. Capable and caring, teach, help solve problems for your subordinates as much as possible. It will make everyone want to continue working with the organization.

2. Assigning a task to a subordinate, must make the feel that he or she is important to the job, even if the responsible task is a small one, making them proud and explaining to the subordinates how the work they do affects the organization. If a subordinate understands the importance of work, they want to be more responsible, and will know that he or she should not miss out on the job.

3. The subordinates must be informed of the expectations of the organization that they want the employee to do. How does the plan work so that employees can focus on their work as expected? It will be in accordance with the plan set by the organization.

4. Must communicate to subordinates that they are part of the organization.

Operation system different stages of operation projects or events, if the subordinates do not know that he or she is part of the organization It will make them not want to focus on work, it will only be the work done. Regardless of the quality of the work done, what will it be?

5. Bonding by giving "Awards" Must be consistent with the performance of subordinates. According to this context, there must be a positive reward and moreover, the organization must be focus on the quality of life for its subordinates as well.



Reference

Bass, B.M., & Avolio B.J. (1990). The implications of Transactional and Transformational Leadership for individual, team, and organizational development. *Research in Organizational Change and Development*.

Fullan, M. (2010). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass

Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, 24(5), 1349–1363. <https://doi.org/10.1016/j.tate.2007.06.005>

Kelloway, E. K. (1998). *Using LISREL for Structural Equation Modelling*. Thousand Oaks, CA: Sage Publication

Kouzes, J. M., & Posner, B. Z. (1988). Development and validation of the leadership practices inventory. *Educational and Psychological Measurement*, 48, 4083-496.

Meyer J P, et al (1993). Commitment to Organizations and Occupations: Extension and Test of a Three-component Conceptualization. *Journal of Applied Psychology*, 78,538-551.

Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299-326.

Mosadegh Rad &Yar Mohammadian, 2006). Leadership Styles as determinants of Organizational Citizenship Behaviour among Public Sector University Teachers, January 2015 35(1):273-286

Spector, P. (1997). *Job Satisfaction: Application, Assessment, Causes and Consequences*. California: Sage.

Spector, P.E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13(6), 693-713.

Voon, Lo, Ngu, & Ayob, (2011). The influence of leadership styles on employees' job satisfaction in public sector organization in Malaysia} January 2011 2(5):24-32

Wahlstrom, K., & Louis, K.S. (2008). How teachers perceive principal leadership. *Educational Administration Quarterly*, 44(4), 498-445.