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Determination of education level, competence and work environment in the intervening motivation on the performance of Health Centre Health Workers in Karimun District

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Abstract

Purpose: This study aimed to examine the influence of education level, competence, and work environment on the performance of Community Health Centre (Puskesmas) health workers in Karimun Regency, with work motivation analyzed as an intervening variable.

Research Methodology: A quantitative approach was used with 139 health workers selected through the Slovin formula from a population of 631 individuals. Primary data were collected using questionnaires, supported by observations and interviews, while secondary data were obtained from official records. Partial Least Squares (PLS) analysis was employed with SmartPLS to test validity, reliability, structural relationships, and mediation effects.

Results: The findings indicate that education level and work environment significantly influence both motivation and performance, while competence shows no significant direct effect on either motivation or performance. Motivation significantly enhances performance. Mediation testing revealed that motivation did not mediate the effect of education level and competence on performance but partially mediated the influence of the work environment on performance.

Conclusions: The study concludes that while higher education and better work environments improve motivation and performance, competence development programs remain insufficient and have not significantly impacted the outcomes. Creating supportive work environments and fulfilling health workers' basic needs are crucial for sustaining performance.

Limitations: This study was limited to one district and relied on self-reported measures, which may affect generalizability and accuracy.

Contribution: This study contributes to public sector human resource management by demonstrating the mediating role of motivation and highlighting the importance of education and workplace conditions in strengthening health workers' performance.

Keywords: *Competency, Education, Motivation, Performance, Work Environment*

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1. Introduction

The performance achievements of all Puskesmas throughout the Karimun Regency are lacking, in accordance with the provisions of the Minister of Health PANRB/No.6/Thn. 2022, it is necessary to evaluate employee performance and follow up on the results of the performance evaluation. In the Puskesmas with the lowest performance category, the Puskesmas had the least number of health workers with higher education backgrounds (Hairul, Wibisono, & Catrayasa, 2024). In contrast, in the performance achievement of the Puskesmas, which had the highest score, most health workers had higher education backgrounds (Irianto et al., 2024). It was also found that employees' motivation to achieve their primary performance goals was not optimal (Latham, 2023). Because of the lack of activity programs to improve knowledge and skills to achieve the main performance goals, activity programs for both health workers and support personnel are more likely to be aimed at carrying out service tasks, while activities intended to improve the competence of health service workers are very limited.

In almost all existing health centers, there is no special room for resting places and places of worship for health workers, as well as limited existing rooms, so that some activities of health workers are sometimes carried out in the same room area as the area to provide services, often causing discomfort for visitors and existing health service workers. Based on the above findings, it can be identified that there are problems with the level of education, competence, and work environment that are suspected of causing problems with the motivation of health workers in the performance of the health center employees in Karimun Regency. A more in-depth and scientific study will be conducted to determine these variables.

According to Septyadi, Satriawan, and Dewi (2024), performance is the result of the work done, the performance of a person, or the level of success that a person has over a certain period of time in completing a task. This means that employees can perform well if they achieve work results in accordance with the company's wishes. According to Rahman and Shanjabin (2022), employee performance refers to the results a person achieves when completing a given task to achieve work goals. Employees perform well if they do their job well. Employee performance is a key factor in an organization's ability to achieve its goals. It can be concluded that the performance of this study is the result of the work of health workers at Puskesmas across the Karimun Regency. When a task is completed within a certain period. The indicators used in this study were Guritno and Waridin Silaen et al. (2021): 1) Able to work on time. 2) Able to create innovation and creativity while completing the work. 3) They can minimize work errors.

According to Zakiah (2020), education leveling is the process of improving education according to the level achieved in a specific period. The indicator for the level of education is training according to the level achieved. Bahri and Sakka (2021) Education level is a systematic and conscious approach to developing human potential, both thoughts and attitudes, and behavior patterns through a structured and gradual educational path consisting of primary, secondary, and higher education. It is concluded that the level of education in this study is a process of improving education in accordance with the level that has been taken at a certain time or the level of formal education of health workers at Puskesmas throughout the Karimun Regency. Referring to Law/No. 20/Year 2003/National Education System and Ismanto in Khaerana and Olfiyandari (2019), it is concluded that the indicators of education level in this study are 1) Formal education level and department suitability; 2) Knowledge related to health standards in general; 3) Operational and technical skills and the ability to carry out tasks according to organizational needs

