HOW DO EMPLOYEES' ATTITUDES TOWARDS "GREEN BEHAVIOR" RELATE TO ENVIRONMENTAL CULTURE?

Ana T. Misoska¹, Snezhana Hristova^{1*}, Elena Bundaleska¹, Sanja Georgieva¹

^{1*}University American College Skopje, North Macedonia;

*Corresponding Author Snezana Hristova, e-mail: shristova@uacs.edu.mk;

Received December 2022; Accepted January 2023; Published March 2023;

DOI: https://doi.org/10.31407/ijees13.216

ABSTRACT

This paper examines the factors that currently boost and/or undermine green behavior of the Macedonian employees. The statistical analysis of the data, gathered through a questionnaire, is based on Pearson correlation, testing the statistical significance of the hypotheses. Key findings show that factors such as attitudes of co-workers, company penalty system and leadership, and support of the superiors are positively related with employee green behavior and outcomes. The paper contributes to a deeper theoretical and empirical research of the green behavior in developing countries through the lens of motivational factors. The research outcomes can encourage managers to improve their overall performance without harming the environment and while meeting environmentally friendly working behavior. Also it can provide important information for the policymakers which can be used for improving the overall country's pro-environmental efforts.

Key words: green behavior, motivational factors, environmental sustainability, North Macedonia.

INTRODUCTION

Nowadays climate change is one of the biggest problems that the world faces, affecting everyday workplace environments and overall quality of living. Being an eco-conscious individual means being concerned and well informed about the environmental issues that face the world and having the drive to initiate changes in organizational behavior and environmental habits that decrease further environment destruction and resources depletion. But, as one cannot easily change its detrimental behavior and habits the planet is furiously responding, with floods, fires, tsunamis, shrinking ice sheets, sea level rise, global temperature rise, and extreme atmospheric carbon dioxide rise, etc. The planet is warming up and people and businesses are the biggest part of this problem. Certain authors describe climate change as a "market failure" (Stern, 2008; Bowen, Dietz, & Hicks, 2012), because most of the time free markets, in an effort to make profit, overlook society's welfare, resulting in pollution, greenhouse effect, insufficient and inconsistent information about the impact on the environment, etc. In such cases, governments need to adopt a range of policies that address the side effects of these market failures. Being an integral part of these markets, businesses should understand their crucial role in either destroying or building a sustainable future. Companies are affecting the environment not only by the way they do business, but also by the way they communicate with their employees and customers, motivating or demotivating them to take environmentally

friendly actions. According to a 2011 McKinsey survey, in the last decade, many companies have been "actively" integrating sustainability principles in their businesses.

With its 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), the United Nations conveyed an urgent call for action by all countries and businesses to recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve many aspects of living, spur economic growth, all while tackling climate change and environment protection and sustainable living.

This is particularly important in developing countries such as the Republic of North Macedonia, which is facing many issues in terms of environmental protection and awareness of the public about its role in environmental protection and is still slow in implementing recommendations in line with the Environmental Performance Review (ECE Information Unit, 2019). Therefore, this paper aims to investigate pro-environmental behavior of the companies and in particular employees' green behavior in North Macedonia, both within their workplaces, and outside the workplaces.

Theoretical background

We are starting the discussion with the premise that many factors affect company environmental sustainability and performance. On one side, there are external factors such as market influence, overall society context or government policies and pressures. On the other hand, the role of the managers and company's characteristics and organizational culture are factors of the internal environment which are found to be very relevant and influence a lot on the company's environmental awareness and performance.

The role of the government and market instruments is vital and creates basic incentives with its regulatory approach. In this regard, public policies are usually focused on the external environment because it is more compliant to policy intervention. The effectiveness of this approach depends on the level of adequate laws and the enforcement capacity. Therefore, the environmental policymakers should consider ensuring that their economic, industrial and education policies include aspects that are likely to improve the environmental performance of companies and that these are integrated with policy incentives. Also, consideration should be given to a greater enforcement of the given regulatory framework as one of the most significant factors in the effort to influence the environment (Stern, 2008; Tuan, 2014).

Looking backward, most of the scholars have examined the effects and the environmental consequences of the external or regulatory factors and this question is always pertinent for policy makers to improve and design better their interventions (Levy-Leboyer et al., 1996). Unfortunately, the internal context is still not examined well, although there is increasing number of studies that are concerned with the questions of the effects of a company's internal characteristics on their environmental impact. Apart from the adoption of environmental management systems that enable organizations to reduce their environmental impacts while increasing operational efficiency, pro-environmental behaviors of the employees (Tsai et al, 2016) can be a significant positive contributo to the overall organizational environmental performance. For example, saving energy and resources, reducing waste and advocating eco-friendly mindset in the company, could be a shared expectation and appropriated behavior embedded in the company's organizational culture. We argue that within the overall organizational policies, more managerial effort is needed to incentivise employee engagement in these behaviors at their workplaces. Moreover, the role of managers is to create greater awareness and implement pro-environmental behavior within the organizational policies and practices and in regards to the employees' adoption. Employees' perceptions of organizational climate is one of the most important drivers of employees' attitudes and green behavior. (Norton et al, 2014). Therefore, managers can play a pivotal role in promoting environment related concerns only if they are skilled and know well the factors that motivate employees towards organizations environmental performance. To be able to analyze employee green behavior one must first understand its meaning. Ones and (2012) define employee green behavior (hereinafter: EGB) as any measurable individual behavior that contributes to or detracts from environmental sustainability goals in the work context. On the other hand, Norton, Parker, Zacher and Ashkanasy (2015) define it as a workplace-specific form of pro-environmental behavior of employees which is categorized into required employee green behavior and voluntary employee green behavior. Required EGB is a green behavior performed within the context of employees required job duties (Bissing-Olson et al., 2013), such as choosing responsive alternatives when working, recycling, reducing, reusing, creating sustainable processes and products. Voluntary EGB is defined as green behavior involving personal initiative that exceeds organizational expectations (Norton et al., 2015).

