

# **The Factors Influencing Employees' Green Behavior Research**

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## Abstract

This article starts from the basic production factor of "people", explores the "green, low-carbon, and harmonious" development requirements faced by enterprises in the "double-carbon" era, analyzes the relationship and mechanism of green HR management and employees' green behavior, and discusses how to build an enterprise green HRs management model, stimulate proactive employees' green behaviors, promote green and low-carbon transformation in enterprise production and operation activities, obtain green competitive advantages and even leading advantages in industrial competition, and promote the national economy to compete on the international stage: capacity improvement and long-term development. This article divided green HR management into five dimensions by distributing questionnaires: green recruitment and screening, green training and development, green performance and evaluation, green salary and benefits, green culture and empowerment, and divided employees' green behaviors into proactive green behavior and follow-up green behavior construct an overall theoretical framework and conceptual model of the relationship between green HR management, organizational commitment, and employee green behavior. Organizational commitment is introduced as a mediating variable and ecological values are used as moderating variables. Finally, the theoretical and practical significance of the article is summarized, and the difficulties, shortcomings encountered in the study, and the future direction of the study are explained in detail, to provide guidance and reference for relevant enterprises on the road to future development.

**Keywords:** Green HR Management, Green Behavior, Organizational Commitment, Ecological Values

## 1. Introduction

### 1.1 Background and Importance of the Problem

First, China's social economy is exploring and practicing a symbiotic and win-win development model of growth and "carbon reduction." China's rapid economic growth is also accompanied by the problem of expanding resource and energy consumption. As environmental pollution and ecological damage become more and more serious, the traditional high-energy-consuming, high-pollution economic growth model is no longer sustainable. To deal with this problem, the Chinese government has taken measures to promote the efficient use of resources and energy by increasing energy conservation and emission reduction, encouraging enterprises to carry out green technology innovation, and increasing environmental protection efforts. Secondly, China's manufacturing industry must promote green management and follow the path of sustainable

development. Finally, the green development of enterprises must be people-oriented to build green competitive advantages. The green and low-carbon transformation of enterprises is the microcarrier and basic unit for achieving coordinated and win-win results between economic growth and energy conservation and emission reduction. This article draws on green ideas and related theories to construct a new green HR management model suitable for enterprises to stimulate green behaviors among enterprise employees. It is of important research value to give full play to the key role of individual employees in achieving organizational green goals, promoting the low-carbon transformation of enterprises from the perspective of human green concepts and behaviors, and promoting the low-carbon development of enterprises, industries, and even the entire social economy. This article intends to use scientific guidance to encourage people to actively engage in green behaviors and promote green development for all.

## 1.2 Research Question

- 1) How effective are the Chinese government's current measures in promoting green technology innovation and enhancing energy conservation and emission reduction in industries?
- 2) What are the critical factors influencing the adoption of green management practices in China's manufacturing industry, and how do these practices contribute to sustainable development?
- 3) To what extent does a people-oriented green HR management model contribute to fostering green behaviors among employees and enhancing the low-carbon transformation of enterprises?

## 1.3 Research Objective

The purpose of this article is to start from the basic production factor of green, low-carbon, harmonious development requirements faced by enterprises in the double-carbon era, and analyze the mechanism between green HR management and employees' green behavior.

## 2. Literature Review

### 2.1 Related Concepts and Theories

#### 2.1.1 Green HR Management

Tang et al. (2018) incorporated employee issue awareness and commitment into the definition. They believed that the definition of green HR management: is a HR management practice that aims to promote environmentally friendly use of resources, strengthen the organization's environmental performance, and improve employees' environmental awareness and commitment to management issues. At the same time, green HR management is a yardstick for credibility and development. It improves employees' green behavior and green awareness by adopting green perspectives and green communication channels. Combined with the content of this article, this article adopts this definition.

#### 2.1.2 Employee Green Behaviors

Spontaneous green behaviors are behaviors that are voluntarily implemented by individual employees. Such behaviors are not explicitly required and are therefore not included in the organization's salary and performance evaluation. They are green behaviors that employees

spontaneously implement to achieve sustainable development of the organization (Dumont et al., 2017). However, in addition to active or spontaneous green behaviors, employees' green behaviors are also affected by job responsibility requirements, the impact of the company's green corporate culture, environmental training and activities, and the green behaviors of surrounding colleagues, which in turn leads to the implementation of green behaviors, that is what this article defined follow-up green behavior.

