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# Work-life balance, Green Human Resource Management, and employee performance: Empirical study of a Malaysian service company

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**Abstract:** Green Human Resource Management (HRM) is considered an emerging field of management that evaluates and ensures green performance and outcomes in organizations. In today's dynamic business environment, work-life balance has become one of the key issues faced by many employees all over the world. Maintaining work-life balance is an issue increasingly recognized as of strategic importance to the organization and significance to employees. In doing so, the present study introduced independent and dependent variables to explain the underlying mechanisms of green HRM and work-life balance and its impact on employee performance. A total of 90 employees of the calibration services company have completed a set of questionnaires through Google Forms to provide data for the analysis. This study is using census method as one of the best probability sampling techniques to be used it's a systematic method that collects and records the data about the members of the population and is suitable when the case-intensive study is required or the area is limited. This study has adopted the quantitative method in this research as the method allows the researcher to focus on the research. The data were analyzed through SPSS which facilitates descriptive statistics, correlation, and multiple regressions. Multiple regression analysis was used to test the hypotheses in this research. The findings showed that green HRM and work-life balance were the significant variables influencing employee performance in the study. In addition, the significance of the study included providing new knowledge from the theoretical perspective, obtaining a better understanding of the importance of green HRM and work-life balance from the perspective of employee performance, and contributing to the efforts made by the government to improve the probability of green culture in organizational and balancing professional life and family life employment of employees through policies from the perspective of the government. Lastly, recommendations for employers, employees, government, and future research are made to improve employee performance.

**Keywords:** green HRM; work-life balance; employee performance; calibration service company

## 1. Introduction

Employee performance refers to the outcome of an employee's job, encompassing both the quality and quantity of their achievements in fulfilling their given activities and responsibilities. This outcome is influenced by factors such as the employee's abilities, experience, dedication, and time management (Kawiana et al., 2018). Furthermore, employee performance refers to the outcome of an individual or a collective effort to enhance the functioning of an organization. Attaining exceptional performance necessitates the strategic involvement of employees as active participants in all organizational endeavours (Carvalho et al., 2020). In their study, Mangaleswaran and Thevanes (2018) found that organizations

are prioritising the implementation of various high-performance employee connection measures and action plans to enhance performance. They also identified work-life balance (WLB) as a crucial instrument in achieving this goal. Historically, human resource practitioners have typically focused on enhancing performance by assessing past performance and providing incentives in return for enhanced performance. However, this fails to account for the inherent interests of the personnel who perform the tasks; hence, it is no longer adequate. Currently, organizational policies are designed to establish a favourable atmosphere for enhancing employee motivation, utilising both internal and external methods, to enhance and augmenting performance. WLB does not signify a state of equilibrium. WLB refers to the complex interplay between many domains of an individual's life, and the consequences of achieving or lacking balance in this regard can have wide-ranging impacts on society at multiple levels (Kishore and Roopavathi, 2020). Johari et al. (2018) substantiate that individuals who are unable to maintain precise equilibrium and exert better control would experience a depletion of energy and an excessive effort. The imbalance leads to the existence of fatigue and poor performance, so further diminishing the quality of life.

Green Human Resource Management, also known as green HRM, encompasses a range of HRM techniques implemented by organizations to enhance the environmental performance of their employees in the workplace (Shen et al., 2018). Green HRM practices encompass several strategies such as evaluating a candidate's environmental values during the recruitment and selection process, providing green awareness and skills training, taking into account an employee's environmentally friendly behaviour when granting promotions and compensation, and conducting performance reviews (Shen et al. 2018). Environmental human resources practices, also known as green HRM, aim to improve HRM by integrating environmental awareness into the entire HRM process, including recruitment, training, rewards, and development. This approach seeks to cultivate a green workforce that appreciates and prioritises environmentally friendly values, practices, and initiatives, ultimately leading to increased organizational efficiency and environmental protection (Ain et al., 2022). The concept of green HRM seeks to combine conventional HRM techniques with environmental management (Khan et al., 2019). Green HRM practices aim to establish organizations that improve environmental management, provide training in innovation and development, and offer incentives and compensation to promote environmental performance. Green HRM approaches aim to convert ordinary employees into environmentally conscious workers, aligning with the organization's environmental objectives and ultimately making significant contributions to environmental sustainability (Khalid et al., 2021).

In today's dynamic and uncertain business environment associated with the rapid globalization era, the inability to balance work and life is one of the problems which affects employee performance. In the services industry, employees face immense pressure due to a substantial workload. Consequently, individuals frequently prioritise their professional obligations, resulting in a reduced amount of time dedicated to their families. These challenges have emerged due to an imbalance in meeting the demands of work and personal life. Moreover, it has sparked a discourse regarding the significance of maintaining a healthy equilibrium between

work and personal life, and its potential impact on employee productivity within the professional environment. Work-life balance refers to the equilibrium between the distinct responsibilities undertaken by an individual in their professional capacity and their personal life, ensuring overall life contentment (Bataineh, 2019). Work-life balance significantly affects employee performance by including their professional responsibilities as well. Work-life balance offers dual benefits by enhancing both the efficiency of the organization and the well-being of its employees. Furthermore, being environmentally conscious implies that the employees possess a heightened awareness and conscientiousness towards sustainability. Embracing a green mindset is a challenge for the employees. Employees lack awareness of the presence of a sustainable environment as a result of high work demands and the focus on meeting predetermined goals. During working hours, employees demonstrate a lack of accountability and awareness regarding environmental conservation.

