

Green Human Resource Management, Perceived Organizational Support and Organizational Citizenship Behavior towards Environment in Malaysian Petroleum Refineries

Hafizatul Alina Mohd Khalid^{1,*}, Haryanni Harun², Azelin Mohamed Noor³ and Hezlina Mohd Hashim⁴

^{1,2,3&4} Department of Management & Humanities, Universiti Teknologi Petronas

Abstract. Organizational Citizenship Behavior towards Environment (OCBE) is a construct that is increasingly being studied to explain voluntary green behaviors by employees. Performance of OCBEs by employees has been associated with positive outcomes such as improved environmental sustainability of organizations. Hence, promoting more of these behaviors is important for organizations both from an environmental and corporate sustainability perspective. Several studies have examined the influence of Green Human Resource Management (Green HRM) and Perceived Organizational Support (POS) on Organizational Citizenship Behavior (OCB) however, there are still calls for more research into the influence of all these three variables; POS and Green HRM on OCB towards environment. The target respondents are executives in middle level management from the petroleum refineries operating in Peninsular Malaysia. Fixed-alternatives questionnaires are used as the research instrument in this study. The data from pilot study were tested and analyzed by using SPSS to compute results namely. The expected result is that there is a positive significant relationship between the independent variables; Green Human Resource Management (Green HRM), Perceived Organizational Support (POS) and dependent variable Organizational Citizenship Behavior towards environment (OCBE). This study provides insights for regulators and policymakers on the extent to which practices and interventions affect Organization Citizenship Behavior on Environment in petroleum refineries operating in Malaysia.

1 Introduction

Organizational Citizenship Behavior for the Environment (OCBE) is originated from the traditional Organizational Citizenship Behavior (OCB) framework. According to Organ (1997), OCB is described as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and in that aggregate promotes effective

* Corresponding author: alina_19000103@utp.edu.my

functioning of the organization". These discretionary behaviors are not specified in job descriptions however, it will contribute to greater impact on organizations through a combined effort of individual employees. OCBE shows the individual ability to take part with the organization via doing practices past the activity obligations that contribute to the environmental environment.

This paper commences with discussing problem statement on the current environmental issue in Malaysia, followed by significance of the study for both academic and industrial perspective. Next, relevant literatures that investigate OCBE, Green HRM and POS were analyzed and discussed, leading to the framework and methodology of the research. This paper concludes by highlighting the result of reliability test from a pilot study.

1.1 Problem Statement

In every element of environmental issues, especially in the diverse metropolitan setting, sustainability has become the primary goal. Environmental issues have evolved into a serious global concern that poses a threat to the environment and human systems, ultimately affecting human health. According to previous studies by Renwick et al. (2013) and Anwar et al. (2020), Asian countries are susceptible to environmental pollution and deterioration given the lack of attention provided to environmental management. As a result, research should be conducted to fill in the literature gap due to environmental sustainability challenges.

These environmental issues pose a threat to environmental sustainability in which have made organizations all over the world to alter their business strategies to support environmental sustainability; hence becoming a green company is one of the initiatives to support environmental sustainability (Chithra et al., 2017). Currently, Malaysia greenhouse gas emission is capped at 4.87kg CO₂-eq./cap/day and the second highest greenhouse gas emission contributor is from petroleum refinery activities with 0.597 kg CO₂-eq./cap/day (Shafie et al., 2020). According to Amanda et al. (2010), the petroleum refining process releases a significant number of pollutants into the atmosphere, including greenhouse gases that are related to global warming.

Besides, many voluntary green behaviors undertaken by employees have gone unnoticed by the management system (Bashirun et al., 2019). Therefore, it is crucial to look into the factors that influence employees' green behaviors in the workplace while considering organizational citizenship behavior towards environment, as most of environmental management studies have failed to distinguish between employees' voluntary and policy-driven involvement in green behaviors.

1.2 Significance of Study

OCBE can be extremely valuable to organizations and can contribute to performance and competitive advantage. Besides, this study aims to give additional perspectives on OCBE literatures' knowledge base by uncovering employees' voluntary behavior towards green initiatives at workplace, which has not been empirically analyzed enough, in order to provide clearer idea of the concept and its implications. Additionally, this study also provides theoretical insights for energy regulators and policymakers on the extent to which policies/interventions affect organization citizenship behavior on environment in Malaysian Petroleum Refineries.

