

THE INFLUENCE OF GRIT ON NURSES' JOB BURNOUT DECREASE IN DEPOK SECONDARY HOSPITALS

Ratna Tri Hari Safariningsih*, Mohamad Rizan, Agung Wahyu Handaru

Jakarta State University, East Jakarta, DKI Jakarta, Indonesia

**ratnatriharisafariningsih_9917921005@mhs.unj.ac.id*

PAPER INFO	ABSTRACT
Received: September 2022	Background: One of the professions with a significant risk of burnout is nursing. As a result of constantly having to regulate their emotions when interacting with patients, nurses have a higher emotional threshold. Physical fatigue, a lack of job satisfaction, and subpar performance can all be caused by emotional exhaustion. Burnout was found to have a detrimental impact on nurse loyalty and service quality.
Revised: September 2022	Aim: The purpose of this research is to determine the role of grit in reducing job burnout among secondary hospital nurses in Depok, West Java Province, Indonesia.
Approved: September 2022	Method: Cross-sectional design, a quantitative approach, was utilized in this study. The study's participants were all the medical staff members employed by three secondary hospitals in Depok City, West Java, Indonesia. This study included 150 nurses from three hospitals as samples. Simple linear regression analysis was used to analyze the data.
	Findings: The findings indicate that grit has a negative and significant impact on job burnout. With a R Square of 0.190, it is clear that other variables account for the remaining 89% of the job burnout variable, leaving only 19% to be explained by grit. Hospitals should analyze their nurses' workloads and create a work culture of mutual support. Nurses should set career goals and continue to learn new skills.
KEYWORDS	<i>grit, nurse, job burnout, Depok secondary hospitals</i>

INTRODUCTION

The quality of health services is important in providing safe and quality services for the community. The most dominant factor in service quality is human resources (Santoso et al., 2021). Therefore, improving the performance of human resources (HR) is very important in an effort to improve services to the community, so it requires continuous efforts in facing community demands (Werfete, 2021).

Nursing is one of the professions that has a high risk of creating burnout. Nurses have a higher emotional level, fatigue from always controlling their emotions when dealing with patients. Emotional fatigue can lead to physical fatigue, low levels of job satisfaction, and poor performance (Halbesleben & Bowler, 2007; Han et al., 2016; Pugliesi, 1999). Maslach and Jackson (1981) describe burnout as a syndrome of emotional exhaustion and cynicism with frequent frequency in individuals whose work is related to other individuals. Burnout was identified as having a negative effect on service quality and nurse loyalty levels (Meng et al., 2014). Burnout also harms organizations, and impacts their financial health and well-being (Davis, 2021).

Grit is a characteristic that can reduce job burnout. Grit is a characteristic that workers have to work tenaciously and enthusiastically to achieve difficult goals, persevere in effort, and maintain a high level of interest over a long period of time in the face of failures, setbacks and

obstacles but at a stable stage on the way to success. Grit is an important characteristic for dealing with the challenges nurses face in the workplace. Grit is something that reflects a person's perseverance to maintain interest, energy, and enthusiasm in carrying out efforts to achieve goals, despite obstacles, difficulties, and failures (A. L. Duckworth et al., 2009).

Several studies have stated that grit has a negative and significant relationship with job burnout. The results of Seguin's (2019) study show that grit contributes to longevity and higher educational attainment as well as decreased burnout in a large group of nurse leaders surveyed across the United States. The results of a study Jumat et al. (2020) conducted on 59 medical students of the class of 2021 at Duke-NUS Medical School showed that a gradual multivariable logistic regression analysis identified grit as having a significant protective effect against experiencing fatigue or burnout (Odds Ratio, 0.84; 95%CI 0.74 to 0.96). Using grit as a single predictor of burnout, the area under the ROC curve is 0.76 (95% CI: 0.62 to 0.89). The research of Halliday et al. (2017) showed that there was a weak negative correlation between grit and burnout in doctors in the UK ($r=-0.243$, $p<0.001$). Hospital consultants have a much higher grit score than trainees. The highest levels of fatigue are found among general practitioners. Research by Brateanu et al. (2020) showed that as many as 63% experienced emotional exhaustion and as many as 42% experienced depersonalization in Internal Medicine Residents. Higher grit scores were shared by Internal Medicine Residents who did not report emotional exhaustion. As grit scores increased, the likelihood of reporting emotional exhaustion decreased significantly, after adjustments for demographics, In-Training Examination scores, medical school type, postgraduate year level, and interest in subspecialties.