While numerous organizations conduct various induction programmes for newly recruited employees, they solely focus on imparting information about their job roles and responsibilities, neglecting to raise awareness about the imperative of safeguarding and conserving the environment. Therefore, this study is conducted to identify the effects of green HRM and work-life balance towards employee performance and one of the calibration service companies in the state of Selangor, Malaysia was selected to be empirically analysed. The company was selected based on its extensive experience in serving over 7000 clients both domestically and internationally, utilising its calibration solutions across various industries including automotive, aviation, engineering, metal and mining, energy, telecommunication, oil and gas, petrochemical, pharmaceutical, pulp and paper, food and beverage, hospital, government bodies and hotels, among others. Additionally, there is a need for green practices as most of the staff are involved in giving technical consultation and at the same time have a heavy workload in fulfilling the highest standards of accuracy and precision that could affect their non-work lives.

## **2. Literature review**

### **2.1. Employee performance**

An employee's performance will be optimal when they possess exceptional abilities, a strong work ethic, receive a satisfactory compensation, and maintain a positive outlook for the future (Al Rashdi, 2020). Performance is a widely used concept in management, where it is also defined in relation to work outcomes and achievements. An employee's performance will be optimal when they possess a combination of advanced talents, a strong work ethic, a satisfactory compensation package, and a positive outlook on their prospects (Manzoor et al., 2020). According to Correia et al. (2020), performance refers to the achievement of desired outcomes in a certain job function or activity within a given timeframe. Handayani et al. (2020) added employee performance is determined by the level of quality and quantity of work accomplished by an individual in fulfilling their given obligations. Appraisal is employed to assess the degree to which the organization's objectives have been accomplished within the specified timeframe set by the company.

## **2.2. Green HRM**

Opatha (2019) has categorised sustainable HRM into three distinct sub-branches: Green HRM, which focuses on environmental concerns; Social HRM, which addresses societal issues; and Economic HRM, which deals with aspects relating to profitability. Opatha (2019) explains that green HRM encompasses various essential components, including the green responsibilities of employees, green functions of HRM, green attitude and behaviour, and green job performance. According to Bombiak (2018), green HRM aims to facilitate environmentally friendly activities within organizations. Moreover, green HRM incorporates environmental goals into its strategic objectives. Examining the environmental factors of operating within an organization is a substantial shift that helps to a more comprehensive approach to sustainability in Human Resource Management. Contemporary literature examines the training of employees as a means to enhance environmental attitudes (Saeed, 2018). Integrating conservation-focused efforts into people management facilitates the broader promotion of environmental sustainability in organizations. Green HRM is an interdisciplinary approach to employee management that aims to promote the accomplishment of environmental goals in the workplace via the utilisation of various technologies (Iddagoda, 2021). Research on green HRM has thrived in recent years, with studies conducted in several industries including tourism and hospitality (Luu, 2017), information technology (Ojo and Raman, 2019), and the automobile industry (Chaudhary, 2019). Pham et al. (2019) conducted a current literature evaluation, which confirmed the necessity for further investigation in various service sectors. Within the limited body of research, Fawehinmi et al. (2020) discovered that the implementation of Green Human Resource Management (HRM) leads to an increase in environmentally friendly behaviours among academic employees. This effect is mediated by the employees' environmental knowledge. Similarly, Gilal et al. (2019) emphasised the importance of incorporating green behaviours of employees into the management practices of higher education organizations. Doing so is crucial for improving the organizations' financial and environmental performance, as well as fostering employee commitment.

## **2.3. Green HRM and employee performance**

The concept of a green company has become popular in the globalization era. At the corporate level, each company competes for the development of organizational performance indicators and employee performance that are aligned with the vision, missions, goals, and trend development of environmentally friendly demand. The paradigm shift from economic-based costing to green economic-based costing has caused many adjustments in organizations by creating performance measurements (employee behaviour) oriented to the formation of pro-environment employees. (Ariani et al., 2018). Nonetheless, no employee performance measurement policy based on employee management policy has been developed to support the implementation of an environmental management system. Poor business practices that disregard the concept of a green environment organization have a long-term negative impact on company adversity. As a result, the company begins to

implement an environmental management system to ensure its long-term survival. Furthermore, the implementation of environmentally friendly Human Resource Management (HRM) techniques not only impacts the supervisors' performance, but also contributes to employee engagement and the identification of viable solutions to environmental issues (Ogbu Edeh and Okwurume, 2019). Zhang et al. (2019) hypothesised that an employee's perception of an organization's green HRM practices may have a favourable impact on their green behaviour. Building upon prior research, the researcher can formulate the initial hypothesis, denoted as H1: There exists a statistically significant relationship between Green HRM and employee performance.

