

The Effect of Proactive Personality, Professionalism, and Work Engagement on Performance among Village Midwives in Neonatal Complication Management Using the Integrated Management of Childhood Illness

Farouk Ilmid Davik¹, Fitri Widyacahya¹, Muhammad Ardian Cahya Laksana², Nyoman Anita Damayanti¹, Dewi Retno Suminar³, Ratna Dwi Wulandari¹

¹Researcher, Faculty of Public Health, Universitas Airlangga, Indonesia, ³Researcher, Department of Obstetric Gynaecology Department, Faculty of Medicine, Universitas Airlangga, Indonesia, ⁵Researcher, Department of Educational and Developmental Psychology, Faculty of Psychology, Universitas Airlangga, Indonesia

Abstract

Approximately 15% of newborns grow with neonatal complications. The percentage of neonatal complications in Probolinggo from 2015 to 2017 has not reached the target of 80%. The number of neonatal complications still achieved 68.68% of the minimum service standards target.

This study analyzed the effect of proactive personality, professionalism, and work engagement on performance among village midwives in managing neonatal complications by using an integrated strategy management of childhood illness. Proportional random sampling was in use to collect 180 village midwives as the sample. The research was conducted in Probolinggo Primary Healthcare Center, Indonesia from March to May 2018. The data collected through questionnaires were analyzed with a linear regression.

The results showed proactive personality influenced work engagement ($p = 0.00$). The higher the village midwives' proactive personality is, the higher the level of work engagement is. Besides, professionalism influenced performance ($p = 0.01$). The higher the level of professionalism is, the higher the level of performance is. This study also revealed work engagement influenced performance ($p = 0.00$). The higher the level of work engagement is, the higher the level of performance is. However, proactive personality did not affect performance.

Keywords: *neonatal complications, integrated management of childhood illness, proactive personality, professionalism, work engagement*

Introduction

Reducing infant mortality rate becomes the top priority of the Indonesian Ministry of Health to achieve the Sustainable Development Goals (SDGs). Indonesia

is targeting a decrease in infant mortality rate in 2030 by 12 deaths per 1000 live births. The infant mortalities in Indonesia were mostly caused by low birth weight, respiratory disorders, sepsis, hypothermia, jaundice, and congenital abnormalities. It was estimated that about 15% of newborns experience neonatal complications¹.

Correspondence author:

Nyoman Anita Damayanti

Researcher, Faculty of Public Health, Universitas Airlangga, Indonesia

Email: nyoman.ad@fkm.unair.ac.id,

dewi.suminar@psikologi.unair.ac.id

Neonatal complications occur to babies aged 0-28 days and exposed to diseases or disorders that can cause morbidity, disability or death. Newborns who are at a high risk of neonatal complications are treated according to the standards by trained health workers in all health service facilities¹.

East Java is a province in Indonesia which has infant mortality rates that do not reach national targets until 2017². In 2017, the number of infant mortalities in East Java Province was 23.1 per 1000 live births². Probolinggo Regency had the highest number of infant mortality rate in East Java in 2016³. The trend of infant mortality from 2016 to 2018 in Probolinggo Regency fluctuated Although the cumulative increase in 2018 was 242 deaths. Infant mortalities in Probolinggo Regency in 2018 occurred due to direct causes, such as low birth weight (30%), asphyxia (9%), congenital abnormalities (32%), pneumonia (7.5%), diarrhea (3.3%) infections (14.5%)) and others (4.5%)⁴. While some infant mortalities happend because of indirect causes, such as delays in decision making, referencing and treatment⁴. Furthermore, neonatal complications in Probolinggo from the period of 2015-2017 have not reached the target of 80%. Only 68.68% of the complications have met the minimum service standards⁵.