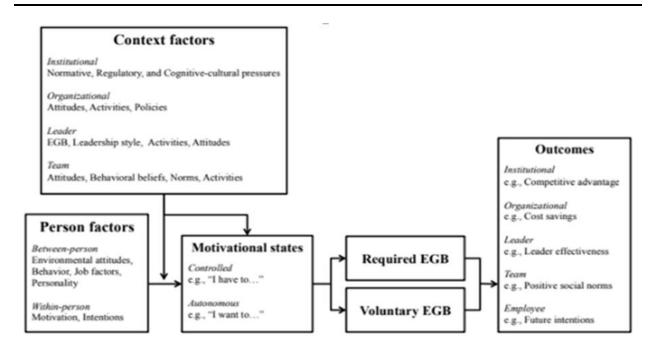


Figure 1. Integrated multilevel model for employee green behavior *Source: Norton, T.A., Parker, S.L., Zacher, H. & Ashkanasy, N.M.* (2015).

As shown in Figure 1, there are different factors that influence the EGB. Under context factors at institutional level there is the external pressure, such as regulatory, normative and cultural-cognitive pressure (Scott, 1995). At the organizational level the organizational policies, incentives, facilities, norms and human resource practices. At leader level, factors directly related to the leaders, choosing to transmit green transformation leadership (ways to increase the pro environmental voluntary activities outside the working spaces). At the team level we have the identification of the employee directly with the team, such as group attitudes (perceived colleague support), team goal setting and green group norms. For this study the most important factor is the Person factor, or the employee level of green behavior divided in two categories: between-person and within-person.

The between person factor refers to the attitude toward the environment between the employees. The between person factors refer to environmental attitudes, environmental concern, pro environmental behavior, habits, beliefs, social norms, motivators (autonomous and controlled motivation) and personality (conscientiousness). The within person refers to the positive affect and behavioral intentions that the person has in itself. This is the most important level that needs to be examined further in order to discover which motivational factors increase the knowledge and individual proactive environmental behavior. (Norton, Parker, Zacher & Ashkanasy, 2015)

The following sections will provide an overview of variables used in the study and the appropriate hypothesis will be linked with each topic discussed in the theoretical overview. Our particular focus will be on exploring the personal factors and connecting with contextual variables enabling understanding of motivational states and explaining the employees green behavior. Specifically, the paper will look at the environmental habits, perceptions of sustainability policy, extrinsic and intrinsic motivation and environmental awareness.

1. Environmental habits

Individual beliefs and habits are a vital part of creating employee green behavior. Lee, Young and Marans (1995) found out that prior recycling experience at home is linked with organizational recycling behavior and that the organizational and physical context of workplaces also plays a role determining office recycling rates. Peoples' habits, beliefs and social norms are created by the community, family and education. In order to have a proactive population, environmental habits must be implemented in the fundamentals of its nation. Environmental habits can be seen as a subconscious environmental lifestyle of every single person. This is not something that can be implemented in a short period of time. It's a long-term process that needs time to be accepted from the nation in order to become an environmental habit (Whitebread & Bingham, 2013).

One strand of research looks at environmental behaviors as manifestations of personal capabilities, habitus, values and attitudes. As such, Bourdieu (1986) uses habitus to explain the green behavior, Habitus is a more deeply trained disposition expressed and reproduced through actions, often habits, but is not necessarily conscious. Anthropologically speaking, habitus has culture specific meanings. Culture is the phenomenon that acts as a powerful agent shaping our values, beliefs and day-to-day habits. His theory of social order argues that order is inscribed in people's minds through "cultural products". Cultural products include education, language, judgments, and principles, methods of classification and activities of everyday life (Bourdieu, 1986). Taking showers, washing hands, rinsing off dishes, turning on lights, turning on the fan, and turning on the T.V. are all done without giving a second thought. These are "normal" everyday activities that make us feel comfortable and help us satisfy certain lifestyle needs. Shove (2003) calls these lifestyle needs the three C's: comfort, cleanliness and convenience. What these practices really represent are unconscious, inconspicuous forms of consumption. This type of consumption enables us to use more energy and water then necessary to fit our growing needs. So, how do new sustainable consumption practices become the norm? New practices take a conscious effort to change. Practices require active reproduction and performance, people must consciously participate in making changes (Shove, 2003). Individuals must take the time to consciously create new habits that not only benefit the environment, but also benefit themselves. Therefore, the habits that people have with regards to environmental protection are linked to employee green behavior (Norton et al., 2015; Tudor, Barr, & Gilg, 2008). To change the environmental attitude at work and at home it is necessary to change people's habits and personal norms (Steg & Vlek, 2009). As such, the current paper proposes the following Hypothesis 1: Environmental habits are linked to employee's green behavior.

2. Perceived sustainability policy

Understanding of sustainability policy is also crucial for the fundamentals of employee green behavior. The perceptions of the "green work climate" on an organizational level and the perceptions of green behavior of coworkers are linked to the environmental attitudes of the individuals (Norton, Zacher & Ashkanasy, 2014). The climate perception of the organization means the employees see the bigger picture of how their company acts on environmental issues and whether or not they should act the same (Bandura, 1977). Employees are generally motivated to show behaviors that are consistent with their perceptions of organization's policies, procedures, and practices (Schneider, 1975). If an employee perceives that the organization has a positive impact on environment and that the whole organization is oriented to environmental sustainability, then the injunctive norm is that the organization approves a behavior that is oriented and benefits the environment and this would refer to the required or task related EGB. On the contrary if an employee perceives that his/her co-workers invest their time and are willing to involve in activities that will contribute to the environment than the descriptive norm would be that the employees of the organization behave positively toward the environment and this would refer to the voluntary or proactive EGB (Cialdini, Kallgren, & Reno, 1990). Tudor et al. (2008) also emphasized that the attitudes of the coworkers and the value the organization places on environmental protection are one of the key individual level factors to affect employee green behavior. Therefore, Hypothesis 2: The increase of perceived sustainability policy (green work climate perception of the organization and the co-workers) is linked to employee green behavior, is tested.