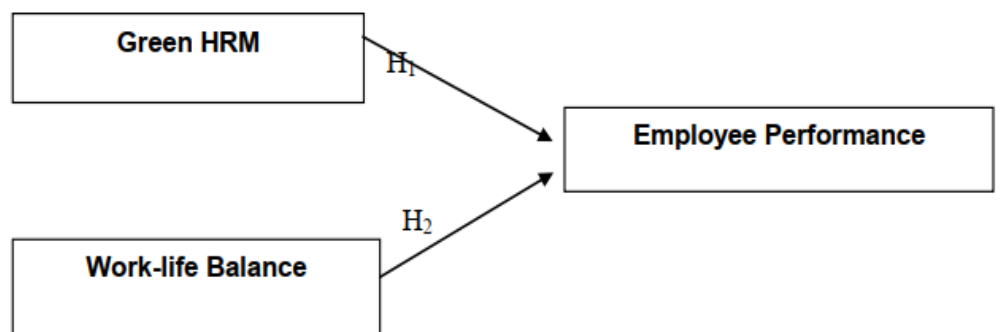
#### **2.4. Work-life balance**

An employee who adheres to employment norms is achieving a harmonious work-life balance. An employee is required to cultivate and preserve professional connections with colleagues, subordinates, customers, and clients within the organization. In contrast, family life encompasses an employee's familial obligations, including the care and responsibilities associated with their loved ones, such as children, parents, grandparents, and spouses, as well as their personal life outside of work (Iddagoda, 2021). The requirements of familial obligations differ greatly from those of professional responsibilities. According to the research, it is stated that to become a green employee, an individual must fulfil four specific responsibilities, including preservationist, conservationist, non-polluter, and maker. The researchers of this study hold the perspective that there are no discernible differences in behaviour patterns when individuals balance their family and work-life responsibilities (Opatha, 2019). The concept of 'work-life' encompasses a wider range of interests and activities beyond just the 'work-family' dynamic. It includes all aspects of life such as leisure, study, hobbies, recreation, travel, social interactions, community involvement, and personal interests. The phrase 'balance' can also refer to the state of harmony or equilibrium between two realms, such as work and non-work (Darakshan and Islam, 2014). According to Kossek et al. (2014), the perception of how well an employee balances their work and outside-of-work responsibilities will differ among individuals due to their unique characteristics. Conversely, the imbalance between work and personal life occurs when the demands of either work or personal responsibilities cause people to prioritise one over the other, leading to decreased productivity in the neglected area. Throughout one's life, the significance of work and family duties, and hence, life values, are expected to undergo shifts. Hence, work-life balance can be regarded as a measure of contentment with the degree to which individuals can align their current life values with their daily living. In addition, studies have confirmed its ability to distinguish between different concepts, such as work-life conflict and enrichment (Carlson, 2009).

#### **2.5. Work-life balance and employee performance**

Bataineh's (2019) research sought to examine the influence of work-life balance and workplace happiness on employee performance. The study found that both

work-life balance and happiness have a favourable and significant impact on employee performance. In Obiageli's (2015) study, the focus was on investigating the relationship between work-life balance and employee performance. The study aimed to assess the influence of leave on service provision and found that it enhances the employee's capacity. Additionally, the study highlighted the significance of work-life balance in boosting employee performance. The study conducted by Mendis and Weerakkody (2017) found a substantial positive correlation and influence of work-life balance on employee performance. Additionally, the study highlighted the significance of family and demographics in regulating variables to uphold a suitable work-life balance within organizations. The study conducted by Wong et al. (2020) emphasised the positive correlation between work-life balance ranking and employee performance. This correlation was evaluated based on six perspectives, namely job motivation, employee attendance, employee recruitment, employee retention, organizational commitment, and productivity. The factors that influenced the connection between work-life balance and organizational effectiveness include gender, sector, and employee hierarchy. Ali and Dissanayaka (2013) conducted a study that demonstrated a direct correlation between the performance of employees and their ability to maintain a healthy work-life balance. This study specifically focused on employees in seven apparel organizations located in Sri Lanka. Several studies have established a direct correlation between work-life balance and employee performance. The correlation between work-life balance and employee performance is a well-established topic in current literature, having been intensively studied for a significant period of time. Carlson (2009) suggests that individuals who are able to effectively manage their work-life balance can make significant contributions to their organizations. Consequently, it impacts their job performance. Building upon prior research, the researcher can formulate the initial hypothesis, denoted as H<sub>2</sub>: There exists a statistically significant relationship between work-life balance and employee performance. (see **Figure 1**)



**Figure 1.** Research framework.

### 3. Methodology

The type of investigation is correlation research of cross-sectional study using the questionnaire. Salkind (2014) shared that correlation research can identify the relationship between two or more variables which makes it suitable to be used in this research. Additionally, according to Almeida et al. (2018), quantitative research is

appropriate to use in research when there is the possibility of collecting variables with quantifiable measures as the research used formal instruments and structured procedures for data collection. The study setting for this study is non-contrived because the research was conducted in the natural environment where the respondent usually works. The total population for this research was 90 employees working in a selected Malaysian calibration services company located in the state of Selangor. The unit of analysis is the individual employee and census sampling was utilised to collect the data from all employees in the studied organization. This method is useful when case intensive study is required or the area is limited. The goal of this sampling technique is to generate a sample that signifies the population. The measurement of employee performance was adopted from Alalade and Oguntodu (2015). In addition, the measurement of independent variables of green HRM was constructed by Dumont et al. (2017) and Omar (2016) for work-life balance. The online questionnaire created in Google Forms was utilized for this study, and it was sent to all employees via WhatsApp and Telegram groups. The researcher distributed the questionnaire from the end of 27 May 2022 until the 01 July 2022. To analyze this data, the researcher used Statistical Packaging for Social Studies (SPSS) Version 25.

