

## Influence of Self-Efficacy and Job Satisfaction on Employee Green Behavior among IT Professionals

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### Abstract

**Background/Objectives:** The havoc created by the environmental degradation and depletion of natural resources is at its peak. IT industries have their share of contribution to environmental degradation. Therefore, it has a social responsibility to reduce environmentally destructive behaviors and protect it from further damage. Self-efficacy, a sense of confidence with regard to the performance of specific tasks and job satisfaction which is a positive feeling about one's job has a significant contribution to engaging employees in pro-environmental behaviours. The present study tried to unravel the role of self-efficacy and job satisfaction in promoting employee green behavior (EGB) among IT professionals. **Method:** An empirical study was carried out using structured questionnaires. The present study was conducted among IT professionals working in Ernakulum district, Kerala. With the consent of HR managers of IT firms, the link of an online survey (Google form) was sent to them which were later forwarded to their respective employees. A total of 120 respondents participated in the study. After eliminating the outliers, 103 data was retained for the final analysis. **Findings:** A significant relationship was pronounced between self-efficacy, job satisfaction and EGB among Indian IT professionals. Self-efficacy and job satisfaction collectively accounted for 30% of the variance in EGB. **Recommendations:** Developing self-efficacy and job satisfaction among employees bound to enhance their green behaviors. Therefore, strategies that cater to the employees' needs and providing opportunities to equip them with the necessary skills would be instrumental to inculcate pro-environmental behaviors among them.

**Keywords:** Environmental degradation, self-efficacy, employee green behavior, job satisfaction, IT professionals

### 1. Introduction

There is growing insight into the harmful impact that humans' actions have on the environment. Most of the environmental problems are rooted in human actions <sup>[1-4]</sup>. For years, humans protracted with the overexploitation of natural resources and consumerism growth, as it has devastating effects on the environment <sup>[5, 6, 2]</sup>. The devastation of nature has posed a serious threat to humans. Organizations are also held accountable for the dreadful situation that the environment faces. Employee Green Behavior (EGB) serves as a method to mitigate the negative impacts caused to the environment. The prime focus of EGB is to enhance the environmental performance of the employees. EGB has the potential to boost the productivity of the employees as well.

Individuals' belief in their self-efficacy largely determines human behavior. One of the major determinants of intention is self-efficacy which further affects the performance <sup>[7]</sup>. Self-efficacy is domain-specific and varies in three different dimensions. They are level, generality, and strength <sup>[7]</sup>. The level is the degree of difficulty in the task which individuals think they can perform. Generality is the array of activities that people judge they are efficacious of. Strength is the magnitude of confidence individuals have to carry out particular tasks. Higher self-efficacy to perform a particular task implies greater capabilities and confidence in performing the tasks and tends to enhance one's behavioral intention. A deficiency in perceived self-efficacy prevents individuals from being active <sup>[8]</sup> and they are

more likely to refrain from activities that they believe are beyond their coping capacities<sup>[7]</sup>. Conversely, when individuals possess a stronger belief about one's self-efficacy, they exhibit higher resilience to adversities<sup>[9]</sup>, better job performance,<sup>[10]</sup> and higher satisfaction with relationships<sup>[11]</sup>. An individual's self-appraisal of ability strongly predicts the possibility of carrying out such actions in the future<sup>[12]</sup>.

Job satisfaction is the employees' evaluative judgment of their experiences in a given job<sup>[13]</sup>. It is directly associated with employees' productivity and personal well-being. It is considered as a key ingredient that results in recognition, income, promotion, and the achievement of other goals which in turn leads to a feeling of fulfillment<sup>[14]</sup>. Some of the influencing factors of job satisfaction are payment, working hours, schedule, benefits, level of stress, and flexibility<sup>[15]</sup>. High level of job performance, positive work values, enhanced employee motivation as well as reduced absenteeism, turnover, and burnout characterizes the positive impact of job satisfaction. Unsatisfied employees are more likely to cause undesirable job outcomes such as low productivity, stealing, moonlighting and high absenteeism<sup>[16]</sup>. Moreover, the relationship between EGB and job satisfaction is an arena that is not explored extensively<sup>[17]</sup>. Therefore, the crucial role of a satisfied employee in the prosperity of the organization and progression in its bottom line cannot be overstated.

