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Development and Validation of Employee Green Behaviour Scale (EGBS) for IT Professionals in India

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ABSTRACT: In recent times, people from all walks of life have started to realize the consequences of negative attitude towards the environment, while engaging in the production and consumption business. In addition to the manufacturing sector, the IT sector inactively contributes to global warming and ill health. Global warming is a stark reality and 'going green' is the attitudinal shift everybody wishes to encourage and follow. As the concept of green behaviour percolate across the society, organizations and industries realize the need to encourage pro-environmental behaviour among its employees. To sustain initiatives, involvement of the employees is crucial. Next to farming and manufacturing, Information Technology (IT) is the major sector in India, providing employment to 3.7 million people. In spite of green behaviour gaining importance among the employees, there is hardly any specific tool to measure the same. Hence, the purpose of this paper is to give an account of the rationale and the process of developing a reliable and valid scale, to assess Employee Green Behaviour (EGB) among Indian IT professionals. Literature reviews suggest a lack of psychological assessment on EGB, specific to IT professionals in the Indian context. This necessitated the need to develop a new EGB scale for IT professionals. The major contribution of this research paper is the development of a standardised tool to assess EGB as the need to develop a valid and reliable tool suitable for a particular setting is of high demand these days. This article explains the processes involved in tool development like defining the construct, generating item, assessing content adequacy, followed by establishing the reliability and validity of the scale and finally developing the norms.

Keywords: Employee Green Behaviour Scale (EGBS), IT professionals, reliability, tool development and validity.

I. INTRODUCTION

Industrialization and urbanization have created drastic changes in society. The advent of multiple organizations was to meet the human demands collectively. As human resources expanded the need for better workspace was on demand. A full-fledged organization with all necessary facilities was accompanied with tremendous destruction of the environment. The construction of skyscrapers, its electricity consumption and infrastructure requires resources from Mother Earth. To make profits and secure top rankings, organisations mercilessly destroyed the environment. Since industrialization is primarily responsible for the destruction of the environment, organizations now, are under severe pressure to engage in sustainable pro-environmental behaviour in the workplace [1, 41]. Environmental awareness is bringing in changes in the mindset of people. Of late, green initiatives in organizations are gaining momentum. Some of the ways in which IT firms initiate green behaviour are by substituting tele-conferencing and video conferencing for face to face interaction, using energy-efficient LED lights, conducting regular energy audits, preferring digital mode to reduce paper wastage and so on. Moreover, organizations have the power to create the required and necessary changes in their employees' perception [18,24] and organizations environmental initiatives' are contingent on employee engagement [43]. Employee involvement in behaviours that reduce pollution, promote eco-innovation and participation in recycling programs largely enhances the environmental performance of organizations [2, 4, 34, 36, 38].

Corporate greening is not possible to achieve without employee participation. The development of specific skills and capabilities of employees are boosted by corporate greening and this places their companies at a competitive edge [8, 16, 39].

Going green benefits the bottom line of the company. Employees who voluntarily take part in international "green" practices increase their productivity by 16percentas they receive better training, are more motivated and are benefitted from a better interpersonal relationship [9]. According to Lorette [26], the overall efficiency of the business can be enhanced by going green especially by cutting down the operating costs.

Environmental hazards of IT Industry: Computers are part and parcel of IT industry. The hazardous chemicals present in computers have the potential to pose a threat to humans along with the environment. The metals and chemicals like lead, mercury, cadmium and brominates flame-retardants release harmful fumes and chemicals if disposed of inappropriately. These materials seep into water and soil and contaminate the food chains. Electricity is generated from coal which releases carbon dioxide, sulphur and pollutants into the atmosphere. Respiratory diseases, smog, acid rain and global climate change are the result of the carbon emission. Each personal computer generates a ton of carbon dioxide every year [30].

