

Article

Not peer-reviewed version

Emotional Intelligence and Annual Work Performance Among Assistant Medical Officers with Annual Renewal Certificate Issues in Malaysia

[Shahril Nizar Ismail](#) *

Posted Date: 20 November 2025

doi: 10.20944/preprints202511.1525.v1

Keywords: emotional intelligence; work performance; Assistant Medical Officer; ARC; LNPT



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a [Creative Commons CC BY 4.0 license](#), which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Article

Emotional Intelligence and Annual Work Performance Among Assistant Medical Officers with Annual Renewal Certificate Issues in Malaysia

Shahril Nizar Ismail

Kangar District Health Office, Ministry of Health Malaysia, Perlis; shahril@moh.gov.my

Abstract

Emotional intelligence (EI) has been increasingly recognised as a psychological resource that supports adaptability, interpersonal functioning, and work-related outcomes in high-demand environments such as healthcare. Recent literature highlights EI as a potential predictor of job performance, professional behaviour, and engagement (Andrei et al., 2020; Kim & Lee, 2021). However, empirical findings remain inconsistent, particularly in regulated healthcare systems where performance appraisals may be shaped by structural or administrative factors. This study examined the relationship between EI and annual work performance (LNPT) among Assistant Medical Officers (AMOs) in Malaysia who faced challenges in renewing their Annual Renewal Certificate (ARC). A cross-sectional design was used involving 172 AMOs selected through stratified sampling. Emotional intelligence was measured using a validated 45-item instrument aligned with Goleman’s five-domain model, while work performance was assessed using official LNPT scores for 2024. Data were analysed using descriptive statistics, ANOVA, Pearson correlations and simple regression. Findings revealed that AMOs demonstrated high EI ($M = 3.91$, $SD = 0.45$) and high LNPT scores ($M = 88.43$, $SD = 14.46$). ANOVA showed significant performance differences by grade level but no differences by gender, ethnicity, marital status, or length of service. Contrary to dominant claims in recent EI research (e.g., Prentice et al., 2020; Wu et al., 2022), EI and its subcomponents showed no significant correlations with LNPT. Regression analysis confirmed that EI was not a significant predictor of performance. These results suggest that structural and procedural factors—rather than emotional competencies may play a greater role in determining performance outcomes among AMOs undergoing ARC renewal scrutiny. The study contributes to ongoing debates regarding the conditional predictive value of EI in public healthcare settings and highlights the need for future research integrating organisational, contextual, and behavioural predictors of performance.

Keywords: emotional intelligence; work performance; Assistant Medical Officer; ARC; LNPT

1. Introduction

Emotional intelligence (EI) has been increasingly recognised as a psychological resource that supports adaptive functioning in complex work environments, especially in healthcare. Contemporary literature positions EI as a multidimensional construct involving emotional perception, regulation, motivation, empathy, and social skills (Goleman, 1999; Salovey & Mayer, 1990). Recent studies emphasise its relevance in mitigating stress, maintaining interpersonal effectiveness, and supporting professional behaviour in clinical settings (Fernández-Berrocal et al., 2020; Wu et al., 2022).

In organisational research, the link between EI and performance remains widely debated. Several meta-analytic and empirical studies suggest that EI predicts task performance, leadership outcomes, and organisational citizenship behaviours (Andrei et al., 2020; Kim & Lee, 2021; Prentice et al., 2020). EI is also argued to facilitate job engagement through mechanisms such as job crafting and relational quality with supervisors (Li et al., 2021). In healthcare, EI contributes to communication

effectiveness, emotional regulation during high-pressure decision-making, and improved patient care (Taheri et al., 2023). However, other findings indicate inconsistencies, suggesting that EI may not uniformly predict objective performance metrics and that contextual and structural factors may play a stronger role (Sunindijo, 2020; Vratskikh et al., 2021).

