Environment and Social Psychology (2025) Volume 10 Issue 4 ISSN: 2424-8975 (O)
doi: 10.59429/esp.v10i4.3395 2424-7979 (P)

RESEARCH ARTICLE

Instrument validation for measuring environmental sustainability performance in the energy sector of Malaysia

Faiza Siddiqui[1,*], Rohani Salleh[2]

[1] *Faiza Siddiqui, Corresponding Author, PhD Scholar, Graduate Assistant, Department of Management & Humanities, Universiti Teknologi PETRONAS, 32610, Malaysia*

2 Rohani Salleh, Senior Lecturer, Department of Management & Humanities, Universiti Teknologi PETRONAS, 32610, Malaysia

*** Corresponding author:** Faiza Siddiqui, faiza_21002834@utp.edu.my

ABSTRACT

United Nations' SDG goals highlighted the importance of conducting behavioral studies on employee energy usage (12th SGD Agenda) due to increasing environmental issues and global sustainability practices for current and future generations. This study aims to better understand the phenomenon of sustainable consumption behavior by incorporating pro-environmental culture and the impact of workplace spirituality. The focus and scope of this study will be on behavioral studies and organizational interactions in Malaysia's energy sector to attain environmental sustainability performance through individual employee contributions. The value-belief-norm theory of environmentalism supports the conceptual model. The study adds both theoretical and empirical knowledge to the body of knowledge, which makes it significant. The link has been analyzed in study design using quantitative methodologies. Survey-based method of primary data has been used to collect from energy sector employees. A total of 104 employees in the energy sector participated in the pilot testing. With the support of real-world implications and suggestions, practitioners and policymakers will find it simpler to comprehend behavioral phenomena and establish sustainable goals to accomplish environmental sustainability performance.

Keywords: environmental sustainability performance; employee sustainable consumption behaviors; pro-environmental culture; workplace spirituality; energy sector; energy consumption

1. Introduction

The concept of environmental sustainability centers on activities that affect people's quality of life while using natural resources such as land, water, energy, and materials. Research is increasingly focusing on the causes of high carbon emissions, energy usage carelessness, and pertinent policies by organizations in an effort to create a more sustainable society. On the other hand, it has been observed during the past ten years that the energy sector is recognizing sustainable developments as the UN's preferred method of accomplishing sustainable development goals [21,7]. The renewal or sustainable sources of energy include coal, solar, wind and hydropower energy, which are sources coming directly from the natural environment without

ARTICLE INFO
Received: 23 January 2025 | Accepted: 19 March 2025 | Available online: 28 April 2025

CITATION
Siddiqui F, Salleh R. Instrument validation for measuring environmental sustainability performance in the energy sector of Malaysia. *Environment and Social Psychology* 2025; 10(4): 3395. doi:10.59429/esp.v10i4.3395

COPYRIGHT
Copyright © 2025 by author(s). *Environment and Social Psychology* is published by Arts and Science Press Pte. Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), permitting distribution and reproduction in any medium, provided the original work is cited.

harming nature to produce energy[7]. Nearly 90% of all carbon dioxide emissions and more than 75% of all greenhouse gas emissions worldwide are caused by fossil fuels, making them the primary cause of climate change. It is imperative that humanity quickly switch to environmentally friendly energy sources in order to slow down global warming. As of right now, 2,414 TWh, or nearly 19.54%, of 2022 energy consumption comes from renewable sources. This list's top three sources of primary energy are hydropower (6.32%), biomass (6.20%), wind power (fourth), and solar power (third and third, respectively, at 3.07% and 1.93%)[14].

Similarly, Malaysia's economy has grown steadily in the past two decades, which also raises concerns about the needs of the next generation in terms of natural resources in line with the UN's SDG targets[21]. As a developing country, Malaysia has seen a growth in energy demand due to environmental degradation, particularly in residential and commercial buildings[9]. Energy demand is anticipated to rise by 50%[7]. Malaysia was placed 27th out of 141 nations in the Global Competitiveness Index (GCI) 4.0 2019, down from 25th place in the previous year. This could be the cause of Malaysian organizations' lack of interest in sustainable development. Governments must not be the only entities to alter laws to support sustainable development; all stakeholders, including private companies, must also accept personal responsibility for adopting sustainable practices[28].

