

The Influence of Employee Quality Factors on Productivity in the Sabah State Public Service

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ABSTRACT

The employee productivity is an important issue in public service sector, especially in Sabah where public services are delivered in different geographical and organisational settings. The work explored the relation between employee quality and employee productivity in Sabah public service industry. We focused on four employee quality dimensions - employee competency, supportive work environment, emotional well-being and physical health. We conducted a quantitative cross-sectional survey among public sector staff from selected public service organisations in Sabah. There were 150 questionnaires and 101 answers were received. The data were analysed using descriptive statistics, Pearson correlation, and multiple regression. Employee competency was found to have the strongest positive correlation to employee productivity ($r = .681$ and $p < .001$) and supportive work environment ($r = .490$ and $p < .001$), and emotional well-being ($r = .432$ and $p < .001$). Physical health was weakly negative and non-significant correlation to employee productivity ($r = -.120$ and $p = .231$). The multiple regression model was statistically significant ($F [4, 96] = 25.099$ and $p < .001$) for $R^2 = .511$ and $R^2 = .491$. The four quality factors accounted for 51.1% of the variance in employee productivity. Employee competency was the strongest significant positive predictor ($\beta = .510$ and $p < .001$), followed by emotional well-being ($\beta = .192$ and $p < .035$). The positive but non-significant unique contribution from supportive work environment ($\beta = .123$, $p = .175$) and physical health was a significant negative coefficient ($\beta = -.176$, $p = .026$). These results indicate that employee competency and emotional well-being are key predictors of productivity and supportive work environment is positively associated with productivity at the bivariate level. These findings can be used to develop competency, maintain employee well-being and productivity in Sabah public service sector.

Keywords: employee productivity, employee quality, employee competency, supportive work environment, emotional well-being, physical health, Sabah public service sector

INTRODUCTION

The productivity and quality of Malaysia's public service have been completely revamped in the past few years to provide quality services to the public. Public service organisations are not only going to have to rely on old-school methods and old-school systems to perform their job, but new methods of service delivery can only be improved, and new methods are needed to meet the needs of the future. Employee productivity is now important in public sector performance as working people are the key to efficient, effective delivery of public services and society needs to change. The expectations and demands of citizens have also changed as the living standards and education levels in Malaysia have improved. The transformation has led to the need for public sector organisations to deliver services that are more efficient, responsive and productive. On the other hand, rapid technological advancement has increased the need for public sector employees to take a leap and be prepared for technological evolution and to perform their assigned duties effectively and remain responsive to ongoing changes. So with the increased productivity of employees, the quality of employees and the environment in which they work is an important factor. The quality of employees plays an important role in the organisation, and the quality of employees is what determines the organisation's performance and productivity. Quality of employees is not just a technical issue, but also the working environment in which employees operate, encompassing both their psychological well-being and physical health. A systematic evaluation of employee quality can help organisations to identify areas that will need improvement and

develop a strategy to enhance workforce capability and productivity. Such an approach can also help organisations to identify potential employees and help them achieve organisational objectives (Leopoldo et al., 2018; Awang et al., 2013). Amirul et al. (2021) proposed several dimensions to consider at employee quality and productivity levels in relation to employee productivity that can influence employee competency, supportive work environment, emotional well-being and physical health. Employee competency is the ability of employees to perform their jobs effectively. Supportive work conditions will be in place for the working environment, in order that employees can work in a safe way. The psychological and emotional well-being of employees will affect their focus, motivation and ability to carry out their job. Physical health is important too; the physical state of an employee will affect their performance and ability to perform. These qualities are very much on the rise especially in public service where employees need to continue to provide the services of the public, in the face of changing administrative, technological and social demands. The Sabah State Public Service is one of the major public service systems in Malaysia and provides a range of services to the public. In Sabah, public servants have the potential to contribute effectively to public service delivery, although productivity levels may vary among employees. Thus, knowing the factors of quality of employees is important to identify areas that can be improved to improve productivity of employees in the Sabah public service. Although previous studies have examined employee productivity in different ways, there is more research in the literature which provides evidence on how employee quality factors interact to increase productivity and thus employee productivity in the Sabah public service sector. The examination of employee competency, supportive work environment, emotional well-being and physical health is an important area to study as these are the dimensions of employee quality that affect productivity of public servants in Sabah. So, this study considers employee quality measurement factors that affect productivity of employees in the Sabah State Public Service in particular. The findings are expected to better clarify the role of quality of employees in productivity enhancement and can give public sector managers and policymakers ideas on how to plan for workforce development and public service improvement.

