



Evaluating the Working Performance of Tuberculosis Program Managers Study Case in Tasikmalaya, West Java

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Abstract. Long treatment and high dropout rates require responsible staff's commitment to preventing and supervising patients taking medication. This study analyzes the correlation of leadership, motivation, and climate organization on the work performance of Tuberculosis (TB) program managers in Tasikmalaya. This study used a survey method with a cross-sectional design of 28 tuberculosis managers in Tasikmalaya. The sample taken is the total population of TB managers. Four variables were studied: leadership, climate organization, motivation, and work performance. The instrument used is a questionnaire using Google Forms. The measurement scale uses Likert and is analyzed by path analysis. This study showed that most of the subjects were women, ranging from 23 to 58 years, graduated with diplomas, had not attended TB training, and worked in Puskesmas (primary health care). They have worked, on average, for 13 years, from one to 34 years. Leadership, climate organization, and work motivation contribute simultaneously and significantly to work performance. The simultaneous influence of leadership variables and climate organization on work motivation. Training on TB is needed for program managers and building a good climate organization for all parties involved in handling TB cases.

Keywords: leadership · climate organization · TB managers · work performance

1 Introduction

Tuberculosis was a leading global cause of death, with most new cases in poor and developing countries. The WHO stated that there are wide and persistent gaps in the detection, prevention, and control of TB, including gender barriers and stigma [1]. Approximately Six million TB cases are notified, 81% of which occur in LMICs and contribute to about 1 million TB deaths globally every year [2, 3].

Health workers of TB or TB program managers are one of the critical component strategies to overcome the epidemic, engaging and involving affected persons, integrating prevention and care services for the disease with relevant community-based health and development activities [4]. The TB managers can contribute to finding missing people and increasing TB treatment, and supporting decreasing TB incidence, costs, and burden, through [5]: reducing the stigma, elevating awareness of TB symptoms, and psychosocial

support [6]; increasing the notifications and early case finding, and treatment support [7], preventing transmission, tracing contacts, and easing the access to TB providers, as well as the referral of a suspect TB person.

Responsive and qualified TB managers are critical determinants of a well-functioning health system and thus improve the health of populations [8]. They have the potential access to vulnerable communities [9, 10] and could effectively improve health effects and behaviors [11, 12]. However, the performance of TB managers is still lacking. Inadequate numbers, unequal distribution, and limited capability have been stated as the main obstacles to gaining the TB control target [13, 14]. Many programs do not have sufficient resources and supervision, resulting in low performance, and the expected health outcomes do not materialize [15]. Long treatment (± 6 months) and high dropout rate also require responsible staff's commitment to preventing and supervising patients taking medication.

The needs of employees within organizations are the essential factors in the companies' sustainability [16, 17]. This condition is not a similar situation in government organizations. Lachman and Buchanan stated that the public sector staff is less satisfied with their work [18, 19]. Employees who work in the regional government are less satisfied with their leaders and how they manage the organization. They are dissatisfied with how the organization synchronizes leaders' perspectives with their subordinates to achieve the goals through high working performance, loyalty, dedication, guidance, direction, motivation, and proper coordination [20].

Leadership is a continuous process by which a person becomes a leader through activities to persuade subordinates to achieve the organization's goals. Leadership has a crucial effect on organizational activities and is needed to improve institutional performance. Besides, the leadership assumed a lack of sensitivity to what is desired by the followers and focused on the goals [21–23].

Organizational culture is a habit that applies and has different patterns and customs in every institution. The employees hold beliefs and assumptions, then develop and bequeath to cope with external adaptation and internal integration problems [24]. Another element is the climate organization built from the organization's culture and continuously created.

Motivation gives the support that allows someone to act toward a particular goal [25]. Employee motivation is like determining work results, such as perseverance, productivity, and performance. High motivation is correlated with the work performance of employees [26].

The study aimed to analyze the influence of leadership, motivation, and climate organization on the work performance of TB program managers in Tasikmalaya.

2 Methods

The study is conducted by survey method with a path analysis approach. We correlate leadership, climate organization, motivation, and work performances of TB program managers.

2.1 Participants

Participants of this study were all TB program managers in Tasikmalaya, with as many as 28 managers in primary health care and hospitals. Data collection was held in April 2020 in Tasikmalaya, West Java, Indonesia.

2.2 Data Collection

The instrument uses a questionnaire that consists of 38 questions: 1) characteristics (name, address, age, sex, working unit, length of work, education, TB training followed); 2) leadership (22 questions), 3) climate organization (4 questions), 4) motivation (3 questions), and work performance (3 questions). The answer to variables (leadership, climate organization, motivation, and performance) using the Likert scale consists of strongly disagree, disagree, enough, agree, and strongly agree.

