HRM in VHE: Leadership, Employee Engagement and Work Environment

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Article Info

Abstract

Human Resource Management (HRM) is the key to the failure or success of educational institutions. The three main factors that influence HRM at Poltekpel Sumbar are leadership, employee engagement and work environment. The purpose of this study is to see the relationship between these four factors including leadership, work environment, employee engagement and HRM at Poltekpel Sumbar. This study was conducted at Merchant Marine Polytechnic of West Sumatera. The research participants were all employees with a total of 154 people. The research instrument was a questionnaire. Data collection was carried out by giving questionnaires directly to the participants. The questionnaire data analysis technique was carried out using linear regression. The conclusion of this study indicated that there is a significant influence of leadership on HRM, employee engagement on HRM, employee engagement on the work environment, and leadership on the work environment. Meanwhile, there is no significant influence of the work environment on HRM and leadership on employee engagement. Further research can also examine in more depth other research variables related to HRM in all vocational higher education institution under the Ministry of Transportation, namely in the maritime, land and railway and aviation institution.

Introduction

The success determinant of an organization, whether a company or an educational institution, is Human Resource Management (HRM). Although material resources, such as infrastructure and facilities also support the success of an institution, human resources are more supportive (Mohamed et al., 2024). This is due to humans are the main actors and drivers of an organization. With a better HRM, the success of an organization will be easily achieved (Mutter, 2023). Therefore, organizing activities in an organization is the same as managing the human actors effectively.

Vocational Higher Education (VHE) is an educational institution that produces graduates who are ready to work in the workplace. In Indonesia today, VHE is an institution that interesting by high school graduates, because it helps them get jobs quickly after graduating from this college (Espinoza & Speckesser, 2022). Globally, it is also recognized that VHE is the government's way of implementing a world economic equality system with access through education (Schmees et al., 2024). In other words, the younger generation is expected to have technical competence according to the demands of the workplace and industry by continuing their studies in vocational higher institution.

Merchant Marine Polytechnic of West Sumatera, hereinafter referred to as Poltekpel Sumbar, is one of the VHE in the maritime sector. Poltekpel Sumbar is a higher education institution under the regulation of Transportation Human Resources Development Agency under the auspices Ministry of Transportation (Abduh et al., 2022). There are three study programs provided at Poltekpel Sumbar, namely Nautical Studies, Nautical Technology, and Sea Transportation (Mashartanto et al., 2024). The Nautical Studies Study Program prepares graduates with competencies in the field of ship deck department (Siska, et al., 2024). The Nautical Technology study program prepares graduates with competencies in the field of ship engine department (Irwan, et al., 2024). Meanwhile, the Sea Transportation study program prepares graduates with competencies in the fields of ports and logistics (Siska, et al., 2024).

In this study, Poltekpel Sumbar was used as the focus of the research because it is the youngest VHE institution under the Ministry of Transportation. Because it is still a "baby", there are many things that are highlighted in the evaluation, especially in terms of HRM. There are several unique problems or challenges in the application of HRM in the context of VHE. First, the lecturers' competence is still not relevant to industry needs. The focus of teaching in VHE is identical to technical skills (70%) and theory (30%), but current industry needs also demand technology and digital skills. This is common in all VHE, because there are still many lecturers who have not mastered digital and technology skills as expected by the industrial world (Cruz & Saunders-Smits, 2022). Another problem is the limited training and ongoing certification programs for HRM (Lewis, 2023). Based on educational background, Poltekpel Sumbar lecturers are divided into 2 groups: academics and practitioners.

Academics are lecturers who come from general universities, while practitioners are lecturers who come from shipping institutions who have a lot of experience in the shipping field. With this different background, a training program is needed for Poltekpel Sumbar HRM to be relevant to the educational program for shipping sector and in accordance with the needs of the shipping industry. In addition, the imbalance in the workload of HRM in VHE under the Ministry of Transportation is also an obstacle to HRM. This has become a common issue, because almost all employees have dual positions with multiple jobs (Böckelmann et al., 2022). For example, in the case of lecturers at Poltekpel Sumbar, besides carrying out functional duties and the Tri Dharma of Higher Education, lecturers also have other structural duties, such as being the head of a work unit. In fact, these administrative tasks are more than the main tasks of a lecturer. The

discussion of this research will be a case study of the challenges and opportunities for HRM in the context of VHE, especially under the Ministry of Transportation.