In Malaysia, Assistant Medical Officers (AMOs) operate within a regulated environment requiring the Annual Practice Certificate (ARC) for continued professional practice. Those failing to meet ARC requirements, often due to CPD deficiencies, must undergo an appeal process, a situation that raises questions about performance determinants. While EI theoretically supports resilience and adaptability, there is limited evidence assessing EI in AMOs experiencing ARC renewal challenges.

This study fills a clear gap by examining EI, demographic differences, and the extent to which EI predicts Annual Work Performance (LNPT) among AMOs who faced ARC renewal issues. By integrating contemporary EI research with a uniquely regulated healthcare context, this study contributes clarity to the mixed evidence surrounding EI and performance relationships.

2. Methods

2.1. Study Design

This study employed a quantitative cross-sectional case-study design to explore the relationship between emotional intelligence and annual work performance.

2.2. Location and Respondents

Data were collected from AMOs under the Cawangan Perkhidmatan Penolong Pegawai Perubatan (CPPPP), Ministry of Health Malaysia. Only AMOs who faced difficulties in ARC renewal and submitted formal appeals were included. Sampling was stratified based on service sector, but only AMOs in the public sector were selected because LNPT data were available only for this group.

2.3. Sample Size

A sample size of 155 was initially targeted using Krejci and Morgan's (1970) method. The final dataset comprised 172 complete responses, meeting adequacy for inferential analysis.

2.4. Instrumentation

The questionnaire consisted of:

Section A: Study information and consent

Section B: Demographics (gender, age, ethnicity, marital status, grade, length of service, workplace, LNPT 2024 score)

Section C: A 45-item emotional intelligence scale adapted from Goleman (1999) and validated in previous local studies. Reliability testing showed high internal consistency ($\alpha = 0.916$).

EI subscales followed Goleman's five-domain structure (self-awareness, self-regulation, motivation, empathy, social skills). Responses were rated on a 5-point Likert scale.

Results

3.1. Descriptive Findings

A total of 172 Assistant Medical Officers participated in this study. The majority were male (79.1%), while females represented 20.9% of the sample. The mean age of respondents was 32.37 years (SD = 7.61), with ages ranging from 22 to 58 years. The median age was 31 years, indicating that the sample was largely composed of younger to mid-career personnel.

Table 1. Demographic Profile of Respondents.

Variable	Category / Statistics	n	%
Gender	Male	136	79.1
	Female	36	20.9
Age	Mean (SD)	32.37 (7.61)	—
	Minimum–Maximum	22–58	—
	Median (IQR)	31 (26–37.75)	—
Ethnicity	Malay	129	75.0
	Others	39	22.7
	Indian	3	1.7
	Chinese	1	0.6

In terms of ethnicity, most respondents were Malay (75.0%), followed by those categorised as “Others” (22.7%). A small proportion identified as Indian (1.7%) and Chinese (0.6%). Overall, the demographic profile reflects the typical composition of Assistant Medical Officers serving in the Malaysian public healthcare system

Table 2. Descriptive Statistics of Emotional Intelligence and LNPT Scores.

Variable	Mean (M)	Standard Deviation (SD)	Min	Max	Notes
Emotional Intelligence (EI)	3.91	0.45	2.42	4.89	High overall EI levels
LNPT Score (%)	88.43	14.46	0	100	Several low outliers retained for accuracy

The analysis showed that the overall emotional intelligence (EI) level among the respondents was high, with a mean score of 3.91 (SD = 0.45). EI scores ranged from 2.42 to 4.89, indicating that the majority of Assistant Medical Officers demonstrated strong emotional competencies across the five EI domains assessed.

The mean LNPT score for 2024 was also high (M = 88.43, SD = 14.46), reflecting generally favourable performance ratings within the sample. Although a few extremely low values (0%) were recorded, these cases were retained in the dataset to preserve the integrity and accuracy of the analysis. The inclusion of these outliers slightly increased the variability but did not affect the overall interpretation that most respondents achieved satisfactory to excellent performance levels.