2.3 Data Analysis

Data processing and analysis in this study using statistical software STATA version 17.

3 Result and Discussion

This study was conducted on April 2022 in Tasikmalaya. As many as 28 respondents contribute to this study. Respondents in this study were women (64.29%), ranging from 23 to 58 years, had diploma graduation (64.29%), and had not received TB training (57.14%). Most of the respondents work in Puskesmas (primary health care). They have worked on average of 13 years, from a to 34 years.

The analysis results show that the simultaneous influence of leadership and climate organization on work motivation is 0.857. The magnitude of the influence of leadership and climate organization on work motivation is very strong.

The simultaneous influence of leadership, climate organization, and work motivation on work performance is 0.967. The magnitude of the influence of leadership, climate organization, and work motivation on work performance is very strong.

Residual value (ϵ), the formula is $\epsilon = 1 - R^2$, the amount of leadership contribution, climate organization has a simultaneous effect which directly affects work motivation is $0.857 \times 100 = 85.7\%$ and the rest (ϵ) = $1 - 0.857 = 0.14$ influenced by other factors. The amount of leadership contribution, climate organization, and work motivation has a simultaneous effect that directly affects work performance is $0.967 \times 100\% = 96.7\%$, and the rest (ϵ) = $1 - 0.967 = 0.033$ influenced by other factors.

Based on the analysis, it was found that the path coefficient of leadership and climate organization on work motivation is statistically significant. The amount of leadership contribution to climate organization has a simultaneous effect that directly affects the working coefficient of leadership, climate organization and work motivation on work performance was statistically significant. Thus, this analysis provides information that leadership, climate organization, and work motivation contribute simultaneously and significantly to work performance. The magnitude of the contribution of leadership, climate organization, and work motivation has a simultaneous effect that directly

affects work performance is $0.967 \times 100\% = 96.7\%$, and the rest (ϵ) = $1 - 0.967 = 0.033$ influenced by other factors. The magnitude of the influence of leadership, climate organization, and work motivation on work performance is very strong.

The result of the study state that leadership, climate organization, and work motivation contribute simultaneously and significantly to work performance. This result is in line with the study of Cahyono and Adnyani, which states that leadership, climate organization, and work motivation have an effect either simultaneously or partially on employee performance at PT. Arabikatama Khatulistiwa Fishing Industry Denpasar, with motivation as the dominant variable that affects work performance. While in this study, the motivational variable acts as a moderating variable [27] (Table 1).

Positive leadership can improve employee performance, either directly or through increasing employee motivation. A good leader can become a catalyst for the success and implementation of organizational tasks embodied in the hierarchy, the granting of respective authority and duties, as well as flexible communication from subordinates and vice versa, and requires cooperation in efforts to achieve organizational goals [28].

The indirect effect of X1 on Y through X3 is $0.34 \times 0.59 = 0.20$. The total effect of X1 on Y is $0.64 + 0.20 = 0.84$. The indirect influence of the leadership variable on work performance has a positive contribution of 20%. This result indicates that leadership has a positive influence on work performance. Better leadership will have a good effect on the results of work performance.

The indirect effect of X2 on Y through X3 is $0.67 \times 0.59 = 0.39$. The total effect of X1 on Y is $-0.23 + 0.39 = 0.16$. The indirect effect of the climate organization variable on work performance has a positive contribution of 39%. This fact indicates that the climate organization has a positive influence on work performance. This means that a better climate organization will have a good effect on work performance.

A good climate organization can improve employee work performance, as a study conducted by Oddang et al. [29]. The climate organization becomes an important variable because it relates to a person's perception of what is provided by the organization and its components and then serves as a basis for someone to behave. Acceptance received by employees from colleagues and a work environment that encourages employees to

Table 1. Path Coefficient, Direct and Indirect Effect, and Total Effect

Variables Effect	Initial Value (Rp)	Direct	Indirect	Total D + I
Leadership-motivation	0.34	0.34	–	0,34
Climate organization-motivation	0.67	0.67	–	0,67
leadership – work performance	0.64	0.64	$0,34 \times 0,59 = 0,20$	0,84
Climate organization-performance	-0.23	-0.23	$0,67 \times 0,59 = 0,39$	0,16
Motivation Performance	0.59	0.59	–	0,59

work more optimally. Uncomfortable working conditions due to a lack of coordination between fellow employees affect performance [30].

Motivation is an inner drive and becomes the starting point for institutions to achieve the desired goal through their activity [31]. Giving the right motivation will encourage employees to carry out their duties optimally. If employees do not get good incentives and rewards, it will reduce their motivation and enthusiasm for work. This condition will affect the work performance of employees. Employee performance is one indicator of the organization's operational success in achieving its goals [32].

