Green human resource management, green organization identity and organizational citizenship behavior for the environment: the moderating effect of environmental values

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Abstract
Purpose – Green human resource management (GHRM) is a new management philosophy and pattern that applies the concept of “green” to human resource management, which plays an important role in realizing environmental goals and obtaining competitive advantage. Based on 201 effective samples from 3 manufacturing enterprises, this study investigates the relationship between GHRM, green organization identity (GOI), environmental values and organizational citizenship behaviors for the environment (OCBEs). The results show that GHRM has a significant positive impact on OCBEs, and GOI plays an intermediary role in the relationship between GHRM and OCBEs, and environmental values moderate the impact of GHRM on GOI and OCBEs. The findings have important theoretical implications for enterprises to achieve green development strategy.

Design/methodology/approach – This study selects three manufacturing enterprises certified by the environmental management system ISO14001, which meet the environmental protection requirements of the Chinese Government, local communities and customers. Through interviews and referring to enterprise documents, the researchers find that the enterprises have set environmental protection standards such as energy consumption, solid waste emissions, water consumption and waste recycling. The enterprises surveyed have adopted the GHRM practice, such as green training for employees, encouraging employees to participate in green activities and so on. This study collects data in two ways: on-the-spot and entrustment questionnaire distribution. In the first stage, the data of GHRM and environmental values were collected. A total of 277 questionnaires were distributed and 264 were sent back, among them 252 were valid.

Findings – GHRM has a positive impact on OCBEs. GOI mediates the influence of GHRM on the OCBEs, and environmental values moderate the effect of GHRM on organizational identity and OCBEs.

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This paper investigates the effect and mechanism of GRHM in China and provides theoretical guidance for enterprises to implement green management effectively.

**Keywords** Green human resource management, Green organization identity, Environmental values, Organizational citizenship behavior for the environment

**Paper type** Research paper

1. **Introduction**

In recent years, environmental issues such as environmental degradation, biodiversity reduction, water pollution, global warming and smog have become increasingly prominent, which arises keen concerns on the sustainable development of environment. As the main makers of the environmental issues, companies have formulated relevant green measures to achieve and maintain sustainable development. However, effective implementation and reinforcement of green measures largely depend on the employees’ attitude toward the organizational citizenship behavior for the environment (OCBE) (Priyankara et al., 2018). Therefore, HRM practitioners faces the challenge of generating, developing and maintaining green workforces that demonstrating OCBE (Priyankara et al., 2018; Renwick et al., 2013).

OCBE is defined as “individual and discretionary behaviors that are not explicitly recognized by the formal work requirements and that contribute to the efficiency of environmental practices” (Boiral, 2009), which includes eco-civic engagements, eco-initiatives, and eco-helping behavior of employees (Boiral and Paillé, 2012). OCBE is a useful supplement to the green development strategies of companies by improving the efficiency of organizational green management measures and ultimately contributing to the sustainable development of the environment. A number of studies have sought to examine the factors of OCBE at the individual level (Norton et al., 2015), such as personal rationale for organizational sustainability (Tosti-Kharas et al., 2017), environmental commitment (Wang et al., 2017), involvement capability (Alt and Spitzeck, 2016), ecological value (Tian et al., 2019), and leader support (Priyankara et al., 2018). Researches have confirmed that single Green human resource management (GHRM) practice such as green training (Pham et al., 2018; Pham et al., 2019), green performance management (Pham et al., 2019), and green involvement (Pham et al., 2019) can enhance OCBE. Besides, literatures suggest that GHRM practices shape employees’ green behavior through different social and psychological processes (Dumont et al., 2017; Kim et al., 2019; Luu, 2019). However, how and when GHRM influences employees’ OCBE still remain unknown (Renwick et al., 2013; Dumont et al., 2017; Chaudhary, 2019).

