

A MEDIATION MODEL OF AFFECTIVE COMMITMENT TOWARDS THE ENVIRONMENT ON LOCAL GOVERNMENT EMPLOYEES' ORGANIZATIONAL CITIZENSHIP BEHAVIOUR TOWARDS THE ENVIRONMENT (OCBE)

Soon-Yew Ju¹, Diyana Kamarudin^{2,3*}

¹*Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Pahang, Malaysia*

²*Faculty of Industrial Management, Universiti Malaysia Pahang, Lebu Raya Tun Razak, 26300, Gambang, Pahang, Malaysia*

³*Faculty of Education and Liberal Studies, City University Malaysia, Menara City U, No. 8, Jalan 51A/223, 46100 Petaling Jaya, Selangor.*

**E-mail: Diyana.kamarudin@city.edu.my*

ABSTRACT

Environmental management practices inside an enterprise are related to the environmental citizenship of its personnel. However, not much is covered on the indirect influence that initiates this association. This study delves into whether affective commitment to the environment functions as a mechanism on the interaction between environmental management practices and eco-helping corporate citizenship behaviour among employees. This study was conducted utilising data collected from 244 Peninsular Malaysia local authority employees. 244 employees from municipal councils, city councils and city halls from Peninsular Malaysia were sampled using purposive sampling where the respondents were asked to fill out a questionnaire. Analysis of indirect effects found that affective attachment to the environment serves as a psychological mechanism in the interaction between environmental management techniques and employees' eco-helping organisational citizenship behaviour.

Keywords: Environment, local government, organizational citizenship behaviour, eco-helping, affective commitment, environment management practices.

INTRODUCTION

Climate change and global warming are the most widely debated environmental issues on a global scale, especially with the dangers they pose to the environment and human systems (Robertson & Barling, 2013) and their impact on human health (Patz *et al.*, 2005). Local Agenda 21 established a criterion where local governments can achieve sustainable goals and development locally (Nurudin *et al.*, 2016). The responsibility of local government acting as the government's direct influencer on local communities is crucial. This is because they can support the climate policy by changing the regulations, implementing new norms, and fostering sustainable lifestyles to enhance the locals' well-being (Coenen & Menkveld, 22 C.E.; Shilpi Kapur, 2012).

Shabecoff (2003) mentioned that if environmentalism were to be an agent, it would require societal revolution for it to transform. As a result, the study of local government employees' organisational citizenship behaviours toward the environment (OCBE) is important as local governments are responsible for promoting developments that are more sustainable (Jörby, 2010). Local government staff who recognise and appreciate sustainable development are firmly preferred (Mohamed *et al.*, 2016). This study focuses on the organisational citizenship behaviour of employees toward the environment — the eco-helping construct.

LITERATURE REVIEW

Social Exchange Theory.

Social exchange theory (SET) proposes that all human interactions are based on a cost-benefit analysis. According to this theory, all human behaviour results from an exchange process. Social exchange theory is the most compelling and dominant way of understanding subordinate and association relationships (Cropanzano & Mitchell, 2016). Thus, the social exchange theory is appropriate for comprehending employees' organisational citizenship behaviours toward the environment (Paillé & Mejía-Morelos, 2014), where the organisation is the space in which employees, coworkers, and the organisation interact and exchange (Wayne *et al.*, 1997). Rarely have studies utilised the social exchange paradigm to describe employees' organisational citizenship behaviours toward the environment (Paillé *et al.*, 2013). Earlier empirical study has shown that organisation-regulated social exchanges anticipate employees' eco-initiatives (Raineri *et al.*, 2016a) and eco-helping (Khan *et al.*, 2021). Social exchange arrangement in this research is utilised as a basis for illuminating the "support - affective commitment" relationship between organisation and subsidiary.

Employees' Organizational Citizenship Behaviours toward the Environment-Eco-Helping.