## ***1.2 Need of the Study***

In India, the phenomenal growth of the IT industry has accelerated the economic growth of the nation. IT industry has enhanced the efficiency of governance, improved access to information, offers access to government services, protects consumers, makes skill development and training more resourceful, progresses delivery health services, and promotes transparency<sup>[18]</sup>. IT industry is booming with huge revenue of 180 billion U.S. dollars in 2019<sup>[19]</sup>. IT industry contributed to 7.7 percent of our country's GDP. IT-BPM sector witnessed a growth of 6.1 percent from last year<sup>[20]</sup>. Undoubtedly, the flourishing IT industry is a country's asset.

The manufacture and production of IT-related products and services result in the depletion of natural resources and the generation of pollution<sup>[21]</sup>. Toxic metals such as mercury, lead, along with valuable amounts of copper, gold, and other materials are also present in computers and other telecommunication equipment<sup>[22]</sup>. The inappropriate disposal of these gadgets emits toxic substances into the environment and leads to myriads of diseases in humans such as cancer, kidney problems, neurological problems, etc. Therefore, it is the need of the hour to curtail its adverse impact on the environment.

Behavioral changes at the individual level do have a significant role in mitigating global challenges like climate change and environmental conservation. Self-efficacy related to the environment is the belief of individuals that they are capable to take mitigation action for the environment<sup>[23]</sup>. Acting pro-environmentally enhances an individual's belief in self-efficacy and possibly fostering future green behaviors in other contexts as well<sup>[24]</sup>.

Being satisfied with the working conditions and sharing values and goals as similar to the organization's especially in terms of harming the natural environment as little as possible by behaving responsibly motivates employees to act in a greener fashion<sup>[25]</sup>. Job satisfaction generates a positive mood that expands one's attention, cognition, action, and intellectual, physical, relational, and psychological resources<sup>[26]</sup>. These resources are broadened to green concerns and practices at work<sup>[27]</sup>. For employees, satisfying work and relationships trigger a favorable attitude towards the organization and other co-workers who satisfy their emotional needs. Such employees experience intrinsic motivation<sup>[28]</sup> which in turn expands their scope of attention towards a broader set of behaviors<sup>[26]</sup> which includes pro-environmental behaviors as well. Also, a clean and environmentally sustainable working condition benefits their colleagues<sup>[29]</sup>. Involvement in green behaviors along with the support of employer makes professional experience more satisfying<sup>[30]</sup>.

The current study is built upon the idea that self-efficacy and job satisfaction plays a vital role in predicting EGB of Indian IT professionals. The belief that one's capability to change the environment together with the way one perceives their job guides pro-environmental behaviors forms the basis of this research. So far, self-efficacy, job satisfaction, and employee green behavior among IT professionals have received only a little attention in Indian research has prompted the researcher to conduct an extensive study in this realm.

## 2. Methodology

### 2.1 Aim

The aim of the study is to explore the influence of job satisfaction and self-efficacy on green behavior among IT professionals

### 2.3 Objectives

- To examine the green behavior of IT professionals
- To assess the self-efficacy of IT professionals
- To assess the job satisfaction of IT professionals
- To understand the influence of self-efficacy and job satisfaction on employee green behavior of IT professionals

### 2.4 Hypotheses

- H<sub>1</sub>: There will not be any significant relationship between green behavior and self-efficacy among IT professionals.
- H<sub>2</sub>: There will not be any significant relationship between green behavior and job satisfaction among IT professionals.
- H<sub>3</sub>: There will not be any significant influence of self-efficacy and job satisfaction on the green behaviour of IT professionals.

### 2.5 Tools

1. The demographic characteristics such as age, gender, marital status, family type, and educational qualification of the respondents were obtained with the assurance of maintaining the confidentiality of their identity.
2. Employee Green Behaviour Scale developed by Jovita and Jayakumar in the year 2019 was used to assess EGB. The tool consisted of five response categories viz. Always (5), Often (4), Sometimes (3), Rarely (2), and Never (1).
3. General Self-Efficacy Scale developed by Jerusalem in 1995 was used to assess self-efficacy. The scale consists of 10 items and was measured on a 4 point Likert scale, viz. Not at all True (1), Hardly True (2), Moderately True (3), and Exactly True (4).
4. Job satisfaction scale developed by Macdonald & MacIntyre in 1997 was also used in the current study. The 10-item scale has five response categories, viz. Strongly Disagree (1), Disagree (2), Don't Know (3), Agree (4) and Strongly Agree (5).