The novelty of this study lays on the fact that grit is commonly connected to the world of education and very few have discussed grit, specifically on nurses; which is what the researchers targeted to study. A study conducted by Dam et al. (2019) explained that there is a significant relationship between grit, burnout, and well-being. The results of the study stated that of the 222 people who completed the survey (response rate = 86%). 173 (77.9%) met the burnout criteria and 107 (48.2%) met the low welfare criteria. This means that high grit scores have a lower chance of experiencing burnout and low well-being. This is also supported by research conducted by Jumat et al. (2020) which identified grit as having a significant protective effect on burnout (Odds Ratio, 0.84; 95%CI 0.74 to 0.96). Therefore, the researchers would like to determine the role of grit in reducing job burnout in nurses working in 3 secondary hospitals in Depok City, West Java Province, Indonesia.

METHOD

This research method used a quantitative method, specifically cross-sectional design. The population in this study was all health workers who worked in 3 secondary hospitals in Depok City, West Java, Indonesia. The samples in this study were nurses working in 3 secondary hospitals in Depok City, West Java, Indonesia. Researchers used calculations from the theory of J. Hair et al. (2014) to determine the number of samples. The determination of samples was based on the number of variables' indicator, which were multiplied by 5 to 10. There are 15 indicators here and hence the calculation of samples:

$$\begin{aligned} \text{Total Sample} &= \text{Total of Indicators} \times 10 \\ \text{Total Sample} &= 15 \times 10 = 150 \end{aligned}$$

The researchers used the convenience sampling method. The simple linear regression analysis was applied with the help of SPSS. The grit was measured by questionnaires adapted from grit scales by Duckworth & Quinn (2009). Job burnout measurements were obtained with questionnaires adapted from the Maslach Burnout Inventory Human Service Survey (MBIHSS) (Maslach & Jackson, 1981a; Sabbah et al., 2012).

Table 1. Instrument Drafting

Variable	Adapted Indicators	Original Indicators (Indonesian)	Source
Grit	Passion	Minat	(A. L. Duckworth & Quinn, 2009)
	New ideas and projects sometimes distract me from previous ones.	<i>Ide dan proyek baru terkadang mengalihkan perhatian saya dari yang sebelumnya</i>	
	I often set a goal but later choose to pursue a different one.	<i>Saya telah terobsesi dengan ide atau proyek tertentu untuk waktu yang singkat tetapi kemudian kehilangan minat</i>	
	My interests change from year to year.	<i>Minat saya berubah dari tahun ke tahun</i>	
	Perseverance	Ketekunan usaha	
	Setbacks don't discourage me. I don't give up easily.	<i>Kemunduran tidak membuat saya patah semangat. Saya tidak mudah menyerah</i>	
	I am a hard worker.	<i>Saya seorang pekerja keras</i>	
	I finish whatever I begin	<i>Saya menyelesaikan apapun yang saya mulai</i>	
Job Burnout	Maslach Burnout Inventory Human Service Survey (MBIHSS)	Maslach Burnout Inventory Human Service Survey (MBIHSS)	(Loera et al., 2014; Maslach & Jackson, 1981b; Sabbah et al., 2012)
	Emotional Exhaustion	Kelelahan emosional	
	I feel emotionally drained from my work	<i>Saya lelah secara emosional dari pekerjaan saya</i>	
	I feel I'm working too hard on my job.	<i>Saya merasa bekerja terlalu keras pada pekerjaan saya.</i>	
	I feel fatigued when I get up in the morning and have to face another day on the job	<i>Saya merasa lelah ketika bangun di pagi hari dan harus menghadapi hari lain di tempat kerja</i>	
	Depersonalization	Depersonalisasi	
	I've become more callous toward people since I took this job.	<i>Saya menjadi lebih tidak berperasaan terhadap orang-orang sejak saya mengambil pekerjaan ini.</i>	

I worry that this job is hardening me emotionally.	<i>Saya khawatir pekerjaan ini membuat saya keras secara emosional.</i>
I don't really care what happens to some recipients	<i>Saya tidak terlalu peduli dengan apa yang terjadi pada beberapa pasien</i>
Personal Accomplishment	<i>Prestasi Pribadi</i>
I can easily understand how my recipients feel about things.	<i>Saya dapat dengan mudah memahami bagaimana perasaan pasien saya tentang berbagai hal.</i>
I deal very effectively with the problems of my recipients.	<i>Saya menangani masalah penerima saya dengan sangat efektif.</i>
I have accomplished many worthwhile things in this job	<i>Saya telah mencapai banyak hal berharga dalam pekerjaan ini</i>

