

THE ROLE OF STRATEGIC SUFFICIENCY IN PROMOTING PRO-ENVIRONMENTAL BEHAVIORS IN THE WORKPLACE: AN ANALYTICAL STUDY

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Abstract: The purpose of this study is to seek to identify the role of strategic sufficiency in promoting pro-environmental behaviors in the workplace and to suggest new Al-Haelah aimed at practicing these behaviors for the enormous company under study, heading towards paths to achieve strategic sufficiency at all levels. The study included qualitative analysis of data related to the Al-Haelah Company in Karbala Governorate under study, and the study sample included 110 individuals working in this company. The study sought to test several hypotheses related to the influence relationships between the study variables represented by strategic sufficiency and pro-environmental behaviors in the workplace. The data were processed through statistical methods using the program (SPSS). The results of the statistical analysis of the data collected through the questionnaire tool prepared for this purpose, in addition to the theoretical conclusions from it, showed that the company adopted strategic sufficiency to improve pro-environmental behaviors by focusing on effective communication and efficient access to knowledge, as well as using them to improve the level of enjoyment The workplace of the employees, and knowledge of the workplace environment of the employees, but it adopted effective communication individually to improve the connection with the nature and place of work of the employees. This study contributes as an attempt to contribute to revealing the role of strategic sufficiency as a strategic tool for Al-Haelah company to promote pro-environmental behaviors.

Keywords: strategic self-sufficiency, pro-environmental behaviors, workplace, Al-Haelah.

1. INTRODUCTION

Strategic sufficiency aims to protect the natural foundations, as it relates to strategies through which materials can be provided, by changing people's behavior, or at least as a result of using less raw materials, as well as a new understanding of prosperity and well-being about a shifting relationship with commodities, production, and consumption. It is appropriate for business and a fundamental strategy for achieving sustainability (Linz, 2006: 7). The objective of strategic sufficiency is the absolute reduction of resource consumption, and strategies such as purchase reduction, modular adjustments, and product longevity are employed to achieve this objective. Increasingly, some external organizations advocate sufficiency-oriented consumption through marketing (Gossen & Kropf, 2022:720). According to (Gunaratne & Ki-Hoon Lee, 2021:1), the objective of strategic sufficiency is to improve the use of resources in an organization's operations to increase productivity, to replace environmentally harmful resources with greener ones, and to reduce resource consumption by eliminating or reducing the need for the organization to use resources. Strategic sufficiency, according to (Figge et al., 2014:217), seeks to reduce environmental pressures caused by resource consumption and accomplish greater sustainability through the optimal use of resources. Pro-environmental behavior (PEB) refers to deliberate actions performed by individuals to protect and preserve the natural world. An individual's pro-environmental behavior comprises voluntary or recommended actions intended to preserve the natural environment. Pro-environmental behavior consists of individual actions that contribute to environmental sustainability and can be exercised at home or in the workplace (Fatoki, 2019:3). Environmentally responsible behavior in the workplace can also be defined as actions taken by employees and management to enhance the natural environment. When employees implement environmentally sustainable behaviors in the workplace, this is referred to as green or pro-environment employee behavior. Kim and Thapa (2018:31) define pro-environmental employee behavior as the voluntary actions and behaviors that employees engage



in to enhance environmental sustainability at work. According to studies, pro-environmental behaviors in the workplace contribute to reducing the environmental impacts of an organization's operations and can help organizations achieve sustainability. Including behaviors in job responsibilities (Mouro et al., 2021:1). While (Wesselink et al., 2017:1-3) consider pro-environmental behaviors in the workplace to be (voluntary behaviors) and the success of organizations' sustainability, in general, depends on individual efforts, a manager cannot compel an employee to engage in such behaviors. encourage the employee to engage in such conduct. Whereas (Foster et al., 2022:2) demonstrated that the fundamental concept of pro-environmental workplace behaviors is to preserve a promising future for the planet and the organization through awareness of sustainable development for people and the promotion of more sustainable workplace behavior and a healthy lifestyle, and to define environmental protection through activities. Human behavior in the name of pro-environmental behaviors or environmentally friendly behavior is a set of environmental responsibilities, such as enhancing environmental knowledge, developing green products and processes, reviewing harmful actions, employees conserving energy by turning off unnecessary electrical appliances, using stairs instead of elevators, and avoiding paper printing. Avoid single-use containers, promote unilateralism, reduce waste, and generate ideas for environmental protection.

2. LITERATURE REVIEW

2.1. Strategic sufficiency

The term sufficiency refers to the sufficiency of a thing and sufficiency (for a particular thing), that is, the amount sufficient for a certain purpose. Stevenson, 2010:522) (Sorrell et al., 2020:1) and colleagues argued that it depends on the economy, saving, and moderation in the use of resources, but there is no universally agreed definition of sufficiency, although there are different benefits of sufficiency, whether at the individual or collective level, it is very difficult to activate the boundaries between adequate consumption and surplus, and There is no consensus on the meaning of sufficiency Some interpret sufficiency as a goal or outcome defined by a level of non-consumption that corresponds to equity, well-being and environmental limits, while it can be interpreted as a set of actions or strategy defined by deliberate reductions in non-consumption.

Sufficiency is about determining what is the right thing to do and it is about having enough to meet the needs of the organization while achieving sustainability (Zahrant, 2014:13). HR is also a major source of competitive advantage for which employees can create continuous improvement in organization and performance at a higher level if they are encouraged to do so. Human resources management can be satisfied with several employees with sufficient experience, skill, and creativity at work to accomplish the tasks directed to them (Sourchi & Jianqiao, 2015:2).

Bocken & Short (2015:3) has discussed the concept of the sufficiency as "moderation, rationalization, reduction of excessive consumption and unnecessary use of resources, which is an institutional sustainability strategy aimed at conserving the resources of the organization." The concept of strategic sufficiency is also concerned with reducing consumption and living well on little by producing based on using fewer resources (Allievi et al., 2014:217).

While Fawcett, 2018:10) explained that the concept of sufficiency is (changing the lifestyle through behavior changes, and the sufficiency strategy can be considered as reducing the demand for resources, that is, sufficiency to a certain amount to meet basic needs while respecting environmental boundaries) and sufficiency can be defined as (the ability to carry out work and make a change while taking into account social, environmental and strategic values where these values are related to social welfare, climate and air quality protection and resource management).