PEB is commonly characterised as "behaviour that minimises the danger of harming the environment and optimises the use of activities that can help the environment" (Steg & Vlek, 2009). Environmentally-related workplace conduct, such as OCBE, has been defined as an optional and voluntary activity (Boiral & Paillé, 2011) based on research findings concerning studies on the green behaviours of employees. Volunteer work is not stated in the official job scope (Lamm *et al.*, 2013), and the individual's initiative does not extend beyond the organisation's objectives. However, required employee behaviour is frequently regarded as contributing to achieving the primary business objectives (Norton *et al.*, 2015). Traditionally, OCBE – eco-helping employee behaviours have been recognised as a success criterion for pollution prevention (Paillé *et al.*, 2013). Eco-helping as a voluntary, non-official activity to promote environmental implementation (Paillé *et al.*, 2013) is a crucial aspect of firm

greening (Boiral *et al.*, 2015). Alt and Spitzeck (2016) discovered through empirical observation that there is a positive correlation between OCBE and environmental personnel performance.

The Influence of EMP to Employees' OCBE – Eco-Helping via ACE.

Environmental management practices (EMP) were defined by (Paillé *et al.*, 2013) as "formal practices aimed at integrating environmental concerns into organisational management and at providing stakeholders with tangible evidence of the organisation's environmental commitment, such as the implementation of an environmental policy, the adoption of ISO-norm 14001, environmental reporting." EMP is typically crucial in enhancing a company's environmental performance (Perez *et al.*, 2009). Norton *et al.* (2015) research identified relationships between the organisational sustainability policy (i.e., the EMP concept) and the employees' active green behaviours. It was argued that the local government must prioritise environmental policy to address the environmental dilemma (Norton *et al.*, 2014, 2015).

Generally, the practical implementations of EMP substantially impact the organisation's environmental performance (Perez *et al.*, 2009). However, EMP alone will not be able to address the complexities produced by environmental challenges, as environmental performance is mainly voluntary (Boiral, 2008). Certainly, EMP is essential for establishing organisational environmental behaviours (Ramus & Steger, 2000a), but as a sole factor in predicting employees' OCBE, it is believed to be very simple.

Consequently, this study proposes that scientists include the indirect effect that influences the relationship between EMP and employees' OCBE, namely, the idea of affective commitment to the environment (ACE) (Ramus & Steger, 2000a) as a mediator. Emotions are the centre of human life. Therefore, understanding and appreciating emotions is crucial to comprehending and realising the nature of humans (Kolb *et al.*, 2019). When emotion is elicited, human feelings are activated, followed by the manifestation of behaviour. Therefore, combining emotional and cognitive human characteristics promotes employees' pro-environmental conduct (Tapia-Fonllem *et al.*, 2013). The indirect effect is a conceptualisation that illuminates the psychological mechanisms underlying the relationship between an exogenous and an endogenous variable (Baron & Kenny, 1986; MacKinnon *et al.*, 2012). PEB is typically characterised as "behaviour that minimises the danger of harming the environment and increases the implementation of methods that can help the environment" (Steg & Vlek, 2009).

Based on the above academic discourse, the following hypotheses will be examined.

Hypothesis 1: There is a statistically positive relationship between EMP and ACE.

Hypothesis 2: This is a statistically positive relationship between ACE and employees' OCBE – eco-helping.

Hypothesis 3: There is a mediation effect between ACE on EMP on employees' OCBE – eco-helping.

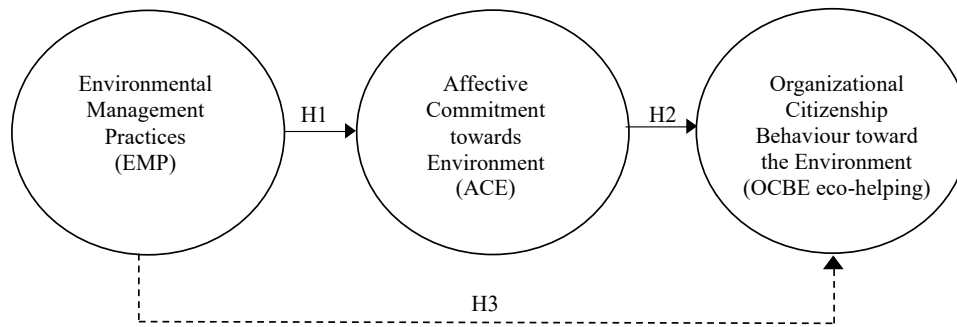


Figure 1. The Research Model.