METHODOLOGY

Research Design

The present study used a quantitative research methodology by means of survey research design to study the relationship between employee quality factors and employee productivity in the public sector in Sabah, Malaysia. The work is based on the positivist approach which is based on the observation that social phenomena can be objectively measured by empirical data and statistical analysis. The results of the study were deductive, and the relationships between study variables were investigated following the theoretical and conceptual assumptions of the study.

The survey design was appropriate because it enabled the researcher to collect standardised responses from public sector employees and statistically examine the relationships between the employee quality dimensions and employee productivity. The study focused on four employee quality dimensions retained for the present analysis: employee competency, supportive work environment, emotional well-being, and physical health.

Population and Sample

The target population of this study included public sector employees working in Sabah. There were employees from five selected public service organisations that we surveyed (Jabatan Air Negeri Sabah, Jabatan Pendaftaran Negara, Jabatan Kerja Raya, Pejabat Pendidikan Daerah and Klinik Kesihatan). These organisations were selected because they represent different types of public services, including technical, administrative, educational, healthcare and utility services, and their employees are directly involved in providing services to the community. The respondents were selected using simple random sampling and were public sector employees in the selected organisations in Sabah and made up the sample that we included in the study. We believe simple random sampling is appropriate as it allows eligible employees to be selected and the researchers have the opportunity to obtain them to provide answers that have been used in the public service working environment. As a result, their experiences were relevant to determine employee quality and productivity in the public sector. The sample size was first calculated using GPower version 3.1.9.4. GPower is a commonly used statistical software package for sample size and power calculations (Althubaiti, 2023).

The GPower analysis was performed with a medium effect size of $f^2 = 0.15$, a significance level of $\alpha = 0.05$, statistical power of 0.80 and four predictor variables. The recommended minimum sample size was 103 respondents. We sent out 150 questionnaires to eligible public sector employees. 101 of them were answered and were then able to be analyzed with a response rate of 67.3%. Although the sample size of 101 respondents was less than the GPower recommendation of 103, it was relatively small. We also examined the number of predictor variables included in the real multiple regression analysis. Four predictor variables were used in the regression model, amounting to approximately 25.25 respondents per predictor ($101/4 = 25.25$). This is much better than the commonly used rule of thumb of about 10 observations per predictor variable. Althubaiti (2023) states that a common rule of thumb for regression analysis is approximately 10 observations per variable, but the quality of a sample should also be considered in relation to the number of predictors and the effect size. The predictor-to-sample ratio in this study was therefore considered a support for the study methodology rather than as a replacement for power analysis. This is consistent with Green (1991), who questioned what was in fact the simple rule of thumb for sample size in regression analysis and argued that sample size should take into account the expected effect size. This is also the method taken by Althubaiti (2023) who said that predictors are important for regression sample size and the sample size is the right one for the planned statistical analysis. In this way, the 101 respondents in this study we were able to do a reasonable empirical study for our planned regression analysis and given that the actual regression model contained four predictors and there were approximately 25 observations per predictor.

Research Instrument

Data were collected using a structured self-administered questionnaire. The questionnaire used a five-point Likert scale to measure respondents' perceptions of the study constructs. The original questionnaire contained 42 items including employee quality factors, rewards, transformational leadership and employee productivity.

For the employee quality construct, 24 items were adapted from Amirul et al. (2021) and 8 items measuring employee productivity were adapted from Taba (2016). Both constructs were measured on a five-point Likert scale. The employee quality was measured based on five dimensions of the Qualitative Labour Productivity Model (QLPM): employee competency, supportive work environment, emotional well-being, physical health and customer reciprocity. However, the customer reciprocity dimension was excluded in the reliability assessment because it recorded a low Cronbach's alpha value. The thesis reported a Cronbach's alpha of 0.301 for the customer reciprocity items.

