Saving energy in the workplace: evidence from Cambodia

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ABSTRACT
Individuals need to adopt energy-saving behaviours to reduce energy consumption and carbon emissions. This study examines how energy-saving behaviour is determined at workplaces. A quantitative method was applied in this study. A research instrument was constructed to investigate (391 participants) the determinants of Cambodian public intentions and behaviours under the extended theory of planned behaviour (TPB). Personal moral norms are considered in the model when engaging in such pro-environmental activities. The data was analysed using PLS-SEM. The results show that energy-saving attitudes, subjective norms, perceived behaviour control, and personal moral norms significantly impact workplace energy-saving intentions. Also, results indicated that adding personal moral norms to the TPB model increases its explanatory power. Additionally, the findings contribute to the field of environmental psychology and environmental behaviour in an emerging region.

Introduction
Society and human behaviour are major causes of environmental problems like global warming, pollution, and climate change. Individuals must proactively take steps to alleviate these issues. For example, although global warming may not directly affect individuals, society will suffer from its effects. Adopting a pro-environmental mindset is the only way to resolve this issue. Hence, motivating individuals to use less energy and practicing energy-saving behaviours may be beneficial in reducing energy consumption. Individual energy-saving behaviours have emerged as a hot topic in recent years. There has been a substantial amount of research on individual-level energy savings, focusing on motivations and underlying factors (e.g. Banfi et al. 2008; Du, Guo, and Wei 2017; Frederiks, Stenner, and Hobman 2015; Pothitou, Hanna, and Chalvatzis 2017; Wang, Zhang, and Li 2014; Webb et al. 2013). Many studies have found that households are keen to reduce their energy use and save energy. Household energy-saving behaviour is significantly influenced by sociodemographic variables, energy-saving awareness, social norms, and situational factors (Gao et al. 2017). Research into workplace energy saving is limited at present.

According to Gao et al. (2017), individuals spend approximately 60% to 70% of their weekly time at work. Therefore, saving energy at work is crucial to reducing energy consumption and carbon emissions. However, the office’s energy cost is practically nonexistent for individuals. Because of this, workplaces waste more energy than private homes. Therefore, further research on individuals’ propensity to save energy at work is needed. Equally, many theories and models are used to predict behaviour in the context of an environment. However, it has yet to be determined which perspective, approach, or model is most appropriate for which situation and behaviour.

This study will attempt to address this gap. This article develops a theory of planned behaviour (TPB) to explain how individuals choose to save energy in the workplace. Additionally, it provides a practical framework to examine individual and pro-environment household behaviours, including sustainable consumption behaviour and green purchasing behaviour (e.g. Abrahamse and Steg 2009; Botetzagias, Dima, and Malesios 2015; Chen and Tung 2014; Sigurdardottir et al. 2013; Yadav and Pathak 2016; Yue, Long, and Chen 2013). Therefore, it is crucial to understand how public perceptions about energy saving are formed and why they support or oppose such initiatives. Equally, policymakers will benefit greatly from this knowledge because it will help them design and communicate innovative methods more effectively. Hence, it is critical to understand the mechanisms influencing public opinion in favour of saving energy and pro-environment behaviour. For example, TPB has demonstrated its usefulness in predicting an individual’s pro-environment intention and behaviour (Ly and Ly 2022). Thus, reminding individuals of their prior environmental efforts can encourage them to adopt environmentally responsible behaviours and strengthen their sense of self-identity (Van der Werff, Steg, and Keizer 2013). Also, having a high personal moral norm would motivate an individual to behave in pro-social behaviour, while having a low personal norm would inhibit such behaviour (Botetzagias, Dima, and Malesios 2015; Fornara et al. 2016). Therefore, this study aimed to investigate whether incorporating personal moral norms into the TPB model impacts employee energy conservation behaviours at work. It is also determined whether adding this variable is more influential and if adding the additional variables increases the predictive power of the model. Equally, this will contribute to the growing literature on environmental resource-saving in the workplace and pro-environmental behaviour.
The theory of planned behaviour (TPB)