One approach to individual performance patterns is proactive personality⁶. Proactive personality is the tendency of individual attitudes to identify opportunities, initiate and take responsibility for carrying out tasks and never give up to achieve meaningful changes for the environment⁷. One of the job performance indicators is determined by professionalism. According to the American Board of Internal Medicine, professionalism is an attitude and behavior of prioritizing patients’ interests over personal interests⁸. While, work engagement is an individual positive perception of a job with enthusiasm, dedication, and absorption⁹. Thus, this study analyzed the effect of proactive personality, professionalism, and work engagement on performance among village midwives in managing neonatal complications by using an integrated strategy management of childhood illness.

Method

This study was an observational analytic study with a cross-sectional design, conducted from March to May 2018 in Probolinggo Primary Healthcare Center. The sample involved 180 village midwives who were selected using proportional stratified random sampling. The data were obtained by disseminating the validated questionnaires and using observation sheets. The analysis was done with linear regression tests. One of the requirements in the multiple linear regression was passing the classical assumption test. The classical assumption test to the independent variables was conducted to identify multicollinearity. The multicollinearity test showed that the error standard value of the independent variables was less than one (<1.0). It suggested that the standard error value was low, and the multicollinearity was not detected. This means that the data were distributed normally.

Results

Based on data collected, the majority of respondents are 25-35 years old (58%) with a high-school diploma (75,6%). Most of them are civil servant and have work for 5-15 years old (45,6%). The majority of village midwives live in villages where they work (62,2%). Nevertheless, there are still village midwives who live far from the villages where their work (47,5%).

The level of village midwives’ proactive personality was the tendency to what extent village midwives manage neonatal complications according to the integrated strategy management of childhood illness. This strategy includes identifying opportunities, showing initiative, taking action and preservation until meaningful changes occur⁷.

Table 1. Level of Village Midwives’ proactive personality in Managing Neonatal Complications based on the Integrated Management of Childhood Illness in Probolinggo Regency in 2019.

No	Proactive Personality Level	n	%
1.	Low	0	0.0
2.	Moderate	167	92.8
3.	High	13	7.2
	Total	180	100.0

Table 1 showed that the level of village midwives' proactive personality was sufficient (95%). It indicated that the village midwives tend to be proactive in using the integrated strategy management of childhood illness to manage neonatal complications in Probolinggo. However, their proactive personality level needs to be improved.

Prioritizing patients' interests over personal interests was related to professionalism. The aspects of professionalism include altruism, accountability, duty, honor, integrity, excellence and respect to others⁸.

Table 2. Level of Village Midwives' Professionalism in Handling Neonatal Complications in Probolinggo Regency in 2019.

No.	Professionalism Level	n	%
1.	Low	0	0.0
2.	Moderate	134	74.4
3.	High	46	25.6
	Total	180	100.0

Table 2 showed that the majority of village midwives (74.4%) in Probolinggo Regency had a sufficient level of professionalism. It means they had sufficient attitudes and behaviors of prioritizing patient interests over personal interests to foster the quality of health workforce.

Being psychologically committed to tasks and roles in handling neonatal complications was often regarded as work engagement. This variable includes vigor, dedication, and absorption⁹.

Table 3. Level of Village Midwives' Work Engagement in Handling Neonatal Complications Using Integrated Management of Childhood Illness in Probolinggo Regency in 2019.

No.	Work Engagement Level	n	%
1.	Low	0	0.0
2.	Moderate	157	87.2
3.	High	23	12.8
	Total	180	100.0

Most of the midwives (87.2%) showed moderate work engagement. It indicated that they were psychologically committed to tasks and roles in handling neonatal complications based on the integrated strategy management of childhood illness. Later, the work engagement level needs to be increased. The success of neonatal complication management could be seen from the midwives' performance as seen in table 4.

Table 4. Level of Village Midwives’ Performance in Handling Neonatal Complications based on the Integrated Management of Childhood Illness in Probolinggo Regency in 2019.

No.	Performance Level	n	%
1.	Not achieved	140	77.8
2.	Achieved	40	22.2
	Total	180	100

Based on table 4, the most respondents have not reached the performance target yet (77.8%). The aspect of village midwives’ performance includes early detection of neonates, physical examination, identification of symptoms, classification of complication rates, treatment according to complications, pre referral action, counseling, recording and reporting the IMCI form, solution problem, and follow up service^{10,11}. All aspect are measured by examining the availability and completeness of Integrated Management of Childhood Illness (IMCI) form.