2 Literature Review

According to Boiral (2009), OCBE can be comprehended as a discretionary and individual social behavior that are not formally recognized by organizational reward system, however, contribute to an increasingly successful organizational environmental sustainability. These are all voluntarily and are not required by the organizations as these discretionary behaviors are not mentioned in job descriptions, but they will contribute to a greater impact of individual employees' effort on organizational sustainability.

2.1 Organizational Citizenship Behavior towards Environment

Individual and discretionary behaviour encompasses a variety of initiatives, such as implementing green technology to reduce carbon waste, suggesting solutions to reduce waste to prevent pollution, and a variety of other green practises initiatives in the workplace. The elements and dimensions of OCBE are mostly comprise of voluntary behaviors towards green initiatives that address organizations' environmental concerns. Besides, Daily et al. (2009) established four OCBE dimensions: organizational commitment, environmental concern, perceived corporate social performance and perceived supervisor support for environmental initiatives, meanwhile, Boiral et al. (2013) believed that voluntary, proactive environmental behaviors, and individual performance are the elements of OCBE.

Boiral and Paillé (2012), on the other hand, proposed that the primary elements of OCBE are eco-initiatives, eco-civic engagement, and eco-helping. This study is focusing on eco civic engagement as the focal type of OCBE. Eco civic engagement is related to any organizational contribution to environment. Involvement in environmental volunteer work and organization environmental activities at workplace, voluntary promotion of the organization's green image in events related to the organization's environmental concerns are just a few examples eco civic engagement practises. OCBE classified as eco-civic engagement were described as unpaid, voluntary participation in environmental initiatives that contribute to an organization's green image improvement. Surprisingly, in the literature on environmental sustainability, this type of behavior has been generally neglected, ignored or taken for granted.

2.2 Green Human Resource Management

An organization through the HRM ought to be a stimulant for employees' awareness about the needs of green management and to turn into the drivers for employees to build up an organization that has an extraordinary environmental performance. In this manner, green HRM showed up as a key management field that has a significant effect on the issues inside the organization. Correspondingly, Green HRM practices are the programs that get executed in the organization to increase positive environmental effects of the organization (Arulrajah et al., 2016).

The phrase 'green human resources management' (Green HRM) is typically defined as incorporating the human resource management related components of environmental management (Pham & Jabbour, 2019), moreover, Silverster (2019) believed that successful implementation of Green HRM strategies in firms may depend on employees' organizational citizenship behaviour toward the environment (OCBE). Green HRM practises are expected to create organisations that enhance environmental management, grant abilities and capabilities training in the innovation and development sectors and offer rewards and remunerations to create a flourishing environmental performance. Green HRM practises are concerned with transforming regular workers into green employees to meet the

organization's environmental goals and eventually making huge contributions to environmental sustainability through Green HRM.

2.3 Perceived Organizational Support

Perceived Organizational Support (POS) fundamentally implies acknowledgment by the organization of a person's loyalty, efforts, socio-emotional needs, and commitment (Paille & Meija-Morelos, 2019) characterized POS towards environment as “the particular convictions held by employees concerning how much the organization values their commitments toward sustainability”. With regards to corporate greening, employees feel bolstered when the organization supported employees' needed resources (Paille & Meija-Morelos, 2019). Therefore, Pinzone (2019) proposed that adjusting the original organizational support theory to environmental concerns results in green POS, since green training is likely to be perceived as an investment made by organization in employees' knowledge and skills for environment enhancement.

The relationship between green training and POS is the most apparent HRM approach by the organization for developing POS since it instils an interest in employees. Preparing is surely a procedure where the organization invests oil and gas and exertion in showing something new; in this way, the employees know about the help that the business gives them and, hence, their POS increments. Employees' opinions about the amount to which the organisation cares about their well-being and values their contributions are reflected in POS, which represents the sorts of support that develops via interactions with superiors.

POS may create a sense of duty to care about the organization's well-being and to assist it in achieving its objectives. According to Yongxing et al. (2017), employees' feelings of commitment to assist the company accomplish its objective are increased when they receive favourable treatment from the business on a regular basis. According to Hur (2013), POS has a significant impact on employees' behavior. POS has been demonstrated to be useful in moderating organizational relationships in previous studies (Cheng et al., 2016; Han et al., 2016; Hur et al., 2013). Therefore, POS is expected to increase employee's feeling of obligation towards helping the organization to reach its objectives, their commitments and their expectation that enhanced performance would be rewarded.