### *2.1.3 Concept and Measurement of Organizational Commitment*

Han Y. & Liao J.Q (2005) combined the career planning cycle to define the organizational commitment cycle and believed that employees have different performance characteristics at different career development stages. This dynamic process includes the interaction and integration of employees and the organization.

### *2.1.4 HR Ecosystem Theory*

The discussion on the HRs ecosystem originated from the research of foreign scholars on the strategic choices of corporate HRs in different environments. Alan Price (2011) and others paid attention to the challenges and coping strategies faced by enterprise HRs under the background of the knowledge economy. In China, Professor Yan A.M of Central South University conducted a systematic study on the HRs ecosystem theory. The HRs ecosystem theory provides an important theoretical basis for green HR management research and helps promote enterprises to achieve greater breakthroughs on the road to environmental protection and sustainable development.

### *2.1.5 Social Exchange Theory*

Social exchange theory advocates that individuals usually follow the principle of exchange in interpersonal interactions and exchange benefits based on the costs paid and rewards received (Blau, 1964), and obligations and responsibilities play a guarantee and promotion role in this process (Cropanzano et al., 2005). Today, this theory has been widely used in the study of the relationship between leaders and subordinates. Research shows that organizational support and superior support can make employees feel cared for by the organization, thereby improving their organizational commitment, loyalty, and positive and friendly behaviors (Temminck et al., 2015). By applying social exchange theory, companies can use the exchange norms of individuals in interpersonal interactions to exchange benefits based on the individual's costs and rewards, such as developing green pay and rewards, better understanding and guiding employee behavior, and achieving green stewardship and the sustainable development goals.

## **2.2 Conceptual Framework**

### Independent Variables

- 1) Green HR Management Dimensions
  - Green Recruitment and Screening
  - Green Training and Development
  - Green Performance and Evaluation
  - Green Salary and Benefits
  - Green Culture and Empowerment

## 2) Organizational Commitment

This variable represents the employees' dedication and loyalty to the organization, influenced by green HR practices.

### Ecological Values (Moderating Variables)

These variables moderate the relationship between green HR management and organizational commitment, influencing how strongly employees align their personal values with ecological principles.

### Dependent Variable

Employee Green Behavior

- Proactive Green Behavior
- Follow-up Green Behavior

## 2.4 Research Hypothesis

### *2.4.1 Green HR Management and Employee Green Behavior*

Research shows that HR policies can affect employees' behaviors, attitudes, knowledge, and motivations related to sustainable development (Boudreau & Ramstad, 2005). Organizational environmental attitudes (Lamm, Tosti-Kharas & King, 2015) and environmental protection measures (Paille & Boiral, 2013) can effectively predict employees' proactive behaviors related to environmental protection. Therefore, this article speculates that green HR management within the organization will guide and promote green behaviors among employees. Based on the above analysis, this article puts forward the following hypotheses:

H1: Green HR management is positively related to employees' green behavior

### *2.4.2 The Mediating Role of Organizational Commitment*

Green HR management identifies employees' environmental protection-related knowledge and abilities through specific measures such as recruitment, training, performance management, and rewards, and emphasizes empowering employees to actively participate in the company's environmental management process (Zibarras & Coan, 2015; Tang Guiyao et al., 2015), employees can actively contribute ideas and suggestions for the organization to solve environmental problems, feel the improvement of their value, and enhance their sense of organizational commitment. Therefore, this article puts forward the following hypotheses:

H2: Green HR management positively affects employees' sense of organizational commitment