According to Sutrisno by Astuti (2020), competencies are knowledge-based skills and abilities that are supported by the work environment as well as their application in the implementation of tasks in the workplace, considering the work requirements that have been set. According to Sukmanitri (2024), competence is a fundamental characteristic or part of the personality inherent in a person in the form of knowledge and skills to do a job based on the knowledge and skills acquired. It is concluded that competence in this study is the ability possessed by health workers with all the knowledge and skills. Competency indicators according to Edison in Sukmanitri (2024) are 1) Ability and expertise; 2) Willpower and initiative; 3) Ability to identify problems and find solutions; 4) Hospitality and courtesy

According to Idayati, Surajiyo, and Hazalena (2020), the work environment is an internal environment that represents the elements in an organization that create a culture and social environment where activities to achieve goals take place. Based on the three concepts above, it can be said that the work environment refers to the physical and non-physical conditions around an employee that affect the way the employee performs his or her job (Alfian, Wibisono, & Khaddafi, 2024). The work environment in this study is something that exists in the environment of health workers at Puskesmas throughout Karimun Regency, which can be useful and influence health workers in performing their duties. The indicators of the work environment in this study were based on Siagian and Astuti (2020). These include both physical and non-physical work environments.

Putri, Rialmi, and Suciati (2022) state that work motivation supports human behavior and encourages us to act in a certain way or at least develop a propensity. According to Al Anshari, Putra, and Fitri (2022), motivation is one of the things that affects human behavior. Motivation is also referred to as the driving force of desires, support, or needs that can excite and motivate a person to act and do certain things that lead to an optimal direction, thereby reducing and satisfying one's own drive. Arisanti, Santoso, and Wahyuni (2019) define work motivation as a state of encouraging and motivating a person internally and externally with the skills and abilities necessary to carry out activities, achieve good work results, and achieve goals. It was concluded that motivation is a series of processes that generate, direct, and sustain human behavior towards the achievement of goals.

2. Literature Review

2.1 Conceptual Framework

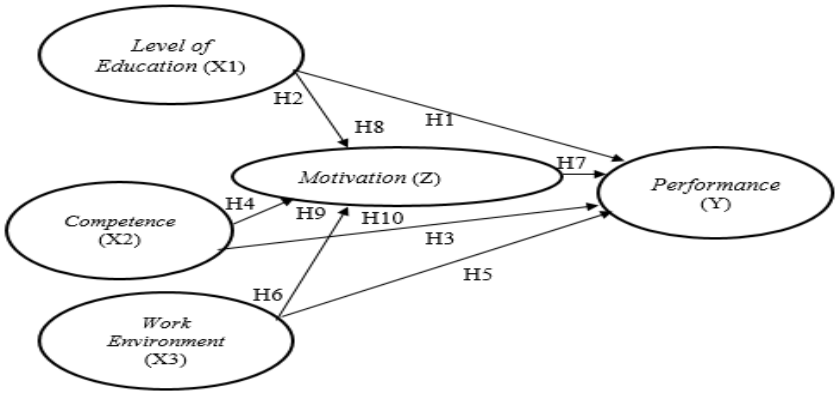

Figure 1. Conceptual Framework

Employee performance in public-service organizations is commonly defined as the extent to which employees achieve the desired outputs in terms of quality and timeliness, while minimizing errors and contributing innovations (Ali AlShehail, Khan, & Ajmal, 2022). In the primary care context, performance spans clinical and non-clinical tasks adherence to standards, continuity of care, community outreach, reporting accuracy, and service responsiveness (Bidner, Bezak, & Parange, 2023). These multifaceted requirements make performance sensitive to individual attributes (education, competence, motivation) and contextual enablers (work environment, leadership, infrastructure) (Sadick & Kamardeen, 2024). Studies of frontline health workers consistently show that performance hinges on capacity (knowledge/skills), opportunity (resources, workflow, organizational climate), and motivation (willingness/drive), three levers that map directly to Human Resources for Health (HRH) frameworks and underpin the present model.

