Impact of Green Human Resource Management on Promoting Green Employee Behaviour in Russia: A Moderating Role of Employee empowerment

Hood Laeeq

Universiti Utara Malaysia
06010 UUM Sintok, Kedah Darul Aman, Malaysia

Abstract

The study aimed to analyze green human resource management (HRM) on promoting green employee behaviour in Russia through the mediating role of employee empowerment. The questionnaire was dispersed among 300 respondents working as HRM managers in the industrial sector of Russia to gather their opinions. To analyze the data accumulated from participants through survey, confirmatory factor analysis, discriminant validity and quality assessment criteria has employed in this study. Furthermore, Smart PLS statistical software has been used. Findings revealed that green empowerment, government policies, and green training have a significant relationship with green employee behaviour. **Limitations:** Geographical, time, budget and limited sample size

Keywords

1. Introduction

The surge in the destruction and demolition of natural resources has contributed to increasing the problem pertaining to environmental pollution (Mandago, 2018). It has negatively impacted the health and living conditions of people across the globe. The government and authorities worldwide are investing their substantial efforts to eradicate the negative environmental effects and control the carbon foot print in order to protect both human society and natural resources for future generations (Guerci et al., 2016). This aspect has led to demand among people from organizations to enforce the measures to control and promote the idea of sustainability (Jyoti, 2019). The growth in industrialization and companies has played a central role in creating the adverse environmental effects due to their lack of alignment with the sustainability measures and incoherent attitude towards going green (Pinzone et al., 2016). In this regard, the focus of the underlying study is the green human resource management practices and their impact on creating green employee behaviour in Russia, considering the mediating effect of employee empowerment.

Green human resource practices focus on establishing the coherence between conventional human resource management practices and the environmental objectives of the firm by emphasizing the collaboration of the green concept in ecology along with HRM (Zhang et al., 2019). Green human resource management is considered the emerging concept in the market that has gained substantial attention among organizations due to the increasing concern of people regarding environmental sustainability. The Green HRM practices aim to enhance employee awareness regarding environmental sustainability and empower them to stay on the committee (Wu and Chen, 2020). Pham et al. (2019) stated that the Green HRM practices always aim toward promoting the environmentally friendly use of resources that will directly assist in strengthening the environmental performance of the firm and boost awareness of staff members and influence their behaviour towards environmental sustainability positively can also be considered as green behaviour.

Russia is considered one of the most powerful countries across the globe leading ahead of other powerful monarchies like Saudi Arabia, Great Britain, Japan and Israel (Riasanovsky and Steinberg, 2018). Manufacturing, mining, and agriculture are Russia's three main economic sectors that have contributed till 3078.9, 2062.1 and 954.3 RUB billion to the GDP of Russia, respectively (Trading Economics, 2020). However, considering the nature of work and type of operations in these sectors, it can be analyzed that the wastage level and exploitation of natural resources in these sectors would be significantly high. According to the reports by Statista (2020), 5.76% workforce of Russia belongs to the agriculture market, whereas 26.68% belongs to the industrial sector, as demonstrated in the below-highlighted graph.
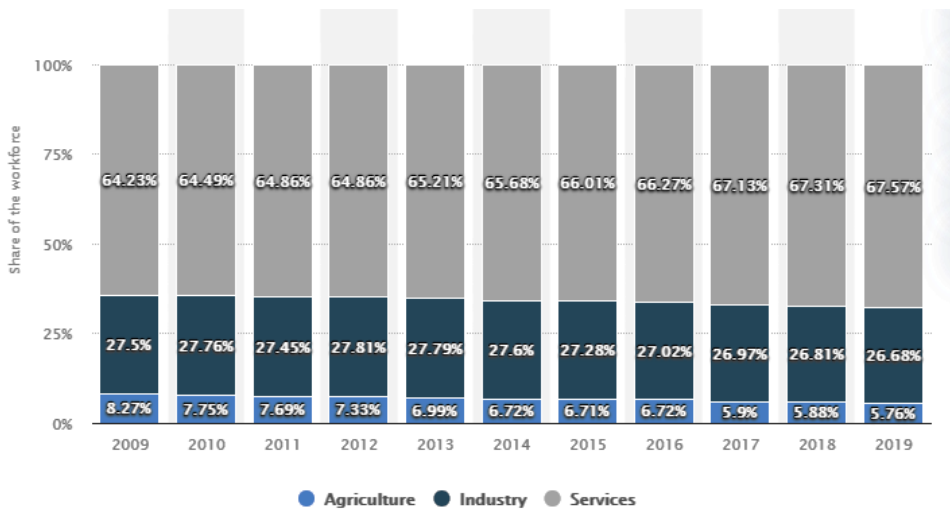
Figure 1: Distribution of the workforce across economic sectors in Russia (Statista, 2020a)