3.2. Inferential Analysis

3.2.1. Group Differences (ANOVA)

Inferential analysis was conducted to determine whether LNPT scores differed across demographic groups. The results showed that grade level was the only variable with a statistically significant effect on performance, where higher-grade Assistant Medical Officers demonstrated higher LNPT scores (F = 4.36, p = .013). This suggests that seniority and expanded responsibilities at higher grades may contribute to better performance ratings.

Table 3. Inferential Analysis: Differences in LNPT Scores Across Demographic Variables.

Variable	Test Statistic	p-value	Significance
Gender	t-test	.135	Not significant
Ethnicity	ANOVA	.957	Not significant
Marital Status	ANOVA	.691	Not significant
Length of Service	ANOVA	.086	Not significant
Grade Level	ANOVA, F = 4.36	.013	Significant

No significant differences were found for gender ($p = .135$), ethnicity ($p = .957$), marital status ($p = .691$), or length of service ($p = .086$). These findings indicate that LNPT performance is largely consistent across these demographic characteristics, suggesting that performance outcomes are shaped more strongly by role expectations and organisational structure than by personal demographic factors.

3.3.3. Correlation Analysis

Pearson correlation analysis revealed that there were no significant linear relationships between LNPT scores and any component of emotional intelligence. The total EI score showed a very weak negative correlation with LNPT ($r = -.074$), while self-awareness had the largest negative coefficient ($r = -.150$), although still within the “very weak” range.

Table 4. Pearson Correlation Between Emotional Intelligence Components and LNPT Scores.

Variable	Pearson r
Emotional Intelligence (Total EI)	−0.074
Self-awareness	−0.150
Self-regulation	0.018
Motivation	−0.089
Empathy	−0.095
Social skills	0.018

Self-regulation ($r = .018$) and social skills ($r = .018$) demonstrated extremely small positive correlations, whereas motivation ($r = -.089$) and empathy ($r = -.095$) showed very weak negative trends. None of these relationships reached statistical significance.

Overall, the findings indicate that emotional intelligence both as a total construct and across its five domains does not meaningfully predict or correlate with annual performance ratings (LNPT) in this sample of Assistant Medical Officers.

3.3.4. Regression Analysis

A simple linear regression analysis was conducted to determine whether emotional intelligence (EI) significantly predicted LNPT scores. The results showed that EI was not a significant predictor

of annual performance. The regression coefficient was negative and non-significant ($\beta = -2.81$, $p = .37$), indicating that changes in EI levels did not correspond to meaningful changes in LNPT scores.

Table 5. Simple Linear Regression: Emotional Intelligence Predicting LNPT Scores.

Model Parameter	Coefficient (β)	p-value
Constant	99.41	—
Emotional Intelligence (EI)	-2.81	.37

The model’s explanatory power was extremely low, with $R^2 = 0.0056$, demonstrating that EI accounted for only 0.56% of the variance in LNPT performance. The overall model fit was also non-significant ($F = 0.81$, $p = .37$). These findings reinforce the earlier correlation results, confirming that emotional intelligence does not contribute meaningfully to predicting annual work performance among Assistant Medical Officers in this sample.

Model Fit Statistic	Value
R^2	0.0056
Adjusted R^2	-0.0003
F-statistic	0.81
p-value	.37

4. Discussion

The findings of this study showed no significant association between emotional intelligence and annual work performance (LNPT) among AMOs with ARC renewal issues. This contrasts with several recent studies suggesting EI meaningfully predicts job behaviour and performance in diverse sectors (Andrei et al., 2020; Kim & Lee, 2021; Prentice et al., 2020). Specifically, EI has been linked to improved communication, reduced stress, proactive job crafting, and stronger supervisor relationships (Li et al., 2021; Wu et al., 2022). In nursing and healthcare settings, EI has also been associated with improved job performance and professional functioning (Taheri et al., 2023).