2.2 Education level and health worker outcomes

Education expands domain knowledge, diagnostic reasoning, and the ability to internalize clinical protocols, which improves task execution and error prevention (Goldowsky & Rencic, 2023). In primary care, higher formal education is associated with more accurate triage, better documentation, and greater adaptability to public health programs (Jeyaraman et al., 2022). Education also scaffolds

motivation indirectly by raising self-efficacy and perceived career mobility; health workers who feel competent and recognized tend to invest more effort in service goals (Kundu, 2020). Evidence from district health systems indicates that facilities with a higher proportion of staff with advanced qualifications demonstrate stronger program indicators and more consistent reporting patterns. This is echoed by the observation that Puskesmas with more highly educated staff show higher performance ratings than those with fewer highly educated staff. This provides a contextual rationale for modeling education as a driver of both performance and motivation in this study.

2.3 Competence as a behavioral enabler

Competence typically integrates knowledge, technical skills, problem-solving, initiative, and professional demeanor (Kachalov et al., 2015). In public health organizations, competence should translate into better adherence to SOPs, fewer procedural errors, and improved patient interactions (Ausserhofer et al., 2016). However, the impact of competence on outcomes can be attenuated by organizational realities: if routine workloads leave little time for continuing education, supervision is sporadic, or the competency framework is not embedded in daily practice, measured competence may not be a strong predictor of motivation or performance (Teunissen et al., 2021). Prior HRH studies frequently report such "competence–performance gaps," particularly where training is ad hoc, learning is not tied to role expectations, or task-shifting occurs without structured capacity building. This helps explain why competence sometimes shows non-significant direct paths in structural models when other levers (e.g., work environment, motivation) are stronger or when competence is unevenly developed across roles—an empirical pattern explored in the present study.

2.4 Work environment: physical and psychosocial conditions

The work environment shapes whether individual capabilities can be converted into desired results. In primary care facilities (Frennert et al., 2023), environmental factors include the adequacy of rooms and equipment, privacy and infection control arrangements, availability of rest spaces and prayer facilities, IT/connectivity for reporting, and the psychosocial climate (supportive supervision, collegiality, clarity of roles). Physical constraints (crowded rooms and lack of dedicated spaces) increase cognitive load and error risk, while psychosocial strain (role conflict and weak coordination) erodes commitment and effort. Empirical work has repeatedly linked better physical environments and supportive climates with higher motivation and performance. In the Puskesmas setting described in the study, where rest/prayer rooms and space allocations are limited, the salience of the environment is clear: even competent or educated staff can underperform if the surrounding conditions hinder focused, uninterrupted service. Consequently, the model positions the work environment as a robust driver of motivation and performance and anticipates partial mediation via motivation when environmental improvements energize staff to meet targets.

3. Research Methodology

3.1 Design of Research Location and Time

Using a quantitative approach using a questionnaire that will be distributed to health workers at Puskesmas throughout Karimun Regency

3.2 Research Variables and Operational Definitions of Variables

The variables operated in this study used five variables consisting of three independent variables, namely Education Level (X1), Competency (X2), Work Environment (X3) and Work Motivation (Z) as intervening variables and Performance Achievement (Y) as bound variables

3.3 Population and Sample

A total of 631 health workers participated in the study. Then to get a sample using the Slovin formula, which is as follows: n= N/1+(Nxe2)
Where: n: Sample size N: Population
e2: Percentage of errors (*error* rate) in the desired sampling.
With a confidence level of 92.5% and *an error* rate of 7.5%, the following calculations were performed: n = 631/ [1+ (631 x $(0.075)^2$] = 138.70. (rounded up to 139) So there are 139 health officers who are used as a sample in this study

3.4 Types, Sources, Data Collection and Techniques

Primary data were obtained directly from the respondents through observations, interviews and questionnaires. Secondary data were obtained through a literature review and data related to the five variables. The data analysis technique used to test the hypothesis uses PLS (Partial least squares (PLS) analysis was used to test the hypothesis. This was chosen because it would be simpler if the results remained accurate (DuryadiDuryadi (2021).