This study attempts to address the research gap by exploring the influence of GHRM on employees’ OCBE. Drawing on the social identity theory, this study develops and tests a theoretical model demonstrating the psychological processes through which GHRM influences employees’ OCBE. Specifically, this study argues that GHRM practices would be positively related to OCBE from the perspective of behavioral HRM. Moreover, the contextual factors of organizations such as GHRM practices shape employees’ green organization identity (GOI) (employees’ interpretive scheme about environmental management and environmental protection) (Chen, 2011; Mittal and Dhar, 2016) and in consistent with the organizational identity literature GHRM practices would lead to GOI, which in turn promotes employees’ OCBE. Further, this study invokes supplies-values fit theory to explore the moderating role of environmental values in the relationships between GHRM and GOI/OCBE. The objectives of this research are threefold as follows:
2. Theory and hypotheses

2.1 Green human resource management and organizational citizenship behavior for the environment

As an important part of green management system, GHRM is a new management philosophy and pattern applying the concept of “green” to human resource management with the aim to realize the strategic goal of corporate environmental management by adopting “green” management approaches (Tang et al., 2015; Jabbour, 2016; Yusliza et al., 2017). GHRM is a group of complementary and coordinated practices such as green recruitment, green training, green performance evaluation and green reward aiming at cultivating green values, green knowledge and green skills, as well as encouraging employees to participate in corporate social responsibility actions and ultimately the corporate environmental performance is improved (Tang et al., 2015; Shen et al., 2018; Longoni et al., 2018). There have been increasing studies devoting to exploring the effect of GHRM since the concept of GHRM was proposed (Haddock-Millar et al., 2016; O’Donohue and Torugsa, 2016). For instance, recent studies have shown that green job analysis, green recruitment, green performance appraisal, green training and green reward significantly enhance corporate green performance (Haddock-Millar et al., 2016; Zibarras and Coan, 2015). Many scholars argue that GHRM is the key to successfully implementing green strategy and environmental management practices (Renwick et al., 2016; Ren et al., 2018; Wehrmeyer, 1996). GHRM reflects the HRM in environmental management, which lays emphasis on the role of HRM in pollution prevention and control and environmental protection in corporate operation (Tang et al., 2015). Therefore, GHRM has recently become an emerging topic in corporate environmental management.

OCBE are spontaneous social behaviors that are not required by formal compensation systems and regulations, but help to improve the effectiveness of organizational environmental management (Paille et al., 2014). Individual environmental awareness, organizational environment, external social environment and leadership style have significant impacts on individual’s OCBE (Lin et al., 2015; Zhang et al., 2018). However, researches on how GHRM affects OCBE have not received much attention.

This study argues that GHRM influences OCBE for several reasons. First, GHRM practices (e.g. green job design, green training, and green performance management) can be
considered as organizational level resources that shape employees’ green-related values, knowledge and skills, and help them participate in green activities (Tang et al., 2015; Tariq et al., 2016) and motivate employees to voluntarily engage in OCBE. Second, HRM theories indicate that effectiveness of HRM practices in guiding right workplace behavior depends on employees’ apprehension of the need and urgency to adopt such practices (Chaudhary, 2019; Nishii et al., 2008). Implementing GHRM practices may indicate organization’s commitment to devote to environmental protection and therefore encourage employees to strive to undertake more green behaviors. Third, GHRM practices such as green promotion, green evaluation, as well as green rewards and compensation stimulate employees proactively engage in environmental protection behaviors. Last, adopting GHRM practices makes employees feel be appreciated and valued by their organizations. Therefore, employees are more obligated and motivated to exhibit voluntary green behaviors. According to the empirical findings, GHRM practices have a positive effect on green behaviors (Dumont et al., 2017; Saeed et al., 2019; Zhang et al., 2019). Thus, this study proposes the hypothesis below:

\[ H1. \text{ GHRM is positively related to OCBE.} \]

2.2 Mediating role of green organization identity
Organizational identity is the collective cognitive framework of the organization which influences the actions of employees (Albert and Whetten, 1985). Organizational identity resides in the shared interpretive scheme collectively constructed by members to provide meaning to their experience (Gioia, 1998). When the environmental consideration becomes an integral part of the organizational identity, it is difficult for a corporate to ignore its environmental impacts and responsibilities that are legitimated as an integral component of its identity (Sharma et al., 1999; Song and Yu, 2018). Chen (2011) proposes a novel concept GOI which refers to “an interpretive scheme about environmental management and protection that members collectively construct to provide meaning to their behaviors.” This concept presents a broader approach to study the behaviors of employees in the workplace. However, scare researches have investigated the relationship between GHRM and GOI since Chen (2011).