Source: Researcher's Adaptation from Various Sources

RESULTS AND DISCUSSION

Table 2. Descriptive Analysis

Variable		Frequency	Percentage
Gender	Man	30	20%
	Woman	120	80%
Age	< 25 years old	6	4%
	25 years old – 49 years old	135	90%
	>49 years old	9	6%
Marital Status	Unmarried	34	22,7%
	Marry	116	77,3%
Recent Education	D3	63	42%
	D4/S1	11	7,3%
	Ners	71	47,3%
	S2	5	3,3%
Service Life	< 5 years	39	26%
	5 years – 10 years	38	25,3%
	> 10 years	73	48,7%
Workplace Units	Outpatient	24	16%
	Inpatient	126	84%

Source: Researchers' Data

Based on table 1, most of the nurses were female (120 nurses) (80%), aged 25 years to 49 years (135 nurses) (90%), married (116 nurses) (77.3%), the last education is Ners (71 nurses)

(47.3%), the nurse's work period for > 10 years (73 nurses) (48.7%), and inpatient (126 nurses) (84%).

Table 3. T_{count} Test

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
1(Constant)	11,644	2,964		14,870	0,000
Grit	-0,701	0,119	-0,436	-5,894	0,000

Source: Data Processed

Table 4. F_{count} Test

Model	Sum of Squares	Df	Mean Square	F	Sig
1 Regression	1004,720	1	1004,720	34,744	0,000
Residual	4279,874	148	28,918		
Total	5284,593	149			

Source: Data Processed

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,436	0,190	0,185	5,378

Source: Data Processed

The Effect of Grit on Reducing Job Burnout

The results of the analysis showed that the value of p value grit was 0.000 (p value is less than 0.05) and $t_{\text{count}} 5.894 > t_{\text{table}} 1.65521$ so the hypothesis was accepted. The results of the regression analysis test obtained a regression coefficient value of -0.701 which means that every time there is a grit change of 1 point, it affects the decrease in job burnout by 0.701 assuming other variables are constant. The result of the R Square value is 0.190 which means that the grit variable can be described as a job burnout variable of 19% while the rest is explained by other variables.

The results of this study are in line with the results of Seguin's (2019) study showing that grits contribute to long life and higher educational attainment as well as a decrease in burnout in a large group of nurse leaders surveyed across the United States. The results of a study Jumat et al. (2020) conducted on 59 medical students of the class of 2021 at Duke-NUS Medical School showed that a gradual multivariable logistic regression analysis identified grit as having a significant protective effect against experiencing fatigue or burnout (Odds Ratio, 0.84; 95%CI 0.74 to 0.96). Using grit as a single predictor of burnout, the area under the ROC curve is 0.76 (95% CI: 0.62 to 0.89). The research of Halliday et al. (2017) showed that there was a

weak negative correlation between grit and burnout in doctors in the UK ($r=-0.243$, $p<0.001$). Hospital consultants have a much higher grit score than trainees. The highest levels of fatigue are found among general practitioners. Research by Brateanu et al. (2020) showed that as many as 63% experienced emotional exhaustion and as many as 42% experienced depersonalization in Internal Medicine Residents. Internal Medicine Residents with lower levels of emotional weariness had higher grit ratings. As grit scores increased, the likelihood of reporting emotional exhaustion decreased significantly, after adjustments for demographics, In-Training Examination scores, medical school type, postgraduate year level, and interest in subspecialties.

These findings suggest that employees at risk of job burnout should stop working and start spending time on activities outside of work to recover from work (Oerlemans & Bakker, 2014). However, if an employee struggles to get a day off from work then one of the efforts that can be made is to develop grit. A person working towards a common goal is given many opportunities to practice consciously, is reminded of a common goal, and is advised to develop grit in the group (A. Duckworth, 2016). The establishment of a work culture that promotes and grows grit in an organization will be a stronger force to withstand job burnout than simply training individuals to become grittier (Jumat et al., 2020).

CONCLUSION

The conclusion of this study is that grit has a negative and significant effect on job burnout. The recommendation for hospitals is to analyze the workload of nurses so that nurses do not experience job burnout. In addition, developing a work culture that supports each other so that nurses can interact with each other regarding work problems and nurses do not feel isolated. The recommendation for nurses is to set career goals and continue to learn to add skills to increase enthusiasm in carrying out work as a nurse.