The TPB is involved with the behaviour of individuals concerning the action they intend to take. It is a theoretical framework that can be applied to understand better individual perceptions of various initiatives’ effectiveness (Ajzen 1991). Recyclability and other environmentally friendly behaviours have been studied using the TPB to date (e.g. Davis et al. 2006; Ly and Ly 2022; Omran et al. 2009; Williams and Kelly 2003). Applying this notion is essential to understanding the reactions of individuals to waste separating activities, which are required to underpin these decisions (Tonglet, Phillips, and Read 2004). The concept posits that individuals act rationally and examine the consequences of their acts, and it was developed from the previous theory of reasoned action (TRA). TPB theory informed this study because Kassim et al. (2017) argued that individuals develop positive attitudes about a particular activity when they feel that the specific behaviours they are engaged in yield a positive outcome. The fundamental premise of this model is that the strongest predictor of observed behaviour is an individual’s intention to conduct a behaviour (Ajzen 1991) and that attitudes, or the individual’s concern about the possible consequences of a particular action, subjective norms, and moral norm allow influence behavioural intention. According to TPB, behaviour has an immediate antecedent as behavioural intention. Intentions are affected by attitude (an individual’s practical assessment of performing behaviour) and subjective norms (an individual’s impression of societal pressure to perform or refrain from performing a behaviour). Also, the TPB provides a model for methodically determining the factors that influence energy-saving. Additionally, the TPB permitted those with positive attitudes to believe in proper normative acceptance and belief in their ability to participate in the activity readily to have a significant behavioural intention (Fielding, McDonald, and Louis 2008). However, the stronger the behavioural intention, the more likely individuals will act on them.

Initially, attitude significantly influences behavioural intentions in TPB. People who enjoy a particular behaviour are more likely to participate in that behaviour (Yang, Zhang, and Zhao 2016). For example, studies indicated that having a positive perception of energy-saving affects how individuals intend to save energy (Blok et al. 2015; Greaves, Zibarras, and Stride 2013; Yadav and Pathak 2017; Yazdanpanah and Forouzani 2015). Also, it has been shown in various studies on workplace recycling behaviours, pro-environmental behaviour in workplaces, and green product purchases (Ru, Wang, and Yan 2018). Thus, the attitude of the individual is the first factor in determining their pro-environmental behaviour. An individual with a positive attitude is more likely to develop the behaviour into a habit. Therefore, this work proposes:

H1: Energy-saving attitudes significantly affect the intentions of individuals to save energy

The subjective norm is the second important variable that impacts behaviour intention. People think they should behave based on what the majority believes (Ajzen 1991; Chen and Tung 2014). If significant others perceive expectations and behaviours, an individual is more likely to exhibit behaviour (Ru, Wang, and Yan 2018). This condition is also conducive to energy conservation behaviour. Thus, this work proposes:

H2: Subjective norm significantly affects the intentions of individuals to save energy

Further, perceptions of behavioural control are considered a key predictor of behavioural intentions in many studies (Botetzagias, Dima, and Malesios 2015; de Leeuw et al. 2015; Lizin, Van Dael, and Van Passel 2017). Additionally, it has been demonstrated that a positive perception of behavioural control influences energy-saving intention, as external conditions such as facility accessibility, cost, time, and knowledge of the behaviour and skills are frequently beyond individual control (Ru, Wang, and Yan 2018). Similarly, an individual can save energy by applying this notion (Wang, Zhang, and Li 2014). Equally, energy-saving is more active when individuals feel comfortable and have relevant knowledge (Donald, Cooper, and Conchle 2014). Hence, this paper proposes:

H3: Perceived behaviour significantly affects the intentions of individuals to save energy

The TPB and the personal moral norm could explain pro-environmental behaviour intentions (Shi, Fan, and Zhao 2017; Wang et al. 2016). There is increasing evidence that moral attributes are adopted in the TPB (Ajzen 1991; Kaiser and Scheutle 2003; Yazdanpanah and Forouzani 2015). Personal moral norm describes the belief that a specific course of action is good or bad (Schwartz 1977). Some view personal moral norms as a social pressure similar to subjective norms, emphasising internalisation and emotional factors (Bamberg, Hunecke, and Blöbaum 2007; Shi, Fan, and Zhao 2017). However, Arvola et al. (2008) contend that moral norms need only be included to understand actions construed in moral terms. There is a disparity between the collective benefits and the individual costs associated with behaviour that is pro-environmental, ecological, and environmentally friendly (Yazdanpanah et al. 2015). Also, it is often necessary to weigh one’s interests against other individuals’ interests to become more conservationist (Kaiser 2006). Thus, energy conservation is moral behaviour. Hence, measures of the moral norm would provide a valuable addition to the TPB model in energy conservation. Accordingly, Kaiser and Scheutle (2003) observed that it enhances the explanation power of TPB and influences the intention of individuals to engage in eco-friendly behaviour. Also, it positively impacts individual intention to save energy (Ru, Wang, and Yan 2018). Thus, this work proposes:

H4: Personal moral norm significantly affects the intentions of individuals to save energy

Methods

This study was conducted in Cambodia to determine if attitudes, objective norms, perceptions of behaviour control, and personal moral norms significantly impact a public employee’s
motivation to save energy. Likewise, the G*power calculator was used to determine the sample size. For the framework designed for the study analysis, there was the appropriate number of predictors with an effect size of 0.3, alpha of 0.05, and the power of the study (1 - β) of 0.95, suggesting a required sample size of 134. According to Kotrlik and Higgins (2001), the sample size should be increased by 50% of what was initially needed. Based on this assumption, 67 more samples were added, increasing the sample size to 201.

Furthermore, this work used a questionnaire-based quantitative research approach. Also, the data were analysed using structural equation modelling (SEM). Two widely used approaches in structural equation modelling are covariance-based and partial least squares (PLS) techniques. This work accepted PLS-SEM over covariance-based testing because it is more accurate in assessing nonparametric and unprecedented studies (Henseler 2018) and evaluating the emerging complexity of existing theories (Hair et al. 2019). Also, it enables researchers to model and estimates complex relationships among numerous dependent and independent variables simultaneously (Hair et al. 2021). Therefore, this method can be used to discuss complex models (Dash and Paul 2021).

Furthermore, Statistical Package for Social Science (SPSS) version 25 was applied for statistical analysis, and a significance level of .05 was specified. In addition, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.82, above the recommended value of 0.60 (Pallant 2020), and Bartlett’s test of sphericity was significant at p < .001. Also, Fornell and Larcker (1981) claim that acceptable internal consistency requires Cronbach’s alpha > 0.70. Likewise, hypothesis models correspond to the analysed data when the χ2/df value is less than 5.0 (Marsh and Hocevar 1985). Additionally, the structural equation analysis was performed with SmartPLS3.

Participants and sampling

Convenience sampling techniques were used in this work because of their convenience and availability (Bryman 2016). Also, data were collected through a self-administered online survey. The survey questionnaire method was chosen because it had many advantages: time savings, flexibility, interaction without bias from interviewers, targeted sample selection, low cost, and reduced processing errors (Chang and Vowles 2013). Thus, one month of online surveys was provided to the public employees in the organisation, who were selected through a convenience sampling procedure. As a result, 391 responses were received from public employees in Cambodia. This sample size was larger than the minimum required of 201, deemed robustly for analysis.

Furthermore, ethics review or permission was not necessary for the study using human volunteers under local regulations or institutional criteria. The questionnaire informed participants not to provide any identification or information in this work. Participants submitted consent to participate in the study after being adequately informed. The profile of respondents revealed that 52.7% were male, 47.3% were female, 85.2% were aged 18–35, and the remaining 14.8% were over 35. Equally, 82.9% were undergraduate, 13.3% were graduate, and 3.8% were post-graduate.

Measurement instruments

The research approach includes five variables: attitude, subjective norm, perceived behavioural control, personal moral norm, and energy-saving intention. The scale items in this work have been taken from previous literature and modified slightly to suit the current context. All scales are rated significantly on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). First, the measurement of energy-saving attitudes, perceived behavioural control, and the subjective norm was adapted and modified from the works of Ajzen (2002), Kaiser and Scheuthele (2003), Manning (2009), Wang, Zhang, and Li (2014), and Yadav and Pathak (2016). In addition, the scale items for personal moral norms were adapted from Bamberg, Hunecke, and Blöbaum (2007), Kaiser and Scheuthele (2003), and Fornara et al. (2016). Finally, energy-saving intention constructs were used in the following four statements: ‘I am willing to save energy in my organization’, ‘I intend to participate in energy-saving efforts in my organization’, ‘I will strive to save energy in my organization’, and ‘I aim to save energy at work regularly if required’. In addition, confirmatory Factor Analysis (CFA) was used to validate the instrument for measuring the constructs. It was used to determine how observed variables are essential with the applied latent construct. This analysis is based on the strength of the regression model connecting the factors to the observed variables rather than the relationship of the variables (Byrne 2010).