In contrast, strategic sufficiency indicates "balance in the process of selecting strategies, which are in line with different environmental challenges and that enable the organization to overcome its competitors" (Lebow, 1982: 189). Lamborn (1995:36) believes that strategic sufficiency expresses (the organization's sufficiency in its current stable situation, content with its material and human resources, capabilities, skills, and essential capabilities that retain its current market position that it has reached).



Gunarathne & Ki-Hoon Lee (2021: 2) has referred to strategic sufficiency as "the optimal use of resources and information by following an environmentally beneficial strategy that contributes to environmental challenges and fluctuations and aims at sustainability."

After reviewing the previous definitions, the researchers conclude that strategic sufficiency is (the ability that enables the organization to spread, expand and control markets, deter competitor attacks, and face environmental challenges, based on the strength it possesses that arises from functional, material, human and technological sufficiency, which leads to achieving its desired goals). Bocken & Short (2015:5) explained the importance of strategic sufficiency in mitigating the environmental impact by avoiding individuals in consumption as some organizations were able to use discarded materials (waste) as inputs (raw materials) for their new products.

The importance of strategic sufficiency also lies in stopping environmental degradation through changes in consumption, i.e. using resources with less environmental impact or reducing resource consumption to reduce environmental footprints fundamentally and improve efficiency in production, technology in innovations, and greening consumption (Sandberg, 2021:1-2).

Sufficiency is an important strategy in reducing environmental impacts, and this is considered a type of pro-environmental behavior, as reducing the use of resources to the extent of sufficiency leads to reducing the emission of greenhouse gases (Sorrell et al., 2020:2).

Kanschik (2016:556) showed the importance of strategic sufficiency in achieving environmental sustainability by consuming fewer resources while meeting limited human needs, and not over-using the economic system to put pressure on the environment and bring about major changes, which helps preserve the climate, prevent pollution and avoid natural disasters.

Strategic sufficiency aims to protect natural fundamentals as it relates to strategies by which materials can be saved, by people changing their behavior or at least as a result of using less raw materials, and also a new understanding of prosperity and well-being about a changing relationship with goods, production, and consumption that is suitable for business and a fundamental path to sustainability (Linz, 2006:7).

The goal of strategic sufficiency is the absolute reduction of resource consumption and entails strategies such as reduced purchases, paradigm shifts, and product longevity, some external organizations increasingly use marketing to advocate for sufficiency-oriented consumption (Gossen & Kropfeld, 2022:720).

Gunarathne & Ki-Hoon Lee (2021:1) explained that the objective of strategic sufficiency is to optimize the use of resources in an organization's operations to improve productivity, replacing environmentally harmful resources with greener resources, and reduce resource consumption by eliminating or reducing the organizational need to use resources. Figge et al. (2014:217) argue that the sufficiency strategy aims to reduce environmental pressures resulting from resource consumption and to achieve more sustainability through the optimal use of resources.

1- Dimensions of strategic sufficiency:

Organizations adopt the application of the concept of strategic sufficiency to achieve a kind of balance and stability and to achieve flexibility and respond to the changes and environmental challenges they face. In addition, it achieves the ability to seize opportunities and deter any potential or unlikely blows by competitors in the markets, this balance achieved by the organization through strategic sufficiency is based on its ability and strength stemming from its material and human resources and its possession of essential skills and capabilities that enhanced this strategic sufficiency, and thus enabled it to deter competitors and outperform them and achieve spread, expansion, and control in the markets (Hagerty et al., 2020:112). In the same context, Perez-Franco et al. (2014:14) believe that the adoption of the concept of strategic sufficiency by organizations reflects the extent to which they achieve their strategic objectives based on all the aforementioned elements to achieve it. Ring (2009:282) also pointed to three dimensions used to measure strategic sufficiency in organizations:

- A. Capacity of Workforce: Through this dimension, the organization achieves strategic sufficiency depending on the capabilities of working individuals, i.e. the extent to which it achieves functional sufficiency in the organization, that is, the organization's ability to ensure adequate



and appropriate levels of employment to accomplish all activities and work in all changing circumstances, including the completion of production processes and the ability to meet customer requirements and meet all different seasonal or changing levels of demand.

- B. **Effective communication Communicating:** This dimension refers to effective communication, that is, the organization has clear communications to increase the effectiveness of the organization, and this communication is done through the transfer, provision, and dissemination of information at all organizational levels, and also includes achieving communication between working individuals, group communication, intercultural communication, and Mass communication, digital and social media.
- C. **Knowledge access:** The dimension of efficient access to knowledge refers to the organization's ability and ability to achieve strategic sufficiency through awareness, awareness, understanding of facts, collecting and evaluating a base of the necessary information about competitors and the environment, establishing a network of knowledge and making it accessible to all individuals working within the organization.

2.2. Pro-environmental behaviors in the workplace

1) The concept of pro-environmental behaviors in the workplace:

Pro-environmental behavior (PEB) is described as an action that is deliberately taken by individuals to minimize harm and protect the natural world. Pro-environmental behavior consists of voluntary or recommended activities in which an individual participates to protect the natural environment. Pro-environmental behavior includes individual behavior that contributes to environmental sustainability and can be practiced in the workplace or at home (Fatoki, 2019:3).

Pro-environmental behavior in the workplace can also be classified as actions by employees and management to improve the natural environment. When environmentally sustainable behaviors are implemented in the workplace by employees, this is called green or pro-environmental employee behavior. Pro-environmental behavior of employees is described as the voluntary actions and behaviors that employees engage in to improve environmental sustainability at work (Kim & Thapa, 2018:31).

Studies have indicated that pro-environmental behaviors can contribute to achieving sustainability for organizations and that pro-environmental behaviors in the workplace contribute to reducing the environmental impacts of the organization's operations, and this is part of its social responsibilities and the sustainability policy of organizations. 2021:1).

Wesselink et al. (2017:1-3) view pro-environmental behaviors in the workplace as "voluntary behaviors and the success of organizational sustainability, in general, depends on individual efforts, but the manager cannot compel the employee to engage in these behaviors; only the employee can be encouraged to engage in these behaviors."

While Foster et al., 2022:2 showed that the basic idea of pro-environmental behaviors in the workplace is to maintain a promising future for the planet and the organization through awareness of the sustainable development of people and the promotion of more sustainable behavior in the workplace and a healthy lifestyle. Create green products and processes, review environmentally harmful measures, conserve energy by turning off unnecessary electrical appliances, use stairs instead of elevators, avoid single-sided paper printing, reduce waste, generate ideas to protect the environment, and avoid using single-use cups.

