



## THE RELATIONSHIP BETWEEN INTERNAL FACTORS AND EMPLOYEES' PERCEPTION OF AN ORGANIZATION'S GREEN PERFORMANCE

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**Abstract:** This paper examines the relationship between internal factors of an organization and employees' perception of organization's green performance – EPGP. An organization's green performance is greatly influenced by its internal efforts toward the implementation of green practices (such as internal green marketing – IGM and its dimensions), and it can be greatly influenced by employees' attitudes and behavior as well (such as organizational identification – OI, employees' satisfaction – ES, employees' eco-friendly behavior – EFB). Therefore, it was considered justified to examine whether each IGM dimension is related to EPGP, and whether each observed employees' attitude and behavior is related to EPGP. Hypotheses were tested on a sample of 177 respondents – employees working in different, mostly service organizations in Serbia, using the regression and correlation analysis. The obtained results revealed that each observed variable is positively related to EPGP. However, in predicting EPGP the contribution of green internal communication – GIC (as the IGM dimension), OI and EFB is statistically significant. The findings provide insight into the relationship between each observed variable and EPGP, and it may be useful for managers in the environmental management process.

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**JEL classification:** M30, M10, M12

## 1. Introduction

Today, many organizations are faced with a variety of environmental challenges, so environmental protection is becoming the essence of global efforts of governmental and non-governmental institutions in this field as well as the corporate strategies of organizations. Hence, most organizations strive for a better green or environmental performance and a better reputation as a green or environmental organization.

An organization's green performance is greatly influenced by its internal efforts toward the implementation of green practices. Green human resource management (GHRM), green marketing (GM) and its dimension i.e. internal green marketing (IGM) are important internal green practices and instruments in environmental management. The human resource function is very important in achieving environment-friendly organizational goals (see: Kim et al., 2019). At the same time, IGM orientation (IGMO) supports the organization's effective response to green challenges, and according to Papadas et al. (2017, p. 244) supports “the effective implementation of strategic green marketing activity” as well. IGMO contributes to the spread of environmental values and corporate green culture (Papadas & Avlonitis, 2014; Papadas et al., 2017). Therefore, it is more likely that in organizations that implement IGM practices, employees will have a better perception of green performance (EPGP). An organization's green performance can be greatly influenced by employees' attitudes and behavior as well (e.g. employees' eco-friendly behavior<sup>2</sup> – EFB, employees' organizational commitment, etc.; Gill et al., 2021; Kim et al., 2019).

Previous research on IGM showed that there is no empirical studies on the relationship between IGM dimensions and EPGP as opposed to the studies on the relationship between GHRM dimensions and employees' perception of environmental performance – EPEP (e.g. Gill et al., 2021; Kim et al., 2019). In addition, the studies on the relationship between employees' attitudes and behavior (e.g. employees' organizational identification – OI, employees' satisfaction – ES, employees' eco-friendly behavior – EFB) and EPGO in the context of IGM are scarce as opposed to the studies in the field of GHRM (e.g. Gill et al., 2021; Kim et al., 2019). One of the reasons is insufficient application of IGM in practice. At the same time, the IGM scales and measurement models have been recently proposed.

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<sup>2</sup> synonym: green behavior

Since it is very important that employees perceive their organization as green, on the one hand, and that the studies examining the relationship between mentioned internal factors of an organization and EPGP are scarce, on the other hand, the subject of this research is to examine the relationship between each of IGM dimensions (green internal communication or GIC, green skill development or GSD, green rewards or GRs, Qureshi & Mehraj, 2022) and EPGP<sup>3</sup>, as well as the relationship between each of observed employees' attitudes and behavior (OI, ES, EFB) and EPGP.

This research is based on the main hypothesis that each observed variable – GIC, GSD, GRs, OI, ES, EFB is related to the EPGP.

Previous literature showed that there are no studies exclusively examining these relationships in the context of IGM. Accordingly, the data were collected by carrying out a survey and the respondents were employees working in different, mostly service organizations in Serbia.

The findings of this paper provide insight into the relationship between each observed variable and EPGP, and can contribute to understanding of the role of GIC, GSD, GRs, OI, ES, and EFB in predicting EPGP. Besides, the findings can motivate managers of Serbian organizations to design EPGP improvement programs through these variables. Finally, employees who perceive the organization's green performance favorably are more willing to effectively implement environmental strategies.