This implies that there is a crucial need to employ Green HRM practices in Russian organizations, specifically within the firm operates in industrial sector to influence the attitude of the employee towards green environmental sustainability and empower them to commit with green environment practices (Sakwa, 2018). The Russia has been taken under consideration because despite of being one of the economically and politically powerful country Russia has been facing issues pertaining to environmental sustainability (Jyoti, 2019).
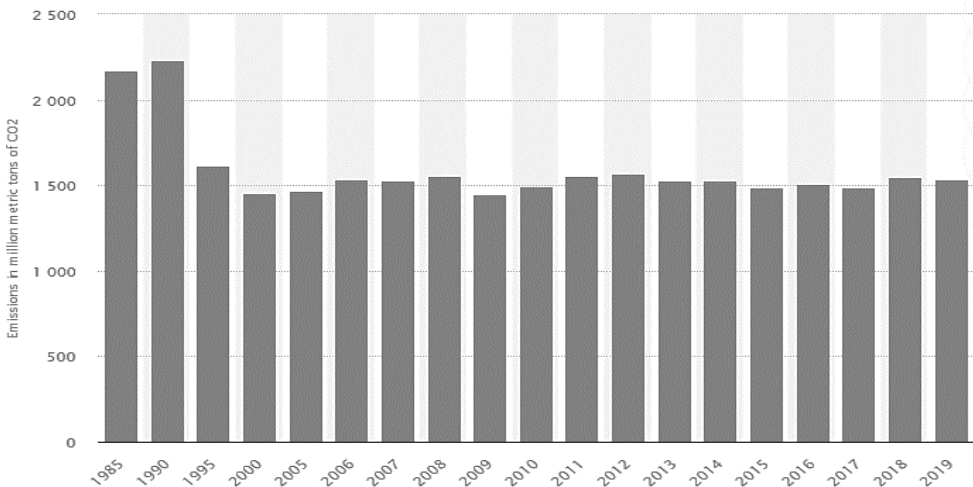

Figure 2: Carbon dioxide emissions volume in Russia (Statista, 2020b)

It can be analyzed from the above highlighted graph that Carbon emission in Russia increased till 1.5 billion metric tons in 2018 from 1.4 billion metric tons in year 2017 (Statista, 2020). The underlying research is highly significant for the human resource managers working in the Russian companies in familiarising and understanding the significance of Green HRM practices and the way it can help in developing the healthy society.

2. Literature Review

In recent years, it has been observed that the idea of green HRM practices has obtained great significance among masses due to the increasing concern and awareness of people regarding the environmental sustainability (Dumont et al., 2017). The Green HRM practices possess the potential to influence the employee behaviour at individual level and empower them to perform their work related task and activities considering the environmental sustainability measures (Shen et al., 2018). The idea of Green HRM involves embracing environmental friendly HR initiatives that helps the company to attain greater efficiency and lower cost. The study contemplated by Opatha and Arulrajah (2014) specified that the lesser use of papers, recruitment through online platform, using electronic documents, virtual interviews, prohibiting plastic bags and lunch boxes at workplace, policy to switch off unnecessary devices on charging points and encouraging employees to use sustainable vehicles for transportation. The employee empowerment regarding environmental sustainability influences their positive towards employee behaviour (Nejati et al., 2017).

H1: employee empowerment moderates the relationship between green HRM practices and green employee behaviour

However, there are different factors of green HRM practices that influences the green employee behaviour and employee empowerment in organization. Environmental training for employees is one of the key factor that influences the green employee behaviour in organization and develop their knowledge regarding environmental sustainability (Wu and Chen, 2020). Pham et al (2019) stated that environmental trainings can assist the employee in understanding the way they can play their role in improving the environment of organization and society that will influence their behaviour towards the environmental sustainability. In this regard, the hypothesis has been formulated as

H2: employee empowerment moderates the relationship between environmental training factor of the green HRM practices and green employee behaviour
H3: employee empowerment do not moderates the relationship between environmental training factor of the green HRM practices and green employee behaviour

Sakwa (2018) specified that Government regulations is another factor of HRM practices that encourages the employee behaviour in regard to environmental sustainability measures. Environmental regulations on industry posed by the government creates the need for HR managers to employ them in the organization effectively in order to avoid from any legal action (Chaudhary, 2020). This factor influences the employee sustainability behaviour by urging them to follow all the

environmental sustainability measures in order to avoid legal investigation and stay complaint with legal laws (Kim et al., 2019). The HRM polices developed based on the government environmental sustainability regulations can create influence of green employee behaviour.