Tabel 5. The Linear Regression Test on Proactive personality, Professionalism, and Work Engagement towards Village Midwives’ Work Performance in Probolinggo Regency.

Independent Variables	Dependent Variables	p-value	B	Significance
Proactive personality	Work Engagement	0.00	0.46	Significant
Proactive personality	Performance	0.08	0.38	Not significant
Professionalism	Performance	0.01	0.42	Significant
Work Engagement	Performance	0.00	0.96	Significant

Table 5 showed the result of the linear regression indicated that proactive personality affected work engagement (p-value < 0,05). While proactive personality indirectly affected performance (p-value > 0,05). Professionalism had a direct effect on midwives’ performance in managing neonatal complications based on the integrated management of childhood illness (p-value < 0,05). Compared to others, work engagement had the strongest effect on midwives’ performance (p – value < 0,05, b=0.967). It means that the higher the level of work engagement is, the higher the performance of neonatal complication management is.

Work engagement had a relationship with performance in handling neonatal complications using the integrated management of childhood illness (p-value < 0,05). Probolinggo Regency are dominated by mountains, lowlands and coastal areas. It causes there

are village midwives did not live in villages where they work. When the community want to access childbirth, baby check-up and other treatments, they travel far to the midwife’s home. This fact was not in accordance with the Regulation of Indonesian Ministry of Health Number 28 of 2017 which explains that a midwife with a practice licence in a primary healthcare center lives and is assigned to carry out midwifery practices in the working area of the primary healthcare center¹².

Discussion

Personality can influence the attachment to someone’s work¹³. Proactive personality is a relatively stable personality to not be restrained by situations and to influence changes in the environment. Proactive personality is attributed to abilities of identifying opportunities, showing initiative, taking action and preservation⁷. The results showed that some village

midwives unyielded their work and took initiatives to find new ways of improving performance in handling neonatal complications based on the integrated strategy management of childhood illness.

Proactive individuals tend to have opportunities to cope obstacles they face and make their working environment according to what they need¹⁴. Individual characteristics such as being proactive can encourage someone to develop themselves more than others. Employees who feel connected to the organizations will more contribute, initiate and develop change¹⁵. Employee proactive personality was positively related to work engagement^{16,17}. The finding within this study showed that proactive personality had an influence on work engagement with a significance value of less than α (0.05). The higher the midwives' proactive personality is, the higher their work engagement is.

However, proactive personality had no effect on performance in managing neonatal complications based on the integrated strategy management of childhood illness. Researchers found the majority of midwives rarely made a specific schedule to visit mothers who experienced neonatal complications. Some village midwives revealed that they often made direct referrals to primary healthcare centers or hospitals without prior physical examination of severe neonatal complications. The village midwives were afraid of infant mortalities during the labor process in their practice station, and thus they would get penalty from the Probolinggo District Health Office. As a result, the village midwives were less optimal in carrying out childhood illness procedures, such as physical examinations, classifications and simple treatments to stabilize neonatal conditions before being referred to primary healthcare centers or hospitals.

This study also highlighted proactive personality could affect performance through work engagement as an intervening variable. It supports previous research that there is an effect of proactive personality on employee task performance through work engagement¹⁸. Moreover, the research by Crant and Bateman supported this finding¹⁹. They found individuals with high proactive personality engaged and took initiatives to get involved in various activities and situations¹⁹. The higher individuals' proactive personality is, the more they tend to show initiative in their work.

ABIM defined professionalism as an attitude and behavior of prioritizing patient interests over personal interests⁸. Professionalism could be seen in staffs' commitment to follow medical practice standards, prioritize patients' interests and safety, and respond to public health needs. Studies on professionalism among health workers are important to enhance professional behavior. Professionalism is a concept of collaboration and communication health workers perform to provide the best possible services²⁰.