After the factor analysis, item BD18 was removed because of its low communality value. The final employee quality measurement was therefore done in terms of 4 dimensions: employee competency, supportive work environment, emotional well-being, and physical health. The resulting factor structure was suitable for further analysis.

Pilot Study and Reliability

A pilot study was conducted before the main data collection to check the clarity, suitability and initial reliability of the questionnaire. 30 public sector employees participated in the pilot study. The pilot study was intended to assess the feasibility of the research procedures, respondents' understanding of the questionnaire items and the internal consistency of the instrument before the main survey.

Cronbach's alpha measured the reliability of the total 42-item questionnaire. The overall Cronbach's alpha was 0.909 and thus indicated high internal consistency.

The reliability assessment also found weaknesses in particular constructs. Customer reciprocity had a low reliability coefficient and was removed from the research model. This allowed the final measurement model to contain items that were more acceptable in terms of internal consistency.

Data Analysis

The collected data were analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive and inferential statistical analyses were conducted. First, descriptive statistics were used to summarise the

characteristics of the respondents and the distribution of the study variables. The reliability analysis using Cronbach's alpha was then conducted to gauge the internal consistency of the measurement items. Exploratory factor analysis was then carried out to assess the underlying factor structure and to assess the construct validity of the employee quality measurement.

Pearson product-moment correlation analysis was used to examine the direction and strength of the relationships between employee quality dimensions and employee productivity. Multiple regression analysis was used to reveal the extent to which employee quality dimensions explained differences in employee productivity. The thesis methodology confirms the reliability testing, factor analysis, Pearson correlation and regression analysis as part of the statistical procedures.

For this article we focus on the direct relationship between the four retained employee quality dimensions (employee competency, supportive work environment, emotional well-being and physical health) and employee productivity. Hence, the analyses provide empirical evidence regarding which dimensions of employee quality are strongly associated with productivity among public sector employees in Sabah.

Research Hypotheses

Based on the Qualitative Labour Productivity Model (QLPM) and the conceptual framework of the study, employee quality is expected to be a factor in employee productivity. In this study, we have examined four dimensions of employee quality in terms of competency, supportive work environment, emotional well-being and physical health. Thus, we have developed hypotheses regarding these dimensions:

H1: Employee competency has a significant positive relationship with employee productivity in the Sabah public service sector.

H2: Supportive work environment has a significant positive relationship with employee productivity in the Sabah public service sector.

H3: Emotional well-being has a significant positive relationship with employee productivity in the Sabah public service sector.

H4: Physical health has a significant relationship with employee productivity in the Sabah public service sector.

RESULT

Respondents' Demographic Profile

A total of 101 completed questionnaires were provided as part of the final analysis. The respondents were public sector employees in selected public service organisations in Sabah. The demographic profile was based on the respondents' service grade, educational level, and length of service. In terms of service grade, the largest proportion of respondents were employees in Grade 41, with 54.5% of the sample. This indicates that more than half of our respondents were in professional and managerial service categories. As for education, bachelor's degree holders were the largest group (50.5% of the total respondents were bachelor's degree holders), followed by other educational classes. Since the degree holders were highly educated, this indicates that the majority of the respondents had tertiary level qualifications. In terms of length of service, most respondents had served more than 16 years and 60.4% of the sample was in the public service. That is, most respondents had considerable experience working in the public service sector and therefore knew the organisation and workplace conditions associated with their employment.

In general, the demographic profile indicates that respondents were experienced public sector employees with a high proportion being professional and bachelor's degree qualified. The characteristics of the respondents will provide a good basis for us to consider the connection between the quality of the employees and the productivity in the Sabah public service sector.

Descriptive Analysis of Employee Quality Factors

Our results indicate that employee competency has the highest mean score ($M = 4.0382$, $SD = 0.69924$). This indicates that most respondents are extremely competent in their work and their job. Each of the individual competency items also had relatively high mean scores ($M = 3.8614$ to 4.1980). The most rated item was completing the assigned tasks ($M = 4.1980$, $SD = 0.84876$). It indicates a sense of high confidence by the respondents to carry out their work.