Need of IT-specific EGB tool: As the significant role of the IT industry to environmental degradation is evident, IT industries have to strive hard to curtail it's impinge. This brings about the relevance of Employee Green Behaviour (EGB). By going green, the organization has humongous benefits like better reputation, decreased

operating cost, higher economic turnover and so on [2]. There is very little systematic research conducted to understand the influence of contextual factors on employee green behaviour such as occupation, industry specific institutions, and the like Ones & Dilchert [33]. IT companies follow a 'global' work culture and management practices such as flat and flexible organizational structures, informal relationships at the workplace are distinctive from the conventional Indian companies. It endorses a work culture of egalitarianism, teamwork, individual initiative and responsibility in addition to a democratic way of decision-making. Software industry brought in quite a different work culture as compared to the old, traditional Indian companies [47]. Since with the existing generic tools it is impossible to capture the complete nuances of the green behaviour occurring in the IT field, the present tool was developed. According to the constraints and capabilities related to institutions and organizations such as jobs, industry, policies and the available technology significantly affects the pro-environmental behaviour of the employees [33]. Most of the already existing tools of EGB tried to capture the domains of green behaviour broadly. Employee green behaviour measures that are tailored to fit specific jobs, industries or organisations have to be developed [50]. Hence, the objective of this study is to develop a valid and reliable EGB tool for IT professionals.

II. METHOD

A. Definition of the construct

Employee Green Behaviour (EGB) is defined as the pro-environmental behaviour wherein the employee acts to enhance the surroundings or inhibit the hazards that threaten the environment and thereby mitigate environmental damage which ultimately leads to environmental sustainability in their workplace and beyond [51].

B. Item generation

A thorough and systematic review of the literature was done in the initial stage of tool development. Items were generated based on the six dimensions identified through interviewing HR Managers of IT firms which are pertinent to Employee Green Behaviour. The six dimensions considered are Environmental Awareness, Taking Initiative, Working Sustainably, Conserving, Avoiding Harm and Influencing Others. Considering these dimensions as anchoring points, a total of 56 items were generated. After proofreading, the generated items were sent to experts for their opinions.

C. Content Validity

To assess whether the generated item pool captures the specific domain of interest adequately, the 56 items generated along with the definition of the construct and dimensions were sent to 9 subject matter experts from Indian Institute of Technology (IIT), Indian Institute of Management (IIM) and 5 HR Managers of IT industry. Experts evaluated these items based on the items representativeness, comprehensiveness, and clarity. The experts were asked to rate the items in terms of acceptance, rejection or modification with respect to each dimension to ensure the initial pool of items reflect the construct. Finally, 50 items were retained for the pilot study based on the responses given by the experts.

D. Pilot study

The 5-point Likert scale was used in the study as it is can capture a range of responses. As suggested by Marton-Williams [27], a five-point scale is easily comprehensible and facilitates the respondents to put across their views. The response categories are Always (5), Often (4), Sometimes (3), Rarely (2) and Never (1). The final draft was circulated among IT professionals. A few IT firms were randomly selected from Ernakulam District, in the state of Kerala, India. After attaining the consent of HR managers of the respective IT firms, the online Google form was sent to them. The HR managers forwarded it to their employees during their spare time. The online Google form consisted of a consent form, a personal data sheet and the statements related to the construct. In total, 211 participants responded to the survey**.** According to Comrey & Lee [7] a sample size of 200 is fair enough. Gorsuch, also suggested that at least 100 should be the sample size for performing EFA [13]. The collected data was statistically analysed using IBM SPSS version 21.0. The sample consists of 113 males and 98 females making a total of 211 participants, with an average age of 27.12 years (SD=4.50).

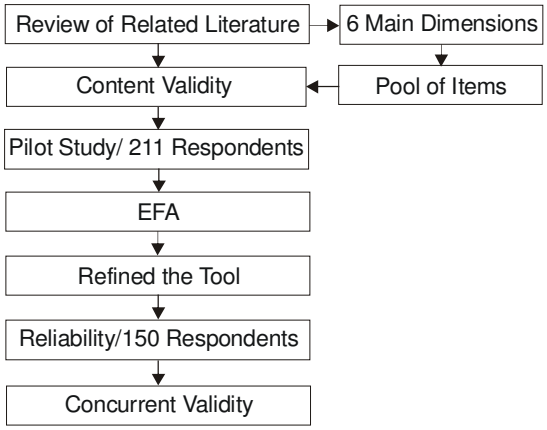

Fig. 1. Diagrammatic Representation of the Process of Development of EGB tool.

III. RESULTS AND DISCUSSION

A. Pilot- study respondent characteristics

Table 1: The socio-demographic characteristics of the IT professionals who responded to the survey.