#### 4. Findings

No questionnaires were rejected or returned by the respondents during the collection process. The researcher selects the mandatory option for each question in Google Forms, therefore requiring the respondent to answer all questions to proceed with the questionnaire.

**Tables 1** and **2** disclose the demographic profiles of respondents and the summary of the mean and normality of each variable. Overall, all variables in this study were at high levels, indicating all employees had considered themselves to have high performance, high green HRM practices and high work-life balance as well, although, in terms of data normality, the variable of employee performance was quite high for the kurtosis.

**Table 1.** Demographic profiles.

Demographic Variables	Frequency (f)	Percentage(%)
Gender		
Male	40	44.4
Female	50	55.6
Age		
25 and below	22	24.4
26–30	37	41.1
31–35	15	16.7
36–40	8	8.9
41–45	3	3.3
46 or more	5	5.6
Ethnicity		
Malay	82	91.1

**Table 1.** (Continued).

Demographic Variables	Frequency (f)	Percentage(%)
Chinese	3	3.3
Indian	5	5.6
Marital Status		
Single	42	46.7
Married	45	50
Others	3	3.3
No of children		
1	13	14.4
2	9	10
3 and above	10	11.1
None	58	64.4
Education Level		
Secondary school	10	11.1
Certificate	4	4.4
Diploma	25	27.8
Bachelor Degree	45	50
Master's Degree	5	5.6
Others	1	1.1
Position in the organization		
Manager	9	10
Executive	18	20
Non- Executive	12	13.3
Officer	7	7.8
Technician	16	17.8
Coordinator	28	31.1
Gross monthly income		
Less than 2000	26	28.9
RM2001–RM3000	31	34.4
RM3001–RM4000	18	20
RM4001–RM5000	7	7.8
RM5001–RM6000	5	5.6
More than RM6001	3	3.3

**Table 2.** Summary of mean and normality analysis for each variable.

Variables	Overall mean	Skewness	Kurtosis
Employee Performance	4.05	-2.02	10.13
Green HRM	3.53	-0.679	1.08
Work-Life Balance	3.74	-0.813	1.52

Based on the result in **Table 3**, green HRM has the highest value among the two independent variables, in terms of the correlation with the dependent variable of



employee performance ( $r = 0.490, p < 0.000$ ). Thus, through the analysis, it can be described that there is a positive relationship between green HRM value and employee performance. The correlation was significant at  $p < 0.01$  and based on the Rule of Thumb presented by Guildford (1973) was adopted for interpreting the relationship strength. Lastly, the correlation coefficient of the relationship between work-life balance and employee performance was also interpreted to have a positive and significant relationship ( $r = 0.450, p < 0.000$ ) with the strength of the relationship to be described as a moderate uphill linear relationship.

**Table 3.** Summary of mean and normality analysis for each variable.

Variables	Employee Performance	Green HRM	Work-life Balance
Employee Performance	1		
Green HRM	0.490**	1	
Work-life Balance	0.450**	0.452**	1

Note. \*\* Correlation is significant at the 0.01 level (2-tailed).

**Table 4** shows the results of the multiple regression analysis. In the table, the  $F$ -value is noted at 19.137 with a significant value of 0.000. Henceforth, it is noted that the model is statistically fit and significant. In addition, the results also have interpreted that the R-square or also known as the coefficient determination be accounted for at 0.306. Hence, this meant that 30.6% of the variance in the dependent variable which was employee performance was explained by the variation of all independent variables namely, green HRM and work-life balance he two independent variables, which were green HRM and work-life balance. The remaining variance of 60.4% explains other factors outside the study that can explain the dependent variable. The respondents predicted dependent variable is equal to employee performance = 2.494 + 0.24 green HRM + 0.19 work-life balance. Besides, the regression intercept takes a value of 2.494 while the regression slope for green GRM takes a value of 0.24, and work-life balance takes a value of 0.19.

**Table 4.** Summary of mean and normality analysis for each variable.

Independent Variables	Unstandardized Coefficient		Standardised Coefficient	t (Sig.)
	B	Std. Error	Beta	
Constant	2.494	0.256		0.000
Green human resource	0.244	0.068	0.360	0.001
Work-life balance	0.186	0.0.65	0.297	0.005
$F$ -Value: 19.137 (Sig: 0.000)				
R-Square: 0.306				

Another independent variable that managed to achieve significance at  $p < 0.05$  from the regression analysis was the work-life balance as the significant value accounted for was 0.005 of a standard deviation. In addition, the beta value for the variable was recorded at a value of 0.297. This meant that the work-life balance was significant in the relationship with employee performance. Henceforth, as affirmed by Sundram et al. (2018), the standardized beta coefficient helped to identify which

of the two independent variables had significance in the relationship with organizational attractiveness together with determining the highest value of significance. From the analysis, the researcher concluded that the green HRM was the most positively significant and most influential variable that affected employee performance as the variable has achieved a beta value of 0.360 and a significance value of  $p < 0.05$  (0.005). However, both variables green HRM and work-life balance are significant in the relationship toward employee performance. Conclusively, the researcher affirmed that H1 and H2 were supported in this study as the results from the analysis showed obvious significance.