However, the absence of significant correlations in this study aligns with a stream of research highlighting that EI does not consistently influence objective performance outcomes. Studies by Sunindijo (2020) and Vratskikh et al. (2021) similarly observed weak or non-significant EI-performance relationships, suggesting that EI may have limited predictive value in environments where structural factors dominate performance metrics.

In the Malaysian public service context, LNPT is influenced by administrative processes, supervisor ratings, documentation quality, and compliance-based performance indicators. These structural components may overshadow the behavioural advantages provided by EI. For AMOs undergoing ARC renewal difficulties, performance ratings could be further complicated by procedural issues, workload distribution, or CPD compliance rather than emotional competencies.

The significant differences in LNPT by grade level observed in this study further emphasise the influence of hierarchical expectations, experience, and job scope on performance outcomes elements well-recognised in organisational behaviour literature. This supports findings that, in some public sector systems, tenure and grade-related responsibilities have stronger effects on performance than EI (Vratskikh et al., 2021).

Overall, the study contributes to contemporary debates by demonstrating that EI is not a universal predictor of performance. Instead, its influence appears contingent on organisational structures, evaluation methods, and contextual pressures. For AMOs, targeted interventions may therefore prioritise procedural training, workload management and CPD reinforcement rather than EI-based interventions alone.

5. Conclusions

This study examined the role of emotional intelligence in predicting annual work performance among Assistant Medical Officers facing ARC renewal issues within Malaysia's public healthcare system. Despite theoretical claims and recent empirical evidence suggesting that EI enhances workplace functioning, communication, and engagement, the findings of this study revealed no significant linear relationship between EI and LNPT scores. Emotional intelligence also did not emerge as a significant predictor of performance, indicating that the Malaysian performance appraisal system may be influenced more strongly by structural, administrative or grade-related factors rather than individual emotional competencies.

The significant differences in performance across grade levels highlight the influence of organisational hierarchy, seniority, and job scope on appraisal outcomes. This suggests that performance variability in this population is likely shaped by contextual and procedural determinants such as documentation processes, CPD compliance, supervisory evaluation styles, and workload distribution rather than emotional regulation or interpersonal abilities alone.

These findings contribute to the broader debate on the conditional predictive value of EI in organisational performance research. While EI may support personal effectiveness and interpersonal functioning, it may not translate directly into formal performance scores within bureaucratic appraisal systems. Future research should integrate environmental, structural, and behavioural constructs such as job demands, burnout, supervisor bias, and organisational climate to build more comprehensive models for predicting healthcare performance. Strengthening performance outcomes among AMOs may therefore require system-level interventions rather than EI-focused strategies alone.

6. Implication

The findings of this study offer several practical implications for performance management within Malaysia's AMO workforce. First, the absence of significant associations between emotional intelligence and LNPT performance suggests that organisational and administrative mechanisms rather than individual emotional abilities are the primary drivers of performance outcomes. This indicates that strengthening documentation processes, CPD tracking systems, and supervisory assessment consistency may be more impactful than EI-focused interventions alone. Second, the significant differences across grade levels highlight a need to review how experience, seniority and role expectations shape appraisal outcomes. Performance instruments could be enhanced to better differentiate competency-based indicators across grades. Third, AMOs with ARC renewal issues may benefit from targeted support systems, such as CPD coaching, structured mentoring, or administrative assistance, to prevent procedural lapses that influence performance scores. Finally, given that EI may still influence teamwork, communication, and stress management, healthcare organisations may consider integrating EI into professional development not as a performance determinant, but as a component of holistic workforce well-being.