4. Result and Discussion

4.1 Validity and Reliability Test Results

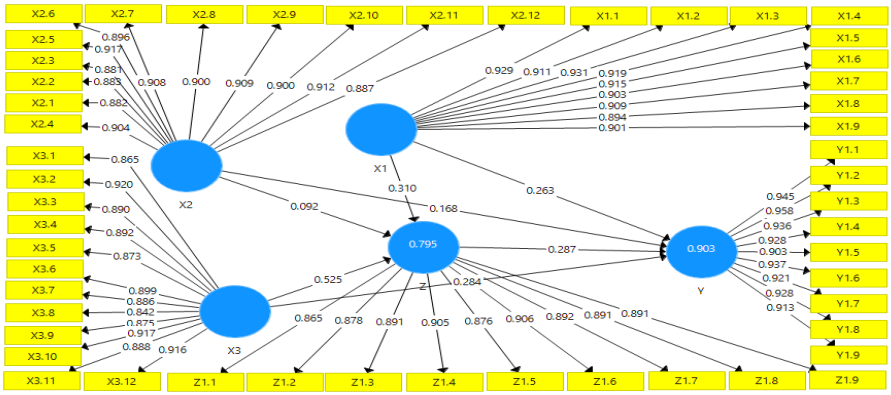

Figure 2. Outer Model Test Results
Source: Output Smart PLS, 2024

From the figure, it can be observed that all variables have a > 0.7. such that it meets the criteria. According to Duryadi (2021), if the outer loading value is more than 0.7, then it meets the criterion *of convergent validity*, and *an outer loading* of more than 0.5 can be tolerated as long as the *validity and reliability of the construct are* acceptable.

Table 1. Construct Reliability and Validity *Table*

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Education Level (X1)	0.975	0.975	0.978	0.833
Competencies (X2)	0.978	0.979	0.980	0.807
Work Environment (X3)	0.976	0.976	0.978	0.790
Motivation (Z)	0.967	0.968	0.971	0.789
Performance (Y)	0.980	0.981	0.983	0.865

Source: Smart PLS Output

The value of the item generated by the X1, X2, X3, Z, and Y constructs met the standard value of convergent validity, which is a value of > 0.7, and the construct validity and reliability were all green; then, it was declared valid so that there was no need to re-measure. Duryadi (2021) Then the results of the Discriminant Validity test, with the provision that the loading value on the intended construct is greater than the other values and the standard value for each construct > 0.7. The are listed in the following table.

Table 2. Cross Loading Values

	Education Level (X1)	Competencies (X2)	Work Environment (X3)	Motivation (Z)	Performance (Y)
X1.1	.929	.836	.773	.764	.829
X1.2	.911	.816	.730	.717	.784
X1.3	.931	.853	.795	.789	.854

X1.4	.919	.842	.780	.781	.828
X1.5	.915	.842	.819	.796	.847
X1.6	.903	.836	.777	.768	.820
X1.7	.909	.821	.762	.774	.812
X1.8	.894	.833	.796	.769	.815
X1.9	.901	.830	.758	.748	.799
X2.1	.816	.882	.772	.722	.797
X2.10	.825	.900	.839	.800	.865
X2.11	.800	.912	.805	.770	.822
X2.12	.798	.887	.805	.776	.798
X2.2	.785	.883	.801	.719	.777
X2.3	.816	.881	.766	.727	.774
X2.4	.792	.904	.767	.718	.764
X2.5	.845	.917	.778	.750	.820
X2.6	.833	.896	.790	.761	.808
X2.7	.856	.908	.798	.752	.806
X2.8	.843	.900	.812	.788	.833
X2.9	.843	.909	.814	.771	.843
X3.1	.724	.740	.865	.786	.752
X3.2	.797	.845	.920	.774	.820
X3.3	.712	.719	.890	.791	.730
X3.4	.754	.793	.892	.732	.803
X3.5	.672	.712	.873	.756	.758
X3.6	.764	.827	.899	.753	.825
X3.7	.749	.801	.886	.760	.840
X3.8	.679	.695	.842	.719	.765
X3.9	.737	.783	.875	.788	.781
X3.10	.871	.883	.917	.842	.896
X3.11	.747	.789	.888	.768	.824
X3.12	.854	.844	.916	.809	.859
Z1.1	.740	.696	.766	.865	.734
Z1.2	.731	.708	.771	.878	.753
Z1.3	.817	.810	.805	.891	.815
Z1.4	.712	.738	.771	.905	.790
Z1.5	.640	.681	.735	.876	.743
Z1.6	.668	.704	.741	.906	.748
Z1.7	.791	.768	.783	.892	.845
Z1.8	.833	.806	.802	.891	.867
Z1.9	.769	.790	.778	.891	.853
Y1.1	.832	.832	.817	.824	.945
Y1.2	.885	.871	.849	.839	.958
Y1.3	.859	.847	.842	.821	.936
Y1.4	.834	.857	.852	.849	.928
Y1.5	.784	.782	.840	.858	.903

	Education Level (X1)	Competencies (X2)	Work Environment (X3)	Motivation (Z)	Performance (Y)
Y1.6	.799	.827	.866	.833	.937
Y1.7	.846	.842	.862	.830	.921
Y1.8	.858	.857	.858	.838	.928
Y1.9	.833	.828	.803	.815	.913

Source: Smart PLS Output

Based on the above table, the loading value of the intended construct is greater than the other values, and the standard value for each construct is greater than 0.7. Thus, the manifest variable in this study is valid and can explain the latent variables (Duryadi, 2021).