Assessment of measurement model

The evaluation of the measurement model involves examining for internal consistency, convergent validity, and discriminant validity (Hair et al. 2016; Hair, Ringle, and Sarstedt 2011; Henseler, Ringle, and Sinkovics 2009). Outer loading values of 0.7 and above are significantly deemed appropriate (Hair et al. 2016). Composite reliability and Cronbach’s alpha values were used to compute the internal consistency of the constructs. All the CRs were higher than the recommended value of 0.70 (Fornell and Larcker 1981). Cronbach’s alpha of each construct exceeded the 0.70 thresholds. Convergent validity was acceptable because the Average Variance Extracted (AVE) was over 0.50. Table 1 summarises the detail of the measurement model assessment (loadings, Cronbach’s alpha, CR, and AVE).

Discriminant validity was evaluated using two procedures in this paper. First, it checks the square root of the AVE of each item to the relationship with the other factors. When the square root of the AVE is greater than the corresponding correlations, the construct has adequate discriminant validity (Fornell and Larcker 1981). As a result of the findings, the square root of AVE for the construct was higher than the inter-construct correlation (See Table 2). Furthermore, discriminant validity was also assessed by the heterotrait-monotrait ratio of correlations (HTMT). Henseler, Ringle, and Sarstedt (2015) set a threshold value of 0.9; therefore, a value of HTMT greater than 0.9 could be problematic when contested discriminant validity. As illustrated (Table 2), the discriminant validity of all constructs was established.
Table 1. Factor loadings, reliability, and validity.

| Constructs                                | Loadings |
|-------------------------------------------|----------|
| Attitude towards energy saving (AT) (Cronbach’s Alpha = 0.804, CR = 0.872, AVE = 0.629) |          |
| AT1-It is important for my organisation to save energy to protect the environment | 0.811    |
| AT2-The reduction of carbon emissions in my organisation is dependent on saving energy | 0.770    |
| AT3-It is crucial to save energy in my organisation to address energy shortages | 0.791    |
| AT4-Energy savings in my organisation are a wise decision | 0.801    |
| Subjective norm (SN) (Cronbach’s Alpha = 0.820, CR = 0.876, AVE = 0.641) |          |
| SN1-My colleagues think that I should save energy in my organisation | 0.895    |
| SN2-My managers think that I should save energy in my organisation | 0.683    |
| SN3-My manager would like me to save energy in my organisation | 0.829    |
| SN4-Those who are important to me believe that I need to save energy in my organisation | 0.782    |
| Perceived behaviour control (PB) (Cronbach’s Alpha = 0.768, CR = 0.848, AVE = 0.582) |          |
| PB1-I think that saving energy in my organisation is an easy task | 0.763    |
| PB2-I know how to save the energy within my organisation | 0.728    |
| PB3-Saving energy is the entire of my choice | 0.736    |
| PB4-If wanted to; I could save energy at work | 0.822    |
| Personal moral norm (MN) (Cronbach’s Alpha = 0.776, CR = 0.856, AVE = 0.598) |          |
| PMN1-It is my moral responsibility to save the energy within my organisation | 0.768    |
| MN2-I have a moral obligation to reduce energy consumption in my organisation | 0.801    |
| MN3-I would be disappointed if I did not make energy-saving in my organisation | 0.713    |
| MN4-The failure to save energy in my organisation would violate my moral convictions | 0.808    |
| Energy saving intention (IN) (Cronbach’s Alpha = 0.847, CR = 0.897, AVE = 0.687) |          |
| IN1-I am willing to save energy in my organisation | 0.850    |
| IN2-I intend to participate in energy-saving efforts in my organisation | 0.844    |
| IN3-I will strive to save energy in my organisation | 0.741    |
| IN4-I aim to save energy at work regularly if required | 0.873    |

Table 2. Discriminant validity-fornell & larker criterion.

|         | AT    | IN    | PB    | MN    | SN    |
|---------|-------|-------|-------|-------|-------|
| AT      | 0.793 |       |       |       |       |
| IN      | 0.469 | 0.829 |       |       |       |
| PB      | 0.368 | 0.751 | 0.763 |       |       |
| MN      | 0.111 | 0.395 | 0.377 | 0.774 |       |
| SN      | 0.238 | 0.471 | 0.433 | 0.492 | 0.801 |
| HTMT    |       |       |       |       |       |
| AT      | 0.567 |       |       |       |       |
| IN      | 0.435 | 0.886 |       |       |       |
| PB      | 0.140 | 0.479 | 0.480 |       |       |
| MN      | 0.258 | 0.508 | 0.497 | 0.595 |       |