7. Limitation

This study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design restricts causal inference, as emotional intelligence and performance scores were measured at a single time point. Longitudinal data would be better suited to detecting delayed or cumulative effects of EI on work performance. Second, LNPT scores may not fully reflect

actual job behaviour due to reliance on supervisor ratings, documentation quality, and administrative processes, which introduces potential evaluator bias and reduces the sensitivity of performance measurement. Third, the sample was limited to AMOs who faced ARC renewal issues within the public healthcare system; therefore, findings may not be generalisable to AMOs without ARC problems or those working in private-sector settings. Fourth, self-reported EI measures are subject to social desirability and response bias, which may overestimate emotional competence. Finally, structural factors such as workload, organisational climate, CPD access, and supervisory practices were not included in the model, limiting the ability to fully explain performance variability.

8. Future Research Direction

Future investigations should adopt multi-level analytical models to explore how organisational climate, supervisory styles, workload distribution and CPD compliance interact with emotional intelligence to influence performance outcomes. Longitudinal designs may also help determine whether EI has delayed or cumulative effects that are not captured in annual performance scores. Qualitative or mixed-methods approaches could further illuminate contextual barriers faced by AMOs undergoing ARC renewal processes, offering deeper insight into performance determinants beyond numerical ratings. Given the structural nature of LNPT evaluations, future studies should compare EI with other psychological constructs such as resilience, burnout, conscientiousness, or job engagement to identify more reliable predictors of performance. Expanding the research to include other healthcare professions or private-sector AMOs would also improve generalisability and clarify whether the observed patterns are unique to the public service environment.

References

- Andrei, F., Siegling, A. B., Aloe, A. M., Baldaro, B., & Petrides, K. V. (2020). The incremental validity of the Trait Emotional Intelligence Questionnaire (TEIQue) in predicting job performance. *Personality and Individual Differences*, 157, 109836. <https://doi.org/10.1016/j.paid.2019.109836>
- Fernández-Berrocal, P., Cabello, R., & Gutiérrez-Cobo, M. J. (2020). Emotional intelligence and mental health in healthcare workers during COVID-19. *International Journal of Clinical and Health Psychology*, 20(3), 253–260. <https://doi.org/10.1016/j.ijchp.2020.07.002>
- Kim, Y., & Lee, S. (2021). Emotional intelligence and job performance: A systematic review and meta-analysis. *Human Resource Development Review*, 20(3), 263–289. <https://doi.org/10.1177/15344843211019109>
- Li, M., Wang, Z., Gao, J., & You, X. (2021). Emotional intelligence and work engagement: The chain mediating effect of job crafting and leader–member exchange. *Current Psychology*, 40, 3154–3162. <https://doi.org/10.1007/s12144-019-00202-9>
- Prentice, C., Zeidan, S., & Wang, X. (2020). Emotional intelligence, personality, and task performance: Testing their interaction effect. *International Journal of Hospitality Management*, 87, 102462. <https://doi.org/10.1016/j.ijhm.2020.102462>
- Shaffakat, S., Choi, S. L., & Awan, H. M. (2022). Emotional intelligence and workplace behavior: Examining the mediating role of psychological empowerment. *SAGE Open*, 12(2), 1–12. <https://doi.org/10.1177/21582440221094541>
- Sunindijo, R. Y. (2020). Emotional intelligence, job stress, and job performance among construction professionals. *International Journal of Managing Projects in Business*, 13(6), 1338–1353. <https://doi.org/10.1108/IJMPB-10-2019-0245>
- Taheri, F., Gheshlagh, R. G., & Dalvand, S. (2023). Emotional intelligence and nurses' job performance: A meta-analysis. *Journal of Nursing Management*, 31(1), 56–67. <https://doi.org/10.1111/jonm.13791>
- Vratskikh, I., Al-Lozi, M., & Maqableh, M. (2021). Emotional intelligence and job performance: A study among employees in the public sector. *Research in Business and Social Science*, 10(2), 70–80. <https://doi.org/10.20525/ijrbs.v10i2.1046>

Wu, X., Li, X., & Khoo, S. (2022). Emotional intelligence and organizational commitment among healthcare workers: The mediating role of job satisfaction. *BMC Health Services Research*, 22, 1298. <https://doi.org/10.1186/s12913-022-08759-9>

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.