Characteristics	Frequency	%
Age (years)		
20-30	181	85.8%
31-40	24	11.4%
>40	6	2.8%
Gender		
Males	113	53.6%
Females	98	46.4%
Marital Status		
Single	139	65.9%
Married	68	32.2%
Others	4	1.9%
Family Type		
Nuclear	195	92.4%
Joint	16	7.6%
Place of Work		
Rural	13	6.2%
Semi-Urban	29	13.7%
Urban	169	80.1%

B. Exploratory Factor Analysis (EFA)

EFA is effective in identifying the underlying latent variables by exploring the association between the

observed variables [29]. EFA was performed with the help of Statistical Package for the Social Sciences version 21(SPSS, 21 software package). To confirm the sample adequacy, Kaiser-Meyer-Oklin (KMO) test was carried out which was 0.81 Hair *et al.,* [14] suggested that a value of 0.5 for KMO test makes a data suitable for factor analysis. Also, to understand the appropriateness of the correlation matrix, Barlett's test of sphericity was performed which obtained a score of 4338.28 ($p<0.01$). The significant p-value less than 0.05 indicate that the dataset does not generate an identity matrix. It also implies that further analyses can proceed with the dataset [35, 11]. The total variance explained for 6 factors is 50.7%. In social sciences and humanities, the total variance explained can be as less as 50% to 60% [46]. The Eigen values for the all the six factors is greater than one. With the retained 50 items which were responded by 211 participants, Principal Component analysis with Varimax rotation was performed. Through Rotation, high item loadings are maximized and low item loadings are minimized which generates more parsimonious, simplified and interpretable solutions [49]. Factors are considered meaningful when the factor loadings appear above 0.40 criterion [12]. Items with a factor loading of 0.4 and above were retained. Harvey *et al.,* suggested that at least four items per scale are required, to assess the homogeneity of items within each latent construct. Hence, the top four items with the highest factor loadings were retained for the final scale.

Table 2: Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of the proposed EGB Scale.

Items	Influencing Others	Conserving	Avoiding Harm	Environmental Awareness	Taking Initiative	Working Sustainably
I educate my colleagues about sustainable behaviour towards the environment	0.76					
In my office, I put prompts/posters that are related to environment conservation themes.	0.72					
I suggest my colleagues to engage in environmentally responsible behaviours.	0.71					
I help my co-workers to be eco-friendly	0.71					
When not in use, I make sure taps are closed properly		0.76				
I set the computer monitors in hibernation mode or turn it off when not in use.		0.68				
If possible, I reuse the products rather throwing it away.		0.66				
I dispose biodegradable and non-biodegradable wastes separately		0.62				
In my office, I don't switch off the lights when not in use.			0.72			
I am not bothered when others waste the resources in my office.			0.70			
I don't use my office resources efficiently.			0.64			
I don't appreciate the co-workers who exhibit environmentally responsible behaviour.			0.59			
I believe that it is always better to preserve the nature rather ruining and fixing it				0.66		
I think about the consequences that my actions may cause to the environment				0.63		
I am concerned about the scarcity of natural resources for the future generation.				0.57		
I understand that the environment is vital, for life on earth.				0.52		
I do not initiate awareness programmes related to the environment in my organization					0.79	
I don't suggest eco-initiatives to be taken in my organizations					0.75	
I don't suggest ways to improve environment friendly practices in my organisation					0.64	
I don't need to design policy intervention to facilitate pro-environmental behaviour in the organisation					0.54	
If necessary, I am willing to pay higher taxes for environmental protection.						0.60
I prefer eco-friendly /reusable/ biodegradable products.						0.51

I would love to introduce any environment sustaining projects, to my office.						0.46
I don't overuse the resources like paper, ink, etc.						0.40

C. Inter-item correlation

Average inter-item correlation compares the relationship between all the pairs of items that test the same construct by calculating the mean of all paired correlations. The average inter-item correlations for the dimensions are as follows: Influencing Others (r=0.5). Avoiding Harm (r=0.37), Conserving (r=0.39), Environmental Awareness (r=0.3). Taking Initiative (r=0.39) and Working Sustainably (r=0.2) [6] suggested that for the dimensions to be adequate the value of average inter-item should range between0.15 and 0.5. Hence, all the items under each dimension have adequate inter-item correlation value.