A supportive work environment ($M = 3.7663$, $SD = 0.78387$) was the second highest. The mean scores for individual items were 3.6139 to 3.9703 demonstrating that respondents generally saw their work environment as supportive. In particular, colleagues showed a high degree of cooperation and support in completing work. On the other hand, emotional well-being was less so ($M = 3.4653$, $SD = 0.60340$). The individual items measuring emotional well-being, on average, were 2.6040 to 2.8218. The responses show that the feelings of emotional well-being are lower than their feelings of competency and workplace support. The thesis also reported that respondents had different experiences of work-related stress and emotional conditions. Physical health had the lowest overall mean ($M = 2.3267$ and $SD = 0.87987$) of the four employee quality dimensions. The individual physical health items have relatively low mean scores, ranging from 2.1485 to 2.7129, suggesting that physical health is less important to the work activities of the employees than the other employee quality dimensions considered in the study.

In general, the descriptive results indicate that employee competency was the strongest quality component of employee well-being, followed by supportive work environment and emotional well-being, while physical health had the lowest mean score. This first suggests that employee competency and workplace support were more important factors in employee quality among the respondents. However, descriptive results alone do not tell us if these factors affect employee productivity; we explore this through correlation and regression analysis.

Emotional Well-being ($\alpha = 0.891$), Physical Health ($\alpha = 0.889$), Transformational Leadership ($\alpha = 0.964$), and Employee Productivity ($\alpha = 0.819$). We concluded that all constructs were reliable and were suitable for further analyses, such as correlation, regression, moderation, and so on.

Table 1. Descriptive Statistics of Employee Quality Factors

Employee Quality Factor	Mean	Standard Deviation	N
Employee Competency	4.0382	0.69924	101
Supportive Work Environment	3.7663	0.78387	101
Emotional Well-being	3.4653	0.60340	101
Physical Health	2.3267	0.87987	101

Pearson Correlation Analysis

Pearson correlation analysis was conducted to examine the relatedness between four employee quality elements and employee productivity (employee competency, supportive work environment, emotional well-being and physical health) in the public sector in Sabah. A total of 101 respondents were included in the analysis. Employee competency had the strongest positive relationship with employee productivity ($r = 0.681$, $p < 0.001$). This result suggests a strong positive association, suggesting that higher levels of employee competency were associated with higher levels of employee productivity. Of the employee quality dimensions studied, competency was the strongest relationship with productivity. Also, a moderate positive and statistically significant relationship was found between supportive work environment and employee

productivity ($r = 0.490$, $p < .001$). This indicates that employees who perceived more support in their working environment also had higher levels of productivity.

And emotional well-being was also a positive and statistically significant association with employee productivity ($r = 0.432$, $p < .001$). While the strength of this relationship is lower than that of employee competency and supportive work environment, it indicates that better emotional well-being was associated with higher employee productivity.

In contrast, physical health had a weak negative correlation with employee productivity ($r = -0.120$, $p = .231$). The relationship was not statistically significant, indicating that there is no clear linear relationship between physical health and employee productivity in our study context.

Overall, the correlation analysis indicates that employee competency, supportive work environment and emotional well-being were positively and significantly linked to employee productivity, while physical health was not highly correlated with employee productivity. Of the four dimensions, employee competency was the strongest associated with employee productivity. These findings provide some support for understanding the predictive impact of the employee quality factors through regression analysis.

Table 2. Pearson Correlation between Employee Quality Factors and Employee Productivity

Variable	r	p	Interpretation
Employee Competency → Productivity	.681	< .001	Strong positive
Supportive Work Environment → Productivity	.490	< .001	Moderate positive
Emotional Well-being → Productivity	.432	< .001	Moderate positive
Physical Health → Productivity	-.120	.231	Weak negative, not significant

Multiple Regression Analysis

We conducted multiple regression analysis to determine whether employee competency, supportive work environment, emotional well-being, and physical health factors significantly predicted employee productivity for Sabah public service workers. Overall, the regression model was statistically significant with $F(4, 96) = 25.099$, $p < .001$. The model had an R of .715, $R^2 = .511$ and adjusted $R^2 = .491$, which means that the four factors that are related to employee quality contributed 51.1% of the variance in employee productivity. The rest 48.9% of the variance could be due to other factors not included in the model. As shown in Table 3, employee competency was the strong positive predictor of employee productivity ($B = .391$, $\beta = .510$, $t = 5.301$, $p < .001$).