Note: Solid arrows show direct effect and dashed arrow mean indirect effect.

RESEARCH DESIGN

This study used a cross-sectional design in which data were obtained from Peninsular Malaysia local government employees within a specific period. Employees from municipal councils, city councils and city halls from Peninsular Malaysia were chosen via non-probability purposive sampling procedure. Local authorities particularly the municipal, city councils and city halls play a respected part in urbanization, waste management, waste production and energy consumption.

Preceding data analysis, the G*Power software were utilized, data of 244 crop power of > 0.99 for indirect effect model, i.e., further than the threshold of 0.80 statistics power. Kline (2004) asserted that respondents of 200 and above are generally excessive and suitable for most of the model.

Measures

Boiral and Paillé (2012) three indicators instrument were used to quantify the dimension of OCBE – eco-helping. Raineri *et al.* (2016) eight items environmental commitment scale was employed as to disclose an individual's attachment to the organization's surroundings. Ramus and Steger (2000) single dimension instrument with eleven indicators was engaged to estimate the dimension of organizational environmental management practices.

As indicated by Podsakoff *et al.* (2011), this study utilized various scale endpoints for external and endogenous variables. Likert scales of seven-point was used to examine respondents' endogenous variable and Likert scales of five-point was used to examine respondents' exogenous variables (e.g., Ngah *et al.*, (2014)).

Data Analysis

SmartPLS 3.2.9 (Hair *et al.*, 2019), PROCESS macro 2.16.3 and SPSS 23.0 software (Hayes, 2018) were engaged to achieve the study investigation. Reliability, convergence, and discriminant validity of the measurement model was examined first prior to examine the structural model.

RESULTS AND DISCUSSION

Measurement Model

As shown on Table 1, all items' loadings are beyond the threshold of > 0.50 (Hair *et al.*, 2014). Indicators' factor loading values ranged from 0.500 to 0.900. Hence, result demonstrated that all items are loaded considerably within their own constructs (Henseler, 2017), therefore no indicators needed to be deleted. The internal consistencies were established by detecting at the composite reliability (CR). Hair *et al.* (2017) urged that reliability means to the degree to which a set of items displays internal consistency to the dimension. Table 1 presented that all reliability values of CR are ranging from 0.889 to 0.938 for all dimensions, which surpasses the least anticipated value of 0.7 (Nunnally, 1994). CR also goes above 0.80 for all dimensions (Nunnally, 1994).

Research also inspects the value of average variance extracted. Average variance extracted denotes to the among a bunch of indicators from the associated dimensions, the suggested values have to be bigger than of 0.50 (Fornell & Larcker, 1981a). Result from the Table 1 revealed that all dimensions' average variance extracted values are ranging from .507 to .774, assigned acceptable degree of convergent validity. Validity and reliability of measure is important social science study (Cabrera-Nguyen, 2010). Henseler (2017) specified that the two focal conditions used to examine goodness of measures are validity and reliability.

Table 1. Reliability and Convergent Validity

Dimension	Indicators	Factor Loading	CR	AVE
Eco Helping	Eco Helping1	0.900	0.911	0.774
	Eco Helping2	0.887		
	Eco Helping3	0.852		
EnvtMP	EnvtMP01	0.757	0.938	0.582
	EnvtMP02	0.743		
	EnvtMP03	0.793		
	EnvtMP04	0.764		
	EnvtMP05	0.834		
	EnvtMP06	0.838		
	EnvtMP07	0.807		
	EnvtMP08	0.724		
	EnvtMP09	0.707		
	EnvtMP10	0.694		
	EnvtMP11	0.712		
ACE	ACE1	0.784	0.889	0.507
	ACE2	0.825		
	ACE3	0.805		
	ACE4	0.766		
	ACE5	0.500		
	ACE6	0.521		
	ACE7	0.682		
	ACE8	0.735		

This study's discriminant validity was validated using the well-known criterion (Fornell & Larcker, 1981b) and Heterotrait-Monotrait Ratio (Henseler *et al.*, 2015). Table 2 displays the Fornell-Larcker criterion, demonstrating that the square root of the average variance extracted for each dimension is greater than the values of the correlations with other dimensions along the horizontal and vertical axes. Fornell & Larcker (1981) argued that its related indicator should demonstrate more significant variance to establish discriminant validity. In Table 2, the results indicate that diagonal essentials of square roots of average variance retrieved are greater than all off-diagonal essentials horizontally and vertically, revealing the Fornell-Larcker criterion and confirming discriminant validity.