This puts future generations' need to discover sustainable consumption alternatives in a concerning predicament. Employee contributions at the individual level to sustainable goals must be a socially rooted process. Employees' sustainable consumption behaviors can have a good environmental impact[5]. Previous studies concentrated on energy conservation in household settings. Smart meters indicate that there may be a decrease in homeowners' electricity use[7]. It makes sense to take the same idea into account at work when it comes to employees' sustainable consumption habits. On the other hand, workplace organizational and contextual factors determine the motivation to preserve energy[28] including pro-environmental culture. Numerous studies have identified variables that, from the standpoint of the consumer, can save energy. In general, policymakers created plans for consumer behavior and household consumption. To attain environmental sustainability performance, they hardly ever investigated the sustainable consumption behaviors of employees in offices and workplaces. This study aims to empirically test the employee sustainable consumption behaviors in the office setting to find out the relationship and impact on environmental sustainability performance.

2. Literature review

2.1. Existing research

2.1.1. Environmental sustainability performance (ESP)

Environmental sustainability explains the effect on human well-being while depleting natural resources such as energy, water, land, and materials[1]. The focus of organizations these days is to attain sustainable performance to meet the UN's SD goals to support the public and private sectors. Lorenco, Branco, Curto, and Eugenio (2012) defines environmental sustainability performance is "the extent to which a firm embraces environmental integrity into its operations, and ultimately the impact they exert on the firm and society". Researchers have suggested that we study many aspects to support sustainable practices, to achieve environmental sustainability performance. The organization's policies and cultural components as predictors of environmental sustainability performance have not been well studied[19]. The main elements influencing the performance of environmental sustainability are thought to be organizational culture, pro-environment culture, contextual and situational factors, and additional organizational support[10]. On the other hand, there

are also important variables that eventually affect sustainable behaviors and environmental sustainability performance, (such as employees' behavior, values, and psychological conditions).

2.1.2. Sustainable consumption behaviors (SCB)

Sustainable consumption behaviors refers to "Individual acts of satisfying needs in different areas of life by acquiring, using, and disposing of goods and services that do not compromise the ecological and socio-economic conditions of all people (currently living or in the future) to satisfy their own needs"[19]. Stated differently, as an activity to preserve and responsibly manage the world's socio-physical resources[4]. Sustainability-minded individuals and workers are more motivated to actively contribute to the preservation of natural resources, behave more equitably, use resources to protect the environment, use less energy, and produce less rubbish. Sustainable consumption behaviors are a result of behavioral actions that are necessary given the situation of the planet and atmosphere today. Sustainable consumption behaviors in a company can benefit the economy as well as the business itself[23]. The environment benefits from it, and the effects of environmental issues are lessened[26, 14]. To reduce the detrimental effects on the environment, organizations must encourage such behavioral practices in their workforce.

2.1.3. Pro-environmental culture (PEC)

Organizational culture is one of the most crucial elements in achieving sustainability objectives. The phrase "organization culture" is the root of "green culture," or pro-environment culture. Pro-environment culture refers to “a symbolic context about environmental management and protection within which interpretations guide behaviors and processes of members’ sense-making and set of values and norms describing how the company perceives the environmental variable”[1]. The environmental focus of a company is reflected in its environmental culture. An organization with a pro-environmental culture is one where employees interact with one another based on the environmental strategies of the business. Numerous studies on culture have revealed several aspects of organizational culture. To put it simply, culture consists of conventions, regulations, practices, behaviors, beliefs, and communication patterns. It is important to keep in mind the Schein culture model. Three different cultural views are included in his approach. First, the artifact serves as the foundation for the culture's values, customs, and tenets. This includes items such as wall hangings made of ecological art and posters. Second, morality and ethical values serve as the foundation for norms and values. Finally, the implicit and nonverbal assumptions that people pick up through socializing and dealing with change throughout time at work[10].