Based on social information processing theory, the higher the employee's commitment to the organization, the easier it is for him or her to input positive information about the organization, improve their evaluation of the organization, and show positive work attitudes and behaviors in the organization (Cui X. et al., 2012). Employees with a higher sense of organizational commitment have a stronger intention to stay in the organization, consider themselves a part of the organization, and actively assume responsibility for achieving organizational goals (Mowday, Ati, 1982). Once employees have a psychological commitment to the organization, they will be more involved in the organization, work hard for the organization, and take the initiative to undertake a series of extra-role

behaviors (Copperhakim & Viswesvaran, 2005). Therefore, the higher the employee's sense of organizational commitment, the more able they are to complete environmental protection-related work responsibilities within the normal work scope. At the same time, they actively assume a series of environmental protection responsibilities outside the work scope, continuously improve their environmental protection capabilities, give full play to their environmental protection value, and inspire employees to be green. At the same time, to achieve organizational goals, employees with a high sense of organizational commitment are more concerned about corporate social responsibility and corporate reputation and have a higher degree of recognition of green HR management, so they are more inclined to show green behaviors that are beneficial to environmental management. Therefore, this article puts forward the following hypotheses:

**H3: Organizational commitment positively affects employees' green behavior**

Employees will compare their contributions and inputs to the organization with the rewards they receive. If, through internal evaluation, they believe that the rewards they receive are greater than their inputs, then their commitment to the organization can be improved; otherwise, their commitment to the organization will be reduced. This theory of exchangeability is based on the social exchange theory and fairness theory (Huang J., 2018), and is the main view of the behavioral school represented by Becker, Salancik, and O'Reilly. However, some scholars regard "commitment" as an individual's attitude or affirmative inner wish towards the organization, and as an individual's emotional dependence on a specific organization. Employees continue to stay in an organization not because they have invested too much time, money, energy, etc., nor are they worried that they will lose benefits such as pension insurance after leaving the organization, but because these employees have a lot of emotional dependence on the organization. Among them, organizational commitment includes employees' expectations to do their best to represent the organization and their willingness to stay in the organization, the degree of employee's sense of belonging and loyalty to the organization, acceptance of the organization's goals and values, and positive evaluation of the organization, etc. Content (Buchanan, 1974); organizational commitment is the relative strength of an individual's identification, investment, and attitude towards an organization (Porter et al., 1974); employee commitment to the organization is a manifestation of the normative pressure internalized by the individual, which causes the individual to adjust his behavior to match the organization's goals and interests (Wiener, 1982).

Therefore, organizational commitment plays a mediating role between green HR management and employees' green behaviors. The hypothesis is put forward:

**H4: Organizational commitment plays a mediating role between green HR management and employee green behavior**

### **3. Research Methodology**

#### **3.1 Research Design**

This article employs a quantitative approach utilizing a questionnaire survey method. The questionnaire design incorporates well-established scales to ensure validity and reliability. Surveys are conducted among company employees to collect relevant data, thereby obtaining first-hand information essential for rigorous and scientifically grounded verification research.

### 3.2 Population and Sample

#### *Population*

The population in this study refers to all employees working in various large, medium, and small enterprises located in Chaozhou City.

#### *Sample*

The sample consists of 485 valid responses obtained from the questionnaire survey conducted among employees during the period from early March 2023 to early June 2023. These responses were collected from diverse sources:

- 21 questionnaires through field surveys
- 65 questionnaires at conferences
- 120 questionnaires during training sessions
- 20 questionnaires via mail
- 274 questionnaires through online platforms

### 3.3 Research Instruments

The questionnaire was used to collect data from the survey participants. The questionnaire was designed with well-established scales to ensure reliability and validity in measuring variables related to green HR management, organizational commitment, and employee green behavior.

### 3.4 Data Collection

The data collection in this study involved the distribution and retrieval of 530 questionnaires over a period of 3 months, from early March 2023 to early June 2023. The questionnaires were distributed through multiple channels: 21 questionnaires through field surveys, 65 questionnaires at conferences, 120 questionnaires during training sessions, 20 questionnaires via mail, 274 questionnaires through online platforms. Out of the 530 distributed questionnaires, 502 were recovered. After screening, 485 responses were deemed valid, resulting in an effective recovery rate of 91%.

The survey aimed to capture responses from employees across diverse demographics including genders, ages, educational backgrounds, income levels, and working hours within various large, medium, and small enterprises in Chaozhou City.

### 3.5 Statistics Used for Data Analysis

The collected data, consisting of 485 valid responses, underwent statistical analysis using SPSSAU software to examine and understand the basic characteristics and relationships within the survey sample. This analysis helped in exploring the variables related to green HR management, organizational commitment, and employee green behavior as outlined in the study.