D. Reliability

According to Hinkin [19], one of the most important processes of scale development is reporting of internal consistency i.e., reliability. Reliability is considered as a necessary pre-condition for validity [32]. Cronbach alpha coefficient is considered as the most suitable measure of reliability when using Likert scales [48,38]. A sample of 150 was used to establish the internal consistency reliability. The Cronbach's alpha for Influencing Others, Avoiding Harm, Conserving, Environmental Awareness, Taking Initiative and Working Sustainably are 0.87, 0.70, 0.74, 0.63, 0.75 and 0.61 respectively. As recommended by [23], reliability of 0.7 to 0.6 is quite acceptable, and the internal consistency reliability for the whole scale was found to be 0.73 which signifies that it is acceptable. To assess Split- Half Reliability of the scale, the scale was divided into two equivalent halves. The reliability of the half test is 0.76. The correlation coefficient obtained from the two halves was corrected with the Spearman-Brown Prophecy Formula. Spearman-Brown coefficient of the test was found to be 0.86 which indicates the scale is quite reliable.

E. Concurrent Validity

Concurrent validity is the extent to which the new measure correlates with the already validated measure. Barclays [37] defined Employee Engagement as the sense of attachment towards the organization he or she works for, belief in its goals and support for its values. Employee engagement can be promoted by organizational policies and practices that boost employee engagement in environmental behaviours [5]. A significant positive relationship between Employee Engagement and Organizational Citizenship Behaviour (OCB) was observed [44]. Incorporating green initiatives in the organization is one of the best ways to engage employees [45]. 5 to 15% of energy savings can be achieved through Employee Engagement [28].

Table 3: Correlation between EGB and OCB.

Variables	EGB	OCB	Mean	SD
EGB	—	0.52*	88.6	10.33
OCB	0.52*	—	113.87	20.74

*significant at 0.05 level (two tail)

In this study, Organizational Citizenship Behaviour (OCB) developed by Jayakumar & Kadhiravan [22] was used. All the items in the scale were measured using a 5-point scale (1=Never, 5=Always).An example item is: "When I am credited for an achievement, I acknowledge others' efforts too". The Cronbach's alpha of OCB tool was found to be 0.95. The newly developed EGB tool correlated significantly with the already existing and validated OCB tool. A correlation of 0.52 was obtained which indicates a moderate and significant correlation. Hence, with the concurrent validity established the process of tool development was completed.

The primary objective of this research was to develop a reliable and valid tool to assess the EGB among IT professionals in the Indian context. Lack of assessment scales, specific to Indian IT professionals led to the development of a new EGB tool. The tool consists of 24 items which are categorized into 6 dimensions viz. Influencing Others, Avoiding Harming, Conserving, Environmental Awareness, Taking Initiative, and Working Sustainably. As IT professionals work under a tight schedule and severe pressure, the length of the newly developed tool was kept reasonable. All the items are measured on a 5-point Likert scale. Higher the score, higher the EGB.

Influencing Others comprises of encouraging and supporting others as well as educating and training for sustainability. *Conserving* is characterized by reducing usage, reusing, repurposing and recycling. *Avoiding Harm* captures behaviours such as preventing pollution, monitoring environmental impacts and strengthening the eco-system. Putting environmental interests first, initiating programs and policies, lobbying and activism fall under the dimension *Taking Initiative*. Changing how work is done, choosing responsible alternatives, creating sustainable products and processes and embracing innovation for sustainability are incorporated in the dimension *Working Sustainably* [33]. *Environmental Awareness* is an individual's understanding and knowledge about the environment and the relevance of its protection which mold them into environmental steward. Environmental Awareness is very crucial as the employees need to understand the goals and motives behind the companies' environmental policies so that they do not undermine it. Getting the employees acquainted about the significance would motivate them to practice green behaviour without much objection and result in better performance. According to Hansla *et al.,* [15], Environmental Awareness is a pre-condition for engaging in pro-environmental behaviour and being unaware is a major hindrance. Cronbach's alpha of the whole scale is 0.73, Split-Half Reliability corrected with Spearman-Brown Prophecy Formula is 0.83 and the concurrent validity of the EGB scale with OCB scale is 0.52 which suggests the robustness of the new scale.

Every research has limitations especially when the tools used are self-report measures. The present research is also subject to social desirability bias. This study was primarily conducted for IT professionals working in India. Hence, the findings cannot be generalized to other cultural contexts.

IV. CONCLUSION

This paper has elaborated on the EGB tool development process. Initially, the construct was operationalized. Then the items were generated and content validity was

established. Pilot study was conducted and EFA was performed. Later, the reliability and concurrent validity of the tool was established. Thus, a standardised scale to assess EGB was developed. As the country becomes more conscious of the environmental damages and its ill effects on lives, many organizations have made environmental policies understanding the need to have a positive image among their customers. IT organizations need to understand the EGB of its employees before promoting or encouraging employees to engage in green behaviour. Based on the results, organizations can introduce or revise green initiatives to have a positive consequence on all the stakeholders including the environment.