Structural model

After the construct validity and reliability were confirmed, an analysis of structural model findings was carried out. All constructs were tested for multicollinearity before this process, and the variance inflation factor (VIF) was calculated to confirm collinearity. According to Hair, Ringle, and Sarstedt (2011), PLS-SEM requires a VIF tolerance value between 0.20 and 5.0, and multicollinearity would be problematic if VIF is higher than 5.0 or lower than 0.20. The findings confirmed the absence of multicollinearity because the VIF values ranged from 1.4 to 2.7. Also, the model quality is evaluated on its ability to predict endogenous constructs. It is accessed based on the coefficient of determination (R^2), cross-validated redundancy (Q^2), path coefficients (β), and significance of paths. Standardised path coefficients test the degree to which hypotheses were confirmed. The goodness of the model is determined by the strength of each structural path (Gallardo-Vázquez and Sánchez-Hernández 2014). It was examined using the R^2 value of the latent dependent variable. Thus, the desired values for each path between constructions should be at least equal to or greater than 0.1 (Falk and Miller 1992). The result in Table 3 revealed that all R^2 values were greater than 0.1, indicating that the model is predictive capability. Also, the Stone-Giesser test or cross-validated redundancy Q^2 was used to evaluate the predictive relevance of the endogenous constructs. A Q^2 larger than 0 indicates that the model is predictively significant, whereas a Q^2 less than 0 indicates that the model is flawed (Castro and Roldán 2013). Therefore, it can be concluded that the prediction of constructions is significant because a constructive Q^2 value was 0.428 of energy-saving intention (See Table 3).

Similarly, the model fit was assessed using SRMR. However, no threshold of SRMR has been proposed in a PLS-SEM context yet (Hair et al. 2016). According to Worthington and Whittaker (2006), SRMR < 0.10 is generally considered an acceptable model fit. Therefore, the finding of SRMR was 0.08, indicating that this study was a good model fit.

Further assessment of the goodness of fit, hypotheses were tested to establish the significance of the relationship. H1 evaluated whether attitudes have a significant impact on intentions. The results exposed that attitude has a statistically significant impact on the intentions to solid waste separation (β = .215, Table 3. Hypotheses testing.

| Hypotheses | Path coefficient | SD | t-value | p-value | Decision |
|------------|-----------------|----|---------|---------|----------|
| AT -> IN   | 0.215           | 0.043 | 4.965 | 0.000  | Supported |
| SN -> IN   | 0.121           | 0.043 | 2.809 | 0.005  | Supported |
| PB -> IN   | 0.586           | 0.043 | 16.470| 0.000  | Supported |
| MN -> SN   | 0.090           | 0.045 | 2.017 | 0.044  | Supported |

R^2 = 0.633, Q^2 = 0.428
t = 4.422, p < .001). Thus, H1 was supported. Similarly, H2 predicted whether subjective norms significantly impact the intentions. As predicted, the findings (see Table 3) confirmed that the subjective norms have a statistically significant impact on the intentions for energy-saving (β = .121, t = 2.809, p = .005). Thus, H2 was robustly supported. Furthermore, when observing the significant influence of the perceived behaviour control on the intentions (H3), the results endorsed that there is a statistically significant (β = .586, t = 16.470, p < .001) and supported H3. Finally, the influence of the personal moral norm items on the saving-energy intention was significant (β = .090, t = 2.017, p = .044) and robustly confirmed H4.

Discussion

This study sought to measure whether the contributing factors – attitude, subjective norms, perceived behaviour control, and personal moral norm – significantly impact the intention to save energy at work. This experiment used the expanded TPB theory to test whether Cambodian’s characteristics related to their past experiences would encourage them to exhibit a more positive attitude towards energy saving. According to the study, attitudes were a statistically significant and positive predictor of saving energy intentions, indicating that individuals who think positively about energy saving are more likely to save energy. This evidence is in line with existing studies (Blok et al. 2015; Greaves, Zibarras, and Stride 2013; Ru, Wang, and Yan 2018; Yadav and Pathak 2017; Yazdanpanah and Forouzani 2015). Thus, attitudes are essential in influencing behaviour towards protecting the environment. Equally, having a positive attitude towards energy-saving behaviour is crucial to achieving optimal performance. At the same time, employees in an organisation with a positive attitude towards this behaviour are more likely to engage in environmental practices.

Further, subjective norms are a second important variable that affects behaviour intentions. According to the findings, the results are significantly and positively correlated with employee intentions to save energy at work. It is consistent with previous studies (Ek and Söderholm 2010; Webb et al. 2013). This signifies that referent individuals are influencing Cambodia’s employees on energy saving. Individuals are more likely to carry out specific actions when vital people expect them to do so (Chen and Tung 2014; Wang et al. 2018a; Wang, Lin, and Li 2018b). Therefore, the opinions of influential people about energy saving will significantly impact whether others adopt energy-saving practices. This finding may impact energy-saving adoption initiatives because raising subjective norms can increase work energy-saving intentions. Mainly, if individuals hold low subjective norms, communication about the habits of others is more effective than widely disseminated public advertising for promoting energy conservation.