H4: employee empowerment moderates the relationship between Government policies factor of the green HRM practices and green employee behaviour

H5: employee empowerment do not moderates the relationship between Government policies factor of the green HRM practices and green employee behaviour

The green rewards is crucial factor of HRM practices that influences the employee behaviour and empower as well as motivate them to play their active role environmental sustainability (Yusliza et al., 2017). The study contemplated by Zaki and Norazman (2019) specified that green rewards such as monetary discount card to purchase from any organic product outlets, eco-friendly vehicle and compensation package consists of green skills acquisition trainings (Masri and Jaaron, 2017). The Green rewards motivates the employee to commit towards environmental responsibility (Tariq et al., 2016).

H6: employee empowerment moderates the relationship between green rewards *factor of the green HRM practices and green employee behaviour*

H7: employee empowerment do not moderates the relationship between green rewards *factor of the green HRM practices and green employee behaviour*
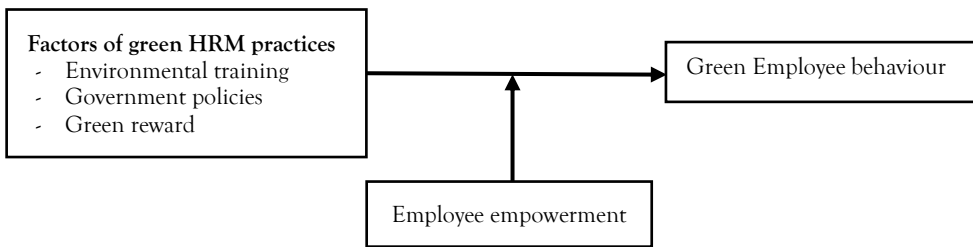

Figure 3: Conceptual Framework

3. Methodology

The research methodology is considered as the crucial component of study. The underlying article aims to analyze the impact of green human resource management on promoting green employee behaviour in Russia along with moderating effect of employee empowerment. In this regard, quantitative research paradigm has been employed in this study because it permits to quantify the different opinions and statistically estimate the impact of one variable over another that is not feasible through the qualitative paradigm. The quantitative analysis helps to obtain the logical estimates regarding the relation between independent and dependent variable that is factors of green HRM practices and green employee behaviour in this study followed by moderating effect of employee empowerment. The primary data collection method has been selected by the research to obtain first-hand information directly from participants by conducting questionnaire survey. The primary source of data was accumulated because it assist in obtaining the updated information about

the phenomenon under examination. The questionnaire has been dispersed among 300 respondents working as the HRM managers in the industrial sector of Russia to gather their opinions regarding the green HRM practices and the way it contributes in influencing the employee green behaviour and empowering them towards environmental responsibility. The non-probability convenience sampling technique has been chosen in this study to select the participants for gathering the data. All the participants were chosen based on ease and convenience of researcher to reach the participants in timely manner. To analyze the data accumulated from participants through survey confirmatory factor analysis, discriminant validity and quality assessment criteria has employed in this study. Furthermore, Smart PLS statistical software has been used in this research to implement all the analysis and examine the data systematically in order avoid human errors or inaccuracy in results. Different hypothesis designed in this study has been tested throughout the analysis.

4. Results and Discussion

4.1. Confirmatory Factor Analysis

Prior to conducting SEM testing for determine the relationship between variables and conducting hypothesis testing, it is essential that researcher undergoes CFA (confirmatory factor analysis) for finding the reliability and validity of the constructs used in this study. The measures are interpreted in order to find the reliability. Four different techniques are used for finding the reliability: Cronbach Alpha, AVE (Average Variance Extracted) and Composite reliability. The values of each technique is shown below in Table 1.