Table 2. Fornell-Larcker Criterion

Dimension	ACE	EnvtMP	Eco Helping
ACE	0.712		
EnvtMP	0.320	0.763	
Eco Helping	0.478	0.344	.880

Table 3, HTMT exhibited those values of HTMT are smaller than 0.85 (ranging from .345 to .526), thus, answers endorsed that all the dimensions are frankly dissimilar (Henseler *et al.*, 2014), thus discriminant validity has been confirmed.

Table 3. Heterotrait-Monotrait Ratio (HTMT)

	ACE	EnvtMP	Eco Helping
ACE			
EnvtMP	0.345		
Eco Helping	0.526	0.379	

Based on above discussion, dimension's validity and reliability is ascertained. Dimension validity is referred to "the degree to which a measure assesses the construct it is purported to assess" (Peter, 2018). Confirmatory factor analysis outcomes strengthened that this study variables were established distinctive for additional analysis, as measurement model offered acceptable convergent and discriminant validity.

Structural Model

R² value of 0.111 for affective commitment towards environment direct effect model suggested that 11.1% of the variance in affective commitment towards environment is explained by environmental management practices. According to Cohen's (1992) standard R² value of 0.111 is weak. nevertheless, for affective commitment towards environment direct effect model one variable (i.e., environmental management practices) in forecasting it. Therefore R² value is relatively low. Moreover, constructs of environmental management practises ($\beta = 0.329$, $t = 5.321$) are significantly correlated with affective commitment to the environment. The empirical t value is greater than the t value of 1.645, indicating

that the relationship between environmental management practices and affective commitment to the environment is significant at a 5% significance level. Thus, the first hypothesis is supported.

According to the organisational citizenship behaviour toward the environment – eco-helping direct impact model R2 value of 0.256, affective commitment towards the environment explains 25.6% of the variance in organisational citizenship behaviour toward the environment – eco-helping. According to Cohen's recommendation, an R2 value of 0.256 is significant. Moreover, affective commitment to the environment dimensions ($\beta = 0.467$, $t = 8.340$) are found to be significantly correlated with organisational citizenship behaviour toward the environment – eco-helping, and the empirical t value is greater than the t value of 1.645, establishing that the relationship between affective commitment to the environment and organisational citizenship behaviour toward the environment – eco-helping is significant at a 5% level of significance. The second hypothesis is therefore supported.

The number of sample repetitions was set to 5,000 to ensure the results' consistency. Preacher and Hayes (2008) recommended the method of 5,000 bootstrap subsamples with 95% bias-corrected confidence intervals for the mediation mode. The mediation was evaluated using Hayes's PROCESS technique (Bolin, 2014). The association between environmental management practises constructions and organisational citizenship behaviour toward the environment – eco-helping dimension was confirmed to be mediated by affective commitment to the environment ($\beta = 0.130$; $CI_{95} = 0.062, 0.222$). Mediation is deemed to materialise and be significant if the value of zero does not fall between the upper and lower 95% confidence ranges. Therefore, the third hypothesis is supported.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Even though the results of this study provide valuable and fascinating insights into the organisational citizenship behaviour of Peninsular Malaysia local authority employees toward the environment in the workplace, some methodological limitations are mentioned.

The study was conducted within the framework of Peninsular Malaysia's local municipal authorities. Consequently, the conclusions of this study cannot be applied to other circumstances. Municipal challenges and characteristics in Peninsular Malaysia differ from district local governments, other government agencies, commercial entities, and even local governments in Sabah and Sarawak. Local municipal authority employees may have a different organisational environment, behavioural characteristics, and physical appearance than other government agencies and private sector employees. Therefore, researchers must exercise caution when generalising these findings and inferences to different contexts.