Following the introduction, the second part shows the observed variables in relevant literature, the third part presents empirical background and the development of hypotheses, the fourth part describes methodology, the fifth part presents results and discussion, the sixth part presents contributions, implications and recommendations. Conclusion and the list of references follow.

## **2. The observed variables in relevant literature**

IGMO or internal green marketing strategy is related to the environmental (green) culture of an organization. In this sense, the organization should align its green marketing strategy with employees' behavior. At the same time, employees should serve and implement organization's internal green marketing strategy (Papadas et al., 2019, p. 636).

Papadas et al. (2017, p. 238) state that IGMO includes employee training, managers' efforts to promote green (environmental) awareness inside the organization, and environmental leadership activities. Qureshi and Mehraj (2022, p.

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<sup>3</sup> IGM i.e. IGMO reflects the level of assimilation of organization's green (environmental) values by all employees and other internal stakeholders (Papadas et al., 2017, p. 240).

789) accepted that IGM actions include “efforts to promote environmental awareness inside the organization and most importantly employee development about organizations green strategies (Dangelico, 2015; Dangelico and Vocalelli, 2017) and green human resource management (Dumont et al., 2017; Longoni et al., 2018; Paulet et al., 2021; Renwick et al., 2013)”. Therefore, Qureshi and Mehraj (2022) observe IGM through GIC, GSD, and GRs.

*Communication as a marketing activity and the IGM dimension:* Communication is the activity of inter-functional coordination that is the component of market orientation (Zhou et al., 2008 as cited in Chen et al., 2015, p. 496). Internal communication is the dimension of internal marketing – IM (e.g. Rafiq & Ahmed, 2000), while green communication is the dimension of green marketing – GM (e.g. Chamorro et al., 2009). Communication (e.g. informing, presentations) is the activity of IGMO (Papadas et al., 2017, p. 241). Finally, communication is one of the IGM dimensions, called GIC (Qureshi & Mehraj, 2022). The purpose of communication as the dimension of IGM (GIC) is to promote green i.e. environmental awareness in the organization (Qureshi & Mehraj, 2022). GIC contributes to the development of green culture in an organization (adapting to Papadas & Avlonitis, 2014). In this regard, it is important that the organization “markets its green values to its employees” (Wells et al., 2015 as cited in Papadas et al., 2017, p. 238), which Papadas et al. (2017, p. 238) support through the view that “environmental values need to be shared and communicated across departments“. Consequently, for some strategic green marketing decisions, internal green information, as the outcome of internal green marketing initiatives, is becoming important (Papadas et al., 2017).

*Activities of GSD and GRs as the IGM dimensions:* Organizations prefer green training “as an economically sustainable and environmentally friendly approach in their attempts to be green” (Yusof et al., 2020 as cited in Yafi et al., 2022, p. 1 of 15). Therefore, the purpose of GSD activities, especially green training programs and green education programs, is to embed environmental knowledge and green culture among employees and across the organization in order to encourage employees to develop their skills to implement green (environmental) strategies (D’Souza et al., 2015; McDonagh & Prothero, 2014 as cited in Qureshi & Mehraj, 2022). The purpose of GRs and other green compensation is to reward employees who are environmentally oriented and to motivate them to continue contributing to green (environmental) protection (Qureshi & Mehraj, 2022).

*ES:* ES shows whether employees are contented, happy, and fulfilling their needs and desires at work (Suzan 2011 as cited in Sageer et al., 2012, p. 32). ES is encouraged by meeting employees' needs - by offering jobs as the internal products (Berry, 1981), so ES is one of the elements of IM (Ahmed et al., 2003). ES is positively influenced by IM programs (Huang et al., 2019), IGM dimensions (Qureshi & Mehraj, 2022), the implementation of green marketing orientation (Chahal et al., 2014), green training (Amrutha & Geetha, 2021; Pinzone et al., 2019), and ES could be positively affected by IGMO (Papadas et al., 2017, p. 243).

Satisfied, motivated and environmentally oriented employees are one of the goals of both IGM and GHRM as well as the focus of their managers, especially as green ES leads to voluntary workplace green behavior (Amrutha & Geetha, 2021<sup>4</sup>). Therefore, it is expected that satisfied employees will more easily recognize the organization's green actions and perceive it positively.