V. FUTURE SCOPE

The newly developed tool can be used by the HR managers who can assess the EGB of employees as well as create awareness about its significance in a healthy work environment also design intervention programmes to enhance EGB among them. The assessment outcome can be used to recommend management to make necessary changes in the organizational policy to go green. At the time of recruitment, potential candidates can be screened using this scale to gauge whether their values on pro-environmental preference aligns with the organization's environmental values and policy.

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REFERENCES

[1]. Banerjee, S. B. (2002). Corporate environmentalism: The construct and its measurement. *Journal of Business Research*, *55*(3), 177-191.

[2]. Boiral, O., Paillé, P., & Raineri, N. (2015). The nature of employees' pro-environmental behaviours. *The Psychology of green organizations* (pp. 12-32). New York, NY: Oxford Press University.

[3]. Brigden, K., & Santillo, D. (2006). *Determining the presence of hazardous substances in five brands of laptop computers (Report No.*GRLTN-05-2006). OtthoHeldringstraat: *Greenpeace Research Laboratories.*

[4]. Bunge, J., Cohen-Rosenthal, E., & Ruiz-Quintanilla, A. (1996). Employment Participation in Pollution Reduction: Preliminary Analysis of the Toxic Release Inventory. *Journal of Cleaner Production*, *4*(1), 453–470.

[5]. Cantor, D. E., Morrow, P. C., & Montabon, F. (2012). Engagement in environmental behaviors among supply chain management employees: An organizational support theoretical perspective. *Journal of Supply Chain Management*, *48*(3), 33-51.

[6]. Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale Development. *Psychological Assessment*, *7*(3), 309.

[7]. Comrey, A., & Lee, H. (1992). *A first course in factor analysis*. Hillsdale, NJ: Erlbaum

[8]. Darnall, N., & Edwards Jr, D. (2006). Predicting the cost of environmental management system adoption: the role of capabilities, resources and ownership structure. *Strategic Management Journal*, *27*(4), 301-320.

[9]. Delmas, M. A., & Pekovic, S. (2013). Environmental standards and labour productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behaviour*, *34*(2), 230-252.

[10]. Employment prospects in India's IT Sector: Robust Outlook. (2017). Retrieved fromhttp://pib.nic.in/newsite/PrintRelease.aspx?relid=162046

[11]. Field, A. (2000). *Discovering Statistics Using SPSS for Windows*. London: Sage Publications.

[12]. Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, *39*(2), 291-314.

[13]. Gorsuch, R. L. (1983). *Factor Analysis*. Hillsdale, NJ: Erlbaum.

[14]. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis* New York, NY: Macmillan.

[15]. Hansla, A., Gamble, A., Juliusson, A., & Gärling, T. (2008). The relationships between awareness of consequences, environmental concern, and value orientations. *Journal of Environmental Psychology*, *28*(1), 1-9.

[16]. Hart, S. L. (1995). A Natural-Resource-Based View of the Firm. *The Academy of Management Review*,*20*(4), 986-1014.

[17]. Harvey, R. J., Billings, R. S., & Nilan, K. J. (1985). Confirmatory factor analysis of the Job Diagnostic Survey: Good news and bad news. *Journal of Applied Psychology*, *70*(3), 461-468.

[18]. Hawken, P. (1993). *The ecology of commerce: A declaration of sustainability*. New York: Harper Collins.

[19]. Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, *21*(5), 967-988.

[20]. Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality & Tourism Research*, *21*(1), 100-120.

[21]. Jackson, S. E., Ones, D. S., & Dilchert, S. (2012). *Managing human resources for environmental sustainability* (Vol. *32*). San Francisco: John Wiley & Sons.

[22]. Jayakumar, K. N., & Kadhiravan, S. (2013). Measuring the citizenship behaviour of IT professionals in India: Development of a scale. *International Journal of Education and Management Studies*, *3*(4), 455.

[23]. Kline, P. (2000). *The handbook of psychological testing*. London: Routledge

[24]. Linnenluecke, M. K., Griffiths, A., & Mumby (2010). Corporate sustainability and organizational culture. *Journal of World Business*, *45*(4), 357-366.

[25]. Loewenthal, K. M. (1996). *An introduction to psychological tests and scales*. London: UCL Press.