## 4. Data Analysis and Findings

### 4.1 Introduction

This article analyzed the reliability and validity of the questionnaire using 147 pieces of data from the pre-survey. The reliability of each variable exceeded 0.7, with factor loadings surpassing 0.5. Confirmatory factor analysis indicated that the four-factor model was optimal.

The distribution and collection of the questionnaire spanned 3 months, from early March 2023 to early June 2023. During this period, 530 questionnaires were distributed, distributed as follows: 21 through field surveys, 65 at conferences, 120 during training sessions, 20 via mail, and 274 through online platforms. A total of 502 questionnaires were recovered, yielding 485 valid responses. The effective recovery rate reached 91%. The survey encompassed employees of diverse genders, ages, educational backgrounds, income levels, and working hours within various large, medium, and small enterprises in Chaozhou City. Statistical analysis of the 485 valid questionnaires was conducted using SPSSAU software to analyze the basic characteristics of the survey sample, as detailed in Table 1.

**Table 1** Basic Information Statistics (N = 485)

Attributes	Category	Frequency (People)	Percentage (%)
Gender	Male	270	55.7
	Female	215	44.3
Age	18-30	89	18.4
	30-40	120	24.7
	40-50	168	34.6
	Over 50 Years Old	108	22.3
Education	High School (Secondary Vocational School) and Below	271	41.6
	University (Higher Vocational) College	102	29.1
	Undergraduate	90	24.7
	Graduate Students and Above	22	4.5
Nature of Business	State-Owned Enterprises	1	0.2
	Private Enterprise	484	99.8
	Others	0	0.0
Working Years	Less than 1 Year	162	33.4
	1-3	154	31.8
	4-6	89	18.4
	7-9	50	10.3
	10 Years and Above	30	6.2
Job Rank	General Staff	302	62.3
	Grassroots Management	90	18.6
	Middle Management	65	13.4
	Top Management	28	5.8

As shown in Table 1, the survey sample of this study comprises 55.7% male and 44.3% female respondents, reflecting a gender structure consistent with the existing population characteristics. Regarding age distribution, respondents aged 30-40 and 40-50 years constitute significant proportions, at 24.7% and 34.6% respectively. In terms of educational attainment, those

with high school (secondary vocational education) education are the largest group, accounting for 41.6%. Concerning work experience, individuals with 1-3 years of service in their current roles constitute the highest percentage, at 31.8%, aligning with the high turnover rates observed in Chaozhou's ceramic industry in recent years. Private enterprises dominate the survey, representing 99.8% of respondents, mirroring the robust development of the private economy in Chaozhou's ceramics sector since the era of reform and opening up.

Overall, the survey sample is representative and effectively captures the diversity in gender, age, education, tenure, and enterprise nature. It provides insights into employees' attitudes and perceptions regarding green HR management, organizational commitment, and green behaviors.

## 4.2 Data Analysis of the Quantitative Data

### 4.2.1 Descriptive Analysis

Judging from the statistical characteristics of the descriptive statistical analysis results of the green HR management survey results, the mean value of the "company's green employer brand is highly attractive to applicants" evaluation item of the green recruitment and screening variables is relatively high, reaching 3.5000; The mean value of the evaluation item "Company conducts comprehensive training to increase employees' emotional investment in the environmental management process" of the green training and development variable is relatively low, 2.6280, and the standard error of the mean is also small, 0.05564. To a certain extent, it shows that companies currently pay more attention to the implementation of green environmental management system systems and forms, but do not pay enough attention to emotional investment and training; "In the performance management system, the company will punish behavior that fails to complete environmental management goals" of green performance and evaluation. "The average value of the assessment items is relatively low, 2.6548, which means that the companies currently surveyed mainly set environmental protection goals and responsibilities, and conduct performance appraisals mainly based on rewards. The average score of the evaluation question "The company implements financial and tax preferential incentives" for green compensation and rewards are relatively low, at 2.04531; the evaluation question "The company has a clear environmental vision to guide employees' behavior" for green culture and empowerment has the highest score, which means The companies surveyed have high awareness and action ability in terms of environmental awareness and environmental culture, thereby guiding employees to adopt green behaviors. In terms of the standard deviation of each assessment item, the statistics of the standard deviation do not fluctuate much, indicating that the respondents' understanding and attitude towards the five dimensions of green HR management are relatively consistent. Overall, green training and development is relatively high, with an average value of 3.3021; while green performance and evaluation is relatively low, with an average value of 2.9055.