*OI*: In the relevant literature, OI is observed through the employee's awareness of belonging to the organization (Ashforth & Mael, 1989) as well as through the feeling that the employee has about belonging to the organization and the value he/she assigns to it (Van Dick, 2001). OI is associated with employee's behavior devoted to collective interests and goals. Consequently, they identify with organizational goals, mission, vision, and culture (Milanović & Radosavljević Njegić, 2019). Employees who have a positive perception of IM programs tend to exhibit a high level of OI (Boukis et al., 2015). A high level of OI is a good basis for enhancing green organizational identity. OI, especially green organizational identity, is a good support for managers in developing green environmental awareness of all employees (Chang et al., 2019). OI encourages employees' green performance behaviors (Chaudhary, 2020). Based on a social identity theory, employees prefer to identify with the organization that has a green (environmental) or eco-friendly reputation (Ribeiro, 2022, p. 2 of 13). Finally, OI has a unique value in explaining an employee's attitudes and behavior (as an individual) in an organization. Hence its importance in employees' perception of green organization.

*EFB*: EFB (or employee green behavior) includes task green behavior or required green behavior and voluntary green behavior (Norton et al., 2015). Besides, EFB "focuses on specific behavior related to energy usage, water usage, and waste reduction..." (adapted from Kim et al., 2019, p. 85). EFB is a good organizational strategy to enhance its environmental performance – EP (Chaudhary, 2020). Generally, employees' attitudes about environmental behavior have a key impact on improvement of their EP (Gill et al., 2021; Kim et al., 2019) and thus EPGP.

*EP* and *EPGO*: EP is defined as a multidimensional construct. EP reflects the extent to which organization meets the environmental expectations of its stakeholders (Schultze & Trommer, 2012). An organization's stakeholders are its employees. In this regard, EPGO in this paper is defined as a variable representing the extent to which the organization has positive impact on the environment to an evaluation of its employees.

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<sup>4</sup> Namely, green ES partially mediates the relationship between green training and voluntary workplace green behavior.

### **3. Empirical background and the development of hypotheses**

From the perspective of green practices, innovations, strategies, orientations, on the one hand, and organizational outcomes (performance), on the other hand, previous studies have mainly examined the impact of green innovation in the development of new products, services and processes on financial performance, as well as on (sustainable) supply chain (e.g. Novitasari & Agustia, 2021; Wang et al., 2021). It has been examined and confirmed that green marketing strategy affects marketing performance (Fraj et al., 2011), that strategic and tactical green marketing orientation affects marketing performance (Papadas et al., 2017), that strategic green marketing orientation affects organizational financial performance (mediated by its competitive advantage), with the moderating role of IGMO (Papadas et al., 2019, p. 636). However, the studies on the role of IGM in achieving organizational performance (Papadas et al., 2017; Papadas et al., 2019) are scarce. At the same time, most of the studies on GM revealed that there is a positive relationship between GM and EP (e.g. D'Souza et al., 2015). Therefore, it is assumed that IGM i.e. each of IGM dimensions is related to EPGP. To authors' knowledge, no previous research on the relationship between IGM dimensions and EPGP has been carried out. Examining this research problem is in its infancy, especially in less developed countries and more unstable business conditions (e.g. Serbia).

In this paper, IGM was observed as the GM dimension, and a reflection of organization's green orientation including three dimensions (according to Qureshi & Mehraj, 2022). Its similarity to the GHRM construct is expected. Both IGM and GHRM<sup>5</sup> include green (environmental) training and education, and green rewards for employees' eco-friendly contributions. IGM also includes GIC, and GHRM includes hiring eco-friendly employees and their maintaining.

Previous studies revealed that internal communication as the dimension of IM (Tortosa et al., 2009) and green communication as the dimension of GM (Candrasa et al., 2020<sup>6</sup>) affect organizational performance. In this sense, the positive relationship between GIC and EPGP is expected: EPGP is the component of performance of the responsible organization towards environment, and GIC is the activity of market orientation<sup>7</sup>. From the perspective of GIC, when an organization effectively and comprehensibly communicates green vision to employees and promotes environmental values of the organization in which employees believe

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<sup>5</sup> GHRM construct includes "hiring and maintaining eco-friendly employees, providing environmental training, and reflecting on employees' eco-friendly contributions in employee performance appraisals" (Guest, 1997 as cited in Kim et al., 2019, p. 83).