### 2.6 Sample

The data was collected from IT professionals working in three IT firms located at Ernakulum district, Kerala. Due to security risks, it is difficult to collect data directly from IT firms. Therefore, the researcher adopted the online survey method for data collection. For the administration of the questionnaire, the consent of HR managers was sought. The link of the online survey Google form was sent to them which were later forwarded to the employees. A total of 120 respondents participated in the study. Outliers were eliminated resulting in a total sample size of 103 in the current study with average age 27.3 (SD=3.32). The sample accounted for 67% males and 36% females. There are 64% single and 39% married respondents in the sample. In the study, 88% of the participants are from nuclear and 15% from the joint family. 54% of the participants are degree qualified and 49% are postgraduates.

**Table 2.1**

*Table 2.1 Demographic profile of the sample*

Characteristics	Frequency	Percentage
<b>Gender</b>		
Males	67	65%
Females	36	35%
<b>Marital Status</b>		
Single	64	62.1%
Married	39	37.9%
<b>Family Type</b>		
Nuclear Family	88	85.4%
Joint Family	15	14.6%
<b>Educational Qualification</b>		
Degree	54	52.4%
Post- Graduation	49	47.6%

.Table 2.2

Table 2.2 Reliability Test for EGB, Self-Efficacy and Job Satisfaction of IT professionals

Variables	Number of Items	Cronbach's Alpha
<b>Employee Green Behaviour</b>	24	0.75
<b>Self-Efficacy</b>	10	0.85
<b>Job Satisfaction</b>	10	0.82

### 3. Results and Discussion

Table 3.1

Table 3.1 Correlation between Employee Green Behaviour and Self-Efficacy of IT professionals

Variables	EGB	Self-Efficacy	Mean	SD
<b>EGB</b>	–	0.49*	84.87	10.54
<b>Self-Efficacy</b>	0.49*	–	32.03	4.55

\*Significant at 0.05 level

Hypothesis 1 posited that there will not be any significant relationship between Employee Green Behavior (EGB) and Self-Efficacy among IT professionals. But, a significant correlation is observed between EGB and Self-efficacy of IT professionals. Hence,  $H_1$  is not confirmed

A significant positive relationship was found between EGB and self-efficacy ( $r=0.49$ ,  $p<0.05$ ). Bandura [7] stated that “the conviction that one can successfully execute the behavior required has shown to have a positive effect on performance. Therefore, as self-efficacy increases, performance tends to enhance. This applies to environmental performance as well.

From a social-cognitive theory perspective, self-efficacy fosters positive outcome expectations which independently and jointly can lead to goals. Consequently, goals in relation to the environment promote pro-environmental behaviors [31]. An individual's strong appraisal of his/her ability strongly determines the individual's tendency to carry out those actions in the future [12]. When individuals perceive that they can efficiently perform responsible environmental behaviors, they tend to engage in it frequently. Perceived lack of ability can be used as a reason to justify personal inaction [32, 33] and on this ground individuals refrain from engaging in green behaviors.

Additionally, there are convincingly sufficient pieces of evidence that mention self-efficacy and engagement in pro-environmental behaviors are positively correlated [34, 35] and last across time [36]. Other streams of research also suggest that a stronger sense of self-efficacy is related to a higher likelihood to involve in behaviors that foster sustainable development [37, 38].

**Table 3.2**

*Table 3.2 Correlation between Employee Green Behaviour and Job Satisfaction of IT professionals*

Variables	EGB	Job Satisfaction	Mean	SD
<b>EGB</b>	–	0.50*	84.87	10.54
<b>Job Satisfaction</b>	0.50*	–	38.16	5.31

\*Significant at 0.05 level

*Hypothesis 2 asserted that there will not be any significant relationship between Employee Green Behavior (EGB) and Job satisfaction among IT professionals. But, a significant correlation is observed between EGB and Job satisfaction of IT professionals. Hence, H<sub>2</sub> is not confirmed.*

Employee Green Behavior and Job Satisfaction share a significant positive relationship with each other ( $r=0.50$ ,  $p<0.05$ ). The usefulness of one's job to society does play a key role to fuel job satisfaction [39, 40]. Going green not only benefits oneself. Rather, the beneficiaries are a wider target in society. This indeed helps them to achieve their prosocial values as well. Involving in green behavior diminishes the employees' work-related stress and hassles and thereby boosts their productivity. Environmental sustainability and stewardship, an opportunity to nature contact at work are some of the best ways to foster a healthy workplace [41-44].