2.1.4. Workplace spirituality (WPS)

Spirituality in the workplace is a developing area in the sustainability field[26]. For improved conceptual understanding and actual findings, more research on laces spirituality is necessary. Senses of mindfulness, a sense of completion, and transcendent encounters with coworkers and the workplace as a whole are all considered aspects of workplace spirituality[18, 11]. There is no clear connection between spirituality and "religion." It encompasses a person's inner self-perception, feeling of accountability, moral character, and willingness to help others when no one else is around. Strong moral principles and workplace spirituality are essential for employees to achieve sustainable goals for future generations. In this manner, individuals will be motivated to care about the environment and experience a sense of community through moral ideals like spirituality, even if they are not happy with their jobs. Performance in terms of environmental sustainability is becoming a critical metric for reporting on sustainable goals. Numerous studies on business and economic performance are currently available. Findings are lacking, nevertheless, when it comes to integrating behavior and values with environmental goals. The theoretical gap in the examination of the relationship between sustainability and workplace spirituality could be seen as a novel aspect[26, 14]. Sustainable

consumption practices and environmental sustainability performance can be strongly correlated with workplace spirituality, which is the tendency for individuals to have self-accountability towards all actions and self-responsibility value traits towards consumption even in the absence of monitoring. Companies that have a spiritual working culture have outperformed those that don't[11, 12]. Compared to organizations with poor spirituality, it offers them a higher chance of growth and success in the future.

2.2. Hypothesis development

2.2.1. Direct relationship of PEC with ESP

Pro-environmental culture is seen in literature as being essential to achieving environmental sustainability performance. This facilitates the acquisition of knowledge by staff members from policies, green practices, role models, and social interactions[10]. A company can easily accomplish sustainable goals if it integrates sustainability measurements into its vision, mission, and regulations and uses behavioral interventions to improve the organization. Understanding culture and its effects can help us comprehend the relationship between environmental performance and pro-environment culture. Numerous studies have demonstrated the impact of culture, both positive and negative, on the performance and profitability of organizations. An institution or other social body develops its own set of rules, conventions, values, and regulations, known as its culture. The culture serves as a guide and a facilitator for instruction. Similarly, companies undertaking sustainable development must foster an environmentally conscious culture for their staff to follow suit in terms of behavior. Therefore, it is hypothesized as:

H1: Company Policies & Practices positively influence Environmental Sustainability Performance.

H2: Responsibility for Environmental Issues positively influences Environmental Sustainability Performance.

2.2.2. Direct relationship of PEC with SCB

It is important to link the favorable elements that enable the achievement of environmental sustainability performance while conceptualizing the factors. One of the mediating factors that can affect the performance of ecological sustainability is Sustainable consumption behaviors. According to this study, overall environmental sustainability performance is difficult to attain if employees perform better at work in a pro-environment coherent culture but do not put out individual-level effort or engage in sustainable consumption behaviors[10]. The theoretical gap highlighted the need for behavioral aspects (sustainable consumption behaviors) to mediate environmental sustainability performance. To assess environmental sustainability performance, there is not enough literature available on the mediating role of sustainable consumption behaviors. Therefore, the following hypotheses are assumed:

H3: Company Policies & Practices positively influence Sustainable Consumption Behavior.

H4: Responsibility for Environmental Issues positively influences Sustainable Consumption Behavior.

2.2.3. Direct relationship with SCB with ESP

Concerns about behavioral inconsistency are growing and employee sustainable consumption behaviors can help to sustain behavior over an extended period[17]. If workers stop being proactive and adopt sustainable practices to improve environmental sustainability performance, organizational elements like the pro-environmental culture may become ineffective. Additionally, research on green practices and corporate culture helps to develop and maintain behaviorally related outcomes (sustainable consumption behaviors). On the other hand, to meet environmental sustainability performance targets (energy consumption) and

sustainability goals, sustainable consumption habits must be attained as a responsible and self-initiated act[2]. With this understanding, it can be hypotheses as:

H5: Sustainable Consumption Behavior positively influences Environmental Sustainability Performance.