## **5. Discussion**

The objective of this study was to quantify the degree to which variables impact the performance of calibration service professionals. The primary premise of the study was that certain aspects of employee performance had a greater impact on green HRM and work-life balance dimensions than others. Prior studies have indicated a direct relationship between work-life conflict and job satisfaction (Mas-Machuca et al., 2016; Rodhiya et al., 2021). The study design aimed to survey millennials who are now employed in the manufacturing industry in the United States. The purpose was to assess their satisfaction levels across six workplace organization indices, which were further divided into 23 specific items. The participants were also instructed to evaluate their experience with 45 work-life balance behaviours, which were classified into eight themes that represent different elements of work-life balance. The primary objective of this study, as outlined in chapter one, was to assess the impact of green HRM and work-life balance on employee performance in the calibration service industry in Malaysia. Consequently, the study aimed to establish the relationship between green HRM and work-life balance and their effects on employees' operational performance. Regarding the literature, certain research, such as Kulsum (2019), explore the relationship between green HRM and employee performance. Conversely, there are also research examining the influence of work-life balance on employee performance. The correlation analysis uncovered a robust positive association between work-life balance and employee performance. Subsequently, the regression analysis substantiated the presence of a substantial influence of work-life balance on employee performance (Preena and Rushna, 2021). Nevertheless, there are other dimensions of elements that influence employee performance. This study examined the correlation between two factors, namely green HRM (Human Resource Management) and work-life balance, and their impact on employee performance at a Malaysian calibration service company situated in Malaysia.

### **5.1. Research Objective 1: To study the relationship between green HRM and employee performance in a Malaysian calibration service company**

The research has examined the relationship between green HRM and employee performance earlier by testing the hypothesis proposed by the researcher, which was labelled as H1. Before performing the multiple regression analysis, the researcher managed to observe the strength of the relationship between green HRM and

employee performance through correlation analysis. Based on **Table 3**, the results of the correlation analysis proved that there was a correlation between both variables stated in Research Objective 1. The correlation of ( $r = 0.490$ ) between the green HRM and the employee performance that there is a positive but weak uphill linear relationship present between the variables in the research. This means that if the green HRM in the organization were well implemented, employee performance would increase. Additionally, the results from the multiple regression analysis have shown that the relationship between the interest value and organization attractiveness is significant ( $r = 0.267$ ,  $p < 0.05$ ). Therefore,  $H_1$  is supported in this research. Previous studies by and Alis and Obaid (2015), Arulrajah et al. (2015), and Renwick et al. (2013) suggest that green HRM is one of the factors that can influence an organization's performance. and have also affirmed the significance of this relationship. Thus, this research is new additional support on the significance of green HRM and employee performance.

## **5.2. Research Objective 2: To identify the relationship between work-life balance and employee performance**

In this research, the relationship between work-life balance and employee performance is determined by analyzing the results derived from the correlation analysis and multiple regression analysis through hypothesis testing. Through the correlation analysis, the researcher concluded that there is a weak uphill linear positive relationship between the work-life balance and employee performance as the result showed a  $< 0.00$  value ( $r = 0.450$ ). Nevertheless, the result for the multiple regression analysis also has described the significance of the relationship between the work-life balance and employee performance as the value of  $p$  is found to significant level of 0.01, in which the value obtained is 0.005. Thus, the statement of  $H_2$  is supported and significantly supported by the research performed by several researchers (Obiageli et al., 2015) and (Mendis and Weerakkody, 2017). Thus, this research is additional support for the significance between work-life balance and employee performance.

## **6. Recommendations**

### **6.1. Recommendation for employer**

A workplace that is stimulating, challenging, exciting, and encouraging innovation through creative efforts in efforts to produce high-quality services and products influences the level of attractiveness of the organization (Berthon et. al, 2005; Santiago, 2018). In the efforts to improve the green HRM in the organization, the managers and HR in the calibration service company should increase the organizational familiarity through the effectiveness of green HRM on employee performance. The researcher suggests to HR practitioners in this company to sets green goals for its employees. According to Arulrajah and Opatha (2014), green HRM is a process of making green employees with the use of green human resource policies and practices, and this is for the benefit of individuals, society, community, and the whole planet. The HRM function acts as a driver of sustainability by

insertion or implicating its green HRM policies and practices with the objective of EPF (Cherian and Jacob, 2012). Taken together, the current data highlight that there is an effect of green HRM on employee performance. Thus, the researcher would recommend that the organization could reward and compensate the staff who practice a green environment. Green HRM affects employee performance, meaning that the higher the green HRM effect, the higher employee performance will be. Green HRM on employee performance is also proven to have a significant impact, the higher the green HRM app, the higher employee performance will improve. In addition, to improve the level of green HRM in this calibration service company, managers or HR practitioners could also provide training on HRM to help all of the organization understand the function of green HRM and how it works to improve employee performance in the company.