Tuberculosis program managers are responsible for preventing, tracing, and even decreasing TB incidence. This heavy burden is added by the long treatment of TB, and the high dropout rate, which requires responsible staff commitment and performance.

The limitation of this study is reaching a small population of TB managers in one district. A larger population can provide a more comprehensive description of the factors that affect the work performance of TB workers.

References

1. WHO, Global tuberculosis report 2019. Geneva. <https://www.who.int/tb/global-report> (2019)
2. C. Dye, Global epidemiology of tuberculosis. *Lancet*. 2006, vol. 367, pp. 938–940. [https://doi.org/10.1016/S0140-6736\(06\)68384-0](https://doi.org/10.1016/S0140-6736(06)68384-0)
3. WHO. Global Tuberculosis Report 2013. Geneva. https://www.who.int/tb/publications/global_report/en/index.html
4. WHO, Primary health care on the road to universal health coverage: 2019 monitoring report. Geneva. (2019). https://www.who.int/healthinfo/universal_health_coverage/report/uhc_report_2019.pdf. (accessed 16 June 2022)
5. WHO, Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy. Geneva. (2017) (<https://www.who.int/hiv/pub/guidelines/advanced-HIV-disease/en/>, accessed 16 June 2022).
6. I. Okeyo, R. Dowse, An illustrated booklet for reinforcing community health worker knowledge of tuberculosis and facilitating patient counselling. *Afr J Primary Health Care Fam Med*. (2018), Vol.10, No. 1, pp. 1687. <https://hdl.handle.net/10520/EJC-f0dbd2ed5>
7. Clarke M, Dick J, Zwarenstein M, Lombard CJ, Diwan VK, Lay health worker intervention with choice of DOTS superior to standard TB care for farm dwellers in South Africa: a cluster randomised control trial. *Int J Tuberc Lung Dis*. (2005). Vol. 9, No.6, pp. 673–679.
8. WHO, Malaria [website]. Geneva, (2019) <https://www.who.int/malaria/en/>. (accessed 16 June 2022)
9. WHO, Operations manual for HIV prevention, care and treatment delivery at primary health centres in high-prevalence, resource-constrained settings. Edition 1 for field testing (Chapter 4. Community), Geneva, https://www.who.int/hiv/pub/imai/om_4_community.pdf. (accessed 16 June 2022), (2008).
10. B.J. Hall, K.L. Sou, R. Beanland, M. Lacky, L.S. Tso, Q. Ma, Barriers and facilitators to interventions improving retention in HIV care: a qualitative evidence meta-synthesis. *AIDS Behav*. Vol. 21, No.. 6, pp. 1755–1967. <https://doi.org/10.1007/s10461-016-1537-0> (2017)
11. WHO, Core competencies in adolescent health and development for primary care providers. Geneva: World Health Organization; https://apps.who.int/iris/bitstream/handle/10665/148354/9789241508315_eng.pdf. (accessed 30 June 2022), (2015)
12. WHO, Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Geneva: World Health Organization; <https://www.who.int/hiv/pub/arv/arv-2016/en/> (accessed 16 June 2022), (2016)