### 4.2.2 Factors Analysis

Based on the above factor analysis, this study uses the five dimensions of green HR management: green recruitment and screening, green training and development, green performance and evaluation, green salary and benefits, and green culture and empowerment as explanatory variables. The two dimensions of behavior (active green behavior and following green behavior) are used as explained variables, and SPSSAU statistical analysis software is used to conduct multiple regression analysis. The analysis results are shown in Table 2.

**Table 2** Regression Analysis Results of Green HR Management on Green Behavior

Type of Variable	Variable	Proactive Green Behavior		Follow-up Green Behavior	
		M1	M2	M3	M4
Constant	-	-6.129	-2.831	-8.639	2.781
Explanatory Variables	Green Recruitment and Screening	0.020**	0.018**	0.010	0.013
	Green Training and Development	0.138***	0.131***	-0.091**	-0.057**
	Green Performance and Assessment	0.122*	0.453*	0.325*	0.342*
	Green Salary and Benefits	0.354**	0.564**	0.234**	0.486**
	Green Culture and Empowerment	0.231**	0.267**	0.389*	0.538*
Control Variables	Age		-0.054		0.018
	Education		0.045		0.081*
	Job Ranks		0.028**		0.119
	Working Years		0.014		-0.011
Model	F	2.878**	1.224*	1.267*	1.649*
Parameters	R2	0.017	0.022	0.008	0.029
	DW	1.787	1.782	1.723	1.735

Note: \*\*\* means significant at the 0.01 level, \*\* means significant at the 0.05 level, \* means significant at the 0.1 level (two-sided test).

From the regression analysis results (Table 3) of the impact of green HR management on employees' green behaviors, it can be seen that although the goodness of fit ( $R^2$ ) is relatively low without control variables and with the addition of control variables, the multiple linear regression equation the DW value of the residuals is relatively close to 2. This result shows that there is no possibility of autocorrelation in the residuals and passes the significance test of the regression equation; the F test statistics are all significant at the 0.01 level. This result shows that the explanatory variables are related to the linear relationship between the explained variables is significant, assuming H1 is established.

**Table 3** Regression Analysis Results of Green HR Management on Organizational Commitment

Type of Variable	Variable	Emotional Commitment		Ongoing Commitment		Normative Commitment	
		M1	M2	M3	M4	M5	M6
Constant	-	0.013	0.003	0.004	6.037	0.002	0.001
Explanatory Variables	Green Recruitment and Screening	0.039**	0.011**	0.024**	0.096**	0.076**	0.087**
	Green Training and Development	0.122	0.143	0.324**	0.897**	0.435**	0.345**
	Green Performance and Assessment	-0.667	-0.765	0.354	0.453	0.879***	0.899***

Control Variables	Green Salary and Benefits	0.435***	0.441***	0.546**	0.765**	0.876	0.956
	Green Culture and Empowerment	0.222***	0.243***	0.456**	0.567**	0.274***	0.341***
	Age		0.076		0.879		0.112
	Education		0.095		-0.256		0.079**
	Job Ranks		0.087		0.875		0.093
	Working Years		0.120**		0.687**		0.103**
	F	14.976***	12.760***	10.505***	9.616***	10.618***	11.254***
	R2	0.172	0.158	0.183	0.170	0.178	0.197
	D-W	1.944	2.028	1.942	1.956	2.028	1.932

Note: \*\*\* means significant at the 0.01 level, \*\* means significant at the 0.05 level, \* means significant at the 0.1 level (two-sided test).

Based on the regression analysis results examining the impact of green HR management on organizational commitment, it is observed that both without control variables and with the addition of control variables, the residual Durbin-Watson (DW) value in the multiple linear regression equation closely approximates 2. This indicates the absence of autocorrelation in the residuals, and the regression equation passes the significance test, with F-test statistics being significant at the 0.01 level. These findings affirm a significant linear relationship between the explanatory variables (green HR management) and the dependent variable (organizational commitment), thereby establishing hypothesis H2.