In consistent with the social identity theory, this study argues that GOI mediates the relation between GHRM and OCBE. Social identity theory argues that external signals in the form of organizational information (e.g. values, polices, and management) are transmitted within and outside the organization, and it is this information that influences how employees view the organization and its intentions (Shen et al., 2018; Tajfel and Turner, 1979). Therefore, employees are inclined to classify themselves as enterprises with good environmental responsibility and have high degrees of identity with such enterprises. GHRM policies and practices aim at achieving environmental sustainability tend to increase an organizational external image and reputation as a good corporate citizen. The enhancement of the prestige and reputation of the organization strengthens employees’ self-concept and self-esteem, which in turn improves their identification with the organization (Chaudhary, 2019). Further, adopting GHRM practices by building the atmosphere of green learning for employees (Luu, 2019), green training, green rewards and recognizing employee green contributions are inclined to enhance employees’ skills and provide them with opportunities to engage in green activities (Shen et al., 2018). Moreover, green employee involvement and skill development make employees closely linked with the organization and find their work more meaningful and valuable and accordingly enhance their GOI, which has been proved by previous studies (Chaudhary, 2019; Chen, 2011).
According to social identity theory, employees are likely to choose behaviors that align with their organizational identification (Ashforth and Mael, 1989). With high levels of GOI, employees feel psychologically connected with their organizations and exhibit more concerns for the environmental goals and sustainable development. Hence, employees are more motivated to display more voluntary green behaviors that benefit their organizations. Based on social theory, employees will invest more efforts in discretionary behaviors when they identity with their organization, contributing to achieve sustainable goals of the organization. Recent studies (Chaudhary, 2019; Shen et al., 2018) have proved that organizational identification mediates the relationship between GHRM and employees’ voluntary green behaviors. Thus, this study proposes the following hypothesis:

H2. GOI mediates the relationship between GHRM and employees’ OCBE.

2.3 Moderating role of environmental values
Environmental values comprise multiple meanings in environmental research. In this study, environmental values refer to the perceived importance of ecological sustainability and the desire of taking actions to protect the environment (Agle and Caldwell, 1999; Mustonen et al., 2016). Environmental values are considered to play a central role in guiding employee’s environmental behaviors (Vermersch et al., 2016). Previous studies have shown that individual environmental values have significant influences on environmental behaviors (Dumont et al., 2017; Chaudhary, 2019; Andersson et al., 2005; Chou, 2014). Hence, environmental values are key factors affecting organizational environment management (Subramanian et al., 2016). The supplies-value fit theory (Edwards and Lambert, 2007) holds that if the employees’ values are consistent with those of the organization, they will show positive work attitudes and behaviors. This study contends that employees’ environmental values are important determinants of the extent to which GHRM is related to employees’ GOI and OCBE.

When an individual’s environmental values coincide well with those of an organization, he or she will display high level of organizational identity, work significance and positive behaviors (Dumont et al., 2017; Edwards and Shipp, 2007; Paarlberg and Perry, 2007). Employees usually make clear judgments on HRM policies and behaviors which determines whether the psychological needs of employees are met or not (Owino and Kwasira, 2016). Therefore, this study suggests that if an organization shapes an environment (e.g. GHRM) that conforms to employees’ values; employees with environmental values are more likely to demonstrate positive attitudes (e.g. GOI). GHRM practices and the sustainable environment of the organization reflect green values of the organization (Chaudhary, 2019). When communicated effectively to employees, they will be informed of the organization’s green goals. Thus, when employees’ values are well matched with that of the organization, they are more inclined to identity with the organization. Thus, this study proposes the hypothesis below:

H3-1. Environmental values positively moderate the relationship between GHRM and GOI.