Managing human resources in a VHE institution is different from a general university, because it prioritizes performance and competence over general knowledge (Farran & Nunez, 2024). Therefore, the treatment and management of educators at this VHE prioritizes their competence and internal motivation. Factors that support HRM in VHE generally include work environment, organizational culture, organizational innovation (Tripathi & Kalia, 2024), the role of leadership supervision, employee engagement (Alam et al., 2024), leadership, work environment, (Berthelsen et al., 2023), leadership dimensions, employee performance, employee engagement, effective leadership, organizational culture (Bhardwaj, 2022), social relations (Ejiofo et al., 2023), digital technology orientation (Allgood & Musgrave, 2024), green innovation and risk management (Correia et al., 2024).

From several previous studies above, the researchers conducted an initial survey to see the main factors that influence HRM at Poltekpel Sumbar. This survey was conducted on all employees in Poltekpel Sumbar. From the survey results, data was obtained that there were 3 main factors that influenced HRM at Poltekpel Sumbar. The results of the initial survey of this research can be seen in Figure 1.

Figure 1. Factors Affecting HRM at Poltekpel Sumbar 2024
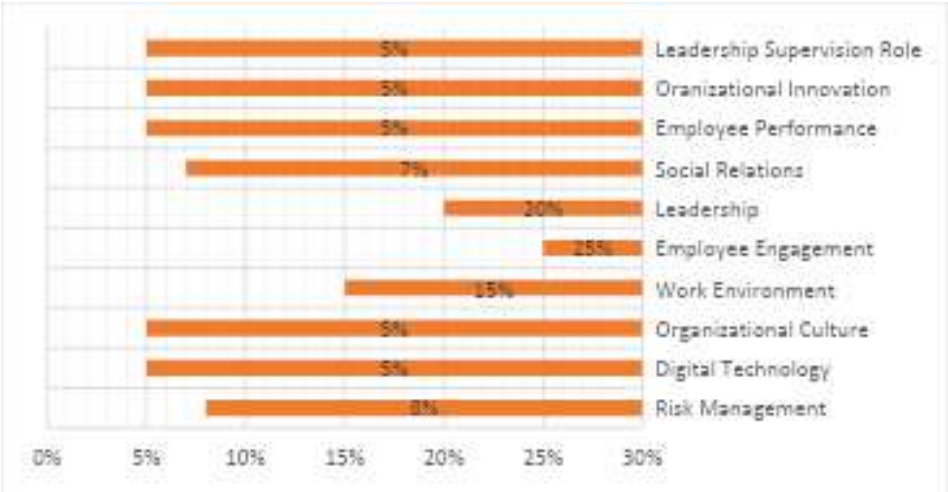
Source: Initial research , 2024

Based on the data above, it can be stated that of the ten factors that affect HRM, there are three main factors that greatly affect HRM at Poltekpel Sumbar, namely employee engagement (25%), leadership (20%), and work environment (15%). Other factors such as the role of leadership supervision, organizational innovation, organizational culture, employee performance, social relations, digital technology and risk management affect HRM below 10%. Therefore, this is the basis for this study.

The purpose of this study is to see the relationship between the four factors including leadership, work environment, employee engagement and HRM at Poltekpel Sumbar. The novelty of this study is that the four research variables have never been seen in relation to each other in previous studies. This is important to discuss, to be a concern for institutional leaders in the future to see what factors need to be improved so that the VHE institution can achieve its educational targets and goals.