Furthermore, utilizing factor analysis as detailed in Table 2, this study employs three dimensions of organizational commitment—affective commitment, continuance commitment, and normative commitment - as explanatory variables. The dependent variables are two dimensions of employee green behavior: proactive green behavior and follower behavior. Using SPSSAU for multiple regression analysis, the results in Table 3 indicate that the residual DW values remain close to 2, suggesting no autocorrelation in the residuals. Additionally, the F-test statistics are significant at the 0.01 level, indicating a significant linear relationship between the variables of organizational commitment and employee green behavior. Hence, hypothesis H3 is substantiated.

These results underscore the robustness of the relationships examined and support the contention that green HR management practices significantly influence both organizational commitment and employee green behaviors within the surveyed population.

**Table 4** Regression Analysis Results of Organizational Commitment and Employee Green Behavior

Type of Variable	Variable	Proactive Green Behavior		Follow-Up Green Behavior	
		M1	M2	M3	M4
Constant	-	-8.216	-5.938	-1.080	1.822
Explanatory Variables	Emotional Commitment	0.137**	0.141**	0.061	0.066
	Ongoing Commitment	0.153**	0.149***	0.250**	0.232**
	Normative Commitment	0.246**	0.243***	0.248**	0.249**
Control Variables	Age		-0.023		0.039
	Education		0.017		0.044
	Job Ranks		0.023**		0.094**
	Working Years		-0.025		-0.036
Model Parameters	F	30.950***	13.251***	35.160***	15.911***
	R2	0.219	0.220	0.241	0.253
	D-W	2.047	2.029	1.966	1.964

Note: \*\*\* means significant at the 0.01 level, \*\* means significant at the 0.05 level, \* means significant at the 0.1 level (two-sided test).

This article employs Baron and Kenny's (1986) method to validate the presence of mediation. In the preceding section, a significant correlation between green HR management and employee green behavior has been established. Two key tasks are undertaken in this stage, and the outcomes are presented in Table 3.

Firstly, examining the left part of Table 3, when green HR management serves as the independent variable and organizational commitment as the dependent variable (Model M2), green HR management accounts for 31.8% of the variance in organizational commitment ( $\Delta R^2 = 0.318$ ). Green HR management significantly and positively influences organizational commitment ( $\beta = 0.599$ ,  $p < 0.01$ ).

Secondly, focusing on the right part of Table 3, with organizational commitment as the independent variable and employee green behavior as the dependent variable (Model M5), organizational commitment explains 40.8% of the variance in employee green behavior ( $\Delta R^2 = 0.408$ ). Organizational commitment positively predicts employee green behavior ( $\beta = 0.647$ ,  $p < 0.01$ ), supporting hypothesis H4.

Furthermore, using employee green behavior as the dependent variable and both green HR management and organizational commitment as independent variables, it is found that these variables collectively explain 14.5% of the variance in employee green behavior ( $\Delta R^2 = 0.145$ ). The regression coefficient for organizational commitment on employee green behavior remains significant ( $\beta = 0.469$ ,  $p < 0.01$ ). Importantly, the regression coefficient for green HR management on employee green behavior decreases to 0.326 ( $p < 0.01$ ), lower than its coefficient in the initial stage ( $\beta = 0.608$ ,  $p < 0.01$ ). This difference suggests that organizational commitment partially mediates the relationship between green HR management and employee green behavior, thereby confirming hypothesis H4.

In conclusion, these results highlight the mediating role of organizational commitment in the relationship between green HR management practices and employee green behavior, providing

empirical support for the theoretical framework proposed in this study.