On the same lines, when there is a favorable environment in the organization that cultivates employees’ environmental values and when employees’ environmental values are similar to that of the organization to some extent, they are more inclined to display green workplace behavior (Edwards and Shipp, 2007). Since GHRM embodies organization’s environmental values (Chaudhary, 2019; Shen et al., 2018), it is expected that employees’ environmental
values may influence the association between GHRM and OCBE. A high level of environmental values in the organization that proactively carries out GHRM practices shows its attempt of achieving a balance among economic benefits, social benefits, and environmental benefits. Therefore, the positive effect of GHRM on OCBE will be augmented. In contrast, when the level of environmental values is low the positive effect of GHRM on OCBE will be weakened. Thus, this study proposes the hypothesis below:

\[ H3-2. \] Environmental values positively moderate the relationship between GHRM and OCBE.

3. Methodology

3.1 Sample and data collection

According to the previous research (Ren et al., 2018), this study selects three manufacturing enterprises certified by the environmental management system ISO14001 which meet the environmental protection requirements of the Chinese government, local communities and customers. Through interviews and refers to enterprise documents, the researchers find that the enterprises have set environmental protection standards such as energy consumption, solid waste emissions, water consumption and waste recycling. The enterprises surveyed have adopted the GHRM practice, such as green training for employees, encouraging employees to participate in green activities and so on. This study collects data in two ways: on-the-spot and entrustment questionnaire distribution. In the first stage (November 1 to December 31, 2018), the data of GHRM and environmental values were collected. A total of 277 questionnaires were distributed and 264 were sent back, among them 252 were valid. In the second stage (April 1 to May 31, 2019), GOI and OCBE were collected, 252 questionnaires were distributed to the respondents of valid questionnaires in the first stage, and 235 questionnaires were sent back, among them 201 were valid. Among the respondents of the valid questionnaires, 121 were males (60.2%) and 80 were females (39.8%). 102 (50.7%) were 21–30 years old, 76 (37.9%) were 31–40 years old, and 23 (11.4%) were 41–50 years old. As for the education, there was 1 junior high school education (0.5%), 18 were senior high school or technical secondary school (9.0%), 37 were junior college (18.4%), 127 were undergraduate (63.1%) and 18 held a master degree or higher level of education (9.0%). The average organizational tenure of the participants was 8.4 years (SD = 7.1).

3.2 Variable measurement

3.2.1 Green human resource management. The measurement scale developed by Dumont et al. (2017) including 6 items is adopted to measure GHRM. For example, “The company assesses the green behavior of its employees in the workplace during promotion.” For all measures, a five-point Likert-type scale was used (ranging from 1 to 5 with 1 indicating “completely disagree” and 5 indicating “completely agree”). Cronbach’s coefficient of the scale is 0.903.

3.2.2 Green organization identity. The measurement scale developed by Mittal and Dhar (2016) is adopted to measure GOI, including 6 items. For example, “Employees believe that the company attaches great importance to environmental management and protection.” For all measures, a five-point Likert-type scale was adopted (ranging from 1 to 5 with 1 indicating “completely disagree” and 5 indicating “completely agree”). Cronbach’s coefficient of the scale is 0.904.

3.2.3 Environmental values. Environmental values are measured by the scale developed by Chou (2014) including 3 items. For example, “I think I have an obligation to do everything
I can to prevent the deterioration of the environment.” For all measures, a five-point Likert-type scale was adopted (ranging from 1 to 5 with 1 indicating “completely disagree” and 5 indicating “completely agree”). Cronbach’s coefficient of the scale is 0.942.

3.2.4 Organizational citizenship behaviors for the environment. OCBE are measured by the scale developed by Raineri and Paille (2016) including seven items. For example, “I will make recommendations on how to protect the environment more effectively.” For all measures, a five-point Likert-type scale was adopted (ranging from 1 to 5 with 1 indicating “completely disagree” and 5 indicating “completely agree”). Cronbach’s coefficient of the scale is 0.904.

3.2.5 Control variables. Referring to the previous researches (Dumont et al., 2017), this study selects gender, age, education and tenure as control variables.