<sup>6</sup> Green communication mediates the relationship between some dimensions of green supply chain and firm performance (Candrasa et al., 2020).

<sup>7</sup> According to Chen et al. (2015), market orientation has a positive effect on environmental strategy, environmental strategy affects employees' environmental involvement, and employees' environmental involvement consequently affects EP.

(Qureshi & Mehraj, 2022, p. 794), it is more likely that EPGP i.e. perception of organization's green performance by its employees will be more favorable. In addition, when an organization communicates about green practices with its employees and encourages employees "to express diversity of opinions about green strategies" of organization (Qureshi & Mehraj, 2022, p. 794), it is more likely that EPGP will be more favorable. In this regard, it was assumed that *GIC is related to EPGP* (h1).

Singh et al. (2019) and Yafi et al. (2022) noted that environmental/green training affects green EP. In addition, education and training (Kim et al., 2019), contribute to improving employees' awareness of environmental protection. If the development of skills and knowledge of all employees about environmental management is a continuous process in the organization, if the organization sets green goals (targets), objectives, duties for each employee and provides training to improve their awareness, know-how and skills about environmental management (Qureshi & Mehraj, 2022, p. 794), it is more likely that EPGP will be more favorable. In this regard, it was assumed that *GSD is related to EPGP* (h2). Besides, if the organization sets compensation system, rewards contributions of employees for environmental protection and their eco-friendly behavior, if it encourages its employees to use eco-products or services, and if the organization "has separate departments for internal audits about environmental performance of employees" (Qureshi & Mehraj, 2022, p. 794), it is more likely that EPGP will be more favorable. In this regard, it was assumed that *GRs are related to EPGP* (h3). Previous studies on GHRM, also, showed that employees' perception of GHRM<sup>8</sup>, including training and rewards, improved the organization's EP (Gill et al., 2021; Kim et al., 2019).

Amrutha and Geetha (2021) concluded that satisfied employees are more willing to adopt the values of green organization, and when they are satisfied with green initiatives, then they manifest voluntary workplace green behavior. However, there is a lack of research in which the goal was to determine the relationship between ES and EPGP as opposed to research in which the goal was to determine the relationship between ES and organization's performance (e.g. Melián-González et al., 2015). In this sense, *it was checked in the paper whether ES is related to EPGP* (h4).

According to Chaudhary (2020, p. 632) "...when individuals positively identify with their organization, it may not only foster responsible behavior toward the environment but also enhance environmental performance". Besides, OI mediates the relationship between GHRM and EFB (Ribeiro et al., 2022; Shah et al., 2021). However, there is a lack of research in which the goal was to determine the relationship between OI and EPGP as opposed to research in which the goal was to

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<sup>8</sup> Since both constructs (GHRM and IGM) include training, education, and rewards and other compensation, the results of studies on GHRM are also useful in this paper (e.g. Gill et al., 2021; Kim et al., 2019). Also, this applies to the results of studies in other similar fields (e.g. Singh et al., 2019).

determine the relationship between OI and EFB especially in the context of GHRM (e.g. Chaudhary, 2020; Ribeiro et al., 2022) or CSR<sup>9</sup> (e.g. Shah et al., 2021). From the OI perspective, if employees feel that they belong to the organization, if they share the emotional experience of its failures and successes, and if they care about the opinion of other actors about the organization, it is more likely that EPGP will be more favorable. In accordance with the above, *it was assumed that OI is related to EPGP* (h5).

Previous studies showed that there is a positive impact EFB on EP (Gill et al., 2021<sup>10</sup>; Kim et al., 2019). In accordance with the above, it was assumed that *EFB is related to EPGP* (h6).

#### 4. Methodological framework

*Sample and the procedure of data collection:* This paper's data were collected through a structured questionnaire (the Google Form survey). The survey was conducted over the course of 3 months (in the period March – May 2022). The respondents for this research were employees working in different, mostly service organizations in Serbia. Of the 689 questionnaires (distributed by the random sampling), 177 were returned (25.7% response rate); all returned questionnaires included complete responses. The structure of the sample is shown in Table 1.