Furthermore, work-life balance may improve employee performance in this calibration service company by allowing for flexible and remote working. Employees value employers who allow them to manage their own time by offering flexible and remote working options. By improving the satisfaction of employees with their ability to balance the needs of the job with those of non-work life, employees feel valued at companies where they can finish earlier, get their boiler fixed, or see a doctor when necessary, knowing that their employer knows they'll still get the job done. Several studies have yielded conflicting results when it comes to the relationship between work-life balance and employee performance. Bataineh's (2019) study aimed to study the impact of life-work balance and happiness at work on employee performance and concluded that work-life balance and happiness positively and significantly affect employee performance so more people can find paid work. In addition, the calibration company should improve in technological advancement and it is highly required to avoid paper or manual work activities. It also reduces communication gaps and saves time. Furthermore, managers should be more creative in training virtual teams to adhere to movement restrictions caused by pandemic restrictions and a more virtual nature of work in the future. Online courses, informal mentoring, or coaching platforms should be used to train virtual teams so that they do not feel excluded from their learning and development.

## **6.2. Recommendation for employee**

In order to optimise job performance and uphold work-life balance within the calibration service organization, employees must demonstrate dedication to their assigned working hours to prevent any disruptions in work operations and mitigate work-related stress. Furthermore, social skills are greatly valued in the workplace as they enhance communication and foster a positive organizational culture. Subsequently, the employee ought to undertake measures to enhance their proficiency in the five domains of emotional intelligence: Self-awareness, self-control, interpersonal abilities, empathy, and motivation. In addition, the individual can promote a healthy work-life balance by refraining from using organizational apps on personal devices outside of working hours. These principles can facilitate and strengthen the division between the work and home settings. An individual burdened with excessive work must have the ability to effectively manage their time.

Meeting deadlines can be facilitated by having a clear understanding of both the timing and the specific completion requirements for each assignment. Engage in a conversation with the supervisor or an individual of higher authority regarding the matter, and consistently explain if additional time is required. Furthermore, each individual must establish a personal objective and exert effort to attain success in both their professional and personal life to attain a harmonious work-life equilibrium. The abilities and tactics employed in the workplace, such as planning, organizing, and setting boundaries, can be utilised in both professional and personal contexts to attain a gratifying and harmonious life. Overburdened and strained employees may experience a decline in performance, ultimately impacting their ability to maintain a healthy work-life balance.

Furthermore, this research also has ramifications for employees who actively implement business sustainability practices. The study found that employees assess the genuineness of organizations' involvement in environmental matters, the extent to which they prioritise their interests, and the level of importance they give to the employee-employer relationship throughout the implementation of environmental management techniques. According to Cunningham and McShane (2012), managers should consistently communicate with employees about the genuineness of their organization's environmental objectives, regardless of the organization's particular environmental management approaches. By employing this approach, they can effectively communicate to employees that their organization highly esteems the employee-employer connection. This will therefore instil confidence in personnel and mitigate any unwarranted doubt towards their organizations. Power saving and tweaking the room temperature is also one of the efforts from employees into green HRM. In place of employees, there are many ways that they can help green HRM to become successful in the organization. Moreover, the utilisation of electronic devices for recording information can significantly reduce paper consumption, since modern information and communication technologies offer numerous possibilities for businesses to operate with less reliance on paper. Utilising electronic mail, Intranets, the Internet, and document scanners can significantly diminish the consumption of paper, while concurrently conserving time and financial resources. Estimations indicate that by utilising the present technology effectively, it is feasible to achieve a decrease of 10–30% in paper use. In addition, duplexing, which refers to the process of duplicating photographs on both sides of a sheet of paper, can result in a 50% reduction in paper expenses. Duplexing reduces costs associated with paper procurement, storage, and postage. Duplex copies are more convenient for folding and stapling. Although certain prints and copies necessitate single-sided formatting, the majority do not.

### **6.3. Recommendations for the government**

The Ministry of Human Resources should generate further ideas and suggestions to enhance the existing working conditions in both the commercial and governmental sectors. Hence, the competent authority must give due consideration to the following suggestion to actualize the work-life balance concept: the complete adoption of flexible working arrangements (FWA), including scheduled days off and

family-friendly beginning and ending times. The Malaysia National Policy on the Environment (DASN) should conduct further awareness efforts on environmental sustainability specifically targeting government agency employees in leadership positions, rather than the general population. The government should serve as a role model in leading the population towards sustainable development. Green Human Resource Management is crucial as it involves the Human Resource department Manager or Department Head motivating and uniting employees to collaborate in order to enhance employee performance and achieve sustainability goals within an organization. In due course, the organization's reputation and deeds will be improved.

#### **6.4. Recommendations for future research**

To ensure the generalizability of the results, it is imperative to employ a substantial population sample for this research. Furthermore, the researcher could have extended this study to encompass other organizations, such as those in the finance, health, or construction sectors, in order to assess the generalizability of the results. To allow future researchers ample time to complete the research and uncover additional findings, it is also advisable to extend the time restrictions. In addition, future researchers might provide further elucidation about the research project to each participant and conduct follow-up procedures subsequent to the distribution of questionnaires. In addition, the researchers must carefully analyze the specific geographical and cultural context in order to choose the appropriate organization to conduct the research study. The researcher must ascertain that the organization possesses an adequate number of people who are capable of participating in the study, and that the organizational culture is resilient enough to withstand the research topic. In addition to providing a questionnaire, researchers have the option to employ alternative approaches such as conducting interviews and utilising other techniques.