4. Empirical analysis
4.1 Confirmatory factor analysis of variables
Table 1 shows that the four-factor model (GHRM, GOI, environmental values, OCBE) is superior to other competitive models.

4.2 Correlation analysis of variables
Table 2 shows that there is a significant positive correlation between GHRM and OCBE ($r = 0.396, p < 0.01$); there is a significant positive correlation between GHRM and GOI ($r = 0.450, p < 0.01$); there is a significant positive correlation between GOI and OCBE ($r = 0.521, p < 0.01$).

4.3 Hypothesis test
4.3.1 Main effect test. Table 3 shows that GHRM has a significant positive effect on OCBE ($M_4, \beta = 0.390, p < 0.001$) which support $H1$.

4.3.2 Mediation effect test. According to the mediation test method recommended by Baron and Kenny (1986), this study tested the mediation effect of GOI. As can be seen from Table 3, model M3 tests the impact of control variables (gender, age, education, and tenure) on OCBE. M4 tests the influence of control variables and GHRM on OCBE; M5 tests the impact of control variables, GHRM and GOI on OCBE. The regression coefficients of M2 model in Table 3 indicate that GHRM has a significant positive effect on GOI ($M_2, \beta = 0.437, p < 0.001$). The regression coefficients of M4 model in Table 3 indicate that GHRM has a significant positive effect on the OCBE ($M_4, \beta = 0.416, p < 0.001$). The regression coefficients of model M5 in Table 3 indicate that GOI has a significant positive effect on OCBE after adding GOI on the basis of M4 ($M_5, \beta = 0.205, p < 0.01$), while GHRM still has a significant positive impact on GHRM ($M_5, \beta = 0.205, p < 0.01$), indicating that GOI has
partial mediating effect in the relationship between GHRM and OCBE. Thus, H2 is supported.

To further test the mediating effect of GOI, this study uses Preacher and Hayes’ PROCESS macros (Preacher and Hayes, 2004) to test the mediating effect of GOI on the relationship between GHRM and OCBE. Bootstrap is randomly sampled 5,000 times, and the confidence interval is 95%. According to the results of Bootstrap method, GHRM plays a significant role in mediating OCBE through GOI ($r = 0.168$, 95% confidence interval is [0.095, 0.265]). Therefore, the mediating effect of GOI is significant, and H2 is further verified (Table 4).

4.3.3 Moderating effect test. To test the moderating effect of environmental values in H3, the interaction item is introduced into the regression model. Table 5 shows that interaction item (GHRM × environmental values) has a positive impact on GOI (M7, $\beta = 0.177$, $p < 0.05$), and the $R^2$ of GOI increases by 0.013. Therefore, H3-1 is supported. To illustrate the moderating effect of environmental values on GOI more clearly, this study takes the positive and negative standard deviation of the mean value of environmental values (Figure 2).

As can be seen from Table 4 that the interaction item (GHRM × environmental values) has a positive impact on OCBE (M9, $\beta = 0.131$, $p < 0.005$), and the $R^2$ of OCBE increases by 0.017. Thus, H3 is supported. To illustrate the moderating effect of environmental values on OCBE more clearly, this study takes the positive and negative standard deviation of the mean value of environmental values (Figure 3).

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tr>
<td>(1) Gender</td>
<td>0.398</td>
<td>0.490</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>(2) Age</td>
<td>31.801</td>
<td>6.451</td>
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<td></td>
<td></td>
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<tr>
<td>(3) Education</td>
<td>3.711</td>
<td>0.772</td>
<td>−0.025</td>
<td>−0.271**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Tenure</td>
<td>8.483</td>
<td>7.099</td>
<td>0.090</td>
<td>0.896**</td>
<td>−0.311**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(5) GHRM</td>
<td>3.939</td>
<td>0.684</td>
<td>−0.145*</td>
<td>0.026</td>
<td>0.104</td>
<td>−0.052</td>
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<tr>
<td>(6) GOI</td>
<td>3.776</td>
<td>0.665</td>
<td>−0.124</td>
<td>0.001</td>
<td>−0.008</td>
<td>−0.068</td>
<td>0.450**</td>
<td>1</td>
<td></td>
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<tr>
<td>(7) Environmental values</td>
<td>3.420</td>
<td>0.811</td>
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<td>0.025</td>
<td>−0.059</td>
<td>−0.054</td>
<td>0.414**</td>
<td>0.523**</td>
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<tr>
<td>(8) OCBE</td>
<td>3.500</td>
<td>0.619</td>
<td>−0.104</td>
<td>0.091</td>
<td>−0.065</td>
<td>0.037</td>
<td>0.396**</td>
<td>0.521**</td>
<td>0.563**</td>
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</table>