To strengthen newborn services, the village midwives had to do home visit for mothers who did not return to health services. During home visits, health workers can identify and provide counseling about risk factors for infants and their environment²¹. However, in fact the village midwives are still difficult to conduct home visits due to lack of awareness of healthcare outreach. This finding supported the previous study conducted by Radina and Damayanti who found that health workers rarely do healthcare outreach because there is no obligation for primary healthcare centers²².

Some village midwives in Probolinggo Regency oversaw to record and report neonatal complications to the Probolinggo District Health Office due to incomplete logistical needs. According to Cawley and Danielsen, professional health workers should be fair and honest as the community expect so²³. Work engagement is not just an attitude like organizational commitment but the level of attention and fusion with work²⁴. Work engagement refers to the relationship between employees and their work, while employees' engagement subjects to the relationship between employees and the organization²⁵. Work engagement is a positive state, fulfillment, and a view of working conditions as shown in vigor, dedication and absorption⁹.

Work engagement could affect employees' work quality, increase job satisfaction, reduce employee absenteeism and turnover²⁴. Furthermore, work engagement was positively related to work performance^{26,27,28}. This study showed that the majority of village midwives had high work engagement. The higher their attachment to their work is, the greater their effort, time, energy and costs are to achieve the organization's targets. In managing neonatal complications, the village midwives are required to

provide high-quality and comprehensive care for healthy newborns for up to 1 month according to their competence. In this case, work engagement affected work performance in handling neonatal complications by following the integrated strategy management of childhood illness.

Conclusion

Proactive personality did not have a direct effect on performance, but it affected performance through work engagement. While professionalism and work engagement affected village midwives' performance in handling neonatal complications based on the integrated strategy management of childhood illness. It is recommended that improving the work facilities, such as medicines and medical devices, office stationery needs to be done. Recording and reporting neonatal complications as well as midwives' knowledge could be improved by applying the integrated management of childhood illness.

Conflict of Interest: Authors declared that the information above is correct, and the manuscript submitted is original. We have no conflict of interest to declare and certify that no funding has been received in the research.

Source of Funding: This research was funded by the authors.

Ethical Clearance : We would like to thank the Ethics Committee for Basic Science Research/Clinics at Faculty of Nursing, Airlangga University, that have approved the ethics for this study (No: 1358-KEPK). Our gratitude also goes to all respondents who were committed to be involved in this study.

References

1. Indonesian Ministry of Health. Buku Saku Pelayanan Kesehatan Neonatus Esensial. Jakarta: Kementerian Kesehatan Republik Indonesia. 2010.
2. East Java Provincial Health Office. Profil Kesehatan Jawa Timur Tahun 2017. Surabaya: East Java Provincial Health Office. 2017.
3. East Java Central Bureau. Angka Kematian Bayi (AKB) Penduduk Jawa Timur Menurut Kabupaten/Kota, 2012-2016 [internet]. Surabaya: East Java Statistical Center; 2017 [update 2017 June 7; cited 2018 January 10] Available from: <https://jatim.bps.go.id/statictable/2017/06/07/389/angka-kematian-bayi-akb-penduduk-jawa-timur-menurut-kabupaten-kota-2012-2016.html>
4. Probolinggo District Health Office. Profil Kesehatan Kabupaten Probolinggo Tahun 2017. Probolinggo: Dinas Kesehatan Kabupaten Probolinggo. 2017.
5. Probolinggo District Health office. Profil Kesehatan Kabupaten Probolinggo Tahun 2017. Probolinggo: Dinas Kesehatan Kabupaten Probolinggo. 2017.
6. Crant JM. Proactive Behavior In Organization. *Journal of management*. 2000; 26: 435-462.
7. Bateman TS, Crant JM. The Proactive Component of Organizational Behavior: A Measure and Correlates. *Journal of Organizational Behavior*. 1993; 14(2):103-118.
8. ABIM. Project Professionalism. Philadelphia: American Board of Internal Medicine. 2001.
9. Schaufeli WB, Bakker AB. The Measurements Of Engagement And Burnout: Comfirmative Analytic Approach. *Journal of Happines Studies*. 2003; 3: 71-92.
10. Indonesian Ministry of Health. Pedoman Terpadu Balita Sakit Berbasis Masyarakat (MTBS-M). Direktorat Jenderal Bina Gizi dan Kesehatan Ibu dan Anak. Jakarta: Kementerian Kesehatan Republik Indonesia. 2014.
11. Indonesian Ministry of Health. Buku Bagan Manajemen Terpadu Bayi Muda (MTBM). Jakarta: Direktorat Bina Kesehatan Anak Kementerian Kesehatan Republik Indonesia. 2014.
12. Indonesian Ministry of Health. Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2017 tentang Izin dan Penyelenggaraan Praktik Bidan. Jakarta: Kementerian Kesehatan Republik Indonesia. 2017.
13. Bakker AB, Leiter MP. Work engagement: A Handbook of Essential Theory And Research. New York: Psychology Press. 2010.
14. Tolentino LR., Garcia PR, Plewam C. Career Adaptation: The Relation of Adaptability To Goal Orientation, Proactive Personality, Carrer Optimism. *Journal of Vocational Behavior*. 2014; 84:39-48.