Hongxin (et al., 2022:2) defined pro-environmental behaviors in the workplace as "individual behavior that consciously aims to minimize actions that harm the environment, and that corporate social responsibility perceptions of employees can shape their responsible behavior, referred to as pro-environmental behaviors."

Employees can be classified according to pro-environmental behavior into five, and these include (Kim & Thapa, 2018:32):

- A. **Conservation:** This focuses on behaviors that conserve resources and avoid waste (such as recycling).
- B. **Avoiding damage:** This includes behaviors that reduce or mitigate damage to the environment (such as preventing pollution).



- C. Transformation: This focuses on change and adaptation to sustainable behavior (i.e. buying green products and renewable energy).
- D. Influencing others: This focuses on social behaviors that support sustainability (i.e., motivation, training, and incentives).
- E. Taking initiative: This includes behaviors that do not support the status quo (such as pressure and activism). Engaging in pro-environmental behavior by company employees has many benefits, the most important of which are:
 - ☒ Improving the natural environment: The long-term survival of the world depends on pro-environmental behavior waste is reduced and scarce resources are conserved through pro-environmental behavior.
 - ☒ Non-compliance with environmental regulations can have financial implications.
 - ☒ Through pro-environmental behavior, companies can reduce costs and improve the triple bottom line (financial, environmental, and social performance).

2) The importance of pro-environmental behaviors in the workplace:

Pro-environmental behaviors in the workplace are important for organizations to achieve organizational sustainability, reduce environmental risks, conserve the organization's resources and energy from recycling materials, and reduce energy consumption, leading to improved organizational efficiency (Mouro et al., 2021:1).

Pro-environmental behaviors are important for the future to reduce the impact of human activities on the environment and thus save natural resources, and reap strategic advantages for organizations by reducing costs, enhancing revenues, achieving sustainability, and maintaining a competitive advantage (Foster et al., 2022:3).

Wesselink (et al., 2017:1) also explained the importance of pro-environmental behaviors in the workplace as one of the factors that contribute to the success of the sustainability of organizations and address major societal challenges, and despite the availability of technologies, individual efforts are necessary for strategic initiatives with the participation of individual employees in the implementation of corporate social responsibility such as saving energy.

The importance of pro-environmental behaviors appears in terms of social and economic exchange, social exchange and corporate social responsibility are represented in the participation of employees in additional work as a result of their involvement in additional roles, and supportive behaviors have economic importance where the employee's contractual engagements and monetary benefits are the subject of economic exchange (et al., 2022:3 Hongxin).

3) Objectives of pro-environmental behaviors in the workplace:

Foster et al., 2022:2 (Foster et al., 2022:2) aim to achieve sustainable development and raise awareness towards plans aimed at promoting healthy lives because there is a negative impact on people on the ground and therefore a decrease in natural and air resources.

Pro-environmental behaviors also aim to achieve strategic benefits for organizations by reducing costs, enhancing revenues, developing a positive image, achieving sustainability initiatives, and competitive advantage (Faraz et al., 2021:1).

The goal of organizations gradually implementing a pro-environmental behavior strategy is to achieve sustainability for organizations and the creation of this strategy is somewhat dependent on the organizational manager (Peng et al., 2020:2).

Pro-environmental behaviors also aim to achieve economic feasibility while operating within the limits of capacity or contributing to the health of economic, social, and environmental systems (Rubel et al., 2021:1).

Rosa & Collado (2018:2) explained the goal of pro-environmental behaviors is to achieve the ecological balance that relies heavily on these behaviors, preserve nature and promote people's health.

Pro-environmental behaviors aim to minimize environmental damage through individual activity carried out by the employee believed to help improve environmental performance and work to protect and preserve the environment (Ture, 2104:138-139).

4) Dimensions of pro-environmental behavior: Pro-Environmental Behavior

Both agree (Fatoki, 2019; Kim & Thapa, 2018; Pothitou & Chalvatzis, 2016; Zhang et al., 2013; Mayer & Frantz, 2004;) However, the dimensions of pro-environmental behavior are as follows:

A. Enjoyment and Workplace of Employees: (PEB)

Enjoyment and Employees' Workplace

Self-determination theory (SDT) assumes that goal-oriented behaviors are inspired in different ways. The concentration of special and differential treatment is the degree to which an individual's behavior is self-motivated and self-defined. Studies based on special and differential treatment have shown that the behavioral experience of individuals is subjective and independent motives rather than external and controlled motives. Special and differential treatment is highly associated with pro-environmental behavior because it depicts how motivation will affect behavior. In addition, special and differential treatment has been widely used in empirical research on motivation. These motives include the pursuit of attention and pleasure. Therefore, if an employee enjoys pro-environmental behavior, they will be interested in performing pro-environmental behavior.

Enjoyment can be described as the degree to which an individual does something (such as work) because they find the thing enjoyable at its core. The individual level factor is how enjoyment can influence pro-environmental behavior, if pro-environmental behavior is enjoyed, participation in such behavior will increase.

B. Connection to nature and workplace of employees: (PEB)

Connectedness to Nature and Employees' Workplace

Attachment to the pledge of allegiance can be defined as an individual's emotional and cognitive attachment to nature. The theory of attachment to nature (CNT) states that an individual's well-being is linked to his/her relationship, exposure, and experiences with the natural world. However, the degree of one's attachment to nature can have a significant positive impact on pro-environmental behavior, however, attachment to nature by individuals has decreased due to globalization, urbanization, and technological disruption and this may negatively affect pro-environmental behavior.

Several studies have found that association with nature has a significant positive correlation with pro-environmental behavior and vulnerable individuals tend to have higher levels of pro-environmental behavior.

C. Environmental Knowledge and Employee Workplace: (PEB)

Environmental Knowledge and Employees' Workplace

Environmental knowledge is described as knowledge and understanding of issues related to the environment. Environmental knowledge focuses on an individual's familiarity with issues related to collective responsibility, environmental impact, and appreciation. Environmental knowledge can be divided into two parts. The first issue concerns knowledge about one's influence on nature, and the second issue concerns knowledge regarding actions that can be taken to minimize one's negative impacts on the environment. The theory of environmentally responsible behavior states that knowledge and a sense of personal responsibility positively influence the adoption of behavior by the individual.

Environmental knowledge promotes awareness and leads to positive attitudes toward nature. There is a positive correlation between environmental knowledge and energy-saving behavior. Research results are not conclusive about the impact of environmental knowledge on pro-environmental behavior studies, as an unimportant relationship has been found between environmental knowledge and pro-environmental behavior and frequent direct information about the impact of climate change has not significantly reduced carbon consumption and the relationship between environmental knowledge and pro-environmental behavior is not significant. However, individuals with environmental knowledge and knowledge of damage to the environment are more likely to be more likely. Do not engage in pro-environmental behavior (green employee behavior).