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

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<th>GOI M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
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<td>Tenure</td>
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<td>−0.193</td>
<td>−0.215</td>
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<td>GHRM</td>
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<td>0.437***</td>
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<td>0.390***</td>
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<td>GOI</td>
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<td>0.217</td>
<td>0.03</td>
<td>0.174</td>
<td>0.315</td>
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<td>$\Delta R^2$</td>
<td>0.036</td>
<td>0.181***</td>
<td>0.03</td>
<td>0.144***</td>
<td>0.141***</td>
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</table>

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$
5. Conclusions and discussion
This study discusses the effect and mechanism of GHRM illustrated in Table 6. First, this study investigates the impact of GHRM on the OCBE. Second, it discusses how GHRM affects OCBE mediated by GOI. Last, it discusses the moderating effect of environmental values on the relationship between GHRM, GOI and OCBE.

5.1 Theoretical contributions
This study has several theoretical implications.
First of all, this study suggests that GHRM has a positive impact on OCBE. As an emerging concept GHRM has not received adequate attentions of empirical researches (Shen et al., 2018). Owing to previous empirical research mainly explored the relationship between GHRM and employee behavior with data from western developed countries while studies on

<table>
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<tr>
<th>Direct effect</th>
<th>Effect</th>
<th>SE</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
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<td>GHRM → OCBE</td>
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<td>0.061</td>
<td>0.003</td>
<td>0.064</td>
<td>0.306</td>
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<td>Indirect effect</td>
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<tr>
<td>GHRM → GOI → OCBE</td>
<td>0.168</td>
<td>0.043</td>
<td>0.095</td>
<td>0.265</td>
<td></td>
</tr>
<tr>
<td>Total effect</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>GHRM → OCBE</td>
<td>0.353</td>
<td>0.063</td>
<td>0.000</td>
<td>0.273</td>
<td>0.518</td>
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Table 4. Bootstrap: Direct and indirect effects of GHRM on OCBE

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<td>Gender</td>
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<td>Tenure</td>
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<td>GHRM</td>
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<td>0.283***</td>
<td>0.202**</td>
<td>0.204**</td>
</tr>
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<td>environmental values</td>
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<td>0.403***</td>
<td>0.479***</td>
<td>0.485***</td>
</tr>
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<td>GHRM × environmental values</td>
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<td>0.373</td>
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</tr>
<tr>
<td>$R^2$</td>
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<td>0.306</td>
<td>0.013*</td>
<td>0.326***</td>
<td>0.017*</td>
</tr>
</tbody>
</table>

Table 5. Results of moderating effect analysis

Figure 2. Moderating effect of environmental values on the relationship between GHRM and GOI
Asian countries are scarce (Renwick et al., 2013; Tang et al., 2015), this study explores how GHRM influences employees’ OCBE in the Chinese context and reveals that GHRM is positively related to employees’ OCBE, which is consistent with previous studies (Dumont et al., 2017; Zhou and Zhang, 2018). This study empirically confirms that GHRM is an active driving force that encourages employees’ OCBE. Unlike traditional organizational citizenship behavior, OCBE is a particularly useful consequence variable for studying the role of GHRM because OCBE helps to reduce negative impact of corporate actions which are elicited by organizational principals, policies and practices. Further, in view of evidences show that GHRM is an important factor in motivating employees to exhibit OCBE, this study develops and verifies a theoretical research model in China, which extends the cross-cultural research on GHRM and increases the universal applicability of practical measures.