2.2.4. Direct relationship with WPS

The research and empirical analysis of workplace spirituality have yielded no evidence about employee sustainable consumption patterns. Few studies found a link between sustainable consumption practices and values like happiness, hereafter life through good deeds, spiritual satisfaction, and ethical and moral values[12]. According to Sani et al. (2018) and Şener & Hazer (2008), through values and conduct, workplace spirituality contributes to environmental sustainability. As a result, building on earlier research on values and belief systems, this study examines how workplace spirituality affects environmental sustainability performance by interpreting the value-belief-norm theory of environmentalism.

H6: Workplace Spirituality positively influences Environmental Sustainability Performance.

Additionally, personal values serve as the foundation for integrating sustainability and spirituality in the workplace. Environmentally friendly activities are influenced by specific elements, according to the Value-Belief-Norm hypothesis of environmentalism. People and companies can gain from combining workplace spirituality with sustainability[8]. According to the phenomenon, spirituality, sustainability, and success are significantly correlated[6]. This illustrates how workplace spirituality can be crucial to establishing enduring practices and culture within businesses.

H7: Workplace Spirituality positively influences Sustainable Consumption Behavior.

2.2.5. Mediating relationship of SCB between WPS and ESP

Research shows employees who feel a sense of purpose and values may adopt sustainable consumption practices, according to research on workplace spirituality. In a time when businesses are coping with problems in an uncertain environment and mounting concerns about energy consumption, these workers are essential[4]. One of the most important factors in an organization's successful transition to sustainable consumption behaviors is the strong feeling of ethics, values, and community among its employees[22,26,13]. The literature makes clear that, despite several initiatives, sustainable consumption behaviors have not much improved. The cause of this is many factors including sense of accountability, and other ethical and moral values, in addition to organizational participation in sustainable development programs[26]. Even with behaviors such as sustainable consumption, employees may yet be dishonest in their pursuit of sustainable aims or feel too lethargic to take the necessary actions. Aligning personal values is essential to prevent inconsistent behaviors and behavioral dissonance[2]. Workplace spirituality has the ability to encourage sustainable behavior in relation to environmental issues, which can be sustained over time under a range of conditions[4].

H8: Sustainable Consumption Behaviors mediate the relationship between Workplace Spirituality and Environmental Sustainability Performance.

2.2.6. Mediating relationship of SCB between PEC and ESP

According to Plomp et al. (2016), employee-sustainable consumption behaviors can help sustain behaviors over an extended period, given the growing concerns around behavioral inconsistency[2]. Organizational factors like pro-environmental culture may become ineffective if workers stop being proactive and adopting sustainable practices in an effort to achieve environmental sustainability performance. Additionally, research on green practices and corporate culture helps to develop and maintain behaviorally

related outcomes (sustainable consumption patterns). Nevertheless, to accomplish sustainable consumption goals about energy consumption and sustainability objectives (environmental sustainability performance), one must act responsibly and voluntarily[2].

H9: Sustainable Consumption Behaviors mediate the relationship between Company Policies & Practices and Environmental Sustainability Performance.

H10: Sustainable Consumption Behaviors mediate the relationship between Responsibility for Environmental Issues and Environmental Sustainability Performance.