[26]. Lorette, K. (n.d.). Why Businesses Should Go Green. Small Business-Chron.com. Retrieved fromhttp://smallbusiness.chron.com/businesses-should-green-766.html.

[27]. Marton-Williams, J. (1986) *Questionnaire design in Consumer Market Research Handbook.* Robert Worcester and John Downham (Eds.). London: McGraw-Hill Book Company.

[28]. Montoto, N. (2019). Employee Engagement and Behaviour Change [video file]. Retrieved from https://www.youtube.com/watch?v=6cVBQBekLSM

[29]. Morgado, F. F., Meireles, J. F., Neves, C. M., Amaral, A. C., & Ferreira, M. E. (2018). Scale development: ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexãoe Crítica*, *30*(1), 3.
[30]. Murugesan, S. (2008). Harnessing green IT: Principles and practices. *IT Professional*, *10*(1), 24-33.
[31]. Norton, T. (2016). *A Multilevel Perspective on Employee Green Behaviour* (Doctoral Thesis, The University of Queensland, Brisbane, Australia).Retrieved from https://bit.ly/2LLiS6h
[32]. Nunnally, J. C. (1978). *Psychometric Theory* (2nd Ed.). New York: McGraw-Hill.
[33]. Ones, D. S., & Dilchert, S. (2012). Environmental sustainability at work: A call to action. *Industrial and Organizational Psychology*, *5*(4), 444-466.[34]. Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, *121*(3), 451-466.
[35]. Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (4th edition). Crows Nest, NSW: Allen & Unwin.
[36]. Ramus, C. A. (2001). Organizational support for employees: Encouraging creative ideas for environmental sustainability. *California Management Review*, *43*(3), 85-105.
[37]. Robertson-Smith, G., & Markwick, C. (2009). *Employee engagement: A review of current thinking*. Brighton: Institute for Employment Studies.
[38]. Robinson, J. (2010). *Triandis Theory of Interpersonal Behaviour in Understanding Software Piracy Behaviour in the South African context* (Doctoral dissertation, University of the Witwatersrand).
[39]. Rothenberg, S. (2003). Knowledge content and worker participation in environmental management at NUMMI. *Journal of Management Studies*, *40*(7), 1783-1802.
[40]. Roy, M. J., Boiral, O., &Paillé, P. (2013). Pursuing quality and environmental performance: Initiatives and supporting processes. *Business Process Management Journal*, *19*(1), 30-53.
[41]. Sarkis, J., Gonzalez-Torre, P., &Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management*, *28*(2), 163-176.
[42]. Shinder, Deb. (2008). What IT pros should know about exposure to hazardous materials? Retrieved from https://www.techrepublic.com/blog/data-center/what-it-pros-should-know-about-exposure-to-hazardous-materials/
[43]. Society for Human Resource Management. (2011). *Advancing sustainability: HR's role: A research report by SHRM, BSR and Aurosoorya*. Alexandria, VA: SHRM.
[44]. Sridhar, A., & Thiruvenkadam, T. (2014). Impact of Employee Engagement on Organization Citizenship Behaviour. *BVIMSRs Journal of Management Research*, *6*(2), 147-155.
[45]. Stanton, A. (2014, November). Four Green Initiatives Employees Are Sure to Embrace. Retrieved fromhttps://www.carbon49.com/2014/11/green-initiatives-employees-engage.
[46]. Streiner, D. L. (1994). Figuring out factors: the use and misuse of factor analysis. *The Canadian Journal of Psychiatry*, *39*(3), 135-140.
[47]. Upadhya, C., & Vasavi, A. R. (2006). Work, culture, and sociality in the Indian IT industry: a sociological study. *Final report submitted to NIAS-IDPAD, Bangalore*.
[48]. Whitley, B. E. (2002). *Principals of Research and Behavioural Science*, Boston: McGraw-Hill
[49]. Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, *8*(3).
[50]. Ones, D. S., Wiernik, B. M., Dilchert, S., & Klein, R. M. (2017). Multiple domains and categories of employee green behaviors: More than conservation. In V. Wells, D. Gregory-Smith, & D. Manika (Eds.), *Research handbook on employee pro-environmental behaviour*. Cheltenham, United Kingdom: Edward Elgar.
[51]. George, J. S. and Jayakumar, K. N. (2019). *Development and Validation of Employee Green Behaviour Scale (EGBS) for it Professionals in India*. Manuscript submitted for publication.

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