Review of Literature

Vocational Higher Education

Vocational Higher Education (VHE), also known as Vocational College, can be defined as an educational institution that focuses on producing graduates that has technical skills and professional competencies according to the field of work they are interested in (Salzmann et al., 2024). VHE provides educational and training programs to change students' behavior and change the learning environment towards the competencies desired by the industrial world (Weijers et al., 2024). Vocational campuses are also characterized by adjusting the learning curriculum to industry competencies (Zhou et al., 2024). VHE was formed to overcome social inequality caused by universities in general, which only select students based on knowledge aspects, while what is more needed by the workplace and industry nowadays are graduates who are formed according to their interests and talents so that they become workforce experts in the field (Yoana et al., 2024).

Human Resource Management

In 1980, Human Resource Management was known as personnel management related to employment in an organization, as well as the systematic creation and development of the workforce according to the organization's targets (Al Harrasi et al., 2024). Human Resource Management, abbreviated as HRM, views humans as the main determinant of the success or failure from an organization, because humans are the driving workforce of the organization (Hampel & Hajduova, 2023). HRM shows how leaders manage humans according to organizational policies for the sustainability of the organization (Huang et al., 2024). HRM aims to create organizational practices in accordance with employee work behavior that is service-based so that all matters become easy and enjoyable for both internal and external organizations (Vuong, 2022).

Leadership

The term leadership refers to the efforts of leaders to encourage the formation of work culture and company performance (Han & Papa, 2024). Leadership does not mean that "someone is great" and prioritizes "strength and authority" so that it makes "power syndrome", but rather rational and humanistic actions needed by the organization by prioritizing common interests (Moore et al., 2023). Leadership means delegating authority to someone by paying attention to the rights and welfare of subordinates through exemplary behavior and providing inspiration (Rohim et al., 2023). Theoretically, leadership can be defined as a strategic action carried out by a person or group of people who become "decision makers" in an institution to strengthen the role of the institution in carrying out planned activities (Borg & Finne, 2024).

Employee Engagement

Employee Engagement (EE) is an action shown by each employee to be actively involved in every activity planned by the leadership of the institution (Duong & Phan, 2024). EE in this study is defined as a positive situation and condition given by employees to provide satisfactory results at work (Ravhudzulo & Eresia-Eke, 2024). Positive employee engagement is reflected by the behavior of employees who are enthusiastic, highly dedicated to aspects of behavioral engagement, cognitive engagement and affective engagement in main tasks and institutions (Mubashar et al., 2022). Positive and solution-oriented employee engagement to the problems of

an organization can be formed through a positive organizational culture, competency training programs, as well as collaborative and democratic leadership (Rožman et al., 2023).

Work Environment

Work environment is defined as the condition of the place and location of work that is deliberately formed and created to facilitate employees in working (Moody et al., 2023). In this study, the work environment includes the internal situation and conditions of the organization, in the form of objects and humans in the workplace (Jensen et al., 2021). The work environment shows the physical and psychological conditions of the workplace. These physical conditions are tangible assets, while psychological conditions are the level of employee comfort in the workplace (Wagdi & Sayed, 2023). The work environment in an institution includes office buildings, classrooms, laboratories and simulators, work rooms, and other rooms that facilitate workers to gather and do their jobs (Markkanen & Herneoja, 2024).

Leadership, Employee Engagement, and Work Environment to HRM in VHE

Leadership belongs to determining factor in HRM in VHE. Mynbayeva et al., (2024) stated that HRM in VHE is highly dependent on leadership policies, due to the strong hierarchical culture. A leader will influence the extortion, training, career development and welfare of employees. Then, the employee engagement factor in VHE also plays an important role in increasing the effectiveness of HRM. Employee engagement includes employee commitment, cognitive, behavior and contribution to the organization (Koeswayo et al., 2024). With the employees who are actively involved, provide solution ideas, and are able to make a good team-work, it will be easier to build an effective HRM in VHE. Furthermore, the work environment also plays an important role in HRM. In VHE, a hierarchical work environment, but conducive in terms of physical, psychological and cultural aspects will increase employee productivity and creativity (Sofyan et al., 2023).