*Measurement scales:* GIC, GSD and GRs, as the dimensions of IGM, were measured by a scale from Qureshi and Mehraj (2022). To measure OI, Mael and Ashforth's scale (1992) was used. This scale for measuring OI is the one most often used in the literature. To the existing items in this scale (6 items; Mael & Ashforth, 1992), one item related to the employees' belonging to the organization was added. To measure ES, the scale by Huang et al. (2019) was used. This scale was used in similar studies on IGM (e.g. Qureshi & Mehraj, 2022). To measure EFB, an adapted scale from Kim et al. (2019)<sup>11</sup> was used.

There are multiple approaches (practice-oriented, theoretical, and empirical approaches) to measuring EP.<sup>12</sup> In this paper, EP was observed as a non-financial performance, because not all respondents are financial or general managers. Namely, EPGP was described with 3 questions ("My organization, through environmental programs, reduces waste, water and energy consumption", "My organization includes green services, products and processes", "My organization has a reputation

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<sup>9</sup> Corporate Social Responsibility

<sup>10</sup> There is partial mediating effect of EFB between GHRM and EP (p. 1725).

<sup>11</sup> According to the scales from Chou, 2014; Hsiao et al., 2014; Scherbaum et al., 2008; Tudor et al., 2007.

<sup>12</sup> From the theoretical approaches perspective, EP is observed as an important component of (corporate) social performance measurement (Wood, 1991, p. 63 as cited in Ilinitch et al., 1998). From the empirical approaches perspective, EP measurement includes „four conceptually distinct but related categories“ (see more: Ilinitch et al., 1998, p. 389).



as a green organization”). All items were administered using five-point Likert scales (from 1=Strongly Disagree to 5=Strongly Agree).

**Table 1. The structure of the sample**

	(n=177) %
<b>Gender</b>	
male	36
female	64
<b>Age</b>	
<31	16
31 – 40	32
41 – 50	28
51 – 60	15
>60	9
<b>Education</b>	
secondary	12
high	86
„rest“	2
<b>Working experience</b>	
<11	35
11 – 20	33
21 – 30	19
31 – 40	9
>40	4
<b>Position</b>	
non-managerial positions	63
managerial positions	37

Source: Authors

*Data analysis:* To the data analysis, correlation and regression analysis was employed. To statistical data processing, the IBM SPSS, version 25, was utilized.

## 5. Results and discussion

### 5.1. Results

In order to validate reliability of the scales in this research Cronbach’s alpha coefficient was observed (Table 2). Descriptive statistics were also presented in Table 2.

Cronbach's alpha values obtained are above 0.7 (Table 2) which is the recommended value of this coefficient in the literature (Churchill, 1979). Based on this result, it was concluded that further investigation was justified.

In order to determine the relationships between each observed variable and EPGP, the Pearson's correlation was used (Table 3). The results in Table 3 showed that EPGP correlates with each observed variable in the model. There is a positive correlation between each observed variable and EPGP. The positive correlations coefficients indicate that improvements in each observed variable (GIC, GSD, GRs, OI, ES, and EFB) would correspond to the EPGP improvement (Table 3).

**Table 2. Descriptive statistics and Cronbach's alpha coefficient ( $\alpha$ )**

The variables	min	max	mean	Std. dev.	$\alpha$
EPGP	3	15	11.37	3.02	0.765
GIC	5	25	15.44	6.05	0.957
GSD	5	25	13.91	6.19	0.960
GRs	5	25	11.87	5.81	0.948
OI	7	35	25.36	6.78	0.908
ES	5	25	18.70	4.84	0.896
EFB	7	35	30.68	4.73	0.805

Source: The data were obtained by the authors' research

**Table 3. The Pearson's correlation coefficients**

	EPGP
GIC	0.753**
GSD	0.692**
GRs	0.594**
OI	0.564**
ES	0.440**
EFB	0.474**
**Statistical significance: p-value=0.01	

Source: The data were obtained by the authors' research

The coefficient of determination ( $R^2=0.613$ ) showed that the obtained model including GIC, GSD, GRs, OI, ES, and EFB predicted 61.3% of the total variance in EPGP (Table 4).

**Table 4. The coefficient of determination**

	R	$R^2$	F	p
EPGP	0.783	0.613	40.371	<0.0005*
*Statistical significance: p-value=0.05				

Source: The data were obtained by the authors' research

The minimum recommended value of  $R^2$  in the social sciences is 0.1 or 0.25 (Falk & Miller, 1992). Based on this result (Table 4), it was concluded that further examination was justified.