3. Types of Motivation

Ryan and Deci (2000) proposed the self-determination theory to explain the factors that influence extrinsic motivation and intrinsic motivation. The intrinsic motivation encompasses activities done for inherent satisfaction, whereas the extrinsic motivation encompasses activities done for their instrumental value in achieving other outcomes (Ryan & Deci, 2000).

In an organizational context the intrinsic motivation is part of the autonomous motivation meaning that employees rely on self-determination of the value of an activity for their own values and goals (Gagné & Deci, 2005). The autonomously motivated employees are intrinsically interested in their work and are embracing the company's values, procedures and rules (Stone, Deci & Ryan, 2009). In addition, in an experimental context using a resource dilemma, a clear link has been found between autonomous motivation and sustainable behavior (Baxter & Pelletier, 2020). Therefore stimulating the intrinsic (autonomous) motivation among the employees by encouraging and educating them about the importance of pro environmental activities can bring sizable environmental impact (Lindblom & Ohlsson, 2011). Green-Demers, Pelletier and Ménard (1997) found that individuals with higher self-determined motivation are engaged in more private green behavior, especially as the perceived difficulty of the behavior increases. In addition, in an organizational setting the autonomous motivation has been found to have a

positive link with the pro environmental behavior (Graves et al., 2013). Therefore the paper tests the following Hypothesis 3: Higher extrinsic (controlled) motivation (such as rewards and incentives) is related to higher EGB. Extrinsic motivation is also known as controlled motivation as it is contingent upon external regulation of the behavior such as rewards and penalties. There are four levels of regulation ranging from external regulation, introjection, identification and integration (Ryan & Deci, 2000). When there is a reward system, then employees are more likely to engage in that behavior. "Introducing incentive payments for those not driving to work had often helped to achieve higher than average levels of behavior change" (Cairns, Newson & Davis, 2010, p.481). Individual financial incentive is assumed to be an extrinsic (controlled) motivational factor that encourages employees to engage in task related EGB (Stone, Deci and Ryan, 2009). Tam and Tam (2008) studied the influence of a stepwise incentive scheme in Hong Kong to assess the motivation of construction employees to reduce waste generation. The scheme was based on the premise that higher incentives will result in higher waste reduction. If employees reduced waste sent to landfill by 10% or more, they received a reward of 30% of the total cost saved. As a result, there was 23% less waste generated in the construction projects. However, the link between external motivation and EGB might not be as clear as the link between intrinsic motivation and EGB. In an experimental context using a resource dilemma a detrimental effect of punishment was found in the group being extrinsically motivated (Baxter & Pelletier, 2020). One study found that external (controlled) motivation, specifically beliefs around rewards and payment encourages EGB. However, the effect was contingent upon the level of transformational leadership. When transformational leadership was high there was a positive link between external motivation and EGB and when it was low the link was negative (Graves et al., 2013). In addition, extrinsic motivation did not have an effect on home recycling practices (Tabernero & Hernandez, 2011). Despite this author's (Zhu et al., 2021) note that the organizations can encourage EGB through human resource management practices and other organizational activities linked to external drivers of EGB. Aware of the differences in findings in the relation between extrinsic motivation and EGB and considering a generally positive link between extrinsic motivation and EGB we test the following Hypothesis 4: Higher intrinsic (autonomous) motivation is related to higher EGB.

4. Environmental awareness

Public awareness on climate change stimulated organizations to be more environmentally friendly oriented and to include the environmental sustainability policy as a part of the main strategy. The environmental policy will help organizations to reduce energy consumption and the use of resources, better performance with lower costs and better publicity (Repetto & Austin, 2000). The perception of the public that a certain organization is green can bring financial benefits, but only if the organization has a reputation of integrity and social responsibility when it comes to being a green business (Mason & Winkelman, 2017). Companies can motivate employee green behavior through appropriate Human Resource Management policies and procedures and a variable that is important is the environmental awareness and responsibility of the individuals (Dumont, Shen, & Deng, 2016; Mason & Winkleman, 2017).

For example, operations in the Canadian chemical industry were more likely to improve environmental performance if employees were aware of their environmental duties (Boiral, 2005). In a comparative study of energy conservation in two public schools, respondents reported that reminders to turn off lights and computers influenced their behavior (Schelly, Cross, Franzen, Hall, & Reeve, 2011). Therefore, the paper tests Hypothesis 5: The increase of employee's environmental awareness is linked to an increase of proactive green behavior.

RESEARCH METHODOLOGY

1. Survey design

In this study a quantitative research strategy (questionnaire) was used, as most of the studies so far have used such approach and the current study being one of the first of its kind in the country intends to serve as a starting point for comparisons, both within the country and internationally (Bamberg & Möser, 2007; Norton et al., 2015). Section one of the questionnaire contains demographic questions. The second section consists of Yes/No questions related to the employees' perception of the environmental policy and practice of their company. An example question for this section is: "Does the company have an environmental policy?". The questions have been developed based on previous studies (Tuan et al., 2014) and adapted to the local context. The variable derived from this section is "Perceived sustainability policy" and originally had 6 items, but only 5 showed acceptable parameters and were used