Tabel 3. Construct Reliability and Validity Table

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Education Level (X1)	0.975	0.975	0.978	0.833
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Performance (Y)	0.980	0.981	0.983	0.865

Source: Output Smart PLS, 2024

The table above shows that all the values of the variables in the reliability test, both because Cronbach's alpha and composite reliability have values above 0.7, and AVE has values above 0.5. Therefore, it was concluded that the variables tested were valid and reliable, and thus, structural model testing could be conducted (Duryadi, 2021).

4.2 Results of Inferential Analysis with Structural Model (Inner Model)

The R Square or determinant coefficient value and Q2 Predictive Relevance or how good the observation value is can be seen in the following table:

Tabel 4. R Squares Table

	R Square	R Square Adjusted
Motivation (Z)	0.795	0.791
Performance (Y)	0.903	0.900

Source: Otput Smart PLS, 2023

The table shows that the motivation R Square value of 0.795 means that the endogenous variable of work motivation of 79.5% is influenced by the variables of education level, competence, and work environment, while 20.5% is influenced by other factors outside the variables studied. The performance R Square value of 0.903 means that the endogenous variable of work performance of 90.3% is influenced by exogenous variables of education level, competence, work environment, and motivation, while 9.7% is influenced by other factors outside the variables studied. The merits of the model are shown in the following table:

Tabel 5. Fit Model Table/Model Goodness (NFI Value)

	Saturated Model	Estimated Model
SRMR	0.047	0.047
d_ULS	2.964	2.964
d_G	7.580	7.580
Chi-Square	4092.786	4092.786
NFI	0.704	0.704

Source: Output Smart PLS, 2024

From the data, it is shown that the NFI value is 0.70.4 or above 0.67, so it can be concluded that the goodness of fit of the model is very strong. Furthermore, after considering the above conditions, it can be concluded that the model can be continued in the next test, namely the hypothesis testing. The results of *the Path Coefficient* test with *bootstrapping* are presented in the following table:

Tabel 6. Path Coefficient *Table*

	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	P Values

X1 -> Y	0.263	0.247	0.095	2.776	0.006
X1 -> Z	0.310	0.312	0.126	2.469	0.014
X2 -> Y	0.168	0.166	0.121	1.395	0.164
X2 -> Z	0.092	0.107	0.165	0.557	0.578
X3 -> Y	0.284	0.285	0.092	3.066	0.002
X3 -> Z	0.525	0.508	0.127	4.149	0.000
Z -> Y	0.287	0.302	0.128	2.238	0.026

Source: Ouput Smart PLS, 2024

From the data mentioned above, it was found that all the original values of the sample were positive and negative. The value of the influence of Education Level (X1) on performance (Y) was 0.263, and the value of the influence of Education Level (X1) on motivation (Z) was 0.310. The Competency Score (X2) to performance (Y) was -0.168, competency (X2) to motivation (Z) was 0.092, Work Environment (X3) to performance (Y) was 0.284, Work Environment (X3) to motivation (Z) was 0.525, and motivation (Z) to performance (Y) was 0.287.

Table 7. Specific Indirects Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics	P Values
X1 -> Z -> Y	0.089	0.094	0.057	1.557	0.120
X2 -> Z -> Y	0.026	0.040	0.062	0.427	0.669
X3 -> Z -> Y	0.151	0.146	0.061	2.488	0.013

Source: Ouput Smart PLS, 2024

From the data mentioned above, it is evident that all the original values for the sample are positive. The influence of X1 on Y Performance through Z was 0.089, X2's influence on Y through Z was 0.026, and X3's influence on Y through Z was 0.151. Then it is carried out in the next step, namely the discussion to prove and discuss the hypothesis by comparing the statistical T value and P Value

4.3 First Hypothesis Discussion

H1: There is a significant direct effect of the level of education on performance.