REFERENCES

- Brateanu, A., Switzer, B., Scott, S. C., Ramsey, J., Thomascik, J., Nowacki, A. S., & Colbert, C. Y. (2020). Higher Grit Scores Associated With Less Burnout in a Cohort of Internal Medicine Residents. *The American Journal of the Medical Sciences*, 360(4), 357–362. <https://doi.org/https://doi.org/10.1016/j.amjms.2020.05.045>
- Dam, A., Perera, T., Jones, M., Haughey, M., & Gaeta, T. (2019). The Relationship Between Grit, Burnout, and Well-being in Emergency Medicine Residents. *AEM Education and Training*, 3(1), 14–19. <https://doi.org/10.1002/aet2.10311>
- Davis, P. (2021). *Beating Burnout at Work: Why Teams Hold the Secret to Well-Being and Resilience*. Wharton School Press. <https://doi.org/10.2307/j.ctv2hdf7b>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner/Simon & Schuster.
- Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the short Grit Scale (Grit-S). *Journal of Personality Assessment*, 91(2), 166–174. <https://doi.org/10.1080/00223890802634290>

- Duckworth, A. L., Quinn, P. D., & Seligman, M. E. P. (2009). Positive predictors of teacher effectiveness. *Journal of Positive Psychology*, 4(6), 540–547. <https://doi.org/10.1080/17439760903157232>
- Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. <https://doi.org/10.1007/978-3-030-80519-7>
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93–106. <https://doi.org/10.1037/0021-9010.92.1.93>
- Halliday, L., Walker, A., Vig, S., Hines, J., & Brecknell, J. (2017). Grit and burnout in UK doctors: a cross-sectional study across specialties and stages of training. *Postgraduate Medical Journal*, 93(1101), 389 LP – 394. <https://doi.org/10.1136/postgradmedj-2015-133919>
- Jumat, M. R., Chow, P. K.-H., Allen, J. C., Lai, S. H., Hwang, N.-C., Iqbal, J., Mok, M. U. S., Rapisarda, A., Velkey, J. M., Engle, D. L., & Compton, S. (2020). Grit protects medical students from burnout: a longitudinal study. *BMC Medical Education*, 20(1), 266. <https://doi.org/10.1186/s12909-020-02187-1>
- Loera, B., Converso, D., & Viotti, S. (2014). Evaluating the psychometric properties of the Maslach Burnout Inventory-human services survey (MBI-HSS) among Italian nurses: How many factors must a researcher consider? *PLoS ONE*, 9(12), 1–18. <https://doi.org/10.1371/journal.pone.0114987>
- Maslach, C., & Jackson, S. E. (1981a). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., & Jackson, S. E. (1981b). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Meng, L., Liu, Y., Liu, H., Hu, Y., Yang, J., & Liu, J. (2014). Relationships among structural empowerment, psychological empowerment, intent to stay and burnout in nursing field in mainland China-based on a cross-sectional questionnaire research. *International Journal of Nursing Practice*, 21(3), 303–312. <https://doi.org/10.1111/ijn.12279>
- Oerlemans, W. G. M., & Bakker, A. B. (2014). Burnout and daily recovery: a day reconstruction study. *Journal of Occupational Health Psychology*, 19(3), 303.
- Sabbah, I., Sabbah, H., Sabbah, S., Akoum, H., & Droubi, N. (2012). Burnout among Lebanese nurses: Psychometric properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS). *Health*, 04(09), 644–652. <https://doi.org/10.4236/health.2012.49101>
- Santoso, T. B., Sarsono, S., & Istiatin, I. (2021). Competency, Collaboration, Motivation and Work Discipline Operation on The Performance of The Room Nurse at Orthopedic Prof Dr. R. Soeharso Hospital Surakarta. *International Journal of Economics, Business and Accounting Research*, 5(3), 1099–1106.
- Seguin, C. (2019). A survey of nurse leaders to explore the relationship between grit and measures of success and well-being. *Journal of Nursing Administration*, 49(3), 125–131. <https://doi.org/10.1097/NNA.0000000000000725>
- Werfete, R. (2021). *Pengaruh Motivasi dan Disiplin Kerja Terhadap Kinerja Pegawai Non Medis di Rumah Sakit Universitas Sumatera Utara Tahun 2020*. Universitas Sumatera Utara.