in further calculations. The employee's environmental participation was also explored through 12 multiple choice questions. The participants were able to choose one of these answers: Never, Once a month, Once a week, 2-3 times per week or every day. This segment of the questionnaire was helpful in understanding the environmental habits and awareness of the employees. The next section had questions to determine the variables: Environmental habits, Work related employee green behavior. Proactive employee green behavior and Employee green behavior. The questions have been constructed using questions from various studies (Graves et al., 2013; Levy-Leboyer et al., 1996; Norton et al., 2014; Paille & Boiral, 2013) and are using Likert type scale with 5 point answers (never, once a month, once a week, every 2-3 days, everyday). The variable "Environmental habits" consists of 8 questions, such as "How often do you recycle?". The variable "Work related employee green behavior" contains 7 items, such as "How often do you use scrap paper for notes?", while the variable "Proactive Employee green behavior" contains 9 items such as "How often do you make suggestions for environmental improvement within the company?". The variable "Employee environmental awareness" consists of 6 items and individual level feedback contains 2 items and "Employee Green Behavior" contains 15 items. The next section contains questions for the variables "Intrinsic motivation" and "Extrinsic motivation". Each of the variables were measured using 4 items based on previous studies (Graves et al., 2013) and adapted to the local context. An example of intrinsic motivation questions is "Do you volunteer in a green committee?". An example of extrinsic motivation is: "I often do things due to the country's penalty system". Cronbach Alpha was calculated for each variable to test for internal consistency. Generally, the acceptable result for the tests is overall value of 0.7 and value above 0.4 for each item within the scale (Nunnally & Bernstein, 1994). Table 1 presents the results of the internal consistency testing using Cronbach Alpha for all variables.

Environmental habits	Perceived sustainability policy	Extrinsic motivation	Intrinsic motivation	Work related employee green behavior	Proactive employee green behavior	Employee environmental awareness	General employee green behavior
0.929	0.762	0.814	0.746	0.942	0.91	0.908	0.945

Table 1. Total Cronbach Alpha for all scales

2. Sample

The survey utilized a convenient sample using only employed participants from the capital of the country (Skopje). The Google Forms link was sent to 500 employees from companies in the SME sector locally founded and funded. The companies were found through various company registers and the only criteria was that they belong to the SME sector. This is one limitation of the study, but being among the first of this kind in the country it serves as a baseline for future studies and provides brief overview of the situation regarding EGB in the SME sector. The questionnaires were sent to line workers, supervisors or middle managers. The response rate was 39.2% with 197 received answers. Table 2 presents the demographic profile of the participants. The survey was answered more by females (67.5%) than males (32.5%). Most of the respondents were in the 20 to 29-year age group (45.7%) followed by 30-39 (36%). Most of the participants have bachelor degree (55.3%), followed by Master degree (32.5%).

Gender	Male	32.5%			
	Female	67.5%			
	20-29	45.7%			
	30-39	36%			
Age	40-49	13.7%			
	50-59	4.2%			
	60 and older	0.5%			
	High-School	7.6%			
	Associate	3%			
Education	Bachelor	55.3%			
	Master	32.5%			
	Doctorate	1.5%			

Table 2. Demographic profile

The structure of the sample is one limitation of the study. However, having in mind that such studies are rare in the country, the results still provide useful information that could be used in the future as a basis for further research as well as policy actions especially on local level.

RESEARCH RESULTS

To get a better insight into the employee green behavior and the related variables this section will start with a presentation of the descriptive analysis of the results for each concept and then the results of the Hypothesis testing will be presented.

1. Descriptive statistics

1.1. Results for employee's environmental perception of their company

To understand how the employees perceive the situation in their companies related to environmental protection activities a number of questions were asked. Table 3 displays those answers. As can be seen, most respondents 189 (95.9%) report that they act environmentally outside of work. Interestingly the environmental reputation of the company is not playing a role when searching for a job for the majority of them (56.9%). In addition, their perceptions of the environmental activities within the companies is mixed. Majority of them 116 (58.9%) consider their company as environmentally responsible. However, this leaves around 40% of the people who do not have such a perception of their companies. Half of the respondents (52.3%) say that there is no written environmental policy in their company. Most of the respondents (88.3%) say that their company does not use solar panels as an energy source and majority (79.2%) say that their company is not organizing any environmental protection activities. The respondents who stated that their companies organize some environmental protection activities list: recycling, energy efficient heating/cooling, bike to work campaigns and cleaning of public spaces. participants (66.5%) do not receive enough information nor feedback on how to increase their environmentally friendly activities. Half of them (52.3%) do not make any suggestions for improvement of their company's environmental performance. Majority (81.2%) do not receive individual level feedback on their individual contribution to the environmental goal set by the company. This proves to be really important as 127 employees out of 165 (64.5%) have answered that they will increase their contribution to the company's environmental goals if they receive individual level feedback. In addition, most of the participants (85.8%) say that their place of living does not have good urban city planning meaning that there are not enough walking and bicycle paths in the city in order to go to work safe and sound through the city.

I don't know Environmental policy 47.7 52.3 Implementation of environmental policy 40.6 9.1 7.6 58.9 41.1 Company environmental responsibility Environmental information from the company 33.5 66.5 Company environmental activities 20.8 79.2 4.1 Being environmentally friendly out of work 95.9 52.3 Suggestions for company environmental Improvement 47.7 Individual level feedback 18.8 81.2 If no, does it make difference? 64.5 19.3 Company ecological reputation 43.1 56.9 Company environmental salary bonus 34 62.9 88.3 11.7 Solar panels

Table 3. Employees' environmental perception of their company (percentages).

1. 2 Results for employees' activities related to green behavior

The findings related to employee's activities related to green behavior (see Table 4 below) are quite interesting. As can be seen around half of the participants (56.9%) use scrap paper for notes every day and edit the working documents on their computer everyday instead of printing them (47.7%). Most participants (88.3%) turn lights off every day when not in use, turn the computer off every day when not in use (74.6%) and save water and electricity every day (45.7%). Around half of the respondents (55.8%) never use one-time usage plastic cups nor plastic cutlery

set during work. A smaller percentage (39.6%) often collect the trash from the streets, throw it in a bin, and discuss environmental issues with other colleagues (43.1%).