This study did not collect data from the participants' co-workers and superiors, who may have objective knowledge of the participants' organisational citizenship behaviour toward the environment in the organisation. Therefore, future research may objectively measure organisational citizenship behaviour toward the environment from the participants' co-workers or superiors as respondents. Cross-sectional data are less reliable for determining causation between components. Also, data were collected

from a single source, with employees serving as the unit of analysis; hence, this may overestimate the connections due to the possibility of common method bias.

Due to the cross-sectional survey data, this study cannot presume a cause-and-effect link, as cause and effect cannot be inferred from these results. In addition, the sampling technique adopted is purposive sampling. Therefore, study results may not be generalisable to the entire community and its representatives; however, this is one of the obstacles in quantitative cross-sectional behavioural and social science research. Future studies may investigate longitudinal investigations, as longitudinal studies may provide additional insight into the long-term construct of organisational citizenship behaviour toward the environment.

The possibility of non-respondent bias concerns may affect the validity of the results, as the final useable and valid data is 244 employees (64.21%) after omitting incomplete and unusable data. Regarding personal confidentiality and ethical involvement, the human resource department did not grant the personal details of employees who decided not to be involved in this study. In addition, employees who participated in this study did so anonymously. This study alerts that there may be a probability of differences between respondents who participated in this study and those who refused. However, this study could not encompass these two groups in a non-response bias test. Hence, evaluation of the potential impact is unmanageable.

Future research may analyse the likelihood of second-order determinants for employees' organisational citizenship behaviour toward the environment construct in relation to the study model's evidence. However, the literature has not conceptualised the three dimensions of organisational citizenship behaviour toward the environment as a second-order element.

CONCLUSION

The findings of this study provide evidence that social exchange theory can be used to predict organisational citizenship behaviour toward the environment – eco-helping within the organisation. In addition, the research found that affective commitment to the environment may indirectly affect the relationship between environmental management techniques and organisational, civic behaviour toward the environment – eco-helping in the context of Malaysian local government. However, because this study is limited to local government employees, its generalizability and validity are diminished. In light of this, it is essential to note that caution must be exercised when applying the findings of this study to organisations with diverse cultural contexts and organisational values.

ACKNOWLEDGEMENTS

The authors would like to thank the Fundamental Research Grant Scheme (FRGS) FRGS/1/2018/SSI09/UMP/02/5 – Hands on Learning Experience: Interactive Teaching Aid for Hearing Impaired Special Education's Linguistic Use and University Malaysia Pahang (RDU 190175) for providing the funds and facilities to making this research possible.

REFERENCE

- Adolfsson Jörby, S. (2010). Local Agenda 21 in Four Swedish Municipalities: A Tool towards Sustainability? *Http://Dx.Doi.Org/10.1080/09640560220116314*, 45(2), 219–244. <https://doi.org/10.1080/09640560220116314>
- Alt, E., & Spitzack, H. (2016). Improving environmental performance through unit-level organizational citizenship behaviors for the environment: A capability perspective. *Journal of Environmental Management*, 182, 48–58. <https://doi.org/10.1016/J.JENVMAN.2016.07.034>
- Baron, R. M., & Kenny, D. A. (1986). *The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations*. 51(6), 1173–1182.
- Boiral, O. (2008). Greening the Corporation Through Organizational Citizenship Behaviors. *Journal of Business Ethics* 2008 87:2, 87(2), 221–236. <https://doi.org/10.1007/S10551-008-9881-2>
- Boiral, O., & Paillé, P. (2011). Organizational Citizenship Behaviour for the Environment: Measurement and Validation. *Journal of Business Ethics* 2011 109:4, 109(4), 431–445. <https://doi.org/10.1007/S10551-011-1138-9>
- Boiral, O., & Paillé, P. (2012). Organizational Citizenship Behaviour for the Environment: Measurement and Validation. *Journal of Business Ethics*, 109(4), 431–445. <https://doi.org/10.1007/S10551-011-1138-9>
- Boiral, O., Talbot, D., & Paillé, P. (2015). Leading by Example: A Model of Organizational Citizenship Behavior for the Environment. *Business Strategy and the Environment*, 24(6), 532–550. <https://doi.org/10.1002/BSE.1835>
- Bolin, J. H. (2014). Hayes, Andrew F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York, NY: The Guilford Press. *Journal of Educational Measurement*, 51(3), 335–337. <https://doi.org/10.1111/JEDM.12050>
- Cabrera-Nguyen, P. (2010). Author Guidelines for Reporting Scale Development and Validation Results in the Journal of the Society for Social Work and Research . *Journal of the Society for Social Work and Research*, 1(2), 99–103. <https://doi.org/10.5243/JSSWR.2010.8>
- Coenen, F., & Menkveld, M. (2012). The role of local authorities in a transition towards a climate-neutral society. In *Global Warming and Social Innovation: the Challenge of a Climate Neutral Society* (1st ed., pp. 107–126). Global Warming and Social Innovation: the Challenge of a Climate Neutral Society.
- Cohen, J. (1992). Statistical Power Analysis. *Current Directions in Psychological Science*, 1(3), 98–101. <https://doi.org/10.1111/1467-8721.ep10768783>
- Cropanzano, R., & Mitchell, M. S. (2016). Social Exchange Theory: An Interdisciplinary Review: *Https://Doi.Org/10.1177/0149206305279602*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- Fornell, C., & Larcker, D. F. (1981a). SEM with Unobservable Variables and Measurement Error: Algebra and Statistics. In *Journal of Marketing Research* (Vol. 18, Issue 3).
- Fornell, C., & Larcker, D. F. (1981b). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate data analysis. In *Pearson custom library*. <https://doi.org/10.1038/259433b0>

- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., Hult, T. G. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE PublicationsSage CA: Los Angeles, CA. <https://doi.org/10.1007/s10995-012-1023-x> [doi]
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, And Conditional Process Analysis: A Regression-Based Approach* (2nd ed.). Guilford Press. <https://psycnet.apa.org/record/2013-21121-000>
- Henseler, J. (2017). Bridging Design and Behavioral Research With Variance-Based Structural Equation Modeling. *Journal of Advertising*, 46(1), 178–192. <https://doi.org/10.1080/00913367.2017.1281780>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/S11747-014-0403-8/FIGURES/8>
- Khan, N. U., Irshad, A. ur R., Ahmed, A., & Khattak, A. (2021). Do organizational citizenship behavior for the environment predict triple bottom line performance in manufacturing firms? *Business Process Management Journal*, 27(4), 1033–1053. <https://doi.org/10.1108/BPMJ-01-2021-0007/FULL/XML>
- Kline, R. B. (2004). *Beyond significance testing: reforming data analysis methods in behavioral research*. 325.
- Kolb, B., Whishaw, I. Q., & Teskey, G. C. (2019). An introduction to brain and behavior. In *An Introduction to Brain and Behavior, sixth edition* (Sixth edition.). Macmillan International Higher Education Worth Publishers.
- Lamm, E., Tosti-Kharas, J., & Williams, E. G. (2013). Read This Article, but Don't Print It: Organizational Citizenship Behavior Toward the Environment. <https://doi.org/10.1177/1059601112475210>, 38(2), 163–197. <https://doi.org/10.1177/1059601112475210>
- MacKinnon, D. P., Cox, S., & Baraldi, A. N. (2012). Guidelines for the Investigation of Mediating Variables in Business Research. *Journal of Business and Psychology*, 27(1), 1. <https://doi.org/10.1007/S10869-011-9248-Z>
- Mohamed, S., Seow, T. W., & Masrom, A. N. (2016). Sustainable Development At Malaysian Local Governments From Management's View of The Knowledge Transfer Practices. *Fourth International Conference on Sustainable Built Environment*.
- Ngah, A. H., Zainuddin, Y., & Thurasamy, R. (2014). Adoption of Halal Supply Chain among Malaysian Halal Manufacturers: An Exploratory Study. *Procedia - Social and Behavioral Sciences*, 129(July 2016), 388–395. <https://doi.org/10.1016/j.sbspro.2014.03.692>
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee Green Behavior: A Theoretical Framework, Multilevel Review, and Future Research Agenda. <http://dx.doi.org/10.1177/1086026615575773>, 28(1), 103–125. <https://doi.org/10.1177/1086026615575773>