The coefficient of the direct correlation of education level to the performance achievement of health workers has a T-statistic value of 2,776 and a P-value of 0. 006. If a T-statistic value of 2.776 means more than (>1.96) and a P-value of 0.006 means less than (<0.05), then it is significant. Thus, H1 is accepted. It was concluded that there was a significant positive relationship between the level of education and the performance of health workers in the Karimun Regency. This is related to the problem of the relationship between the level of education of health workers and the lack of employee performance achievements. In the Puskesmas that had the lowest category of performance performance, it was found that the Puskesmas had the least number of health workers with higher education backgrounds (Sumbogo, Oktaria, Barusman, Defrizal, & Barusman, 2024). In contrast, in the Puskesmas with the highest performance, most health workers had higher education. Therefore, it can be said that the level of education has had a significant positive impact on the performance of health workers throughout Karimun Regency. In terms of follow-up on the results of the performance achievement evaluation, the agency can still optimize the level of formal education, skills, operational and technical mastery, as well as cooperate, be loyal, disciplined, and responsible according to the role of existing health workers; thus, in the future, the performance of employees and the performance of the Puskesmas as a whole can be improved again.

4.4 Second Hypothesis Discussion

H2: There is a significant direct effect of the level of education on work motivation.

The value of the correlation coefficient of education level directly with the motivation of health workers had a T-statistic value of 2,469 and a P-value of 0. 014. A T-statistic value of 2.46 means more than

(>1.96), and a P-value of 0.014 means less than (<0.05), then it is significant. Thus, H2 is accepted. It was concluded that there was a significant positive relationship between the level of education and the motivation of health workers throughout the Karimun Regency. This is related to the problem of the relationship between the level of education of health workers and the lack of performance achievements of Puskesmas employees. In the Puskesmas that had the lowest category of performance performance, it was found that the Puskesmas had the least number of health workers with higher education backgrounds. In contrast, in the Puskesmas with the highest performance, most health workers had higher education. Lack of work motivation for employees to achieve their main performance goals. Referring to the conclusion of this study, it can be said that even though there are these problems, the education level of health workers has had a positive impact on the level of employee work motivation.

4.5 Third Hypothesis Discussion

H3: Competence significantly determines performance achievements.

The value of the competency correlation coefficient directly to the performance achievement of health workers with a T-statistic value of 1,395 and p-value of 0. 164. A T-statistic value of 1.395 means less than (<1.96) and a P-value of 0.164 means more than (>0.05), which is not significant. Thus, H3 was rejected. It was concluded that there was a positive but not significant relationship between the competence and performance achievements of health workers in Karimun Regency. The problem of health worker competence is related to the lack of performance achievements of the Health Center, which is the impact of the lack of activity programs to improve knowledge and skills to achieve the main performance targets, both activity programs for health workers and support personnel, where all existing activities are more likely to be aimed at carrying out service duties, while activities intended to improve the competence of health service workers themselves are very limited. Based on the results of this study, this condition is the cause of competence that has not significantly impacted the performance of health workers.

4.6 Discussion of the Fourth Hypothesis

H4: There is a significant direct determination of competence in work motivation.

The coefficient of direct correlation of competence to the work motivation of health workers had a T-statistic value of 0.557 and a p-value of 0.578. A T-value of 0.557 is less than (<1.96), and a P-value of 0.578 is more than (>0.05), which is not significant. Thus, H4 was rejected. It was concluded that there was a positive but not significant direct competence towards the work motivation of health workers in the Karimun Regency, Indonesia. The problem of health worker competence and work motivation is related to the lack of performance achievements due to the lack of work motivation of employees to achieve the main performance goals, which is the impact of the lack of activity programs to improve knowledge and skills to achieve the main performance goals, both activity programs for health workers and support personnel, where all existing activities are more likely to be aimed at implementing service duties, while activities intended to improve the competence of health service workers themselves are very limited. Based on the results of this study, it can be said that this condition is the cause of competence, which has not significantly impacted the work motivation of health workers.

4.7 Discussion of the Fifth Hypothesis

H5: There is a significant direct relationship between the work environment and performance achievement.

The value of the work environment correlation coefficient directly to the performance achievement of health workers had a T-statistic value of 3.066, and a p-value of 0.02. If a T-statistic value of 3.066 means more than (>1.96) and a P-value of 0.02 means less than (<0.05), then it is significant. Thus, H5 is accepted. It was concluded that there was a significant positive determination of the work environment directly on the work performance achievements of health workers throughout the Karimun Regency. Related to the problems of the work environment of the Health Center, in the form of conditions in the field, in almost all existing Health Centers, there is no special room for rest and places of worship for health workers, as well as a limited number of available rooms; thus, some activities of

health workers are sometimes carried out in the same room area as the area to provide services, often causing discomfort for visitors and health service workers. Based on the results of this study, it can be said that the problem is the cause of the work environment condition, which has not significantly impacted the performance achievements of health workers in the Karimun Regency.