The least positive answers are related to recycling, where only 33% never put recycling materials (cans, paper, bottles or batteries) in separate recycling bins and a high percentage of companies do not have designated space for that (29.4%). Half of the respondents (51.3%) never separate the leftovers of organic materials (fruits and vegetables) in the compost bin and (39.6%) do not have composting bins in their workplace. Despite the positive answers explained in the paragraph above that employees don't use one time plastic cups or cutlery sets, the negative answers, 35% do not have the habit to bring their own reusable bags when shopping.

Employee's environmental participation	Never	Once a month	Once a week	2-3 times per week	Every day	Don't have compost/rec ycling bins
I print double sided	14.7	10.7	8.6	10.2	55.8	
Selection in compost bins	51.3	0	1.5	1	6.6	39.6
Selection in recycling bins	33	1	1	9.1	26.4	29.4
Plastics usage	55.8	9.6	11.2	8.1	15.2	
Turn lights off when not in use	7.1	0	2.5	2	88.3	
Turns computer off	14.7	2.5	3	5.1	74.6	
I collect trash when I see it	14.2		29.4	39.6	16.8	
Discuss for environmental issues	10.2		36.5	43.1	10.2	
Saving water and electricity	0.5		10.7	43.1	45.7	
Scrap paper for notes	17.3	6.1	7.6	12.2	56.9	
Edit work documents on screen	2		14.7	35.5	47.7	
Reusable bags when shopping	35	12.2	12.7	14.2	25.9	

Table 4. Employee's activities related to green behavior.

1.3. Intrinsic motivational factors for employee green behavior

Participants were asked which motivational factors will increase their green behavior at work (answers in Table 5 below). The results of the analysis show that the motivational factor perceived by the employees to be most significantly linked to their green behavior at work is: country's changes of the existing laws and by laws for environmental protection, and their strict implementation in practice (46.7%). Seeing and copying the behavior of the colleagues that act environmentally, with 27.9%, is the second most important motivational factor, while the moral support from superiors (17.3%) and company's penalty system (17.3%) are perceived as equally important motivational factors, coming in third place.

Motivational factors	Moral support from superiors	Training and seminar for employee environmental behavior	Seeing and copying colleague's behavior	Reward for environ-mental behavior	Environ-mental protection laws and by laws and their implementation	Company's penalty system	Protecting the environment
Percent	17.3	14.7	27.9	7.6	46.7	17.3	0.5

Table 5. Motivation factors for employee green behavior

Furthermore, the participants were asked to provide answers as to which factors demotivate them to act environmentally friendly at the workplace. The answers are shown in table 6 below. The results show that the most significant demotivational factor that deters employees in North Macedonia from acting environmentally friendly is: Lack of infrastructure, i.e. recycling containers in the city (57.4%). Second demotivational factor, with a significant 51.3%, is: Lack of implementation i.e. inspections and controls of companies' compliance with country's

environmental protection laws and by laws (51.3%). Non-existing penalty system, i.e. no punishments for the employees who do not comply with the environmental protection requirements (49.2%) is the third demotivational factor for the participants in the study.

	Lack of environmental protection laws and by laws	Non-existing penalty system	ack of knowledge and information	Companies do not care for the environment
Percent	5. 30.5	9.2	43.7	ਚ 44.2
	Lack of internal policies and procedures, within companies	No trainings and dissemination of information	No inspections for companies' compliance with laws and by laws	No infrastructure, i.s. lack of recycling containers
Percent	39.6	27.4	51.3	57.4

Table 6. Demotivation factors.

2. Hypothesis testing

To test the hypothesis of the research, Pearson correlation tests were conducted to determine the relationship between the variables (see Table 7 below) and to test for statistical significance.

	Hypothesis	1	Hypothesis	2	Hypothesis	m	Hypothesis	4	Hypothesis	5
Correlations	Environmental habits	Employee green behavior	Perceived sustainability policy	Employee green behavior	Employees intrinsic motivation	Proactive employee green behavior	Employees extrinsic motivation	Work related employee green behavior	Employee environmental awareness	Proactive employee green behavior
Pearson correlation	0.99	90	0.9:	52	0.	984	-0	.961	0.9	91
Sig 0.000		0.000		0.000		0.000		0.000		

Table 7. Pearson correlation tests for hypothesis 1 to hypothesis 5.

The results in table 7 show that the all tested hypotheses have strong correlation and they are all statistically significant. Most of the hypotheses were supported, with exception of Hypothesis 4. Namely, regarding Hypothesis 4 Extrinsic motivation and work related EGB have strong statistically significant correlation of -0.961 indicating a perfect negative relationship. This means that the higher extrinsic motivation is related to lower employee green behavior. This finding is not in line with the assumptions. However, there might be several explanations for the finding. To begin with, other studies have found that extrinsic motivation is contingent upon other factors such as leadership quality (Graves et al., 2013) or the timing of the rewards and punishments (Baxter & Pelletier, 2020). The current study did not test for the effects of either of those factors, which might explain why the finding is inconsistent with the hypothesis. Secondly, the sample of the study was self-selected which might mean that mostly intrinsically motivated people filled the questionnaire and for them the incentives provided can have detrimental effects on their self-determination like it has been shown in certain studies (Malek et al., 2020). In any case further research is needed to provide a deeper understanding of the issue.