15. Albrecht SL, Bakker AB, Gruman JA, Macey WH, Saks AM. Employee Engagement, Human Resource Management Practices, And Competitive Advantage: An Integrated Approach. *Journal of Organizational Effectiveness, People, and Performance*. 2015; 2(1):7-35.
16. Li L, Mao S. Moderating effects of proactive personality on factors influencing work engagement based on the job demands-resources model. *Social Behavior and Personality: An International Journal*. 2014; 42(1):7-15.
17. Lv A, Lv R., Xu H, Ning Y, Ning Y. Team Autonomy Amplifies the Positive Effects of Proactive Personality on Work Engagement. *Social Behavior and Personality: An International Journal*. 2018; 46(7):1071-1082.
18. Wang Z, Zhang J, Thomas CL, Yu J, Spitzmueller C. Explaining benefit of employee Proactive personality: the role of engagement, team proactive composition and perceived organizational support. *Journal of Vocational Behavior*. 2017; 101: 90-103.
19. Crant JM, Bateman TS. Charismatic leadership viewed from above: the impact of proactive personality. *Journal of Organizational Behavior*. 2000; 2, 63-75.
20. McNair RP. The Case for educating health students in professionalism as the core content of interprofessional education. *Medical Education*. 2005; 39: 456-464.
21. Indonesian Ministry of Health. Profil Kesehatan Indonesia Tahun 2012. Jakarta: Indonesian ministry of health. 2012.
22. Radina DF, Damayanti NA. Evaluasi Pelaksanaan Standar Pelayanan Minimal Pada Program Penemuan Penderita Pneumonia Balita. *Jurnal Administrasi Indonesia*. 2013; 1(4):301-308.
23. Cawley JF, Danielsen RD. 2007. Compassion and Integrity in Health Professions Education. *The internet journal of Allied Health Science and Practice*. 2007; 5(2).
24. Schaufeli WB, Bakker AB. Job demands, job resources, and their relation with burnout and engagement: a multi-sample study. *Journal of Organization Behavior*. 2004; 1, 293-315.
25. Schaufeli WB, Bakker AB. Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research*. New York: Psychology Press. 2010. 10-24 p.
26. Gorgievski MJ, Bakker AB, Schaufeli WB. Work engagement and workaholism: comparing the self-employed and salaried employees. *Journal of Positive Psychology*. 2010; 5(1):83-96.
27. Balducci C, Fraccaroli F, Schaufeli, WB. Psychometric Properties of the Italian Version of the Utrecht Work Engagement Scale (UWES-9). *European Journal of Psychological Assessment*. 2010; 26(2):143-149
28. Kirk-Brown A, Dijk, PV. Safe to engage: Chronic illness and organisational citizenship behaviours at work. *International Journal of Disability Management*. 2011; 6(1):1-9.