3. DATA AND METHODOLOGY

According to Wooley (1990:338), strategic sufficiency refers to the process of maintaining an organization's current status against potential strikes by attackers from its rivals and minimizing the

damage it suffers from such attacks. Thus, there is a large body of empirical and theoretical research accumulated on the subject of strategic sufficiency (Bobbitt, 1988; Ring, 2009; Thomason et al., 2018), and this study was motivated by the assumption that the availability of strategic sufficiency enhances the practice of pro-environmental behaviors in the workplace.

In light of this, the problem of the study was identified by raising the following questions:

- 1) What is our perception of the concepts of strategic sufficiency and pro-environmental behaviors in the workplace?
- 2) Do we have a clear idea of promoting pro-environmental behaviors in the workplace based on strategic sufficiency as an independent variable?

The importance of the study comes from the role of strategic sufficiency in enhancing the physical and human characteristics of the organization (Geist, 2015:48), increasing its expansion and spread, and its control over markets.

The importance of the study was also embodied in the following:

- 1) The importance of the study for industrial companies is evident in the country, which today is in dire need of developing their business.
- 2) The study sought to frame the cognitive contributions related to the topics of strategic sufficiency and pro-environmental behaviors in the workplace in a theoretical framework that included the presentation of theoretical contributions on the concept and dimensions.

The study seeks to draw attention to the relative interest in good environmental management by companies, given their large number and importance in most countries, the behavior of companies needs to change significantly to address the negative environmental impacts of their activities, in addition to achieving the following sub-goals:

- 1) Know the intellectual and theoretical aspects of the study variables represented in strategic sufficiency and pro-environmental behaviors in the workplace.
- 2) Test the role of strategic sufficiency in how employees engage in pro-environmental behavior (PEB), which is often voluntary or to meet company expectations.

Figure (1) illustrates the proposed hypothetical study scheme, which represents the general framework of the study variables and its hypotheses, which consisted of two main hypotheses from which sub-hypotheses stemmed between the sub-variables of the independent variable and the dependent variable based on the hypotheses of correlation and influence.

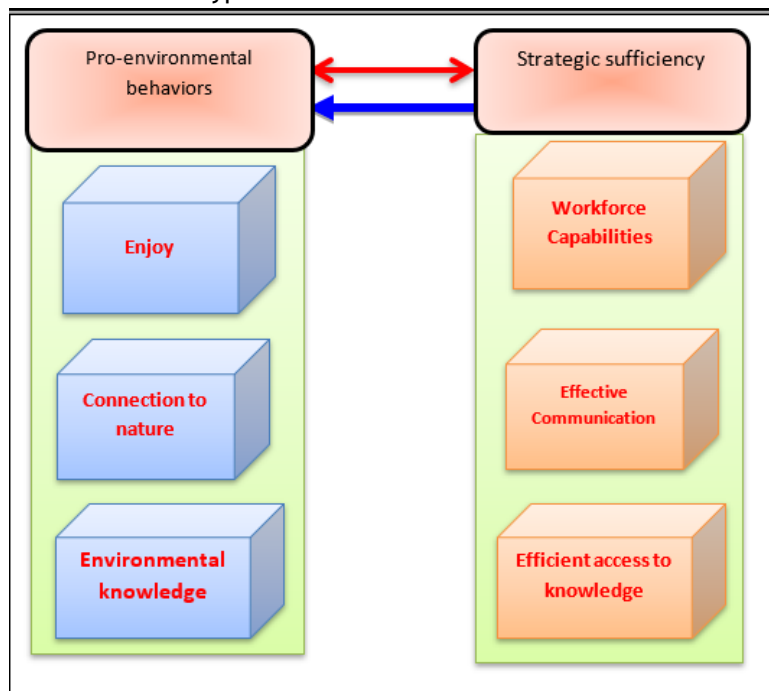


Figure 1. The hypothetical scheme of study

Al-Hawila Company in Karbala Governorate was selected as a community for the current study, and the sample was represented by individuals working in it at all upper, middle, and lower levels in the company under research in Karbala, and we distributed the questionnaire forms, which amounted to (110) forms.

4. HYPOTHESES DEVELOPMENT

The hypotheses of the study were embodied according to the folds of the study problem and the objectives set for it and the hypothetical model to represent the logical relationships between the independent variables and the dependent variables in the study model as follows:

%The first main hypothesis: **(H1: (Strategic sufficiency is significantly related to pro-environmental behaviors in the company under study) and the following sub-hypotheses emerged from it:**

Sub-hypothesis I (H11): The capabilities of the labor force are significantly related to pro-environmental behaviors and their dimensions.

Sub-hypothesis II (H12): Effective communication is significantly associated with pro-environmental behaviors.

Sub-hypothesis III (H13): The efficiency of access to knowledge is significantly related to pro-environmental behaviors.

%The second main hypothesis: **(H2: There is a significant impact of strategic sufficiency and its dimensions (workforce capabilities, effective communication, efficiency of access to knowledge) combined with pro-environmental behaviors and its dimensions (enjoyment of the workplace of employees, correlation to the nature and place of work of employees, knowledge of the environment of the workplace of employees). The following sub-hypotheses emerged from it:**

Sub-hypothesis I (H21): The dimensions of strategic sufficiency combined with the enjoyment of the workplace of employees have a significant impact.

Second sub-hypothesis (H22): The dimensions of strategic sufficiency together affect the correlation with the nature and place of work of employees significantly.

Sub-hypothesis II (H23): The dimensions of strategic sufficiency combined affect the knowledge of the workplace environment of employees significantly.

5. THE RESULTS

The current topic aims to identify the type, strength, and direction of the relationship (correlation, and influence) between the two variables of the study (strategic sufficiency) being the independent variable, and (pro-environmental behaviors) as the dependent variable, the goal of the study in the process of improvement, and after the survey of the opinions of the sample (110) viewing from members of the enormous company, an analysis of the correlation relationship of the independent variable and its dimensions (labor force capabilities) was conducted, effective communication, efficient access to knowledge) in a community, with the dependent variable and its dimensions (enjoyment of the workplace of employees, not related to the nature and place of work of employees, knowledge of the environment of the workplace of employees).