2.3. Conceptual framework

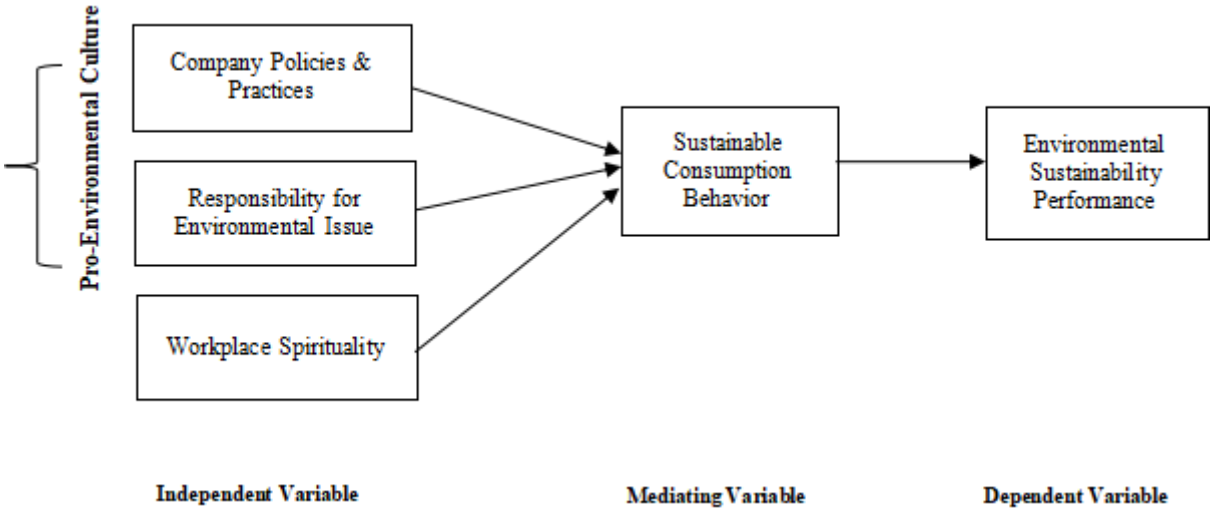

Figure 1. Conceptual framework.

3. Research methodology

The study is based on a quantitative method and empirical analysis conducted from a primary data collection survey on the energy sector of Malaysia. The objective of the research is to assess the reliability of measuring instruments to propose models for environmental sustainability performance through cultural and behavioral factors. Hence, the companies were selected with inclusion criteria, including those companies that have environmental culture policies and practices. The target population is the energy sector of Malaysia, and the number of employees is unknown, therefore; convenience and snowball sampling techniques were used to collect data[27]. Therefore, this study sample size is 104 participants to run the primary data. The pilot data were analyzed through SmartPLS-4 to measure reliability of the instruments and SPSS to explain the descriptive statistics.

3.1. Respondents' profile

This study is based on the pilot testing results, comprised of 104 participants. The respondents' profiles included gender, age, nationality, qualification, job experience, job position, location, and industry type. The survey was filled by 63 males and 41 females. The majority of age falls between 31-40 years, which is almost 40% of the participants. The nationality is Malaysian, which reflects the energy sector there were no or few international employees. Most of the qualifications were bachelor's degrees which is 44.2%, followed by masters' 18.3% and others 37.5%. Besides that, most of the employees are executive workers, 49% as compared to non-executives and supervisors, who were 20.2% and 30.8%. Moreover, out of 104, 43 participants had experience from 0-5 years, followed by 37 participants from 11-15 years of experience in

the job field. Moreover, location-wise the highest respondents are from Perak, which is 62.5%, then Selangor which is 21% and others are 16.5%. Lastly, the major industry typo of these respondents is working in Oil & Gas companies, which is 80% of total respondents.

3.2. Descriptive analysis

Descriptive analysis is a technique to describe population characteristics. **Table 1** is the representation of the data set. Some critical measures of Descriptive analysis include mean median, mode, skewness, kurtosis, standard deviation, and variance. These measures help to critically analyze population characteristics and sampling frame[27].

Table 1. Descriptive statistics.