- Norton, T. A., Zacher, H., & Ashkanasy, N. M. (2014). Organisational sustainability policies and employee green behaviour: The mediating role of work climate perceptions. *Journal of Environmental Psychology*, 38, 49–54. <https://doi.org/10.1016/J.JENVP.2013.12.008>
- Nunnally, J. C. (1994). Psychometric theory. In *McGraw-Hill, New York* (3rd ed., Issue 1994). McGraw-Hill.
- Nurudin, S. M., Hashim, R., Hamik, S. A., Rahman, S., Zulkifli, N., & Mohamed, A. S. P. (2016). Public Participation in Local Agenda 21 Programs Implemented by Seremban Municipal Council. *Procedia - Social and Behavioral Sciences*, 219, 555–561. <https://doi.org/10.1016/J.SBSPRO.2016.05.034>
- Paillé, P., Boiral, O., & Chen, Y. (2013). Linking environmental management practices and organizational citizenship behaviour for the environment: a social exchange perspective. <https://doi.org/10.1080/09585192.2013.777934>, 24(18), 3552–3575.
- Paillé, P., & Mejía-Morelos, J. H. (2014). Antecedents of pro-environmental behaviours at work: The moderating influence of psychological contract breach. *Journal of Environmental Psychology*, 38, 124–131. <https://doi.org/10.1016/J.JENVP.2014.01.004>
- Patz, J. A., Campbell-Lendrum, D., Holloway, T., & Foley, J. A. (2005). Impact of regional climate change on human health. *Nature* 2005 438:7066, 438(7066), 310–317. <https://doi.org/10.1038/nature04188>
- Perez, P. O., Amichai-Hamburger, Y., & Shterental, T. (2009). The Dynamic of Corporate Self-Regulation: ISO 14001, Environmental Commitment and Organizational Citizenship Behavior. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.1407227>
- Peter, J. P. (2018). Construct Validity: A Review of Basic Issues and Marketing Practices: <https://doi.org/10.1177/002224378101800201>, 18(2), 133–145.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2011). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. <http://dx.doi.org/10.1146/annurev-psych-120710-100452>, 63, 539–569. <https://doi.org/10.1146/ANNUREV-PSYCH-120710-100452>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods* 2008 40:3, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Raineri, N., Mejía-Morelos, J. H., Francoeur, V., & Paillé, P. (2016a). Employee eco-initiatives and the workplace social exchange network. *European Management Journal*, 34(1), 47–58. <https://doi.org/10.1016/J.EMJ.2015.10.006>
- Raineri, N., Mejía-Morelos, J. H., Francoeur, V., & Paillé, P. (2016b). Employee eco-initiatives and the workplace social exchange network. *European Management Journal*, 34(1), 47–58. <https://doi.org/10.1016/J.EMJ.2015.10.006>
- Ramus, C. A., & Steger, U. (2000a). The roles of supervisory support behaviors and environmental policy in employee “ecoinitiatives” at leading-edge European companies. *Academy of Management Journal*, 43(4), 605–626. <https://doi.org/10.2307/1556357>
- Ramus, C. A., & Steger, U. (2000b). The roles of supervisory support behaviors and environmental policy in employee “ecoinitiatives” at leading-edge European companies. *Academy of Management Journal*, 43(4), 605–626. <https://doi.org/10.2307/1556357>

- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194. <https://doi.org/10.1002/JOB.1820>
- Shabecoff, P. (2003). *The American environmental movement*. Island Press.
- Shilpi Kapur, B. (2012, June). Role of local governments in fostering the transition to sustainable lifestyles and livelihoods and improved well-being. *Global Research Forum on Sustainable Consumption and Production Workshop*.
- Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29(3), 309–317. <https://doi.org/10.1016/J.JENVP.2008.10.004>
- Tapia-Fonllem, C., Corral-Verdugo, V., Gutiérrez-Sida, C., Mireles-Acosta, J., & Tirado-Medina, H. (2013). Emotions and pro-environmental behaviour. *Uniwersytet Śląski*, 343–354. <https://doi.org/10.2/JQUERY.MIN.JS>
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82–111. <https://doi.org/10.2307/257021>