In the next step, simple (bivariate) regression analyses were conducted. The results of the conducted series of bivariate regressions are presented in Table 5.

**Table 5. The parameters of regression analysis**

	Unst. Coeff. $\beta$	Std. error	Stand. Coeff. $\beta$	t-value	p- value
Const.	2.477	1.086	-	2.281	0.024*
GIC	0.274	0.055	0.538	5.013	<0.0005*
GSD	0.011	0.057	0.022	0.189	0.850
GRs	0.044	0.042	0.084	1.062	0.290
OI	0.089	0.032	0.198	2.791	0.006*
ES	-0.035	0.042	-0.057	-0.833	0.406
EFB	0.075	0.037	0.119	2.042	0.043*

\*Statistical significance: p-value=0.05

Source: The data were obtained by the authors' research

The obtained results (Table 5) showed that in predicting EPGP the contribution of GIC, OI and EFB as the predictors is statistically significant. GIC is the best predictors of EPGP ( $\beta=0.538$ ,  $p<0.05$ ). It is found that there is no significant contribution of other independent variables to predicting EPGP.

Finally, differences in respondents' answers regarding his/her position: managerial/non-managerial employees are presented in Table 6.

**Table 6. Differences in the respondents' answers regarding his/her position**

	Managerial employees	Non managerial employees	t-value	p-value
	Mean			
GIC	16.24 $\pm$ 5.64	14.96 $\pm$ 6.29	1.349	0.179
GRC	14.78 $\pm$ 6.18	13.41 $\pm$ 6.19	1.374	0.171
GR	12.67 $\pm$ 5.69	11.38 $\pm$ 5.87	1.398	0.164
ES	19.95 $\pm$ 3.83	17.95 $\pm$ 5.25	2.862	0.005*
OI	27.77 $\pm$ 5.56	23.94 $\pm$ 7.08	3.977	<0.0005*
EFB	30.21 $\pm$ 4.97	30.93 $\pm$ 4.58	-0.968	0.334
EPGP	11.63 $\pm$ 3.04	11.23 $\pm$ 3.01	0.848	0.397

\*Statistical significance: p-value=0.05

Source: The data were obtained by the authors' research

There is a statistically significant difference in relation to the workplace regarding ES and OI. Managers are more satisfied and have a higher level of OI than non-managerial employees.

## 5.2. Discussion

This paper examined the relationship between IGM and its dimensions (as internal green practices), OI, ES, EFB (as employees' attitudes and behavior), and EPGP. As anticipated, GIC is related to EPGP (h1), GSD is related to EPGP (h2), GRs is related to EPGP (h3), OI is related to EPGP (h4), ES is related to EPGP (h5), EFB is related to EPGP (h6). In predicting EPGP, the contribution of GIC, OI and EFB is statistically significant.

This paper confirmed that there is a positive statistically significant relationship between GIC and EPGP i.e. between effectively and comprehensibly communicating green vision to employees who believe in it, promoting environmental values of the organization in which employees believe, communicating about green practices with its employees, encouraging employees "to express diversity of opinions about green strategies" of organization (Qureshi & Mehraj, 2022, p. 794), and EPGP. In predicting EPGP the contribution of GIC is statistically significant. Hence, it can be argued that the activities of GIC in the Serbian service organizations are effective, and that GIC as the dimension of IGM contributes to the positive perception of employees of green performance of their organization (EPGP) as opposed to the activities of both GSD and GRs.

The findings appertaining to the relationship between GSD and EPGP, and between GRs and EPGP in this paper can be compared with the findings of the previous studies conducted in the GHRM field and other fields, although this paper is focused on IGM. Namely, IGM and GHRM are two similar concepts and constructs. IGM and GHRM are crucial elements of environmental management. In this regard, internal marketing and human resource management (HRM)<sup>13</sup> are key practices "to achieving organizational goals via employee participation" (adapting to Kim et al., 2019, p. 89). In this regard, Gill et al. (2021) reported that GHRM influences EP. From the perspective of GHRM dimensions, EP is influenced by green training (which is a GSD activity in the IGM construct) as well as green rewards (which are also a GRs activity in the IGM construct). This observation confirms the justification of the integration of the marketing activities and the human resources activities in the context of both internal dimension and green dimension of these functions or the necessity of improving cross-functional coordination. From the perspective of other research fields, it was found that GSD affects EP<sup>14</sup> (Singh et al., 2019). However, this paper confirmed that in predicting EPGP the contribution of GSD and GRs is not statistically significant. It is assumed that in the Serbian organizations in the sample, GSD and GRs practices are not implemented at all, or they are not implemented continuously, or their implementation is insufficient.