The 95% confidence interval for the unstandardised coefficient was from .245 to .537, indicating a positive impact on employee productivity when the other predictors were held constant. This finding is in line with previous research in Malaysian rail employees. Mahmood et al. (2022) in Malaysian rail employees work showed that competency is highly relevant for job performance while the previous Malaysian studies found a positive effect on employee performance. Similarly, studies have shown that competency is key for government employees to perform tasks effectively as they need the right knowledge and skills to adapt to the changing work environment. We believe the present finding supports the importance of employee competency in building productivity in public sector organisations.

Emotional well-being also showed a strong predictive relationship with employee productivity ($B = .170$, $\beta = .192$, $t = 2.141$, $p = .035$). Its 95% confidence interval was from .012 to .328 (not zero). This finding is in line with the recent Malaysian research by Mohamad and Abiddin (2024) who highlighted the link between emotional well-being and employee productivity and highlighted emotional regulation, emotional intelligence and other psychological resources to support employee well-being and work performance. Moreover, a recent

study in Malaysian public sector universities found a relationship between psychological capital and work happiness is high and work performance was also high, so the psychological and emotional state of employees will be crucial to workplace performance.

Therefore, the present finding indicates that emotional well-being is related to employees being able to maintain productive work habits in the public service. In contrast, supportive work environment did not make a statistically significant unique contribution to employee productivity ($B = .084$, $\beta = .123$, $t = 1.367$, $p = .175$). The 95% confidence interval was $-.038$ to $.207$, which suggests that the coefficient is not significant. This is not in line with some previous literature that has shown positive relations between supportive work environment and employee performance. For instance, employees in Malaysia banking sector reported that positive work environment behaviour and organisational support was related to employee performance.

Furthermore, earlier studies have also shown that supportive organisational environments are important for employee outcomes. So the non-significant result in this study might be related to the Sabah public service context (that is, employees may experience supportive environmental conditions in the same way or have an overlap with the other variables which were included in the regression model). The most important finding is that the supportive work environment did not play a meaningful role in the sample after employee competency, emotional well-being, and physical health were controlled. Physical health had a negative predictive relationship with employee productivity ($B = -.107$, $\beta = -.176$, $t = -2.263$, $p = .026$).

The 95% confidence interval was between $-.201$ and $-.013$. The negative direction is in contrast to previous studies that link better employee health to increased productivity. For example, in the study on health of employees physical and mental health conditions were strongly related to employee productivity. So the negative coefficient found in our study should be taken cautiously and not as a conclusion that lower physical health means higher productivity. One reason is that the coefficient is unique due to the health of physical health after controlling for all three other predictors, and not simply because of the correlation between physical health and productivity in general.

Different work demands in the public sector, measurement characteristics, and the degree of overlap between employee-quality dimensions could also explain this unexpected direction. Such longitudinal or objective health and productivity measures would help to clarify this relationship. We found no problematic multicollinearity among the predictors by the multicollinearity diagnostics. The tolerance was from $.551$ to $.844$, and the VIF was from 1.185 to 1.815 . The values suggest the predictors were so distinct that they fit in the multiple regression model, and the regression coefficients could be interpreted without great concern about excessive multicollinearity.

The overall results of the multiple regression study showed that employee competency was the most influential predictor of employee productivity, followed by emotional well-being. Physical health also showed a statistically significant negative association, and supportive work environment did not make a significant unique contribution when all four employee quality factors were considered simultaneously. These results are in part consistent with previous work that has shown competency and employee well-being are important for work performance, but the non-significant supportive work environment finding and negative physical-health coefficient indicate contextual differences and need to be further investigated. These findings suggest statistical associations and predictive relationships, not causal effects because the study was cross-sectional. Therefore, it should be interpreted in the sense of the sampled Sabah public sector employees and not as evidence that any quality factors would cause any productivity change.