We have conducted testing the main hypotheses of the study, and knowing the strength and direction of the hypothesis of correlation between the variables and their dimensions, through the use of Pearson's correlation coefficient, given that the sample (110) is seen and its data are distributed normally, as the multiple linear regression coefficients also need a normal distribution, especially since the study adopted it to prove the validity of the hypotheses emanating from the main question of the study and its title and hypothesis scheme, so the values of the correlation coefficient were between (1 + /), while the strength of the relationship was in its negative and positive directions Heading to (0<->0.30) weak, from (0.30-<0.50) average strength, and from (0.50->1) strong and explained according to (Cohen, 1986:14).

First: Verifying the Correlation Hypothesis:

Testing the first main hypothesis (strategic sufficiency is significantly linked to pro-environmental behaviors) from which the following sub-hypotheses emerged:



- 1) The capabilities of the workforce are morally linked to pro-environmental behaviors and their dimensions.
- 2) Effective communication is significantly linked to pro-environmental behaviors.
- 3) The efficiency of access to knowledge is significantly linked to pro-environmental behaviors.

1) Verification of the first sub-hypothesis:

The review of the results of Table (13) found the following:

If the labor force capabilities dimension achieved a direct correlation (0.368**) medium strength with pro-environmental behaviors with a probability value of (0.000) and any increase in interest provided by Al-Hawila Company in the capabilities of the labor force for one unit, that increases will necessarily lead to its interest in pro-environmental behaviors. , which is equal to the value of the correlation coefficient between them and vice versa, and at the level of the relationship of labor force capabilities with the dimensions of pro-environmental behaviors, the capabilities of the labor force were able to find a direct correlation with the enjoyment of the workplace of employees (0.288**) weak strength and a probability value (0.002), and the capabilities of the labor force achieved a correlation with the correlation with the nature and place of work of employees (0.206*) weak strength with a p-value of (0.031), and the capabilities of the labor force achieved a correlation with knowledge of the workplace environment of employees with a value of (0.246**) weak strength and a p-value of (0.010), i.e. the enormous company was able to employ the capabilities of the labor force in improving the level of pro-environmental behaviors Moderately to poorly in improving pro-environmental behaviors and the link to the nature and place of work of employees and knowledge of the environment of the workplace of employees, and enjoyment of the workplace of employees, and from all of the above accept the first sub-hypothesis of the first main hypothesis (tlink the capabilities of the labor force with behaviors supportive of the environment and dimensions morally).

2) Verification of the second sub-hypothesis:

After effective communication, achieve a direct correlation (0.464**) of medium strength with pro-environmental behaviors with a probability value of (0.000), and that any increase in interest provided by a huge company in effective communication for one unit, that increase will necessarily lead to its interest inpro-environmental behaviors, and be equal to the value of the correlation coefficient between them and vice versa, and at the level of effective communication relationship With the dimensions of pro-environmental behaviors, effective communication was able to find a direct correlation with enjoying the workplace of employees (0.364**) medium strength and p-value (0.000), and effective communication achieved a correlation with the nature and workplace of employees (0.279**) weak strength and p-value (0.003), and achieved a correlation with knowledge of the workplace environment of employees with a weak strength value of (0.295**) and a p-value of (0.002), i.e. the enormous company was able to employ effective communication in improving the level of pro-environmental behaviors Moderately to poorly in improving the connection with the nature and place of work of employees and knowledge of the environment of the workplace of employees, and enjoyment of the workplace of employees, and from all of the above accept the second sub-hypothesis of the first main hypothesis (effective communication is associated with pro-environmental behaviors and their dimensions significantly).

3) Verification of the third sub-hypothesis:

After the efficiency of access to knowledge, achieve a direct correlation relationship (0.317**) of medium strength with pro-environmental behaviors with a probability value of (0.001), and that any increase in interest provided by Al-Hawala Company in the efficiency of access to knowledge for one unit, that increase will necessarily lead to its interest inpro-environmental behaviors, and be equal to the value of the correlation coefficient between them and vice versa, and at the level of a relationship Efficiency of access to knowledge with the dimensions of pro-environmental behaviors, the efficiency of access to knowledge was able to find a direct correlation with the enjoyment of the workplace of employees (0.334**) medium strength and a probability value of (0.000), and the efficiency of access to knowledge did not achieve any correlation with the correlation with the nature and place of work of employees as its value (0.007) is very weak with a probability value of

(0.939), and achieved a correlation with knowledge of the employees' workplace environment with a value of (0.274**) weak strength and a p-value of (0.004), i.e. Al-Hamilah Company was able to employ the efficiency of access to knowledge in improving the level of pro-environmental behaviors Moderately to poorly in improving the workplace of employees and knowledge of the environment of the workplace of employees, and enjoying the workplace of employees while you could not find a relationship with the link to the nature of the workplace, and from all of the above accept the third sub-hypothesis of the first main hypothesis (the efficiency of access to knowledge is associated with pro-environmental behaviors and its dimensions significantly).

Verification of the first main hypothesis: By reviewing the results of Table (13), it was found that the overall strategic sufficiency has achieved four correlations out of four strong and medium to weak, and by (100%) of the relationships with pro-environmental behaviors and dimensions, all with a probability value of less than (5%) and according to the following results:

- 1) Strategic sufficiency has achieved a strong correlation of (0.521**) with pro-environmental behaviors with a probability value of (0.000), and any increase in interest provided by the enormous company in strategic sufficiency for one unit, that increase will necessarily lead to its interest in pro-environmental behaviors, and be equal to the value of the correlation coefficient between them and vice versa, and at the level of the relationship of labor force capabilities with the dimensions of pro-environmental behaviors, it has been able to Strategic sufficiency of finding a direct correlation with enjoying the workplace of employees (0.448**) medium strength and probability value (0.000), strategic sufficiency achieved a correlation with correlation with the nature and place of work of employees (0.222*) weak strength and p-value (0.020), and strategic sufficiency achieved a correlation relationship With knowledge of the workplace environment of employees with a value of (0.370**) medium strength and a probability value of (0.000), that is, Al-Hawila Company was able to employ strategic sufficiency in improving the level of pro-environmental behaviors in an average way in improving the relevance to the nature and place of work of employees and knowledge of the workplace environment of employees, and enjoyment of the workplace of employees, and from all of the above accept the first main hypothesis (Strategic sufficiency is linked to pro-environmental behaviors and their moral dimensions).