On the other hand, green behavior mitigates pollution and improves the health and safety of the employees which eventually generates job satisfaction among them. Also, there is a scholarly inquiry that demonstrated a positive linkage between job satisfaction and pro-environmental behaviors [45, 46]. Satisfied employees experience positive affect and are intrinsically motivated to make their workplace environmentally responsible and sustainable for their organizations [27]. Engaging in sustainable practices helps to develop new skills that are essential for the functioning of the organization and thus improve job satisfaction [47].

**Table 3.3**

*Table 3.3 Influence of Self-Efficacy and Job Satisfaction on EGB*

Independent Variables	Dependent Variable	Unstandardized Coefficient		Beta	t-value p<0.05	Model Summary p<0.05	Tolerance	VIF
		B	SE					
<b>Self-Efficacy</b>	<b>EGB</b>	0.69	0.60	0.30	2.88	F=22.71 R <sup>2</sup> =0.30	0.63	1.57
		0.64	0.20	0.32	3.11			
<b>Job Satisfaction</b>							0.63	1.57

*Hypothesis 3 maintained that there will be no significant influence of self-efficacy and job satisfaction on EGB of IT professionals is not confirmed. A significant influence of self-efficacy and job satisfaction was seen in green behavior of IT professionals.*

Multi-collinearity of independent variables in the multiple regression analysis was assessed using Variance Inflation Factor (VIF) and tolerance. The tolerance value has to fall below 0.10 and VIF should not exceed 10<sup>[48]</sup>. Both Variance Inflation Factor (VIF) and tolerance fall within the threshold for self-efficacy and job satisfaction.

A highly self-efficacious individual has greater capacity and confidence in carrying out particular tasks. Self-efficacy, a personal sense of one's capacity produces and regulates events in one's life and is considered as a major incentive to act<sup>[49, 50]</sup>. When individuals perceive themselves as self-efficacious, they are more likely to behave in favor of the natural environment<sup>[51, 52, 24]</sup> which result in the protection of the environment and conservation of resources. Employees' competency to execute particular tasks prompts them to act pro-environmentally. Enhancing individuals' belief in their efficacy through involvement in pro-environmental behaviours fosters such actions in future as well. Self-efficacy increases the internal motivation and further enhances environmental behaviors<sup>[53]</sup> and therefore self-efficacy of employees does predict their green behavior.

Consistent with the present findings, other research studies revealed that self-efficacy affects people's environmental behaviours<sup>[53-56]</sup>.

Job satisfaction significantly predicts Employee Green Behavior among IT professionals. Employees who experience high job satisfaction are less susceptible to absenteeism and quitting the job. Instead, they are more prone to be productive, resourceful, diligent and display high organizational commitment and are also more likely to be content with one's lives<sup>[57]</sup>. When such satisfied employees share similar values and goals of the organization with respect to protecting the environment tend to engage in green behaviors<sup>[25]</sup>. Thus, they conform to the rules and regulations of the organisation.

On the other hand, satisfied employees wanted to sustain their positive affect. This is obtained through environmentally responsible behaviours. An individual with negative emotions is less likely to indulge in green behaviour, feel helpless to involve in meaningful behaviour change or refute the need to change behaviour. Positive emotions broaden one's action possibilities and they are more open to change their behaviour in the positive direction and therefore are willing to engage in pro-environmental behaviours<sup>[58]</sup>. Engagement in such behavior in turn stimulates positive emotions. Individuals who act eco-friendly are more likely to experience high levels of happiness and higher life satisfaction<sup>[59-61]</sup>. Hence, the significant influence of job satisfaction on EGB.

One of the possible limitations of the present study is the administration of questionnaires to conduct the survey. The participants are likely to under-report undesirable behaviors and over-report desirable behaviors. A small sample size is another limitation of this study. The results of this study are limited to generalization to other cultural contexts as it was primarily conducted in India.

#### **4. Conclusion**

The present paper highlighted the significance of self-efficacy and job satisfaction in promoting EGB. As the self-efficacious and satisfied employees do make sustainable efforts to reduce ecological footprints, the role of organisation to develop such elements and qualities cannot be overlooked. Organizations need to step up and be prudent about the employees' well-being for its effective functioning.

#### **5. Recommendations**

1. Self-efficacy and affinity towards nature had to be considered as a vital criterion during the recruitment of IT professionals.
2. Training programs specific to self-efficacy and sustainable practices have to be conducted for the employees in the organization.
3. HR managers have to make sure that the employees are treated with respect and all the reasonable grievances of the employees are resolved.

4. Providing positive feedback about the employees' performance during the appraisal keeps them motivated.

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