Table 3. Summary of Multiple Regression Analysis

Predictor	B	SE	β	t	p	95% CI for B	Tolerance	VIF
Employee Competency (KP)	0.391	0.074	0.510	5.301	< .001	[0.245, 0.537]	0.551	1.815

Supportive Work Environment (SP)	0.084	0.062	0.123	1.367	.175	[-0.038, 0.207]	0.626	1.598
Emotional Well-being (KE)	0.170	0.080	0.192	2.141	.035	[0.012, 0.328]	0.636	1.572
Physical Health (KS)	-0.107	0.047	-0.176	-2.263	.026	[-0.201, -0.013]	0.844	1.185

Model statistics: $R = .715$; $R^2 = .511$; Adjusted $R^2 = .491$; $F(4, 96) = 25.099$, $p < .001$; Std. Error of the Estimate = .38293; $N = 101$.

Note: B = unstandardised coefficient; SE = standard error; β = standardised regression coefficient; CI = confidence interval; VIF = variance inflation factor

Hypotheses Testing

The hypotheses were tested based on correlation and regression analyses examining the relationships between the four employee quality factors and employee productivity in the Sabah public service sector.

H1: Employee competency has a significant positive relationship with employee productivity in the Sabah public service sector.

The hypothesis was supported. Employee competency was the strongest positive correlation between employee productivity and productivity $r = 0.681$ ($p < 0.001$) and the regression analysis also had a positive predictive effect. This indicates that employee competency was a crucial factor for employee productivity.

H2: Supportive work environment has a significant positive relationship with employee productivity in Sabah public service sector.

We confirmed the hypothesis. The supporting evidence supported a positive and statistically significant relationship between supportive work environment and employee productivity with $r = 0.490$ ($p < .001$). The regression analysis also showed a positive predictive effect of supportive work environment on employee productivity.

H3: Emotional well-being has a positive impact on employee productivity in the Sabah public service sector.

The hypothesis was supported. Emotional well-being positively correlated with employee productivity with a Pearson correlation of $r = 0.432$ ($p < 0.001$). The regression also revealed a positive beta coefficient of $\beta = 0.432$ with $R^2 = 0.010$ and $F = 22.659$. These results suggest that emotional well-being is a positive predictor of employee productivity, but it does not explain the difference in productivity.

H4: Physical health has a significant relationship with employee productivity in the Sabah public service sector.

The hypothesis was not confirmed. Physical health had a weak negative relationship with employee productivity ($r = -0.120$, $p = 0.231$). The regression analysis also suggested a negative beta coefficient ($\beta = -0.240$) with $R^2 = 0.016$ and $F = 1.632$ that physical health was not a significant predictor of employee productivity in the study context.

Overall, three of the four hypotheses were confirmed. Employee competency, supportive work environments and emotional well-being were positively associated with employee productivity, whereas physical health did not have a significant impact on productivity. Of all four employee quality dimensions, employee competency was the greatest factor associated with productivity.

Table 4. Summary of Hypotheses Testing

Hypothesis	Relationship	Result
H1	Employee competency → Employee productivity	Supported
H2	Supportive work environment → Employee productivity	Supported
H3	Emotional well-being → Employee productivity	Supported
H4	Physical health → Employee productivity	Not Supported

DISCUSSION

The findings show that employee quality factors are associated with employee productivity in the Sabah public service sector. However, the Pearson correlation and multiple regression analyses have different interpretations. The Pearson correlation analysis looks at the bivariate relationship between each employee quality factor and productivity and the multiple regression analysis looks at the specific contribution of each factor after the other predictors are controlled. Therefore, a factor may have a strong Pearson correlation but it may not be significant in the multiple regression model. A factor not significant in bivariate analysis may become significant when the other predictors are controlled. The overall multiple regression model was statistically significant, $F(4, 96) = 25.099$, $p < .001$, and $R = .715$, $R^2 = .511$, and adjusted $R^2 = .491$. The four employee quality factors accounted for 51.1% of the variance in employee productivity, while 48.9% could be explained by other factors that we did not include in our model. Our findings imply that employee productivity is linked to multiple dimensions of employee quality rather than being explained by one factor.