Based on the conceptual theoretical framework above, the development of the hypothesis in this study is as below:

H1: There is a significant influence of leadership on HRM

H2: There is a significant influence of employee engagement on HRM

H3: There is a significant influence of the work environment on HRM

H4: There is a significant influence of leadership on employee engagement

H5: There is a significant influence of employee engagement on the work environment

H6: There is a significant influence of leadership on the work environment

Research Method

This research is a quantitative research by using a comparative method. The research location is at the Merchant Marine Polytechnic of West Sumatera and uses all employees as participants in this research. The total participants is 154 people and its demography can be seen in table 1. The research sample consists of questionnaire trial sample and research sample. The selection of the trial sample was carried out using a percentage technique, namely taking 23% of the total number of research samples. Thus, the number of trial samples was 34 people and it was confirmed that they could represent the trial sample (Mengistu et al., 2023). Then, the selection of the research sample was carried out using a total sampling technique, namely taking all

samples other than the trial sample. Thus, the number of research samples was 120 people and it could ensure the validity of the research results.

Table 1. Participants Demography

Status	Total Number	Trial Sample 23%	Research Participants
Civil Servant	80	18	62
Government Employee with Employment Agreement	11	2	9
Non-Civil Servant Government Employee	63	14	49
Total	154	34	120

The research instrument is a questionnaire about HRM, work environment, employee engagement and leadership. Data collection technique is by giving questionnaires directly to participants. The data analysis technique is by using the T-test (Independent-Sample). The independent sample t-test is very relevant for research that aims to compare the average between two independent data groups, as long as the data characteristics meet the assumptions of this test (Disasa & Teshome, 2021). Before given to the research sample, a trial questionnaire was conducted on 34 trial samples. The trial questionnaire can be seen in table 2.

Table 2. Trial Questionnaire

No.	Variable	Indicator	Description	Code
1	Human Resource Management (Akwei & Nwachukwu, 2023; Meijerink et al., 2021; Rashid et al., 2023)	Employee Empowerment	The institution provide job-related training	HRM1
			The institution provide personal development program	HRM2
			The institution manage the compensation for workforce	HRM3
			The director gives performance appraisal for workers	HRM4
		Knowledge Sharing	The institution organizes focus group discussion	HRM5
			The institution manages competence training program for workers	HRM6
			The institution arranges job rotation among staff	HRM7
			The institution organizes knowledge sharing through social media	HRM8
		HRM Practices	The institution apply selective recruitment	HRM9
			The institution conduct main competitive strategies	HRM10
			The institution implement workplace autonomy	HRM11
			The institution implement worktime autonomy	HRM12
2	Leadership (Shetty et al., 2022; Dahlan, 2023)	Wisdom	The director cares about my well being	LS1
			The director cares about my work satisfaction	LS2
			The director guides me to do my job well	LS3

			The director applied servant leadership	LS4
		Hard Skills	The director has good organizational stewardship	LS5
			The director has dilligence, faithfulness, and innovativeness	LS6
			The director motivates me in working and makes my job interesting	LS7
			The director has good commitment for organization	LS8
		Soft Skills	The director has persuasive leadership	LS9
			The director has democratic leadership	LS10
			The director has an effective communication skill	LS11
			The director is emotionally good	LS12
3	Employee Engagement (Kulachai, 2024; Davis & Southey, 2024)	Self-Engagement	I work hard to achieve goals	EE1
			I focus on my job list	EE2
			I pay very attention to my work	EE3
			I feel positive in doing my job	EE4
		Work Engagement	I am enthusiastic in working	EE5
			I can do my work alone	EE6
			I can make better result for institution	EE7
			I am easy to understand my leaders' instruction	EE8
		Social Engagement	I share positive vibes on working with my colleagues	EE9
			I share strong job commitment with my colleagues	EE10
			I discuss the work goals with my colleagues	EE11
			I can be a good member in the teamwork	EE12
4	Work Environment (Ageel & Shbeer, 2022; Bergefurt et al., 2023)	Workforce	I can be my self in working and develop my personal characteristics	WE1
			I have good mental health for working	WE2
			I have good communication skill in working	WE3
			I can built true collaboration	WE4
		Workplace	This institution is like home-workspace characteristics	WE5
			The institution placed staff properly	WE6
			The management has an effective decision-making	WE7
			This institution build meaningful recognition	WE8
		Situation & Condition	My surroundings maintains good communication in working	WE9
			My surroundings respects each other	WE10
			This institution organizes zero tolerance for disrespect and abuse	WE11
			This institution spread positive vibes for workers	WE12

Source: Research Developed Questionnaire

From the table above, it can be explained that the trial questionnaire consists of 48 items which were developed from 4 research variables. In other words, each research variable has 12 questionnaire items.