		Gender	Age	Nationality	Qualification	Experience	Job Position	Location	Industry Type
N	Valid	104	104	104	104	104	104	104	104
	Missing	0	0	0	0	0	0	0	0
Mean		1.3942	2.6635	1.0000	3.7019	2.1731	2.1058	3.3942	1.7019
Std. Deviation		.49105	.86586	.00000	1.22973	1.17781	.70941	1.56055	1.50003
Variance		.241	.750	.000	1.512	1.387	.503	2.435	2.250
Skewness		.439	.075		-.527	.638	-.154	.115	1.933
Std. Error of Skewness		.237	.237	.237	.237	.237	.237	.237	.237
Kurtosis		-1.843	-.786		.471	-.333	-.982	.571	2.257
Std. Error of Kurtosis		.469	.469	.469	.469	.469	.469	.469	.469

3.3. Research measuring instruments

The following four measuring scales were adopted to conduct data collection through survey questionnaires. Following are the details of each construct and respective sub-dimensions. See **Table 2** for a summary:

3.3.1. Pro-environmental culture (PEC)

Pro-Environmental Culture has two sub-dimensions including Company Policies & Practices and Responsibility for Environmental Issues. The scale was developed by Petchsawang, & Duchon, (2009) with 25 statements with a five-point Likert-type scale where '1' is strongly disagree and '5' is strongly agree.

3.3.2. Workplace spirituality (WPS)

Workplace spirituality has four sub-dimensions including compassion, mindfulness, meaningful work, and Transcendence. The scale was developed by Petchsawang, & Duchon, (2009) with 22 statements with a five-point Likert-type scale where '1' is strongly disagree and '5' is strongly agree.

3.3.3. Sustainable consumption behaviors (SCB)

Sustainable consumption behaviors will be measured by the adopted scale from Elisha Temminck, Kathryn Mearns, and Laura Fruhen, (2013) comprising seven statements. This scale comprises questions Likert five-point scale (where '1' is strongly disagree and '5' is strongly agree).

3.3.4. Environmental sustainability performance (ESP)

Lastly, the dependent variable, environmental sustainability performance will be measured through the adopted scale developed by Afzal & Lim, (2022). The scale comprises 7 measuring statements and is

measured through 5-point Likert scales ranging from (where '1' is strongly disagree and '5' is strongly agree).

Table 2. Measuring instruments.

No.	Constructs	Measuring Scale Author & Reference	Dimensions	Items
1.	Pro-Environmental Culture (PEC)	Piwowar-Sulej, K. (2020)	2	25
2.	Workplace Spirituality (WPS)	Petchsawang, & Duchon, (2009)	4	22
3.	Sustainable Consumption Behaviors (SCB)	Elisha Temminck, Kathryn Mearns, and Laura Fruhen, (2013)	1	7
4.	Environmental Sustainability Performance (ESP)	Afzal, F., & Lim, B. (2022)	1	7

4. Results and findings

The pilot study was conducted on the conceptual model. The total respondents comprised 104 respondents. To analyze the model, the study analyzes the construct reliability and validity to check the measurement model fit. In the measurement model, reliability and validity were tested through SmartPLS-4. The construct reliability explains the relationship between the constructs and items of each variable. These tests verify the data screening by analyzing the construct's reliability and validity. In **Table 3**, the Cronbach's alpha and composite reliability values for all items and constructs are above the threshold, i.e., 0.7, which is an acceptable and reliable value to continue the model. Similarly, AVE less than 0.5, shows a greater chance of error testing[27]. However, workplace spirituality is close to 0.4 still considered acceptable because composite reliability values is very high 0.945[3]. The pilot study met the given criteria as illustrated in **Table 3**.

Table 3. Construct reliability and validity.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CPP	0.928	0.944	0.940	0.547
ESP	0.897	0.909	0.920	0.625
REI	0.951	0.957	0.958	0.674
SCB	0.943	0.949	0.954	0.746
WPS	0.878	0.945	0.875	0.348

5. Discussion, implications & conclusion

Scholars have recognized multiple views about environmental sustainability performance and sustainable consumer behaviors. Corporate social responsibility, policymaking, and competitive strategic decision-making are some of these viewpoints[20, 25], however; the energy sector is exploring new avenues to investigate the value-behavioral phenomenon of maintaining and stabilizing sustainable consumption behaviors over time and across situations (in this study, workplace spirituality). The primary traits of workplace spirituality include a sense of responsibility for environmental preservation, moral accountability, and ownership. In addition, these days, it is less successful to motivate employees to adopt sustainable practices with materialistic and financial incentives. Several scholars proposed that sustainable behaviors should go from moral ideals to spiritual and ethical phenomena to avoid the issue of behavioral inconsistency towards sustainable consumption behaviors[4, 5]. Therefore, this study proposes the theoretical model for environmental sustainability performance with the reliability test for measuring instruments. All the instruments show high reliability values (See **Table 3**).