Table 1: Confirmatory Factor Analysis

	Outer Loading	Cronbach Alpha	Composite Reliability	AVE
EE1	0.847	0.894	0.925	0.755
EE2	0.857			
EE3	0.890			
EE4	0.881			
ET1	0.759	0.720	0.838	0.633
ET2	0.850			
ET3	0.775			
GEB1	0.783	0.871	0.939	0.885
GEB2	0.852			
GEB3	0.866			
GEB4	0.841			
GP1	0.950	0.856	0.902	0.699
GP2	0.932			
GR1	0.713	0.745	0.854	0.663
GR2	0.910			
GR3	0.807			

To determine the individual reliability of each indicator of the instrument, outer loading values are interpreted. Hasan et al. (2019) revealed that the indicators show the reliability of the indicators that are further explained through latent variable. The threshold value of outer loading is 0.70 or above is considered to be

highly reliable whereas, any value below it shows that it is not reliable. From the Table 1 above, it is evident that all constructs have values above 0.70.

The next value that is important in the table above is Cronbach Alpha which shows the internal consistency of the scale used which needs to be higher than 0.7 in order to state it as reliable. In the Table 1 above, all the values of Cronbach alpha are above 0.7. However, the researchers do not solely rely on Cronbach alpha as it is not able to completely predict the lower bound values hence, in such a case, composite reliability is used. The composite reliability should also be greater than 0.70 in order to validate it as internally consistent (Choa & Chun, 2018). Moreover, the last value used in Table 1 is AVE (Average Variance Extracted) that shows the communality of the constructs. The values of AVE should be above 0.5 so that higher variance can be obtained. This means in the table above that 50% of variance is due to the indicators used in the study.
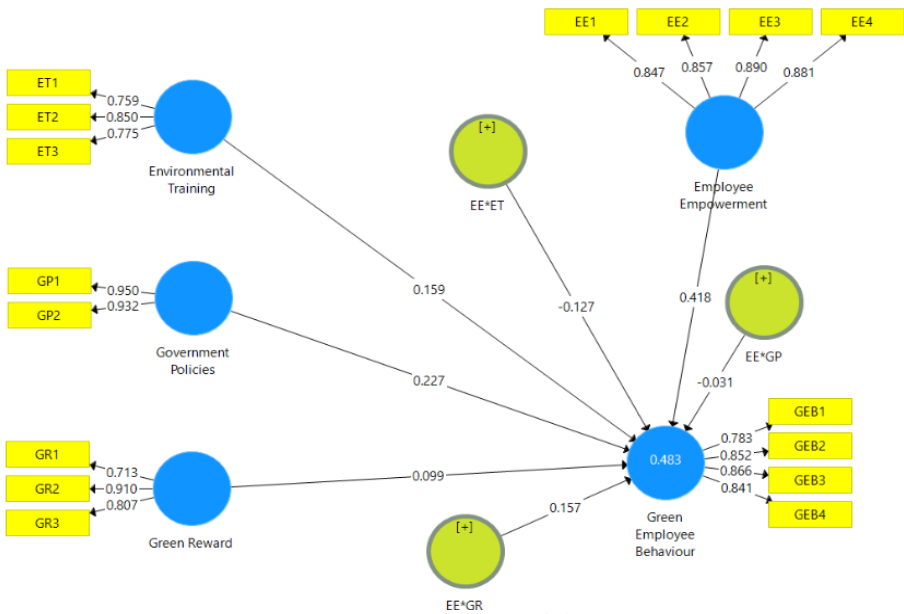

Figure 4: Research Model PLS

4.2. Discriminant Validity

The purpose of using discriminant validity is to establish that measures used in the model are not related with each other. There are different ways of conducting this tests and one of the technique selected here is HTMT (Heterotrait-Monotrait Ratio).

Table 2: Heterotrait-Monotrait Ratio

EE*ET				
EE*GP	0.578			
EE*GR	0.451	0.457		
Employee Empowerment	0.265	0.094	0.167	
Environmental Training	0.133	0.125	0.084	0.348

Government Policies	0.050	0.062	0.113	0.358	0.643	
Green Employee Behaviour	0.078	0.079	0.221	0.611	0.560	0.571
Green Reward	0.105	0.120	0.181	0.273	0.459	0.471

Based on the results above, the likely value of HTM ratio should be less than 0.90 whereas, any value that exceeds 0.90 means that the constructs are linked or related with each other. Based on Table 2, all the variables are less than 0.90 apart from 1 which indicates that variables are not similar with each other. It is necessary to study this because for further hypothesis testing, it is mandatory to know whether the variables are related to each other or not.

4.3. Path Assessment

In this section of path assessment, the researcher has analyzed the proposed model of SEM. The goodness of fit of the model is shown by R square and adjusted R square as shown below in the Table 3.

Table 3: Goodness of fit of model

	R Square	R Square Adjusted
Green EmployeeBehaviour	0.483041091	0.470938374

Table 3 shows the goodness of fit model that includes R square and adjusted R square value. Green employee behaviour has R square of 0.48 and R square adjusted 0.47 which means that model is significant and can be used further for hypothesis testing.