DISCUSSION AND CONCLUSION

- The organizational environmental behavior in the workplace has received significant attention and effort in the literature following the global acknowledgment of the environmental impacts. The fact is that external factors have great influence, and policy makers have overall responsibility and most significant role in inspiring or mandating environmental and sustainable behavior. Businesses, whoever, have the responsibility not only to follow the laws and the by laws, but to go beyond the legal requirements and introduce forward looking company policies and procedures, in order motivate their employees to behave environmentally friendly and sustainable.
- Throughout the years, the Macedonian policymakers have shown some improvements for the overall environmental protection and sustainability, through different laws and by laws and amendments to the same. Overall, it is evident that the country is striving toward sustainable businesses and environmentally friendly existence, however there is a lack of institutional support and will to implement these laws and by laws in practice (United Nations Economic Commission for Europe, 2021).
- The paper contributes to this endeavor by investigating the motivational factors related to employees' involvement and personal commitment to being more environmentally friendly within Macedonian businesses. The findings in this paper correspond with previous empirical studies claiming that motivational factors, whether general or focused on the workplace, contribute to a more pro-environmental organizational culture. The results in this study extend the existing findings by showing that organizations, through their pro-environmental approach, can create incentives and change the attitude of the employees with regards to their personal commitment to behave in a more sustainable way. This also is well aligned with the theoretical model which was elaborated in the paper. We pinpoint on several aspects that might make a difference such as: 1) Seeing and copying the behavior of the colleagues that act environmentally can be rewarded as doing the right thing. Sharing practices among coworkers can influence stronger personal norms and a greater tendency to adopt environmental behavior. This is also well aligned with other findings previously highlighted in the literature review in which Tudor et al. (p.17) has emphasized that the key individual level factors to affect employee behavior are: the attitudes of co-workers, especially as a result of the value placed on the environment. More association can be found also in Venkatesan (p.18) who has argued that the fashion shops don't need to convince us directly that their product is good, they need only to convince us that many others think so, which, among consumers, is often proof enough and Bandura (see p.18) who is mentioning the littering problem is also a part of copying other behavior as people think that littering would do less damage in an already littered environment compared to a clean environment. 2) Moral support from superiors is much appreciated. These findings correspond with some previous studies (Lindblom & Ohlsson p.11) showing that inspiring employees to change their mindset, being able to encourage, educate and motivate them to act pro-environmentally, combined with the support and cooperation of the community and the government (changing infrastructural strategy to become more walkable city) can bring a huge environmental impact. This goes in line with Leithwood and Jantzi (2000), affirming that the leaders also play a key role in empowering and inspiring action within organizations.
- In regards to the proposed hypotheses, the given data have confirmed all of them except the fourth one which has fully neglected the proposed rationale. From the results, it can be revealed that employee green behavior can be positively influenced by the environmental habits, intrinsic motivation, the level of deployed sustainability policy and the increase of employee environmental awareness. These results can be matched to the literature in which it is well argumented that employees are nowadays more prone to develop personal habits and attitudes for coping with and managing green behavior. Also, that managers can impact the level of environmental awareness by spreading shared knowledge, group learning, informational and inspirational seminars, environmental books and brochures (Shove, 2012 p.15). The company itself through its organizational culture and values must be a good example of how the employees should behave (Bandura, 1977, p.19).
- What can be interesting to consider from the results is that the fourth hypothesis which claimed that "higher extrinsic motivation is linked to higher proactive EGB" has been neglected. This means that the higher extrinsic motivation is related to lower employee green behavior. This finding is not in line with the assumptions. As stated previously in the paper, there might be several explanations which approve the findings. Namely, the current study did not consider factors such as leadership quality (Graves et al., 2013)

- or the timing of the rewards and punishments (Baxter & Pelletier, 2020) which have been shown to have an effect on employee green behavior, nor did it use representative sample. In any case further research is needed to provide a deeper understanding of the issue.
- This paper has limitations mostly related to the composition of the sample and the sample size. However, the attention is on the SME sector and on a topic which is rarely the focus of attention of the researchers in the country. As such it provides starting point for future studies in the country to understand the factors related to EGB and how best to stimulate it.
- To sum up the main implications of the paper, the fact is that the relation between employee green behavior and organizational culture is a very important aspect for managing pro-environmental performance. The focus of this research was to see how employees within the companies from North Macedonia experience the green behavior practices with special attention to the existence of nexus between the personal factors and contextual variables enabling understanding of motivation and the level of green practices. The research data show that employees perceive different levels of pre-environmental behavior and that there is a link between personal and motivation factors and the overall green behaviors. If companies in North Macedonia are willing to improve their environmental status and to motivate their employees to act proenvironmentally, they have more mechanisms and practices to explore and deploy such as provide moral support and lead a change, to develop a training system where employees by sharing and perception can learn from the manager/ leader's and co-workers behavior. Another important issue is that the companies need to deploy environment protection policies and implement them consistently. Not to forget to mention that beyond all of this, the Macedonian government also has an important role in strengthening its capacities towards increased employee green behavior through implementing various environmental policies, making frequent inspections of businesses and penalizing those that do not act environmentally friendly.