4.8 Discussion of the Sixth Hypothesis

H6: There is a significant direct effect of the work environment on work motivation.

The value of the coefficient of correlation of the work environment directly to the work motivation of health workers with a T-statistic value of 4.149 and a P-value of 0.000 with a T-statistical value of 4.149 means more than (>1.96), and a P-Value value of 0.000 means less than (<0.05), then significant. Thus, H6 is accepted. It was concluded that there was a significant positive determination of the work environment directly on the motivation of health workers throughout the Karimun Regency. Related to the problems of the work environment of the Health Center, in the form of conditions in the field, in almost all existing Health Centers, there is no special room for rest and places of worship for health workers, as well as a limited number of available rooms; thus, some activities of health workers are sometimes carried out in the same room area as the area to provide services, often causing discomfort for visitors and health service workers. The results of this study indicate that despite these problems, the work environment significantly impacts health workers' motivation in Karimun Regency.

4.9 Discussion of the Seventh Hypothesis

H7: There is a significant direct relationship between work motivation and performance achievement.

The value of the coefficient of correlation of work motivation directly to the performance achievement of health workers had a T-statistic value of 2.238 and a p-value of 0.026. If a T-value of 2.238 means more than (>1.96) and a p-value of 0.026 means less than (<0.05), then it is significant. Thus, H7 is accepted. It was concluded that there was a significant positive relationship between work motivation and the achievement of health workers' work performance throughout the Karimun Regency. Regarding the initial findings that there are problems with the level of education, competence, and work environment, which are suspected to cause problems with the motivation of health workers in employee performance, if you refer to the results of this study, it can be said that even though there are these problems, the condition of the work motivation of health workers has had a significant impact on the level of performance achievement of health workers in Karimun Regency.

4.10 Discussion of the Eighth Hypothesis

H8: There is a significant relationship between the level of education and performance achievement in work motivation interventions.

The value of the correlation coefficient of education level indirectly to the performance achievement in the intervention of work motivation of health workers had a T-statistic value of 1.557 and a p-value of 0.120. A T-value of 1.557 is less than (<1.96), and a P-value of 0.033 is greater than (>0.05), which is not significant. Thus, H8 was rejected. It was concluded that there was a positive but insignificant effect of the level of education on performance achievement in intervening in the work motivation of health workers at the Health Center. Alternatively, work motivation cannot determine the level of education for health workers' performance achievements at health centers. This is related to the problem of the relationship between the level of education of health workers and the lack of performance achievements of Puskesmas employees. In the Puskesmas with the lowest performance category, it was found that the Puskesmas had the least number of health workers with higher education backgrounds. In contrast, in the Puskesmas with the highest performance, most health workers had higher education. Lack of work motivation for employees to achieve their main performance goals. Based on the results of this study, it can be said that the condition of work motivation of health workers has not been able to mediate or intervene in the educational level in having a significant impact on the level of performance achievement of health workers in Karimun Regency.

4.11 ussion of the Ninth Hypothesis

Hi: There is a significant relationship between competence in intervening with work motivation and job performance.

The value of the competency correlation coefficient was indirectly related to performance achievement in the intervention of work motivation of health workers at the Puskesmas, with a T-statistic value of 0.427 and a P-value of 0.669. A T-value of 0.427 was less than (<1.96), and a P-value of 0.669 was greater than (>0.05), which was not significant. Thus, H9 was rejected. It was concluded that there was a positive, but not significant, competence in the performance achievement in intervening in the work motivation of health workers at Puskesmas in Karimun Regency. Alternatively, work motivation cannot align the determination of competence with health workers' performance. Related to the problem of competence of health workers and work motivation due to the lack of performance achievements of the Health Center, it is suspected that this is due to the lack of work motivation of employees to achieve the main performance goals, which is the impact of the lack of activity programs to improve knowledge and skills to achieve the main performance goals, both activity programs for health workers and support personnel, where all existing activities are more likely to be aimed at carrying out service duties, while activities intended to improve the competence of health service workers themselves are very limited. Based on the results of this study, it can be said that the condition of work motivation of health workers has not been able to mediate or intervene in the condition of health workers' competence in having a significant impact on the level of performance achievement of health workers in the Karimun Regency.