13. S. Drager, G. Gedik, M.R. Dal Poz, Health workforce No.s and the Global Fund to fight AIDS, Tuberculosis, and Malaria: an analytical review. *Hum Resour Health*, Vol. 4, p. 23. <https://doi.org/10.1186/1478-4491-4-23> (2006)
14. A.D. Harries, R. Zachariah, K. Bergstrom, L. Blanc, F.M. Salaniponi, G. Elzinga, Human resources for control of tuberculosis and HIV- associated tuberculosis. *Int J Tuberc Lung Dis*, Vol. 9, pp. 128–137 (2005).
15. C. Masquillier, E. Wouters, D. Mortelmans, B. van Wyk, H. Hausler, W. van Damme, HIV/AIDS competent households: interaction between a health-enabling environment and community-based treatment adherence support for people living with HIV/AIDS in South Africa. *PLOS ONE*. Vol. 11, No.: 3, pp. e0151379. <https://doi.org/10.1371/journal.pone.0151379> (2016)
16. M. Mappamiring, M. Akob, A.H.P.K. Putra, What Millennial Workers Want? Turnover or Intention to Stay in Company. *Journal of Asian Finance, Economics, and Business*, Vol. 7, No. 5, pp.237–248. <https://doi.org/10.13106/jafeb.2020.vol7.no5.237> (2020)
17. T. Uslu, Innovation culture and strategic human resource management in public, and private sector within the framework of employee ownership. *Procedia-Soc. Behav. Sci.* Vol. 195, pp. 1463–1470. <https://doi.org/10.1016/j.sbspro.2015.06.445> (2015).
18. B. Buchanan, Government managers, business executives, and organizational commitment. *Public Adm. Rev.* 1974, pp. 339–347. <https://doi.org/10.2307/975244>
19. R. Lachman, Public and private sector differences: CEOs' perceptions of their role environments. *Acad. Manag. J.* Vol. 28, pp. 671–680. <https://doi.org/10.5465/256122>, (1985)
20. Paais, Maartje, J.R. Pattihuru, Effect of Motivation, Leadership, and Organizational Culture on Satisfaction and Employee Performance. *The Journal of Asian Finance, Economics and Business*. Vol. 7, no. 8 (August 30, 2020): 577–88. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.577> (2020)
21. H.M. Nguyen, L.T. Mai, T. L. Huynh, The Role of Transformational Leadership toward Work Performance through Intrinsic Motivation: A Study in the Pharmaceutical Field in Vietnam. *Journal of Asian Finance, Economics and Business*. Vol. 6, No. 4, pp. 201–212. <https://doi.org/10.13106/jafeb.2019.vol6.no4.201> (2019)
22. H. T. T. Suong, D. D. Thanh, T. T. X. Dao, The Impact of Leadership Styles on the Engagement of Cadres, Lecturers and Staff at Public Universities - Evidence from Vietnam. *Journal of Asian Finance, Economics, and Business*. Vol. 6, No. 1, pp. 273–280. <https://doi.org/10.13106/jafeb.2019.vol6.no1.273> (2019)
23. T. Thanh, T. Doan, L. Cam, T. Nguyen, T. Dan, N. Nguyen, Emotional Intelligence and Project Success. *The Roles of Transformational Leadership and Organizational Commitment*. Vol. 7, No. 3, pp. 223–233. <https://doi.org/10.13106/jafeb.2020.vol7.no3.223> (2020)
24. E. Limaj, E.W.N. Bernroider, The roles of absorptive capacity and cultural balance for exploratory and exploitative innovation in SMEs. *Journal of Business Research*. Vol. 94, pp. 137–153. <https://doi.org/10.1016/j.jbusres.2017.10.052> (2019)
25. A. Indahingwati, A. Launtu, H. Tamsah, A. Firman, A.H.P.K. Putra, A. Aswari, How Digital Technology Driven Millennial Consumer Behaviour in Indonesia. *Journal of Distribution Science*. Vol. 17, No. 8, pp. 25–34. <https://doi.org/10.15722/jds.17.08.201908.25> (2019)
26. N. Arshadia, Necessary need satisfaction, work motivation, and job performance in an industrial company in Iran. *Procedia - Social and Behavioral Sciences*. 5(January), pp. 1267–1272. <https://doi.org/10.1016/j.sbspro.2010.07.273> (2010)
27. E. A. Cahyono, I.G.A.D. Adnyani, Pengaruh Gaya Kepemimpinan, Motivasi Kerja dan Iklim Organisasi Terhadap Prestasi Kerja Karyawan Bagian Engineering Pada PT. Arabikatama Khatulistiwa Fishing Industry Denpasar, (Disertasi, Universitas Udayana), (2020)
28. A. Gani, Analisis faktor-faktor yang mempengaruhi kinerja pegawai kantor pelayanan pajak bumi dan bangunan kota Makassar. *Jurnal Aplikasi Manajemen*. Vol. 7, No.1, pp. 220–228, (2009)

29. O. Oddang, A. Gani, R. Ramlawati, Pengaruh Gaya Kepemimpinan, Iklim Organisasi dan Budaya Organisasi Terhadap Prestasi Kerja Pegawai. *Tata Kelola*. 2020, Vol. 7, No. 1, pp. 1–9. <https://doi.org/10.52103/tatakelola.v7i1.58>
30. N.K.S.D Astuti, I.B.K. Surya, Pengaruh iklim organisasi, motivasi kerja dan kepemimpinan transaksional terhadap kepuasan kerja karyawan. *E-Jurnal Manajemen*. Vol. 9, No.1, pp. 7431–7450. <https://doi.org/10.24843/EJMUNUD.2020.v09.i01.p01> (2020)
31. E. M. Kiruja, Effect of Motivation on Employee Performance In Public Middle Level Technical Training Institutions In Kenya. *International Journal of Advances in Management and Economics*. Vol. 2, No. 4, pp. 73–82. (2013)
32. Handoko, T. Hani, *Manajemen*. Edisi 2. BPFE, Yogyakarta. (2009).

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