#### **7. Limitations**

This study has identified several limitations which have constrained generalisation, requiring further investigation in future research. The constraints pertaining to the findings, the impediment to research, the ability to apply the findings to a broader context, and the researcher's approach to conducting the study and ensuring its accuracy. The researcher has a very restricted amount of time for conducting study. Due to time limitations, the researcher was unable to gather reliable data and information for the study. By allocating more time to conduct the research and administer the questionnaire survey, it is likely that more precise data will be acquired, enabling comprehensive research. Additionally, it is probable that the respondents had a hectic agenda, which impacted the accuracy and reliability of the data. Accessing research papers might be challenging due to restricted financial resources, such as ResearchGate and Scribd, which need researchers to subscribe to their plans. While researchers have the option to get this data from secondary sources, it is possible that the authors may not be able to incorporate all pertinent material into this study.

## 8. Conclusion

The primary aim of this study is to ascertain the elements that influence the performance of employees at a calibration services company in Malaysia. The study employed Pearson's correlation analysis to determine the substantial association between green HRM and work-life balance in employee performance. Regression analysis was employed to determine the most influential factor among these factors. According to **Table 4**, the beta value for green HRM is 0.360, which is greater than the beta value for the variable work-life balance. In addition, the recorded beta for work-life balance was 0.297. Consequently, this study determined that green HRM is more potent than any other factor in forecasting employee performance in a calibration services organization. The study suggested two distinct techniques to establish a green HRM system and assessed their impact on employees' performance inside an organization, aiming to enhance the application of environmentally friendly HRM practices. Moreover, the study suggested that an ethical leadership style exhibited by a line manager would involve effectively implementing commitment-inducing and compliance-attaining green HRM practices. Based on the collected data, policymakers will gain valuable insights to improve and sustain environmentally friendly Human Resource Management (HRM) practices and work-life balance. Furthermore, this suggests that politicians must make a concerted effort to refrain from implementing any laws that contravene the principles of environmentally friendly Human Resource Management and maintaining a healthy work-life equilibrium. This study could assist HR practitioners in improving green HRM among employees through the implementation of training and coaching programmes. The organization should prioritise employee work-life balance to avoid workload segregation and implement steps to minimise work overload. Simultaneously, this study aids employees in enhancing their time management skills to fulfil deadlines, so promoting and strengthening the distinction between their work and home environments. This article aims to explore the correlation between green HRM and work-life balance concerning employee performance. The analysis of the results verified that the implementation of green HRM and work-life balance had a significant influence on employee performance.

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## References

- Alalade, S. Y., Oguntodu, J. A. (2015). Motivation and Employees' Performance in the Nigerian Banking Industry A Survey of Selected Banks.
- Almeida, F. (2018). Strategies to perform a mixed methods study. *European Journal of Education Studies*, 5(1), 137–151
- Al-Rashdi, M. (2020). The impact of performance-related pay on employees' performance: case studies of Omani public and private sector organizations [Doctoral Dissertation]. M.BA Franklin University
- Anitha, J. (2014). Determinants of Employee Engagement and Their Impact on Employee Performance. *International Journal of Productivity and Performance Management*, 63, 308-323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Ariani Wulansari, N., Setyo Witiastuti, R., Ridloah, S. (2018). Employee performance measurement development based on green HRM indicators. *KnE Social Sciences*, 3(10), 1179. <https://doi.org/10.18502/kss.v3i10.3201>
- Arulrajah, A. A., Opatha, H. H. D. N. P., Nawaratne, N. N. J. (2015). Green human resource management practices: A review. *Sri Lankan Journal of Human Resource Management*, 5(1).
- Bataineh, K. A. (2019). Impact of work-life balance, happiness at work, employee performance. *International Business Research*, 12(2), 99. <https://doi.org/10.5539/ibr.v12n2p99>
- Berthon, P., Ewing, M., Hah, L. L. (2005). Captivating company: dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2), 151–172.
- Bombiak, E., Marciniuk-Kluska, A. Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience. *Sustainability* 2018, 10, 1739.
- Carlson, D. S., Grzywacz, J. G., Zivnuska, S. (2009). Is work—family balance more than conflict and enrichment? *Human Relations*. <https://doi.org/10.1177/0018726709336500>
- Carvalho, A. da C., Riana, I. G., Soares, A. de C. (2020). Motivation on job satisfaction and employee performance. *International Research Journal of Management, IT and Social Sciences*, 7(5), 13–23. <https://doi.org/10.21744/irjmis.v7n5.960>
- Chaudhary, R. (2019). Green human resource management in the Indian automobile industry. *Journal of Global Responsibility*, 10(2), 61–175
- Cherian, P. J. Jacob, J. (2012). A Study of Green HR Practices and Its Effective Implementation in the Organization: A Review. *International Journal of Business and Management*, 7. [10.5539/ijbm.v7n21p25](https://doi.org/10.5539/ijbm.v7n21p25).
- Correia J. M., Santos I, Pezarat-Correia P, et al. (2020). Effects of Intermittent Fasting on Specific Exercise Performance Outcomes: A Systematic Review Including Meta-Analysis. *Nutrients*, 12(5), 1390. doi: 10.3390/nu12051390.
- Darakshan, N., Islam, J. U. (2014). Effect of occupational stress and work-life balance on job satisfaction among female faculties of central universities in Delhi. *Pezzottaite Journals*, 3(2), 1005–1009.
- Dissanayaka, N., Ali, M.H. (2013). Impact of work-life balance on employees performance: an empirical study on seven apparel organizations in Sri Lanka.
- Dumont, J., Shen, J., Deng, X. (2017). Effects of green HRM practices on employee workplace green behaviour: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627. <https://doi.org/10.1002/hrm.21792>
- Fawehinmi, O., Yulsiza, M., Mohamad, Z., et al. (2020). Assessing the green behaviour of academics: The role of green human resource management and environmental knowledge. *International Journal of Manpower*.
- Gilal, F.G., Ashraf, Z., Gilal, N.G., Gilal, R.G. and Chaana, N.A. (2019). Promoting environmental performance through green human resource management practices in higher education institutions: a moderated mediation model. *Corporate Social Responsibility and Environmental Management*, 6, 1579–1590
- Guilford, J. P. (1973). *Fundamental statistics in psychology and education*. New York, NY: McGraw-Hill.
- Iddagoda, A., Hysa, E., Bulińska-Stangrecka, H., Manta, O. (2021). Green work-life balance and greenwashing the construct of work-life balance: Myth and reality. *Energies*, 14(15), 4556. <https://doi.org/10.3390/en14154556>
- Khalid, H. A., Harun, H., Noor, A. M., Hashim, H. M. (2021). Green Human Resource Management, perceived organizational support and organizational citizenship behaviour towards the environment in Malaysian Petroleum Refineries. *SHS Web of Conferences*, 124. <https://doi.org/10.1051/shsconf/202112411001>
- Khan, A. J., Iqbal, J. (2020). Do High-Performance Work Practices Increase the Organizational Performance of Public Sector Companies? An Invocation of Mediation Mechanism. *Pakistan Journal of Social Sciences (PJSS)*, 40(2), 1007–1021