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<sup>13</sup> „HRM is a key resource to achieving organizational goals via employee participation“ (de la Cruz Déniz-Déniz & Saá-Pérez, 2003; Domínguez-Falcón et al., 2016 as cited in Kim et al., 2019, p. 89).

<sup>14</sup> „Environmental training to employees mediates the influence of environmental ethics on firm's environmental performance and competitive advantage“ (Singh et al., 2019, p. 203).

As anticipated, OI is related to EPGP. The relationship between these variables is significant and positive. In predicting EPGP, the contribution of OI is statistically significant. This result is consistent with the view that when employees are identified with their organization, they are satisfied to be part of it, and work to achieve its sustainable goals (Chaudhary, 2020, p. 632). In this regard, employees who are aware of belonging to their organization, who share the emotional experience of its failures and successes, who care about the opinion of other actors about the organization, perceive the organization's green performance (EPGP) more favorably. Employees who identified with their organization understand its vision and values. They identify with organizational goals, mission, vision, and culture (Milanović & Radosavljević Njegić, 2019), and more easily adopt its green values. Then they are able to make a realistic assessment of the organization's green performance (EPGP).

ES and OI of employees are related outcomes. Amrutha & Geetha (2021) noted that satisfied employees are more willing to adopt the values of green organization. In that case, employees identify more with their organization. Satisfied and identified employees are more willing to adopt EFB. The obtained finding in this paper that there is the relationship between ES and EPGP can be conditionally based on the finding that ES affects organization's performance (e.g. Melián-González et al., 2015), because there is a lack of the studies on the relationship between ES and EPGP. In predicting EPGP, the contribution of ES is not statistically significant. Therefore, employees' satisfaction does not automatically mean commitment to the organization and their willingness to contribute to its goals.

From the perspective of the relationship between EFB and EPGP, the result showed that the relationship between these variables is significant and positive. This result was consistent with findings in the previous studies on the relationship between GHRM, EFB, and EPGP. Previous studies showed that there is a positive impact EFB on EP (Gill et al., 2021; Kim et al., 2019). In predicting EPGP, the contribution of EFB is statistically significant. The result confirmed the findings of the previous studies that EFB enables employees to have positive behavior towards reduced waste, the consumption of water and energy, development and use of green products and services, and the reputation of a green organization.

## **6. Contribution, implication and recommendation**

The results in this paper can contribute to the existing knowledge on internal green practices of the organization - on IGM and its relation with GHRM, and on OI, ES, EFB in the context of green organizational initiatives. If GIC, OI, EFB are favorable, then employees' perception of EPGP is also favorable. Generally, by improving OI, EPGP will improve per se. Improving IGM dimensions and EFB require "green" efforts of the organization. Examining the relationship between green ES and EPGP or EP, and between green OI and EPGP or EP is recommended for future research.

This paper included the variables whose interrelations were confirmed in previous studies (e.g. the effect of IGM on ES – Qureshi & Mehraj, 2022; the effect of IM on OI – Boukis et al., 2015; the effect of OI on ES – Karanika-Murray et al., 2015; the effect of OI on EFB – Ribeiro et al., 2022). However, there are no studies on the relationship between each of these variables and EPGP. Therefore, the second contribution of this paper lies in testing the above relationships, in the context of Serbian service organizations.

According to the results of this paper, it is important for the service organizations in Serbia to continue developing GIC practice, to implement pertinent GSD and GRs initiatives i.e. to improve them, to encourage OI, EFB, especially green ES, because they support a more favorable employees' perception of the organization's green performance i.e. EPGP. In this regard, this paper carries implications for GIC and, thus, organization communication. Employees should be informed about the IGM as the organization's green initiative in order to create a favorable employees' perception regarding organization's green performance and practices. Managers should communicate with all employees about environmental protection issues from the perspective of the organization and all of its stakeholders. To enhance EP and thus EPGP, the service organizations should implement green training and educational programs, as this enables organizations to implement more effectively environmental strategies. Employees should be motivated to engage in environmental activities. It is recommended to organize and realize trainings and seminars to create awareness among employees to promote EFB for environment protection. It is also necessary to link the rewards and other compensations with EFB of employees to promote the green performance. Environmental training should be a continuous process to improve green performance in the organization. Adoption of green rewards programs e.g. monetary rewards, can encourage EFB.