3 Proposed Research Framework

In addition to the research questions and research objectives of this study, the objective of the study is to find out the relationship between Green HRM and OCBE as well as moderating impacts of relationship between POS, and Green HRM towards OCBE. Hence, based on application of OCBE, the research framework is illustrated in Figure 1. This will give the implications to the employees and organizations in encouraging green behavior at the workplace.

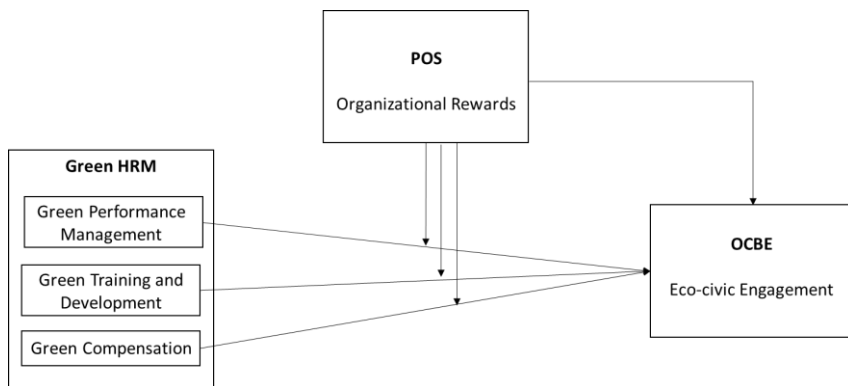


Figure 1: Conceptual Framework for Impact of Green HRM towards OCBE with POS as moderator (Developed for this study)

4 Proposed Methodology

This study intends to utilize a quantitative research method approach in addressing the research questions and to fulfil the research objectives. An organizational survey will be conducted to derive the intended findings. An organizational survey is a fact-based assessment that is essential to successfully manage human capital as this is the most feasible and easy to conduct data collection method. The scope of this study concentrates on the Malaysian Petroleum Refineries of which the employees' green behaviors in the organizations will be examined. Data will be collected from executives from the middle level of management in petroleum refineries operating all around Malaysia.

4.1 Sampling Design

The target population is executives from the middle level of management in petroleum refineries operating all around Malaysia. There are 6 refineries that operate all around Malaysia. 3 of them are owned by PETRONAS and the remaining 3 are owned individually by PETRON, TIPCO and Hengyuan Refining Company. The population generated from the HRDF Industrial Insights Report (2019) is 13,483 employees that registered with HRDF in all 6 petroleum refineries operating in Malaysia. Therefore, Krejcie and Morgan (1970) suggested that the targeted sample size should be around 373 samples.

4.2 Research Instrument

This study uses fixed-alternative questions for questionnaires. There will be 2 sections for questionnaires in this study; the first section is set of questions based on demographic profile and it contained a total of 8 questions which asks for the respondent's organization, department, gender, age, working experiences, education background. The rest of the questions in the next section are formed with dependent and independent variables with a total of 45 questions. This section is designed to analyze the degree of agree and disagree of respondents on the statement in the questionnaire by the aid of Five-point Likert scale.

A pilot study was conducted to examine the reliability and the validity of the instrument produced in the final stages of the testing. For a pilot study, a small sample from target population were used to improve the instrument prior to using the actual and bigger sample. The instruments used for this pilot study is administered and monitored by experts' review to ensure the final study will be conducted in smooth procedures and processes.

Hence, the revised questionnaires were distributed through online platform to 3 petroleum refineries operating in Malaysia and a total of 20 responses were collected from it. This pilot study was conducted to ensure that the questionnaire is relevant and easy to understand. The reliability test analysis was conducted using SPSS program to determine the reliability of the questionnaire. As the figure of Cronbach's alpha coefficient closer to 1, the greater the degree of the reliability. Hence, the reliability test revealed that all items used in this study were reliable with Cronbach's alpha above 0.80 as shown in Table 1, therefore, no item was deleted.