4.12 Tenth Hypothesis Discussion

Hi: The work environment significantly determines performance in work-motivation interventions.

The value of the work environment correlation coefficient was indirect to the performance achievement in the intervention of work motivation of health workers with a t-statistical value of 2.831 and a p-value of 0.005. A T-statistic value of 2.831, greater than (>1.96), and a P-value of 0.005, less than (<0.05), indicates significance. Thus, H10 is accepted. It was concluded that there was a significant positive determination of the work environment on performance achievement in intervening in the work motivation of health workers at Puskesmas throughout Karimun Regency. Work motivation can also reflect the determination of the work environment to the performance achievements of health workers at health centers. If there is a significant determination of the work environment of health workers on the achievement of the work performance of health workers in Karimun Regency. Meanwhile, indirectly, there is also a significant determination of the work environment on performance achievements in intervening in health workers' motivation. This means that motivation is a partially intervening variable in determining the work environment variables for the performance achievement of health workers. Related to the problem of conditions in the field, in almost all existing health centers, there is no special room for rest and places of worship for health workers, as well as limited existing rooms; thus, some activities of health workers are sometimes carried out in the same room area as the area to provide services, which often causes discomfort for visitors and existing health service workers. Based on the results of this study, it can be said that even though there are these problems, the condition of the work motivation of health workers has been able to mediate or partially intervene, and the condition of the working environment of health workers has a significant impact on the level of performance achievement of health workers in Karimun Regency.

5. Conclusion

5.1 Conclusion

There was no significant positive determination of the level of education directly on the performance achievements of health workers in Karimun Regency. There is a significant positive determination of the level of education directly on the work motivation of health workers in Karimun Regency. There is a positive but not significant relationship between competence and the performance achievements of health workers in the Karimun Regency. There is a positive but not significant relationship between competence and work motivation of health workers in Karimun Regency. There is a significant positive relationship between the work environment and the achievement of health workers' work performance throughout the Karimun Regency.

There is a significant positive relationship between the work environment and the motivation of health workers in the Karimun Regency. There is a significant positive relationship between work motivation and the achievement of health workers' work performance throughout the Karimun Regency. Work motivation cannot reflect the level of education on the performance achievements of health workers at Puskesmas in Karimun Regency. Work motivation cannot reflect the determination of competence in the performance of health workers in Puskesmas throughout Karimun Regency. Work motivation is able to reflect the determination of the work environment on the performance achievements of health workers at Puskesmas throughout Karimun Regency. as a partially intervening variable

5.2 Suggestion

The Heads of Health Centers throughout the Karimun Regency are recommended to:

1. The level of formal education, skills, operational and technical mastery, cooperation, loyalty, discipline, and responsibility should be optimized according to the role of health workers.
2. Optimizing skills, knowledge of initiatives to learn, trying new things, the ability to find the root cause of problems, taking corrective actions and solutions, and being able to respond kindly and politely are all part of the work of health workers.
3. Continuing to improve the conditions of comfortable and safe workplace buildings, which are supported by proper resting and worship facilities, and ensuring that the relationship between members and the chairman and leadership elements is always conducive to achieving work targets is recommended.
4. Ensuring the fulfillment of the basic needs of health workers related to their roles and functions as health workers, which can motivate the optimization of formal education levels, skills, operational and technical mastery as well as to work together, be loyal, disciplined and responsible in line with the roles of their respective health workers
5. Ensuring the fulfillment of the basic needs of health workers related to their roles and functions as health workers, which can motivate the improvement of skills, knowledge, initiative to learn, try new things, the ability to find the root cause of problems, take corrective actions and solutions, and be able to respond in a friendly and polite manner as part of the work of health workers in accordance with the role of each health worker in improving the performance achievements of the employees themselves and the performance of the Puskesmas as a whole
6. Ensuring that there is an improvement in the condition of the workplace building so that it is comfortable and safe, there is support for proper resting and worship facilities, and ensuring that the relationship between members and the chairman and leadership elements is always conducive to achieving work targets. This is in line with the basic needs of health workers related to their roles and functions as health workers, each of which will improve the performance achievements of the employees themselves and the performance of the Puskesmas as a whole.

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