Employee Competency

Employee competency was highly positively correlated with employee productivity ($r = .681$, $p < .001$). In particular, there was a strong bivariate association between workers' competency and productivity. The relationship was still statistically significant for the multiple regression case, where employee competency was the best unique predictor of employee productivity ($B = .391$, $\beta = .510$, $t = 5.301$, $p < .001$). The 95% confidence interval was from .245 to .537, which indicates that the coefficient is in the positive direction. The consistent Pearson correlation with multiple regression results also supports that employee competency is a significant factor of productivity in the present sample and should be regarded as such. This finding is consistent with Amirul et al. (2021) whose Qualitative Labour Productivity Model (QLPM) shows that the competency of employees is an important dimension of qualitative labour productivity. It is also supported by Kelarisah et al. (2025) who found that competency is positively associated with employee performance and Utomo et al. (2024) who found that competency is associated with employee performance. The strong contribution of competency can be particularly relevant to the Sabah public service as employees perform diverse administrative, technical, professional, educational, and service-related tasks in urban, rural, and remote locations. Competency includes not only technical knowledge and skills, but also problem-solving that will also be effective in different working situations, adaptability, communication, and so on. So competent employees might be better able to continue delivering a good service even in different working situations. Management can now put a higher premium on competency-based training, professional development, and opportunities for employees to improve their technical and interpersonal skills from now on.

Supportive Work Environment

Supportive work environment showed a moderate positive Pearson correlation to employee productivity ($r = .490$, $p < .001$). This means that employees who reported a more supportive work environment also reported higher productivity at bivariate level. This finding is in line with Kelarisah et al. (2025) who found a strong correlation between work environment and employee performance and Maryani and Gazali (2024) who found that work environment and employee productivity were linked. Abu Bakar et al. (2025) found that work

environment and employee productivity were related. Flexible work arrangements and work-life balance were found to be positively associated with employee performance in the Sabah public service. Yet multiple regression analysis is a more nuanced finding. When employee competency, emotional well-being and physical health were checked at the same time as supportive work environment, employee productivity was also positively related but statistically not significant ($B = .084$, $\beta = .123$, $t = 1.367$ and $p = .175$). The 95% confidence interval was from $-.038$ to $.207$ and included zero. The difference between the Pearson correlation and multiple regression results is important. The Pearson correlation indicates that supportive work environment is associated with productivity when taken on its own. However, its non-significant regression coefficient indicates that it did not explain a statistically significant amount of unique variance in productivity after controlling for the other employee quality factors. That does not mean supportive work environment is irrelevant to productivity. Rather, it might correlate with other quality of work (including competency and emotional well-being). This could also be attributed to the specific context of Sabah public service. Public sector employees may work under relatively standardised organisational structures, policies, and procedures so differences in perceived work environment may not translate into a statistically significant unique contribution once individual employee characteristics are considered.

Emotional Well-being

Emotional well-being showed a positive Pearson correlation with employee productivity ($r = .432$, $p < .001$). This implies a modest positive bivariate correlation between emotional well-being and productivity. Importantly, this relationship was also significant in the multiple regression model. In addition, emotional health is a significant positive unique factor in employee productivity ($B = .170$, $\beta = .192$, $t = 2.141$, $p = .035$). The 95% confidence interval ranged from $.012$ to $.328$ and did not include zero. The Pearson correlation and regression are consistent with the conclusion that emotional well-being is not related only to productivity because it overlaps with the other predictors, but still has a statistically significant unique contribution after the competency, supportive work environment, and physical health have been controlled. This conclusion is consistent with Utomo et al. (2024), who found that emotional intelligence is correlated with employee performance. Spader et al. (2026) also found a correlation between emotional intelligence, professional competence, employee engagement, and work-related outcomes. That is why we found that employees' emotional well-being is related to their ability to stay focused, motivated, emotionally strong, and engaged in their work and to stay well-functioning and happy. This may benefit public service industries where people are very much working with the public and have different expectations and service needs to be satisfied.