Variables	Cronbach's Alpha
Organizational Citizenship Behavior towards Environment	0.844
Green Human Resource Management	0.970
Perceived Organizational Support	0.938

Table 1: Cronbach's Alpha Coefficient (Developed for this study)

5 Conclusion

This study intends to derive the findings of relationship between Green HRM, POS and OCBE. Going forward, more research in this area of studies is expected to be conducted in the future to assist organization in enhancing environmental management at workplace. Moreover, this study provides additional perspectives to OCBE by looking into employees' green behaviors at workplace with the support from POS and Green HRM. In conclusion, this study provides valuable findings that gain understanding on how POS and Green HRM impact OCBE in Malaysian Petroleum Refineries and their contribution to achieve a sustainable workplace.

6 References

- Anwar, N., Mahmood, N. H. N., Yusliza, M. Y., Ramayah, T., Faezah, J. N., & Khalid, W. (2020). Green Human Resource Management for organisational citizenship behavior towards the environment and environmental performance on a university campus. *Journal of Cleaner Production*, 256, 120401.
- Bashirun, S. N., Samudin, N. M. R., Mohd Zolkapli, N., & Badrolhisam, N. I. (2019). Fostering Organizational Citizenship Behavior for the Environment in Promoting Employee Green Behavior at the Workplace. *International Journal of Business and Management*, 3(1), 18–24.
- Boiral, O. (2009), "Greening the corporation through organizational citizenship behaviors", *Journal of Business Ethics*, Vol. 87, No. 2, pp. 221-236.
- Boiral, O., & Paille, P. (2012). Organizational Citizenship Behavior for the Environment: Measurement and Validation. *Journal of Business Ethics*, 109, 431-445.

Boiral, O., Talbot, D., & Paillé, P. (2013). Leading by Example: A Model of Organizational Citizenship Behavior for the Environment. *Business Strategy and the Environment*, 24(6), 532–550.

Cheng, J.C., Yen, C.H., Chen, C.Y., Teng, H.Y., 2016. Tour leaders' job crafting and job.

Chithra, M., & Jyothi, P., Dr. (2017). Eco-civic Engagement – A dimension of OCBE. *International Journal of Human Resource Development and Management*,7(1), 1-12.

Daily, B. F., Bishop, J. W., & Govindarajulu, N. (2009). A Conceptual Model for Organizational Citizenship Behavior Directed Toward the Environment. *Business and Society*, 48(2), 243–256.

Han, S.J., Bonn, M.A., Cho, M., 2016. The relationship between customer incivility, restaurant frontline service employee burnout and turnover intention. *Int. J. Hosp. Manage.* 52 (1), 97–106.

HRDF (2019). Human Resources Development Fund: Industrial Insights Report. Ministry of Human Resources, Malaysia. Issue 4/2019.

Hur, W.M., Moon, T.W., Jun, J.K., 2013. The role of perceived organizational support on emotional labor in the airline industry. *Int. J. Contemp. Hosp. Manage.* 25 (1), 105–123.

Krejcie R. V., & Morgan D. W. (1970). Determining sample size for research., *Educational and Psychological Measurement*, vol. 30, pp. 607-610

Paillé, P., & Meija-Morelos, J. H. (2019). Organizational support is not always enough to encourage employee environmental performance. The moderating role of exchange ideology. *Journal of Cleaner Production*,220, 1061-1070.

Pham, N. T., Tučková, Z., & Jabbour, C. J. (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., Lettieria, E., & Huisingh, D. (2019). Effects of 'green' training on pro-environmental behaviors and job satisfaction: Evidence from the Italian healthcare sector. *Journal of Cleaner Production*,226, 221-232.

Renwick, D.W., Redman, T., Maguire, S., 2013. Green Human Resource Management: A Review and Research Agenda. *International Journal Management Review*, 15 (1).

Shafie, F. A., Suparman, N., Mesarandi, U. A. A., Omar, D., Karuppanan, S., & Oliver, L. H. L. (2020). Environmentally- extended input-output analysis for Malaysia. *Healthscope: The Official Research Book of Faculty of Health Sciences, UiTM*, 3(3), 38 - 43.

Yongxing, G., Hongfei, D., Baoguo, X., & Lei, M. (2017, October). (PDF) Work engagement and job performance: The moderating role of perceived organizational support.