If the level of employees' OI is higher, it is more likely that employees will support green practices of their organization. Further, a green reputation of the organization will positively affect OI and EFB (adapting to Ribeiro, 2022). In addition, as IGM affects ES and OI of employees, satisfied and identified employees are more ready to adopt new IGM initiatives, and therefore to adopt the green values of their organization and manifest EFB. At the same time, the high level of OI, and especially EFB can contribute EPGP.

The organization through IGM practice and its dimensions can make employees responsible towards environment and ready to follow their green goals and green goals of their organization.

There are some limitations to this research. First, all variables were rated by the same respondents (self-rated method was applied). This means that there is some risk of bias. This paper collected data from Serbia as a less developed country, so one should be careful when interpreting (generalizing) the results. Future studies should include examining whereby the observed variables affect EPGP and whether there are indirect relationships, and moderating and mediating effects.

## 7. Conclusion

This paper extends both the IGM and environmental literature by examining the relationship between IGM dimensions, OI, ES, EFB and employees' perception of a green organization (EPGP), although examining was conducted in the Serbian context – the context of a less developed country. Organization's green performance and its status of the green organization from the employees' perspective are linked with IGM and its dimensions, especially GIC, as well as with employees' attitudes and behaviour, especially OI and EFB. These findings are useful since they provide insight in the relationship between the observed variables. The findings may be useful for managers in the environmental management process.

According to all, there is insufficient understanding of IGM (GIC, GSD, GRs) in the organizations of the service sector in Serbia that were represented in the sample, its role in the organization, its importance for the environment and employees, its influence on the employees' attitudes and behaviour (such as OI, ES, EFB) and the organizational outcomes (such as green performance). Increasing green performance contributes to sustainable development and becomes one of the conditions for successful business in modern conditions. Hence, every organization should strive for a better green performance and a better reputation as a green organization from the perspective of its stakeholders, including employees, regardless of the level of environmental sensitivity of the sector in which it operates.

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## ODNOS IZMEĐU INTERNIH FAKTORA I PERCEPCIJE ZAPOSLENIH O ZELENIH PERFORMANSAMA ORGANIZACIJE

**Rezime:** Ovaj rad ispituje odnos između internih faktora organizacije i percepcije zaposlenih o zelenim performansama organizacije (EPGP). Na zelene performanse organizacije u velikoj meri utiču njeni interni naponi ka implementaciji zelenih praksi (kao što je interni zeleni marketing – IGM i njegove dimenzije), a na njih mogu u velikoj meri uticati i stavovi i ponašanje zaposlenih (kao što su organizaciona identifikacija zaposlenih – OI, zadovoljstvo zaposlenih – ES, ekološki prihvatljivo ponašanje zaposlenih – EFB). Stoga se smatralo opravdanim da se ispita da li je svaka IGM dimenzija povezana sa EPGP, kao i da li je svaki posmatrani stav i ponašanje zaposlenih povezan sa EPGP. Hipoteze su testirane na uzorku od 177 ispitanika – zaposlenih koji rade u različitim, pretežno uslužnim organizacijama u Srbiji, korišćenjem regresione i korelacione analize. Dobijeni rezultati su pokazali da je svaka posmatrana varijabla povezana sa EPGP. Međutim, u predviđanju EPGP doprinos zelene interne komunikacije – GIC (kao IGM dimenzije), OI, i EFB je statistički značajan. Nalazi pružaju uvid u odnos između svake posmatrane varijable i EPGP, i mogu biti korisni za menadžere u procesu upravljanja okolinom.

**Ključne reči:** interni zeleni marketing (IGM), zelena interna komunikacija (GIC), razvoj zelenih veština (GSD), zelene nagrade (GRs), organizaciona identifikacija zaposlenih (OI), zadovoljstvo zaposlenih (ES), ekološki prihvatljivo ponašanje zaposlenih (EFB), percepcija zaposlenih o zelenim performansama organizacije (EPGP)

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