Results

Before conducting the T-test, the researcher tested the validity and reliability of the research trial questionnaire. Table 3 below presents the results of the validity and reliability test of the questionnaire using the SPSS application.

Table 3. Prerequisite Test Results

Validity				Reliability	
Variable	Code	Pearson Correlation	Result	Cronbach's Alpha	Result
Human Resource Management (HRM)	HRM1	0.474	V		
	HRM2	0.422	V		
	HRM3	0.871	V		
	HRM4	0.878	V		
	HRM5	0.873	V		
	HRM6	0.875	V		
	HRM7	0.535	V	0.870	Reliable
	HRM8	-0.005	InV		
	HRM9	0.297	InV		
	HRM10	0.619	V		
	HRM11	0.685	V		
	HRM12	0.656	V		
Leadership (LS)	LS1	0.532	V		
	LS2	0.869	V		
	LS3	0.394	V		
	LS4	0.826	V		
	LS5	0.769	V		
	LS6	0.349	V		
	LS7	0.785	V	0.866	Reliable
	LS8	0.403	V		
	LS9	0.516	V		
	LS10	0.440	V		
	LS11	0.492	V		
	LS12	0.502	V		
Employee Engagement (EE)	EE1	0.854	V		
	EE2	0.875	V		
	EE3	0.498	V		
	EE4	0.908	V		
	EE5	0.829	V		
	EE6	0.590	V	0.957	Reliable
	EE7	0.804	V		
	EE8	0.916	V		
	EE9	0.784	V		
	EE10	0.780	V		
	EE11	0.890	V		
	EE12	0.921	V		
Work Environment (WE)	WE1	0.891	V		
	WE2	0.834	V		
	WE3	0.859	V		
	WE4	0.859	V		

WE5	0.812	V			
WE6	0.926	V		0.922	Reliable
WE7	0.672	V			
WE8	0.875	V			
WE9	0.667	V			
WE10	0.026	InV			
WE11	0.033	InV			
WE12	0.736	V			

Source: SPSS Result

From the SPSS processing result above, the valid and reliable questionnaire items used for the research are explained in Table 4.

Table 4. The Research Questionnaire

No.	Variable	Initial Questionnaire	Valid and Reliable Questionnaire
1	Leadership (X1)	12	12
2	Employee Engagement (X2)	12	12
3	Work Environment (X3)	12	10
4	Human Resource Management (Y)	12	10

Source: Data Analysis Result

From the table above, it can be stated that out of 48 trial questionnaire items, only 44 items are valid and can be used as a research questionnaire. Valid and reliable research questionnaires were then given to 120 samples. After collecting the questionnaire data, it was continued with a data normality test which is the main requirement for the T-test to be carried out. The results are described in table 5.

Table 5. Normality Data

No.	Variable	Shapiro-Wilk Criteria	Shapiro-Wilk Significance	Result
1	Leadership (X1)	> 0.05	0.123	Normal Data
2	Employee Engagement (X2)	> 0.05	0.133	Normal Data
3	Work Environment (X3)	> 0.05	0.067	Normal Data
4	Human Resource Management (Y)	> 0.05	0.158	Normal Data

Source: SPSS Result

Table 5 explains that all the data from the research questionnaire are normally distributed. This is indicated by a significance value greater than 0.05. After the normality of the data is tested, a T-test can be conducted. The results of the T-test can be seen in table 6.