Second, this study extends the research on GHRM by introducing a useful mediator to explicate how GHRM enhances employees’ OCBE. The result is consistent with Pham et al. (2019), Kim et al. (2019), and Chaudhary (2019), which demonstrates that employee’s OCBE is contingent on implementing GHRM via the mediating role of GOI. In doing so, this research finds that GOI is a key “bridge” through which GHRM encourages employees to display OCBE. In addition, in line with previous findings (Chaudhary, 2019; Shen et al., 2018), this study shows that GOI is a causal mechanism that GHRM results in various types of green behaviors. This study illustrates the psychological process of the influence of GHRM on employees’ OCBE at micro level and advances HRM literature. Besides, focusing on employee’s OCBE, this study contributes to corporate sustainability programs in terms of minimizing natural resources consumption, emissions, and pollution.

Finally, this study suggests that environmental values moderate the impacts of GHRM on GOI and OCBE. Prior studies found that the extent to which GHRM ultimately leads to positive outcomes may depend on boundary conditions (Dumont et al., 2017; Shen et al., 2018). This study examines the moderating effects of environmental values on GHRM-GOI and GHRM-OCBE. The results indicate that environmental values moderate the effect of

![Figure 3. Moderating effect of environmental values on the relationship between GHRM and OCBE](image)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong>: GHRM is positively related to OCBE</td>
<td>yes</td>
</tr>
<tr>
<td><strong>H2</strong>: GOI mediates the relationship between GHRM and employees’ OCBE</td>
<td>yes</td>
</tr>
<tr>
<td><strong>H3</strong>: Environmental values positively moderate the relationship between GHRM and GOI</td>
<td>yes</td>
</tr>
<tr>
<td><strong>H4</strong>: Environmental values positively moderate the relationship between GHRM and OCBE.</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 6. The research results
GHRM on employees’ GOI and OCBE, which is consistent with the prior findings (Pham et al., 2019; Wehrmeyer, 1996), that is, contingency factors influence the effect of GHRM. This finding helps us better explain the social and psychological processes in which GHRM affects employees’ green attitudes and behaviors and help us understand the role of GHRM in organizations.

5.2 Managerial implications
This study has some managerial implications for Chinese enterprises.

First, it is necessary for enterprises to proactively implement GHRM practices. Enterprises should provide effective green education and training for employees to enhance green knowledge and skills for effectively engaging in green activities. Moreover, the promotion, compensation and rewards of employees should base on the green performance standards.

Second, organizations should enhance the levels of GOI of employees. This study shows that GHRM promotes employees’ OCBE through GOI. Therefore, GHRM practices should reflect the principles and value of organizational green management, which ensures that employees can identify with organizational green goals. In addition, organizations should make employees be informed of the intention of GHRM practices, such as training, promotion, and rewards, so as to enhance their understanding of corporate green strategy, promote their green recognition and stimulate them to undertake more environmental behaviors.

Third, organizations can cultivate employees’ green belief and green consciousness through green culture so that employees internalize the environmental values and environmental goals of organizations as their own mission to carry out more voluntary green behaviors.

5.3 Limitations and future directions
This study has several limitations. First, it investigates employees’ responses toward GHRM merely from the individual-level perspective. As strategic HRM scholars (Wright and Boswell, 2002; Chang et al., 2014) note, there is a dearth of research aimed at understanding how multiple HRM practices influence individual’s attitudinal and behavioral outcomes. Hence, future research would integrate firm and unit level as well as macro and micro level GHRM to investigate the effect of GHRM on individual-level outcomes. Second, although this study explores the mechanism of GHRM by introducing GOI, GHRM literature shows that GHRM affects employee outcomes via a variety of potential mechanisms (Dumont et al., 2017; Kim et al., 2019). Future researches might choose other mediating variables (e.g. green commitment, green self-efficacy, green trust, and psychological green climate) or moderating variables (e.g. environmentally specific servant leadership, green organizational climates, and leader’s support for environment). Third, this study investigates the effect of GHRM on OCBE at the individual level. Future researches might examine the impact of firm and team level GHRM practices on firm and unit level outcomes (e.g. firm performance, firm reputation, team creativity, and team innovation performance).

References


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