REFERENCES

- 1. Bamberg, S. and Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new metaanalysis of psycho-social determinants of pro-environmental behavior, *Journal of Environmental Psychology*, 27, 14-25. https://doi.org/10.1016/j.jenvp.2006.12.002;
- 2. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191;
- 3. Baxter, D. and Pelletier, L.G. (2020). The roles of motivation and goals on sustainable behaviour in a resource dilemma: A self-determination theory perspective, *Journal of Environmental Psychology*, 69, 101437. https://doi.org/10.1016/j.jenvp.2020.101437;
- 4. Bissing-Olson, M. J., Iyer, A., Fielding, K. S., & Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *Journal of Organizational Behavior*, 34(2), 156-175. https://doi.org/10.1002/job.1788;
- 5. Boiral, O. (2005). The Impact of Operator Involvement in Pollution Reduction: Case Studies in Canadian Chemical Companies. *Business Strategy and the Environment*, 14(6), 339-360. https://doi.org/10.1002/bse.431;
- 6. Bourdieu, P. (1968). Structuralism and theory of sociological knowledge. *Social Research: An International Quarterly of Political and Social Science*, *35(4)*, 681-706. https://www.jstor.org/stable/40969937;
- 7. Bowen, A., Dietz, S., & Hicks, N. (2012). Why do economists describe climate change as a 'market failure'? *The Guardian*, 2012;
- 8. Cairns, S., Newson, C., & Davis, A. (2010). Understanding successful workplace travel initiatives in the UK. *Transportation Research Part A Policy and Practice*, 44(7), 473-494. https://doi: 10.1016/j.tra.2010.03.010;
- 9. Calthorpe, P. (2011). *Urbanism in the age of climate change*. Island Press Washington, DC: Island Press. https://doi.org/10.5822/978-1-61091-005-7;
- 10. Cialdini, B. R, Kallgren, A. C., & Reno, R. R., (1991). A Focus Theory of Normative Conduct: A Theoretical Refinement and Reevaluation of the Role of Norms in Human Behavior. *Advances in Experimental Social Psychology*, 24, 201-234. https://doi.org/10.1177/01461672002610009;

- 11. Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic Leadership and Follower Effects. *Journal of Organizational Behavior*, 21(7), 747–767. http://www.jstor.org/stable/3100311;
- 12. Dumont, J., Shen, J., & Deng, X. (2016). Effects of green human resources management practices on employee workplace behavior: The role of psychological climate and employee green values. *Human Resource Management*, (56)4, 613-627. https://doi.org/10.1002/hrm.21792;
- 13. ECE Information Unit. (2019). Environmental Performance Reviews: North Macedonia. *United Nations Economic Commissions for Europe*. https://www.unece.org/fileadmin/DAM/env/epr/epr studies/ECE.CEP.186.Eng.pdf;
- 14. Graves, L. M., Sarkis, J., & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China. *Journal of Environmental Psychology*, 35, 81-91;
- 15. Green-Demers, I., Pelletier, L. and Menard, S. (1997). The impact of behavioral difficult on the saliency of the association between self-determined motivation and environmental behaviors, *Canadian Journal of Behavioural Science*, 29(3):157-166. https://doi.org/10.1037/0008-400X.29.3.157;
- 16. Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-520. https://doi.org/10.1108/EUM0000000006155;
- 17. Lee, Y.-J., De Young, R., & Marans, R. W. (1995). Factors influencing individual recycling behavior in office settings: A study of office workers in Taiwan. *Environment and Behavior*, 27(3), 380–403. https://doi.org/10.1177/0013916595273006;
- 18. Leithwood, K., & Jantzi, D. (2000) The Effects of Transformational Leadership on Organizational Conditions and Student Engagement with School. *Journal of Educational Administration*, 38, 112-129. http://eric.ed.gov/?id=ED432035; https://doi.org/10.1108/09578230010320064;
- 19. Levy-Leboyer, C., Bonner, M., Chase, J., Ferreira-Marques, H. and Pawlik, K. (1996). Determinants of pro-environmental behaviors: A five-country comparison, *European Psychologist*, 1 (2), 123-129.;
- 20. Lindblom, A., & Ohlsson, L. (2011). *Stakeholders influence on the environmental strategy of the firm. Study of the Swedish Energy Intensive Industry* (Masters dissertation, Halmstad University, Halmstad, Sweden). http://www.diva-portal.org/smash/get/diva2:435189/FULLTEXT01.pdf%0D;
- 21. Malek, S.C., Sarin, S. and Haon, C. (2020). Extrinsic rewards, intrinsic Motivation, and new product development performance, *Journal of Product Innovation Management*, 7(6), 528–551. https://doi.org/10.1111/jpim.12554;
- 22. Mason, S. E., & Winkelman, J. J. (2017). Protecting the environment: awareness and responsibility. *Journal of Vincentian Social Action*, 2(1). https://scholar.stjohns.edu/jovsa/vol2/iss1/6;
- 23. McKinsey. (2011). The business of Sustainability Survey. https://www.mckinsey.com/business-functions/sustainability/our-insights/the-business-of-sustainability-mckinsey-global-survey-results;
- 24. Moss, L. R. (2008). Local governments reduce costs through pollution prevention. *Journal of Cleaner Production*, 16(6), 704-708. https://doi.org/10.1016/j.jclepro.2007.02.021;
- 25. Norton, T. A., Zacher, H., & Ashkanazy, N.M. (2014). Organizational sustainability policies and employee green behaviour: The mediating role of work climate perceptions. *Journal of Environmental Psychology*, 38, 49-54. http://dx.doi.org/10.1016/j.jenvp.2013.12.008;
- 26. Norton, T. A., Parker, S. L., Zacher, H., & Ashkanazy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organization and Environment*, 28 (1), 103-125. https://doi.org/10.1177/1086026615575773;
- 27. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York, NY: McGraw-Hill. https://doi.org/10.1177/014662169501900308;
- 28. Ones, D. S., & Dilchert, S. (2012). Environmental sustainability at work: A call to action. *Industrial and Organizational Psychology*, 5, 447-469. https://doi.org/10.1111/j.1754-9434.2012.01478.x;
- 29. Paille, P and Boiral, O. (2013). Pro-environmental behavior at work: construct validity and determinants, *Journal of Environmental Psychology*, 36, 118-128. http://dx.doi.org/10.1016/j.jenvp.2013.07.014;
- 30. Parliament of the Republic of Macedonia. (2005). Environmental Law. (Official Gazette of Republic of Macedonia 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 42/14 and 44/15) http://www.slvesnik.com.mk/Issues/ACF1AC118E6F81438BE8DD53D5A613F0.pdf.
- 31. Priyankara, R. P. H., Luo, F., Saeed, A., Nubuor, A. S., & Jayasuriya, F. P. M. (2018). How does a leader's support for the environment promote organizational citizenship behavior for the environment? A Multi-Theory Perspective. *Sustainability*, 10(1), 271. https://doi.org/10.3390/su10010271;