Table (1) Matrix of the correlation of strategic sufficiency and its dimensions with pro-environmental behaviors and its dimensions

Dimensions	Enjoy the employee workplace	Connection to the nature and place of work of employees	Knowledge of the workplace environment of employees	Citizenship Conduct	Number of relationships	Relationship strength
Workforce Capabilities	0.288**	0.206*	0.246**	0.368**	4	From weak to medium
	0.002	0.031	0.010	0.000		
Effective Communication	0.364**	0.279**	0.295**	0.464**	4	From weak to medium
	0.000	0.003	0.002	0.000		
Efficient access to knowledge	0.334**	0.007	0.274**	0.317**	3	From weak to medium
	0.000	0.939	0.004	0.001		
Strategic sufficiency	0.448**	0.222*	0.370**	0.521**	4	From weak to strong
	0.000	0.020	0.000	0.000		

, n=110, DF=109, T=1.9823 P**<0.01, P*<0.05

Second: Testing the impact of strategic sufficiency on pro-environmental behaviors:

The second main hypothesis of the study was identified: there was a significant effect of strategic sufficiency and its dimensions (workforce capabilities, effective communication, efficient access to knowledge) combined with pro-environmental behaviors and dimensions (enjoyment of the workplace of employees, correlation with the nature and place of work of employees, knowledge of the environment of the workplace of employees), and to validate the hypotheses. A multiple linear regression model was implemented according to the following sub-hypotheses:

- 1) The dimensions of strategic sufficiency combined affect the enjoyment of the workplace of employees significantly.
- 2) The dimensions of strategic sufficiency together affect the relationship with the nature and place of work of employees significantly.
- 3) The dimensions of strategic sufficiency combined affect the knowledge of the workplace environment of employees significantly.

Verification of the first sub-hypothesis: The dimensions of strategic sufficiency combined affect the enjoyment of the workplace of employees significantly:

The results of Table (14) showed the existence of an interpretation coefficient (0.198), and a modified interpretation coefficient (0.183), as the dimensions of (strategic sufficiency combined) were able to explain (18.3%) of the changes that occur in the enjoyment of the workplace of employees, while the remaining percentage (81.7%) is attributed to other variables that were not included in the laboratory model. The interpretation model is a statistically acceptable model that can be adopted in interpreting the improvement in the enjoyment of the workplace of employees due to strategic sufficiency in its combined dimensions, especially since the value of (F) calculated for the model (13.175) which exceeds its scheduled value (3.930) at the degree of freedom (109) and a p-value of (0.05).

While it was found that there was a positive positive effect of the effective communication dimension in enjoying the workplace of employees by (0.292), with a p-value of (0.001), and a calculated value of (T) (3.386), as well as an effect of the efficiency of access to knowledge by (0.265), a p-value of (0.004) and a calculated value of (T) (2.949).) is more than its tabular value (1.9823) with a degree of freedom (109) and a p-value (0.05), while no investment of the dimension (workforce capabilities) was shown in improving the enjoyment of the workplace of employees, as we noted the company's enormous dependence on the dimensions of strategic sufficiency (effective communication, efficient access to knowledge).) in improving the enjoyment of the workplace of employees positively, as these results lead to the acceptance of the first sub-hypothesis of the second main hypothesis (the dimensions of strategic sufficiency collectively affect the enjoyment of the workplace of employees significantly), according to the following equation:

$$\text{Employee workplace enjoyment (Y)} = (1.972) + 0.292 * (\text{effective communication}) + 0.265 * (\text{efficient access to knowledge})$$

Table 2: Impact of Strategic Sufficiency Dimensions on Employee Workplace Enjoyment (n=110)

Independent variable	Enjoy the employee workplace						
	A	B	R ²	A R ²	p-value	T	F
Workforce Capabilities	1.972	0.108	0.198	0.183	0.283	1.080	13.175
Effective Communication		0.292			0.001	3.386	
Efficient access to knowledge		0.265			0.004	2.949	

Source: SPSS V.28 Outputs

Verification of the second sub-hypothesis: The dimensions of strategic sufficiency combined affect the correlation with the nature and place of work of employees significantly:

The results of Table (15) showed the existence of an interpretation coefficient (0.078), and a modified interpretation coefficient (0.069), as the dimensions of (strategic sufficiency in their combined dimensions) were able to explain (6.9%) of the changes that occur in the link to the nature and place of work of employees, while the remaining percentage (93.1%) is attributed to other variables that were not included in the laboratory model. The interpretation model is statistically acceptable and can be adopted in interpreting the improvement that occurs in the relationship with the nature and place of work of employees due to strategic sufficiency in its combined dimensions, especially since the value of (F) calculated for the model (9.105), which exceeds its scheduled value (3.930) at the degree of freedom (109) and a probability value of (0.05).

While it was found that there was a positive positive effect for the effective communication dimension concerning the nature and place of work of employees by (0.253) with a probability value (0.003), and with a calculated value (T) (3.018), which is more than its tabular value (1.9823) with a degree of freedom (109) and a p-value of (0.05), while no investment appeared for the dimension (labor force capabilities, Efficient access to knowledge, working as a team) in improving the link to the nature and place of work of employees, as we note the company's enormous dependence on the dimensions of strategic sufficiency (effective communication) in improving the link to the nature and place of work of employees, as these results lead to the acceptance of the second sub-hypothesis of the second main hypothesis (the dimensions of strategic sufficiency combined affect The relationship with the nature and place of work of employees significantly), according to the following equation:

$$\text{Correlation to the nature and place of work of employees (Y) = (3.056) + 0.253 * (effective communication)}$$

Table 3. Effect of Strategic Sufficiency Dimensions on Relation to the Nature and Place of Work of Employees (n=110)

Independent variable	Connection to the nature and place of work of employees						
	A	B	R ²	A R ²	p-value	T	F
Workforce Capabilities	3.056	0.090	0.078	0.069	0.399	0.848	9.105
Effective Communication		0.253			0.003	3.018	
Efficient access to knowledge		-0.062			0.518	0.649	

Source: SPSS V.28 Outputs

To verify the third sub-hypothesis: The dimensions of strategic sufficiency combined affect knowledge of the workplace environment of employees significantly:

The results of Table (16) showed the existence of an interpretation coefficient (0.131), and a modified interpretation coefficient (0.115), as the dimensions of (strategic sufficiency combined) were able to explain (11.5%) of the changes that occur in the knowledge of the workplace environment of employees, while the remaining percentage (88.5%) is attributed to other variables that were not included in the laboratory model. The interpretation model is a statistically acceptable model that can be adopted in interpreting the improvement in knowledge of the workplace environment of employees due to strategic sufficiency in its combined dimensions, as the value of (F) calculated for the model (8.092), which exceeds its scheduled value (3.930) at the degree of freedom (109) and a probability value (0.05).