This study implies the significant implication of the energy sector as well as the practitioner and stakeholder. The theoretical model emphasized the importance of behavioral and cultural factors to improve environmental sustainability performance. Therefore, energy sector policymakers can be considered to develop the policy with a greater focus on the company's practices, culture, and responsibility for environmental issues and cultivate the practice of workplace spirituality. This will improve employee sustainable consumption behaviors which ultimately help companies to improve sustainable practices as per the global and national agenda of Malaysia.

In conclusion, this study integrates various constructs from individual factors, such as values and behavioral phenomena, by integrating the "value-belief-norm theory of environmentalism," and organizational factors, such as pro-environmental culture, to achieve environmental sustainability performance. This allows for the proposal of multiple domains in a single model. Additionally, this study gives more weight to workplace spirituality, which has been demonstrated to have a significant role in strengthening the behavioral relationship to achieve environmental sustainability goals that are in line with employers' SDG targets. For future research interests, this notably opens up a new line of inquiry into workplace spirituality with sustainability.

6. Research gap, limitation & future research directions

This study covers the missing gap of sustainable consumption behaviors from the employee's perspective. The current literature shows evidence for consumer sustainable behaviors. Moreover, in the current literature the employe consumption behavior study is found as a conceptual underpinning and proposition. In this way, the study also fills the gap of empirical research on employee sustainable consumption behavior. Moreover, the pilot testing was employed on Malaysian energy sector which is itself a unique contribution towards existing literature gap.

Furthermore, this study have few limitations. Study was based on the data collection with primary data collection survey methods. Future research can be conducted with qualitative research methods to analyze the proposed conceptual framework. Moreover, this study is based on pilot testing results on small sample testing. Future research can be conducted on complete empirical analysis of the hypothesized model with the bigger data set. Lastly, this study focuses on the one dependent variable, the future study can be conducted by incorporating the financial and non-financial environmental sustainability performance of a company.

Conflict of interest

The authors declare no conflict of interest.

References

1. Afzal, F. and Lim, B., 2022. Organizational Factors Influencing the Sustainability Performance of Construction Organizations. Sustainability, 14(16), p.10449.
2. Ali, F.M., 2021. Impact of proactive behavior on sustainable performance. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(12), pp.4416-4423
3. Chin, CL., Yao, G. (2014). Convergent Validity. In: Michalos, A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht.
4. Corral Verdugo, V., 2012. The positive psychology of sustainability. Environment, Development and Sustainability, 14, pp.651-666.
5. Figueiredo, M.D.D., Castro, N.M.D. and Silva, M.E., 2021. A practice-based learning approach toward sustainable consumption in the workplace. Journal of Workplace Learning, 33(3), pp.197-211.
6. Doran, R., Hanss, D. and Larsen, S., 2017. Intentions to make sustainable tourism choices: do value orientations, time perspective, and efficacy beliefs explain individual differences?. Scandinavian Journal of Hospitality and Tourism, 17(3), pp.223-238.