Additionally, perceptions of behaviour control are crucial to energy-saving intentions in the model of this study. These qualities determine the ease or difficulty of implementing energy saving. This study found that perceived behaviour control significantly and positively impacts individual intentions to save energy at work. It is consistent with various studies that perceived behavioural control influences energy saving (Chen 2016; Lee and Tanusia 2016; Rezaei and Ghooranfarid 2018; Ru, Wang, and Yan 2018; Wan, Shen, and Yu 2014). This suggests that individuals can save energy more quickly when comfortable and have the necessary knowledge and skills. Thus, individuals are more likely to engage in energy-saving behaviours if their intentions are high (Lee and Tanusia 2016).

Lastly, there was significant evidence that personal moral norms influence energy saving intentions. This regard is consistent with the fact that this construct is an essential predictor of energy-saving intentions (Fornara et al. 2016; Ru, Wang, and Yan 2018; Xu et al. 2017). It generally helps people behave effectively and adaptively. Also, individuals tend to evaluate their performances, possessions, and well-being rather than in absolute terms (Olson, Herman, and Zanna 2014; Smith et al. 2012). This indicates that a high personal moral norm would motivate individuals to conduct energy-saving at work, whereas a low moral norm can inhibit such behaviour. Likewise, the intentions of individuals to save energy are determined by their ethical principles to act rightly. Hence, it is reasonable to assume that an individual with a high personal moral norm will have a strong moral obligation to save energy. It is argued in the model that an individual’s pro-environmental behaviour is influenced not only by social norms but also by their personal moral norms. Thus, a personal moral norm plays a vital role in pro-environmental behaviour (Shi, Fan, and Zhao 2017).

In conclusion, employee energy-saving behaviour is the key to achieving energy-saving goals. Therefore, organisations should encourage their employees to adopt energy-saving habits to save energy. Ajzen (1991) defined intentions as a predictor of behaviour because they capture human motivations. Attitude towards the behaviour, subjective norms, perceived behavioural control, and personal moral norms also play a role in determining intentions. Therefore, the TPB establishes a good foundation for explaining energy conservation intentions, while additional constructs such as personal moral norms are critical. This increases its predictive capacity.

Conclusion

The importance of energy saving at work today cannot be overstated. It is important to encourage individuals to save energy and lower their consumption to reduce carbon emissions. However, there have been few investigations into how individuals save energy at work since most individual-level studies focus on households. Additionally, organisations’ energy-saving behaviours and activities are neither encouraged nor promoted in Cambodia. For example, it is common for employees not to shut off the electricity while leaving the office. This study aims to determine how employees perceive energy saving at work. It provides a better understanding of marginal and theoretical perspectives.

Furthermore, these results have critical implications for organisations that wish to encourage their employees to adopt energy-saving practices at work. Similarly, it is anticipated to generate suggestions for public policy and recommendations for extension and awareness to promote effective adoption and mitigation behaviours among Cambodian public employees. Academically, this study examines how an individual makes decisions concerning energy saving. The public
and private organisations can use this research to implement policies that reduce energy consumption by adopting a marginal perspective. According to these findings, individuals with a positive attitude towards energy saving, high perceived behaviour control, and a strong personal moral norm are more likely to establish the intention to conserve energy in their workplaces. Likewise, all stakeholders need to work together to promote individual energy-saving behaviours. The results of this study provide an incentive to start reducing energy consumption. However, there is no one-size-fits-all approach to implementing energy-saving initiatives.

Limitation

Although this paper was comprehensively investigated, its limitations remain. There are drawbacks to this study as it relies on self-reports in an online survey. The study studied only general energy-saving intentions, which may over-represent the behaviours of different places. Further research would be needed to validate the validity of the current findings, which would involve replicating the analysis among a larger, more representative sample. In addition, this article is focused exclusively on generic energy-saving objectives. Behavioural processes that save energy differ widely between the workplace and the home. For instance, cognitive dissonance is more likely to occur at work than at home; individuals may follow the actions of colleagues and leaders even if they disagree with those actions. Hence, examining energy-saving behaviours in different locations may generate more intriguing results.

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