While it was found that there is a positive positive effect of the effective communication dimension in the knowledge of the workplace environment of employees by (0.279) with a probability value (0.010), and a calculated value of (T) (2.631), as well as an effect of the dimension of efficient access

to knowledge in environmental knowledge in the workplace of employees by (0.258) and a probability value of (0.021) and a value of (T). calculated (2.335) which exceeds its tabular value (1.9823) with a degree of freedom (109), while no investment was shown for the dimension of the capabilities of the labor force in improving knowledge of the workplace environment of employees, as we noted the dependence of the enormous company on the dimensions of strategic sufficiency (effective communication). , the efficiency of access to knowledge) in improving knowledge of the workplace environment of employees positively, as these results lead to the acceptance of the third sub-hypothesis of the second main hypothesis (the dimensions of strategic sufficiency collectively affect knowledge of the workplace environment of employees significantly), according to the following equation:

$$\text{Knowledge of the employee workplace environment (Y)} = (1.773) + 0.279 * (\text{effective communication}) + 0.258 * (\text{knowledge access efficiency})$$

Table 4. Impact of Strategic Sufficiency Dimensions on Knowledge of the Employee Workplace Environment (n=110)

Independent variable	Knowledge of the workplace environment of employees						
	A	B	R ²	A R ²	p-value	T	F
Workforce Capabilities	1.773	0.104	0.131	0.115	0.320	0.999	8.092
Effective Communication		0.279			0.010	2.631	
Efficient access to knowledge		0.258			0.021	2.335	

Source: SPSS V.28 Outputs

Verification of the second main hypothesis: The dimensions of strategic sufficiency combined affect pro-environmental behaviors significantly:

The results of Table (17) showed the existence of an interpretation coefficient (0.261), and a modified interpretation coefficient (0.247), as the dimensions of (strategic sufficiency combined) were able to explain (24.7%) of the changes that occur in pro-environmental behaviors, while the remaining percentage (75.3%) is attributed to other variables that were not included in the laboratory model. The interpretation model is an acceptable model that can be adopted in explaining the improvement that occurs in pro-environmental behaviors due to strategic sufficiency in their combined dimensions, and it was found that the value of (F) calculated for the model (18.883) is more than its tabular value (3.930) at the probability value (0.05).

While it was found that there is a positive positive effect of the effective communication dimension in pro-environmental behaviors of (0. 279) with a probability value (0.0 00), and a calculated value (T) (4.820), as well as an effect of the efficiency dimension of access to knowledge of (0. 155) with a p-value (0. 012) and with the calculated value (T) (2. 566), which is more than its scheduled value (1.9823) while no investment was shown for the dimension of the capabilities of the workforce in improving pro-environmental behaviors, as we noted the company's enormous adoption of the dimensions of strategic sufficiency (effective communication, efficient access to knowledge). In improving pro-environmental behaviors positively, as these results lead to the acceptance of the second main hypothesis (the dimensions of strategic sufficiency collectively affect pro-environmental behaviors significantly), according to the following equation:

$$\text{Pro-environmental behaviors (Y)} = (3.150) + 0.182 * (\text{effective communication}) + 0.103 * (\text{knowledge access efficiency})$$

Table 5: Effect of Strategic Sufficiency Dimensions on Pro-Environmental Behaviors (n=110)

Independent variable	Pro-environmental behaviors						
	A	B	R ²	A R ²	p-value	T	F
Workforce Capabilities	2.336	0.155	0.261	0.247	0.107	1.624	18.883
Effective Communication		0.279			0.000	4.820	
Efficient access to knowledge		0.155			0.012	2.566	

6. CONCLUSIONS AND DISCUSSIONS

The results show the company's tremendous focus on the capabilities of the workforce and directing it mainly to enhance strategic sufficiency as a result of its reliance on the capabilities of its workers, and its ability to ensure sufficient and appropriate employment levels to accomplish all activities and capabilities in various fluctuations of conditions and environment. Al-Haelah Company has also shown its high interest in effective communication, which leads to improving strategic sufficiency through communication with employees and its community, as it has effective communications that increase its effectiveness in performing its activities and tasks. The results also show the company's interest in efficient access to knowledge, in a way that improves the level of strategic sufficiency as a result of its realization, understanding, and awareness of the facts, and in a way that makes it more able to adapt to changes in strategic work based on reading its leaders and their analysis of the environment. In addition, the company tended to pay high attention to the enjoyment of its employees in the workplace, which made them turn off the lights when they were not in the workplace, as well as their participation in environmentally friendly programs such as riding bicycles, walking to work, and attending the lunch day that the two companies allocate for their employees. Therefore, the company must pay attention to the capabilities of the workforce, in a way that enhances its strategic sufficiency and in a way that guarantees the completion of production processes and meeting the requirements of customers in all cases and different levels of demand, as well as resorting to the following mechanisms:

- 1) Attracting and employing talented human capital that will be a milestone for the company's workforce that can achieve and support its core competence.
- 2) Training employees on new tasks that make a competitive difference and lead the company to sufficiency in its workforce.

In addition, the company should pay more attention to effective communication in a way that improves its strategic sufficiency by focusing on communication with employees, customers, and stakeholders, disclosing information and publishing it on its official page and divisions, so that everyone knows about its products and steps in the future while preserving its technical core, as well as On going to employ the following mechanisms:

- 1) Obtaining high technology, communication systems, and software that increase the effectiveness of communication with stakeholders.
- 2) Interest in public relations, digital media, and digital marketing to communicate with the various target segments of the two companies products.

On the other hand, the company must pay attention to improving the efficiency of access to knowledge because of its important role in strategic sufficiency, as well as directing awareness and realizing facts through the knowledge network that allows its workers more progress and efficiency, as well as adopting the following mechanisms:


- 1) Adoption of the environmental survey, monitoring, and analysis in a way that makes the company more adaptable to the environment and the adoption of the readings of its leaders and their strategic intelligence.



2) Adopting the database and supporting it with expert decision support systems that explore the general and overall environment and monitor demand, competitors' movements, and resources, so that the decision-maker can see them promptly.