Physical Health

Physical health only had a weak negative Pearson correlation with employee productivity ($r = -.120$, $p = .231$). Therefore, the bivariate relationship was not significant. Based on the Pearson correlation alone, there is not much evidence to conclude that physical health is strongly related to employee productivity in the sample. Interestingly, a different result was obtained by multiple regression analysis. On controlling for employee competence, work environment, and emotional well-being, we found that physical health was a statistically significant negative unique component to employee productivity ($B = -.107$, $\beta = -.176$, $t = -2.263$, $p = .026$). The 95% confidence interval was $-.201$ to $-.013$. The difference between the Pearson correlation and multiple regression results should be taken very carefully. The non-significant Pearson correlation indicates that physical health did not have a statistically significant bivariate relationship with productivity. The significant negative regression coefficient indicates that physical health was related to productivity in a different direction after accounting for the shared variance with the other predictors. This change in significance and direction suggests that the relationship could be related to the factors such as quality and the employees' quality factors. The result should be viewed as not proof of a correlation that lower physical health leads to higher productivity. One possible explanation may be that the sample included people working in a variety of administrative, professional, managerial, educational, technical, and computer-based roles for which productivity may depend more on cognitive ability and psychological ability than physical stamina. This explanation has not been tested and could be seen as a possible context. The finding also differs from previous research that has highlighted that health and healthy working conditions are very important for workers and organizational health. For example, Papilaya et al. (2022) stressed the importance of quality of work life and safe and healthy working

conditions. Therefore, the unexpected negative regression coefficient observed in the present study is worth further investigation using more specific measures of physical health, occupational demands, and productivity.

Sabah Geographical Context

The geographical aspects of Sabah provide a contextual basis for the findings. Public services are provided in cities, rural areas, coastal and remote interior areas with different levels of accessibility, infrastructure, communication and organisational resources. This situation may be particularly applicable to the great contribution of employee competency. In geographically challenging areas, employees may need to be more flexible, problem-solving and resource-constrained to work with limited resources. Similarly, organisational support is important in giving employees the resources and communications infrastructure to perform their duties. However, geographical location was not tested as an independent variable or moderator in this study. Therefore geographical diversity should be considered as a contextual factor instead of a direct explanation for the statistical findings. Future research can examine rural-urban location, infrastructure access, geographical remoteness or digital connectivity to the extent that quality factors in employees are moderated by their location and productivity.

Overall Discussion

We conclude that the results are consistent with previous research on employee competency, emotional well-being and employee performance (Amirul et al., 2021; Kellarisah et al., 2025; Utomo et al., 2024) and the findings on supportive work environment and physical health are more context specific and relate to the context. Our findings suggest that productivity improvement in Sabah public service must be an integrated approach that takes into account different employees' competency, emotional well-being and workplace environment. On the other hand, the physical health finding suggests that we need further investigation rather than immediate policy conclusions. In total, the multiple regression model explained 51.1% of the variance in employee productivity ($R^2 = .511$) and more than half of the variance in productivity was left unexplained by the four predictors in the model. Other factors like leadership, job satisfaction, rewards, work-life balance, motivation, organisational practices, job characteristics, etc. may contribute to employee productivity but were not addressed in this regression model.

CONCLUSION

In this study, we have examined the relationship between employee quality factors and employee productivity in the Sabah public service sector. Pearson correlation analysis showed that employee competency, supportive work environment, and emotional well-being were significantly and positively associated with productivity, while physical health was negative but non-significant. The findings have many practical implications for public service management in Sabah. First, the strong effect of employee competency suggests that productivity enhancement activities need to focus on continuous professional development, competency-based training, skills development, and opportunities for employees to enhance their technical and interpersonal capabilities. Second, although supportive work environment was not a significant unique predictor in the multiple regression model, it has an important bivariate relationship with productivity, which means that the support of organisational bodies and the workplace environment are still relevant. Third, the strong effect of emotional well-being emphasizes that psychological support, emotional resilience, stress management, and good interpersonal relationships are all important. The findings should also be considered in Sabah's geographically diverse public service context. People may work in urban centres, rural areas, coastal communities, and remote areas with various levels of infrastructure, access, communication facilities, etc., and organisational resources. The differences in location may influence employees' implementation of their skills and access to organizational support. But the location was not directly investigated in this study and therefore, it is a context factor and not a causal source of the findings. The outcome of the study shows that employee productivity is a multidimensional phenomenon which is based on multiple factors as well as individual and organisational factors. Employee competency was the strongest predictor but emotional well-being also played a meaningful role. Supportive work environment was positively related to productivity, but did not contribute unique characteristics in the simultaneous regression model, and physical health had an unexpected significant negative coefficient after controlling for the other predictors. Our research has given

more depth to employee productivity in the Sabah public service sector and this data suggests productivity should be combined with psychological well-being and working conditions.

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