- 32. Raju, P. S., & Venkatesan, M. (Eds.). (1980). Exploratory behavior in the consumer context: a state of the art review. *Advances in Consumer Research*, 7, 258-263;
- 33. Repetto, R., & Austin, D. (2000). Pure profit: The financial implications of environmental performance. *World Resources Institute*. http://pdf.wri.org/pureprofit.pdf;
- 34. Richard, M., Ryan, M. R., & Deci, L. E. (2000). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. doi.org/10.1006/ceps.1999.1020;
- 35. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. http://dx.doi.org/10.1037110003-066X.55.1.68;
- 36. Saif, A. M., Zefreh, M. M., & Torok, A. (2018). Public transport accessibility: A literature review. *Periodica Polytechnica Transportation Engineering*, *3*. https://doi.org/10.3311/PPtr.12072;
- 37. Schelly, H., Cross, J. E., Franzen, W.S., Hall, P., & Reeve, S. (2011). Reducing energy consumption and creating a conservation culture in organizations: a case study of one public school district. *Environment and Behavior*, *43*(3), 316-343. https://doi.org/10.1177/0013916510371754;
- 38. Schneider, B. (1975). Organizational climate: Individual preferences and organizational realities revisited. *Journal of Applied Psychology*, 60(4), 459–465. https://doi.org/10.1037/h0076919;
- 39. Schwartz, T., Betz, M., Ramirez, L., & Stevens, G. (2010). Sustainable energy practices at work: Understanding the role of workers in energy conservation. *Proceedings of the Nordi Conference on Human Rights*, 452-462. https://doi.org/10.1145/1868914.1868966;
- 40. Shove, E. (2012). *Converging Conventions of Comfort, Cleanliness and Convenience*. Lancaster LA: Department of Sociology, Lancaster University. http://www.comp.lancs.ac.uk/sociology/papers/Shove-Converging-Conventions.pdf;
- 41. Siero, F. W., Bakker, A. B., Dekker, G. B., & van den Burg M. T. C. (1996). Changing organizational energy consumption behavior through comparative feedback. *Journal of Environmental Psychology*, *16*(*3*), 235–246. https://doi.org/10.1006/jevp.1996.0019;
- 42. Staats, H., van Leeuwen, E., & Wit, A. (2000). A longitudinal study of informational interventions to save energy in an office building. *Journal of Applied Behavior Analysis*, *33(1)*, 101-104. https://doi.org/10.1901/jaba.2000.33-101;
- 43. Steg, L., & Vlek, G. (2008). Encouraging pro-environmental behavior: An integrative review and research agenda. *Journal of Environmental Psychology*, 20(3), 309-317, http://dx.doi.org/10.1016/j.jenvp.2008.10.004;
- 44. Stern, N. (2008). The Economics of Climate Change. *The American Economic Review*, 98(2), 1–37. http://www.jstor.org/stable/29729990;
- 45. Stone, D. N., Deci, E. L., & Ryan, R. M. (2009). Beyond talk: Creating autonomous motivation through self-determination theory. *Journal of General Management*, *34*(3), 75-91. https://doi.org/10.1177/030630700903400305;
- 46. Tabernero, C., & Hernández, B. (2011). Self-efficacy and intrinsic motivation guiding environmental behavior. *Environment and Behavior*, 43(5), 658–675. https://doi.org/10.1177/0013916510379759;
- 47. Tam, V. W. Y., & Tam, C. M. (2008). Waste reduction through incentives: A case study. *Building Research and Information*, 36(1), 37-43. https://doi.org/10.1080/09613210701417003;
- 48. Tuan, N.P., Yoshi, T. and Mai, N.T.T. (2014). The Roles of Supervisory Support Behaviors and Environmental Policy in Employee "Eco-initiatives" at Manufacturing Companies in Vietnam, *JED*, 221, 105-126. http://doi.org. 0.24311/jed/2014.221.04;
- 49. Tudor, T. L., Barr S.W., & Gilg, A. W. (2008). A novel conceptual framework for examining environmental behavior in large organizations A case study of the Cornwall National Health Service in the United Kingdom. *Environment and Behavior*, 40(3), 426–450, doi:10.1177/0013916507300664;
- 50. Ulus, M., & Hatipoglu, B. (2016). Human aspect as a critical factor for organization sustainability in the tourism industry. *Sustainability*, 8, 232. https://doi.org/10.3390/su10010271;
- 51. United Nations Development Programme. (2016). *A smart future for public transport in Skopje*. https://www.mk.undp.org/content/north-macedonia/en/home/presscenter/articles/2016/12/07/a-smart-future-for-public-transport-in-skopje.html;
- 52. United Nations Economic Commission for Europe (2021). *North Macedonia Environmental Performance Reviews Third Review Highlights*. https://unece.org/epr-reviewed-countries;
- 53. White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297–333. https://doi.org/10.1037/h0040934;

- 54. Whitebread, D., & Bingham, S. (2013). Too Much, Too Young. *The New Scientist*, 220(2943), 28-29. https://doi: 10.1016/S0262-4079(13)62688-3;
- 55. Xue, F., Gou, Z., & Lau, S. (2017). The green open space development model and associated use behaviours in dense urban settings: Lessons from Hong Kong and Singapore. *Urban Design International*, 22 (4), 287-302. https://doi.org/10.1057/s41289-017-0049-5;
- 56. Zhu, J., Tang, W., Wang, H. and Chen, Y. (2021). The influence of green human resource management on employee green behavior A study on the mediating effect of environmental belief and green organizational identity, *Sustainability*, 13, 4544. https://doi.org/10.3390/su13084544;