7. Elnaggar, M., El-Khozondar, H. J., Salah, W. A., Nassar, Y. F., & Bashir, M. J. (2024). Assessing the techno-enviro-economic viability of wind farms to address electricity shortages and Foster sustainability in Palestine. Results in Engineering, 24, 103111.
8. Grzeda, M., 2019. Tikkun Olam: exploring a spiritual path to sustainability. Journal of Management, Spirituality & Religion, 16(5), pp.413-427.
9. Geiger, S.M., Fischer, D. and Schrader, U., 2018. Measuring what matters in sustainable consumption: An integrative framework for the selection of relevant behaviors. Sustainable development, 26(1), pp.18-33.
10. Islam, M.S., Tseng, M.L. and Karia, N., 2019. Assessment of corporate culture in sustainability performance using a hierarchical framework and interdependence relations. Journal of cleaner production, 217, pp.676-690.
11. Karakas, F., 2010. Spirituality and performance in organizations: A literature review. Journal of business ethics, 94, pp.89-106.
12. Lind, H.B., Nordfjærn, T., Jørgensen, S.H. and Rundmo, T., 2015. The value-belief-norm theory, personal norms and sustainable travel mode choice in urban areas. Journal of Environmental Psychology, 44, pp.119-125.
13. Meng, B., Lee, M.J., Chua, B.L. and Han, H., 2022. An integrated framework of behavioral reasoning theory, theory of planned behavior, moral norm and emotions for fostering hospitality/tourism employees' sustainable behaviors. International Journal of Contemporary Hospitality Management, (ahead-of-print).
14. Ma, H.Y., Kao, J.C., Kao, R.H. and Cho, C.C., 2020. How to shape the employees' sustainable work attitude: The moderating effect of supervisor attitudes. Sustainability, 12(20), p.8331.
15. Nassar, Y. F., El-Khozondar, H. J., Alatrash, A. A., Ahmed, B. A., Elzer, R. S., Ahmed, A. A., ... & Khaleel, M. M. (2024). Assessing the viability of solar and wind energy technologies in semi-arid and arid regions: a case study of Libya's climatic conditions. Applied solar energy, 60(1), 149-170.
16. Piwowar-Sulej, K., 2020. Pro-environmental organizational culture: Its essence and a concept for its operationalization. Sustainability, 12(10), p.4197.
17. Plomp, J., Tims, M., Akkermans, J., Khapova, S.N., Jansen, P.G. and Bakker, A.B., 2016. Career competencies and job crafting: How proactive employees influence their well-being. Career Development International.
18. Petchsawang, P. and Duchon, D., 2009. Measuring workplace spirituality in an Asian context. Human resource development international, 12(4), pp.459-468.
19. Quoquab, F., & Mohammad, J. (2020). A review of sustainable consumption (2000 to 2020): What we know and what we need to know. Journal of Global Marketing, 33(5), 305-334.
20. Siddiqui, F., Salleh, R., & Shamim, A. (2023). Conceptualizing Sustainable Consumption Behaviors among Millennial Employees in the Energy Sector. KnE Social Sciences, 726-744.
21. Svensson, G. and Padin, C., 2019. Industry note: Sustainable development requires economic, social and environmental sustainability: A business perspective. Int. J. Agric. Innov. Technol. Glob, 1.
22. Sani, A., Wekke, I.S., Maharani, V., Abbas, B., Idris, I. and Ibrahim, F., 2018. Moderation effect of workplace spirituality on the organizational citizenship behavior. International Journal of Applied Business and Economic Research, 16(2), pp.455-462.
23. Steg, L., Perlaviciute, G. and Van der Werff, E., 2015. Understanding the human dimensions of a sustainable energy transition. Frontiers in psychology, 6, p.805.
24. Şener, A. and Hazer, O., 2008. Values and sustainable consumption behavior of women: a Turkish sample. Sustainable Development, 16(5), pp.291-300.
25. Wang, C., Ghadimi, P., Lim, M.K. and Tseng, M.L., 2019. A literature review of sustainable consumption and production: A comparative analysis in developed and developing economies. Journal of cleaner production, 206, pp.741-754.
26. Wahab Ab., M., 2017. Relationships between religious work values, sustainable work behaviours and sustainable energy consumptions: An empirical analysis using Muslim employees. Management Decision, 55(9), pp.1854-1867.
27. Walliman, N. (2021). Research methods: The basics. Routledge.
28. Yusop, H.M., Adam, A.A. and Rahim, A.R.A., 2020. Employee Pro-environmental Behaviour at Workplace in Malaysia: The Role of Organizational and Individual Determinants. Asian Journal of Behavioural Sciences, 2(3), pp.26-40.