**Table 5** Examination of the Mediating Role of Organizational Commitment

Variable	Mediating Variable: Sense of Organizational Commitment		Dependent Variable: Employee Green Behavior			
	M1	M2	M3	M4	M5	M6
Control Variables						
Age	-0.103	-0.125	-0.081	-0.114	-0.014	-0.021
Education	-0.087	-0.031	-0.032	0.025	0.025	0.032
Job Ranks	0.023	-0.062	0.027	0.113	0.123	0.154
Working Years	0.044	0.023	0.034	0.012	0.005	0.067
Independent Variable						
Green HRs Management		0.599***		0.608***		
Mediating Variable						0.326***
Organizational Commitment					0.647***	0.469***
R2	0.025	0.343	0.023	0.35	0.431	0.495**
$\Delta R^2$	0.025	0.318	0.002	0.327	0.408	0.145
F	1.184	20.376***	1.086	21.009***	29.585***	33.310***

Note: \*\*\* means significant at the 0.01 level, \*\* means significant at the 0.05 level, \* means significant at the 0.1 level (two-sided test).

This study will further test the mediating effect of organizational commitment by using the Hayes (2012) Bootstrap method. Here, Mode7 is selected, using the bias-corrected Bootstrap method and setting a 95% confidence interval. The number of repeated samples is 5000. See Table 4. The test results show that the mediating effect of organizational commitment between green HR management and employee green behavior is significant ( $\beta=0.232$ ,  $p < 0.001$ ). At the same time, the Bootstrap 95% confidence interval of the mediating effect of organizational commitment is [0.167, 0.318], the upper and lower limits of the confidence interval do not include 0, and the mediation effect accounts for 45.1% of the total effect, so hypothesis H4 is further verified.

### 4.3 Summary of the Results

**Table 6** Summary of Research Hypothesis Testing Results

H1: Green HR management is positively related to employees' green behavior	Accepted
H2: Green HR management positively affects employees' sense of organizational commitment	Accepted
H3: Organizational commitment positively affects employees' green behavior	Accepted
H4: Organizational commitment plays a mediating role between green HR management and employee green behavior	Accepted

## 5. Conclusion, Discussion, and Recommendation

### 5.1 Conclusion

Ecological values play a crucial role as a mediator between green HR management practices and organizational commitment within enterprises. This study has developed a robust theoretical framework that underscores the significance of aligning organizational values with employees' ecological beliefs. When employees perceive strong alignment between their personal ecological values and the organization's green initiatives, they exhibit higher levels of organizational commitment. This alignment fosters a sense of belonging and mutual cooperation, leading to sustained efforts towards achieving organizational green goals and advancing sustainable development.

### 5.2 Discussion

The findings highlight several key insights for organizations aiming to enhance employee green behaviors through strategic HR management. Firstly, building a HR management mechanism centered on organizational commitment involves integrating green practices comprehensively across recruitment, training, performance evaluation, compensation, and organizational culture. This holistic approach ensures that sustainability becomes ingrained in the organizational DNA, influencing employee behaviors positively.

Secondly, efforts to bolster employees' organizational commitment should focus on creating an inclusive and supportive workplace environment. Providing opportunities for skill development, recognizing and rewarding green initiatives, and fostering transparent communication about sustainability efforts are crucial steps in nurturing a committed workforce.

Moreover, the mediating role of ecological values underscores the importance of authenticity and transparency in organizational green initiatives. Organizations must actively communicate their commitment to environmental stewardship, aligning their actions with employees' ecological values to strengthen organizational cohesion and commitment.

### 5.3 Recommendation

Moving forward, this study suggests several recommendations for future research and practical implementation:

- **Expand Sample Sources:** Future studies should broaden the scope of survey samples to enhance the external validity of research findings across diverse organizational contexts and industries.
- **Enrich Conceptual Models:** Further research should enrich and expand the conceptual model using multivariate statistical analysis to delve deeper into the internal mechanisms influencing employees' green behaviors. This approach will provide more nuanced insights into the interplay between green HR practices, ecological values, and organizational commitment.
- **Implement Strategic Initiatives:** Organizations are encouraged to implement strategic initiatives that strengthen the link between green HR management and organizational commitment. This includes developing tailored HR policies that foster a culture of



sustainability, enhancing employee engagement in green practices, and leveraging ecological values as a driving force for organizational success in sustainability endeavors.

By addressing these recommendations, organizations can effectively cultivate a workforce that is not only committed to organizational goals but also actively contribute to environmental sustainability, thereby enhancing competitive advantage and long-term viability in a global context increasingly focused on sustainable development.

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