Table 4: Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
EE*ET -> Green Employee Behaviour	-0.126	-0.128	0.075	1.685	0.092
EE*GP -> Green Employee Behaviour	-0.029	-0.029	0.064	0.458	0.647
EE*GR -> Green Employee Behaviour	0.157	0.170	0.077	2.030	0.043
Employee Empowerment -> Green Employee Behaviour	0.422	0.417	0.050	8.420	0.000
Environmental Training -> Green Employee Behaviour	0.158	0.162	0.050	3.186	0.001
Government Policies -> Green Employee Behaviour	0.225	0.220	0.051	4.420	0.000
Green Reward -> Green Employee Behaviour	0.098	0.098	0.052	1.864	0.062

The table 4 above shows path coefficients which indicate whether the paths of variables are statistically significant or not. The values are assessed on the basis of the P values obtained. From the table above, it is evident that employee empowerment mediates green reward with 0.0043, employee empowerment mediates green employee behaviour at 0.000, Environmental Training has significant relationship with green employee behaviour at 0.001, government policies has impact over green employee behaviour at 0.000 and there is no impact of green reward on green employee behaviour. This shows that those paths which do not have significant impact on each other do not have any relationship hence, their hypothesis is not accepted. It clearly indicates that environmental training, government policies and employee empowerment has impact on green employee behaviour. The literature review above can also validate this because environmental training and government policies are highly necessary for influencing the green employee behaviour.

4.4. Hypothesis Assessment

After the process of testing is done, the summary of hypothesis is analyzed to know whether all hypothesis are accepted or rejected. Table 5 shows the signifjcance values and the results of the hypothesis obtained.

Table 5: Hypothesis assessment

S. No.	Sig Value	Results
EE*ET -> Green Employee Behaviour	0.092	Rejected
EE*GP -> Green Employee Behaviour	0.647	Rejected
EE*GR -> Green Employee Behaviour	0.043	Accepted
Employee Empowerment -> Green Employee Behaviour	0.000	Accepted
Environmental Training -> Green Employee Behaviour	0.001	Accepted
Government Policies -> Green Employee Behaviour	0.000	Accepted
Green Reward -> Green Employee Behaviour	0.062	Rejected

Based on the results shown above, it is evident that out of all paths, four were accepted, and the remaining were rejected. This was determined through the P values that should be below 0.05 to validate it as significant or else any value below it is considered insignificant. EE*GR -> Green Employee Behaviour was accepted at 0.043, Employee Empowerment and Green Employee Behaviour was accepted at 0.000, Environmental Training and Green Employee Behaviour was accepted at 0.001, and finally, Government Policies and Green Employee Behaviour was accepted at 0.000. Thus, based on these results, the hypothesis was accepted.

This study aims to analyze green human resource management in-depth in promoting environmentally friendly employee behaviour in Russia through the mediating role of employee empowerment. The research was carried out by designing a structured survey questionnaire consisting of different questions related to variables. The independent variables were environmental training, government policies, and green reward, whereas the dependent variable was green employee behaviour. From the existing studies conducted in similar domain, it was found that green human resource management is associated with policies and practices that inculcate green behaviour among employees so that they become more responsible

towards the environment. On the other hand, various factors can also help employees become more careful about the environment and adopt green strategies.

5. Conclusion

In order to conclude the study, it can be stated that after examining the relationship between variables, it was found that Employee Empowerment and Green Employee Behaviour was accepted at 0.000, Environmental Training and Green Employee Behaviour was accepted at 0.001, and finally, Government Policies and Green Employee Behaviour was accepted at 0.000. This indicates that if adequate training is provided to employees, so they will be able to work on better green projects and protect their environment. The researcher used PLS, and some statistical techniques were used, such as discriminant validity, path assessment, confirmatory factor analysis and hypothesis testing was done. However, some of the limitations were related to the geographical region because the researcher had collected data from Russian employees; hence, in future, the study could be improved by collecting data from other countries and comparing them.

References

Chaudhary, R. (2020). Green human resource management and employee green behavior: an empirical analysis. *Corporate Social Responsibility and Environmental Management*, *27*(2), 630-641.

Choa, E., & Chun, S. (2018). Originators of reliability coefficients: A historical review of the originators of reliability coefficients including Cronbach's Alpha. 조사연구, *19*(2), 73-104.

Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human resource management*, *56*(4), 613-627.

Guerci, M., Longoni, A., & Luzzini, D. (2016). Translating stakeholder pressures into environmental performance–the mediating role of green HRM practices. *The International Journal of Human Resource Management*, *27*(2), 262-289.

Hassan, S., Shamsudin, M. F., & Mustapha, I. (2019). The effect of service quality and corporate image on student satisfaction and loyalty in TVET higher learning institutes (HLIs). *Journal of Technical Education and Training*, *11*(4), 77-85.

Jyoti, K. (2019). Green HRM–people management commitment to environmental sustainability. In *proceedings of 10th international conference on digital strategies for organizational success*.

Kim, Y. J., Kim, W. G., Choi, H. M. & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, *76*, 83-93.

Mandago, R. J. (2018). Influence of green reward and compensation practice on environmental sustainability in selected service based state corporations in Kenya. *European Journal of Business and Strategic Management*, *3*(6), 1-12.

Masri, H. A., & Jaaron, A. A. (2017). Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of cleaner production*, *143*, 474-489.

Nejati, M., Rabiei, S., & Jabbour, C. J. C. (2017). Envisioning the invisible: Understanding the synergy between green human resource management and green supply chain management in manufacturing firms in Iran in light of the moderating effect of employees' resistance to change. *Journal of cleaner production*, *168*, 163-172.

Opatha, H. H. D. N. P. and Arulrajah, A. A. (2014). Green human resource management: Simplified general reflections. *International Business Research*, *7*(8), 101-112.

Pham, N. T., Tučková, Z., & Jabbour, C. J. C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, *72*, 386-399.

Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: the role of 'Green'HRM. *Journal of Cleaner Production*, *122*, 201-211.

Riasanovsky, N. V., & Steinberg, M. D. (2018). *A history of Russia*. Oxford University Press.

Sakwa, S. M. (2018). *Factors affecting implementation of green human resource practices in the civil service in Kenya* (Doctoral dissertation, university of nairobi).

Shen, J., Dumont, J., & Deng, X. (2018). Employees' perceptions of green HRM and non-green employee work outcomes: The social identity and stakeholder perspectives. *Group & Organization Management*, *43*(4), 594-622.

Statista. (2020a). *Russia - Distribution of the workforce across economic sectors*. Available at: https://www.statista.com/statistics/271373/distribution-of-the-workforce-across-economic-sectors-in-russia/#:~:text=In%202019%2C%205.76%20percent%20of,and%2067.57%20percent%20in%20services.&text=The%20majority%20of%20Russia's%20labor,the%20jobs%20in%20the%20country. (Accessed: 15 September 2020).

Statista. (2020b). *Russia: carbon dioxide emissions 1985-2019*. Available at: https://www.statista.com/statistics/449817/co2-emissions-russia/#:~:text=Between%202000%20and%202019%2C%20Russia,percent%20between%201990%20and%202017. (Accessed: 15 September 2020).

Tariq, S., Jan, F. A., & Ahmad, M. S. (2016). Green employee empowerment: a systematic literature review on state-of-art in green human resource management. *Quality & Quantity*, *50*(1), 237-269.

Trading Economics. (2020). *Russia GDP From Agriculture | 2003-2020 Data | 2021-2022 Forecast | Historical | Chart (2020)*. Available at: https://tradingeconomics.com/russia/gdp-from-agriculture (Accessed: 15 September 2020).

Wu, C. H., & Chen, C. S. (2020, April). Green Human Resource Management and Green Employee Purchase Behavior: Research and Relationships. In *The 2nd China-ASEAN International Conference 2020 & The 2nd International Conference on Tourism, Business, & Social Sciences 2020: Insight to China and ASEAN's Wellness, Tourism, & Innovation* (pp. 33-42). Dhurakij Pundit University.

Yusliza, M. Y., Othman, N. Z., & Jabbour, C. J. C. (2017). Deciphering the implementation of green human resource management in an emerging economy. *Journal of Management Development*, *36*(10), 1230-1246.

Zaki, N. A. B. M., & Norazman, I. (2019). The Relationship between Employee Motivation towards Green HRM Mediates by Green Employee Empowerment: A Systematic Review and Conceptual Analysis. *Journal of Research in Psychology*, *1*(2), 6-9.

Zhang, Y., Luo, Y., Zhang, X., & Zhao, J. (2019). How Green Human Resource Management Can Promote Green Employee Behavior in China: A Technology Acceptance Model Perspective. *Sustainability*, *11*(19), 1-19.