Table 6. Independent Sample T-Test Result

No.	Hypothesis Testing	t-table	t-value	Significance Criteria	Significance Value	Result
1	X1 →Y	1.66	11.410	< 0.05	0.000	Accept H1
2	X2 →Y	1.66	11.683	< 0.05	0.000	Accept H2
3	X3 →Y	1.66	-1.142	< 0.05	0.255	Reject H3
4	X1 →X2	1.66	0.094	< 0.05	0.925	Reject H3
5	X2 →X3	1.66	11.704	< 0.05	0.000	Accept H5
6	X1 →X3	1.66	11.480	< 0.05	0.000	Accept H6

Source: SPSS Result

From table 6, it can be explained that the testing of research hypothesis can be seen from two categories, namely by looking at the t-value and the significance value. In order for the research hypothesis to be accepted, the t-value must be greater than the t-table, then the significance value must be less than 0.05.

Thus, the results of the research hypothesis testing can be described as follows:

H1: There is a significant influence of leadership on HRM

H2: There is a significant influence of employee engagement on HRM

H3: There is no significant influence of the work environment on HRM

H4: There is no significant influence of leadership on employee engagement

H5: There is a significant influence of employee engagement on the work environment

H6: There is a significant influence of leadership on the work environment

Discussion

Based on the results of the study, it can be stated that hypothesis 1 is accepted, in other words there is a significant influence of leadership on HRM. This is because the leader of the institution is the policy maker in HRM. Employees will develop according to the organizational pattern applied by the leader (Hansen et al., 2021). The director's transformational leadership style will also bring changes in forming employees who are literate about change, especially with current digital developments (Metaferia et al., 2023). The policy of Poltekpel Sumbar Director in implementing character education through humanistic parenting patterns and classroom learning is one way to form character-based human resources (Kurniawan, 2024). In other words, if the leader has strong character and committed to the organization, then HRM will be effective and workers will also provide satisfactory results.

Hypothesis 2 is also accepted, namely there is a significant influence of employee engagement on HRM. Employee engagement with positive personality will create green HRM practices, namely green employee activity and green behavior patterns in the workplace (Ababneh, 2021). The use of the term "green" here refers to all the good things that are expected by the organization. Employee engagement will determine the success or failure of HRM practices, because employees will create the best approach to initiating organizational innovation (Knox & Marin-Cadavid, 2023). Prabowo & Yumna (2023) explained that the involvement of Poltekpel Sumbar employees in every policy implemented by the leadership will show employee performance and will have an indirect impact on the implementation of HRM at Poltekpel Sumbar.

The results of the data calculation state that hypothesis 3 is rejected, thus it can be concluded that there is no significant influence of the work environment on HRM. Based on the assumption, this is due to Poltekpel Sumbar work environment is felt to be inflexible by its employees (Lee et al., 2024). Another assumption is that the work environment at Poltekpel Sumbar creates stress for its workers, both in terms of the people in it and from inadequate facilities (Mozgovoy, 2022). A work environment that is not conducive to employees, such as a negative social culture, excessive punishment, and the absence of a reward system from the leadership will hamper the implementation of HRM (Mbare, 2023). This is in line with the research concept of Al Doghan et al., (2024) which states that the current HRM practices globally is to align HRM with the organizational environment known as green HRM. Thus, this result assumed that green HRM has not been implemented or applied properly at Poltekpel Sumbar.

Another contextual factor that causes the work environment not affect HRM in VHE is a work culture that tends to be hierarchical (Lau et al., 2024). Hierarchical culture will cause employees to focus only on regulations and compliance, but lack innovation and creativity, which will cause HR to be less effective for the institution. Then, methodological limitations can also cause this hypothesis to be rejected, such as the non-comprehensive measurement of the work environment from the questionnaire developed. In addition, it is assumed that there are other uncontrolled or more dominant variables which influence HRM in VHE, such as leadership and employee involvement (Townsend & Loudoun, 2024).