- Luu, T. T. (2017), “CSR and organizational citizenship behaviour the environment in the hotel industry: the moderating roles of corporate entrepreneurship and employee attachment style”, *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 11, pp. 2867–2900. (GHRM).
- McShane, L., Cunningham, P. (2012). To twine own self be true? Employees’ judgments of the authenticity of their organization’s corporate social responsibility program. *Journal of Business Ethics*, 108(1), 81–100.
- Mendis, M. D., Weerakkody, W. A. (2018). The impact of work-life balance on employee performance with reference to telecommunication industry in Sri Lanka: A mediation model. *Kelaniya Journal of Human Resource Management*, 12(1), 72. <https://doi.org/10.4038/kjhrm.v12i1.42>
- Nur’ain, A., Omar, M. K., Munir, R. (2022). Sustainable Institutions: Operational Study of Green HRM. *Journal of Advanced Management Science*, 10(1), 14–21.
- Obaid, T. F., Alias, R. B. (2015). The impact of green recruitment, green training and green learning on the firm performance: conceptual paper. *International Journal of Applied Research*, 1(12), 951–953.
- Ogbu Edeh, F., Okwurume, C. N. (2019). Green Human Resource Management and Organizational Sustainability of Deposit Money Banks in Nigeria. *Journal of Management Sciences*, 3(1), 224–235.
- Ojo, A.O. Raman, M. (2019), “Role of green HRM practices in employees’ pro-environmental IT practices”, *World Conference on Information Systems and Technologies*, Springer International Publishing, Cham, pp. 678–688.
- Omar, M. K. (2016). Work-life balance and job satisfaction among Malaysian Healthcare Employees. *Environment-Behaviour Proceedings Journal*, 1(4), 271. <https://doi.org/10.21834/e-bpj.v1i4.177>
- Opatha, Arulrajah, A. (2014). Green Human Resource Management: Simplified General Reflections. *International Business Research*, Vol. 7, No. 8; PP 67–88
- Opatha, H. H. D. N. P. (2019). Sustainable Human Resource Management. *Expanding Horizons of HRM*, 1st ed.; University of Sri Jayewardenepura: Gangodawila, Sri Lanka, 2019; pp. 1–464.
- Pham, N. T., Tučková, Z., Jabbour, C. J. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behaviour in hotels? A mixed-methods study. *Tourism Management*, 72, 386–399.
- Preena, R., Preena, R. (2021). Impact of Work-Life Balance on Employee Performance: An empirical study on a Shipping Company in Sri Lanka. *International Journal on Global Business Management and Research*, 10(1), 48–73., Available at SSRN: <https://ssrn.com/abstract=3856506>
- Preena, Rushna. Impact of Work-Life Balance on Employee Performance: An empirical study on a Shipping Company in Sri Lanka (February 1, 2021).
- Renwick, D. W., Redman, T., Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15, 1–14
- Salkind, N. J. (2014). *Statistics for People Who Think They Hate Statistics*. SAGE Publications, Los Angeles. University of Kansas
- Santiago, J. (2018). The relationship between brand attractiveness and the intent to apply for a job: A millennials’ perspective. *European Journal of Management and Business Economics*. 28. 10.1108/EJMBE-12-2018-0136.
- Sundram, V., Rajagopal, P., Bahrin, A., et al. (2018). *Research Methodology: Tools, Methods and Techniques*. MLSCA, Selangor.