REFERENCES

- [1] Allievi, Vinnari, Luukkanen. (2015). Meat consumption and production e analysis of efficiency, sufficiency, and consistency of global trends. *Journal of Cleaner Production* 1e10. 24
- [2] Bobbitt, P. (1988). Assured Destruction and Strategic Sufficiency. In *Democracy and Deterrence* (pp. 56-74). Palgrave Macmillan, London.
- [3] Bockena, N.M.P. b, S.W. Short b.(2015). Towards a sufficiency-driven business model: Experiences and opportunities. *journal Environmental Innovation and Societal Transitions, G Model EIST-184; No 17. 15*
- [4] Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, 2nd ed. Hillsdale, NJ: Erlbaum.
- [5] Fatoki, Olawale, (2019), " Employees' Pro-Environmental Behaviour In Small And Medium Enterprises: The Role Of Enjoyment, Connectedness To Nature And Environmental Knowledge", *Academy of Entrepreneurship Journal*, Volume 25, Issue 4,
- [6] Fawcett. (2018). Energy sufficiency: an introduction Concept. 28
- [7] Faye V. McDonald (2014). Developing an Integrated Conceptual Framework of Pro-Environmental Behavior in the Workplace through Synthesis of the Current Literature.
- [8] Figge, Young, Barkemeyer. (2014). Sufficiency or efficiency to achieve lower resource consumption and emissions? The role of the rebound effect. *Journal of Cleaner Production* 69, 216e224.23
- [9] Foster, Muhammad, Yusliza, Faezah, Johansyah, Yong, ul-Haque, Saputra, Ramayah Fawehinmi. (2022), Determinants of Pro-Environmental Behaviour in the Workplace. *Journal Sustainability*, 14, 4420.
- [10] Geist, E. (2015). Deterrence stability in the cyber age. *Strategic studies quarterly*, 9(4), 44-61.
- [11] Gorge, Herbert,(2014). What Do We Really Need? Questioning Consumption Through Sufficiency. *Journal of Macromarketing* 2015, Vol. 35(1) 11-22.
- [12] Gossen, Kropfeld. (2022). Choose nature. Buy less." Exploring sufficiency-oriented marketing and consumption practices in the outdoor industry. *Journal Sustainable Production and Consumption*,30,720 -736.
- [13] Gunarathne, Ki-Hoon Lee. (2021). The link between corporate energy management and environmental strategy implementation: Efficiency, sufficiency, and consistency strategy perspectives. *Journal of Cleaner Production* 293, 126082. 1
- [14] Hagerty, D. T., Hagerty, & Pusca. (2020). *Nuclear Weapons and Deterrence Stability in South Asia*. Springer International Publishing.
- [15] Hongxin, Khan, Zhenqiang, Cismas, Ali, Saleem, Negrut. (2022). Unleashing the Role of CSR and Employees' Pro-Environmental Behavior for Organizational Success: The Role of Connectedness to Nature. *Journal Sustainability* 2022, 14, 3191.
- [16] Kanschik. (2016). Eco-Sufficiency and Distributive Sufficient Arianism - Friends or Foes? *Environmental Values*, 553-571. 30
- [17] Kim, M., Kim, J., & Thapa, B (2018). Influence of environmental knowledge on affect, nature affiliation and Pro-environmental behaviors among tourists. *Sustainability*, 10(9), 1-16.
- [18] Lamborn, A. C. (1995). Grand Strategy, Liberal vs. Closed Economies, and Great Power War.
- [19] Lebow, R. N. (1982). Misconceptions in American strategic assessment. *Political Science Quarterly*, 97(2), 187-206.
- [20] Linz. (2006). Was dann aus der wirtschaft, Nr157.ISSN 0949-5266. 34
- [21] Mayer, F., & Frantz, C. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology*, 23(4), 503-515.
- [22] Mouro, Carla Vera Lomba and Ana Patrícia Duarte. (2021). Pro-Environmental Behaviours at Work: The Interactive Role of Norms and Attitudinal Ambivalence.

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- [23] Peng, Jian Xiao Chen, Yanchun Zou, Qi Nie,(2020). Environmentally specific transformational leadership and team pro-environmental behaviors: The roles of pro-environmental goal clarity, pro-environmental harmonious passion, and power distance.
 - [24] Perez-Franco, R. J., Caplice, C., Singh, M., & Sheffi, Y. (2014). A type-independent approach to supply-chain strategy evaluation.
 - [25] Pothitou, M., Hanna, R.F., & Chalvatzis, K.J. (2016). Environmental knowledge, pro-environmental behavior, and energy savings in households: An empirical study. *Applied Energy*, 184, 1217-1229.
 - [26] Ring, J. (2009, March). Strategy for a whole system modeling capability. In 2009 3rd Annual IEEE Systems Conference (pp. 279-284). IEEE.
 - [27] Rosa, Collado. (2018). Enhancing nature conservation and health: Changing the focus to active pro-environmental behaviors. Universidade Estadual de Santa Cruz.
 - [28] Rubel, Hung Kee, Rimi. (2021). Green human resource management and supervisor pro-environmental behavior: The role of green work climate perceptions. *Journal of Cleaner Production* 313, 127669.
 - [29] Sandberg. (2021). Sufficiency transitions: A review of consumption changes for environmental sustainability. *Journal of Cleaner Production* 293, 126097. 50
 - [30] Sorrell, Gatersleben, Druckman. (2020). The limits of energy sufficiency: A review of the evidence for rebound effects and negative spillovers from behavioral change. *Journal Energy Research & Social Science*, 64-101439. 25
 - [31] Source, Jianqiao. (2015). The Positive Impact of High-Performance Work Systems (HPWS) on Employee Commitment and Self-Sufficiency in Strategic Human Resource Management (SHRM)in Kurdistan. *European Journal of Business and Management*, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.3, 2015. 18
 - [32] Stevenson, A. (Ed.). (2010). *Oxford Dictionary of English*. Oxford University Press, USA.
 - [33] Thomason, J. S., Blackwell, J. A., Tillman, M. E., & Wallace, T. J. (2018). Independent Assessment of the Chairman of the Joint Chiefs of Staff Report on the Reconnaissance Strike Group. Institute for Defense Analyses Alexandria United States.
 - [34] Ture, Ganesh. (2014). Understanding Pro-environmental Behaviours at Workplace: Proposal of a Model. DOI: 10.1177/2319510X14536219.
 - [35] Wesselink, Blok, Ringersma. (2017). Pro-environmental behavior in the workplace and the role of managers and organization. *Journal of Cleaner Production* jclepro.2017.08.214.
 - [36] Schneidewind, U., & Zahrnt, A. (2014). The politics of sufficiency: making it easier to live the good life. Oekom-Verl.
 - [37] Zhang, Y., Wang, Z., & Zhou, G. (2013). Determinants and implications of employee electricity saving habit: An empirical study in China *Applied Energy*, 112, 1529-1535.