Then, hypothesis 4 of this study was also not accepted, which means that there is no significant influence of leadership on employee engagement. This is in line with the opinion of Meijerink, Boons, et al., (2021) which states that instead of using the power of a leader to control employee behavior to be actively involved in organizational work, digital HRM can do it with digital control without physical supervision. At Poltekpel Sumbar, the implementation of digital HRM can be exemplified by the use of fingerprints for employee attendance, the use of digital applications to check the attendance of employee in morning briefings and work coordination through WhatsApp groups. This is in contrast to the results of research from Pass & Ridgway

(2022) which states that leadership is the main factor that will be the liaison between employees and institutions, so that leaders will determine whether employees can be directly involved in organizational activities. In the context of this study, the leadership factor does not affect employee engagement, which can occur because of employee perceptions of leaders and their leadership styles. This is a recommendation for further research by outlining the causes of this.

The factor of leadership at Poltekpel Sumbar does not affect employee engagement in HRM practices contextually can be caused by several things. First, a centralistic organizational culture and a more administrative role for leaders cause employees to be afraid of being involved in many institutional activities (Beresford-Dey et al., 2024). This causes interpersonal relationships between employees and leaders to be disharmonious and less communicative. In addition, employee perceptions of leaders also determine their involvement in institutional activities (Shi et al., 2024). Leadership that is only "a mask" without showing real performance and has less positive impact on employee career development will bring bad perceptions from employees and reduce their involvement in organizational activities. Another methodological factor that causes leadership not affect employee involvement is the subjectivity of research respondents who have a biased perception of leadership at Poltekpel Sumbar (Sun et al., 2023).

Hypothesis 5 of the study is accepted, which means that there is a significant influence of employee engagement on the work environment. A conducive and solution-oriented work environment will create healthy employee psychology, so that employees will be actively involved in every work task given by the leadership (Martins & Lucas, 2021). According to Meese et al., (2024), the work environment is what makes employees involved in a work project and makes cooperation between employees meaningful. Active, creative and innovative employees will create a positive, conducive and solution-oriented work environment (Zeeshan et al., 2021). Employee engagement that shows high work enthusiasm, high motivation, strong dedication and a satisfying role will spread good habits to the surrounding environment (Alam et al., 2021).

Furthermore, hypothesis 6 of this study is accepted, it means that there is a significant influence of leadership on the work environment. Irwan, et al., (2024) explained that leadership factors influence and are influenced by many aspects including educational patterns in the institutional environment and the self-efficacy of each individual in the organizational area. Effective leadership for an institution is not determined by skin color, place of origin, academic title, corps or group, but how a leader carries himself so that he is accepted in the workplace (González-Doğan, 2021). A good work environment is formed by the work behavior of a leader and the policies he makes as a decision maker (Ahmed et al., 2022).

The results of this research contribute to the broader understanding of HRM in VHE. Leadership factor need to be considered by Poltekpel Sumbar, because they have a significant contribution to employee development, namely as strategic directors, empowerment and innovation, and the formation of a positive organizational culture. Employee engagement factor will create intrinsic motivation and job satisfaction from employees which will automatically build collaboration and synergy from employees by increasing competence and performance. Work environment factors will also contribute to form green HRM in Poltekpel Sumbar in terms of providing adequate facilities and infrastructure, balancing work with welfare, and optimizing psychological health in the institutional environment. The relevance and implications of this research for the future are to be the basis for Poltekpel Sumbar in order to build adaptation to the global change by maximizing sustainable HRM. In addition, Poltekpel Sumbar focuses on developing competent HR by collaborating with the industrial world which leads up to digitalization and automation.

Conclusion

The conclusion of this study is that there is a significant influence of leadership on HRM, employee engagement on HRM, employee engagement on the work environment, and leadership on the work environment. Meanwhile, there is no significant influence of the work environment on HRM and leadership on employee engagement. This study limitation is it was only conducted on Poltekpel Sumbar employees, so it is conducted only in one place. Another limitation lies in the research method which only uses the quantitative method with the T-test. As a recommendation for further research, qualitative research is suggested to be carried out by examining in more depth the factors that related with HRM. Further research can also examine in more depth other research variables related to HRM in all VHE under the Ministry of Transportation, namely in the maritime, land and railway, as well as aviation sectors.

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