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How to Improve Green Behaviour of Employees in Chinese Universities? The effects of Responsible Leadership, Organizational Ethical Climate, and Psychological Capital

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ABSTRACT

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Chinese Universities, Responsible Leadership, Employees Green Behaviours, Organizational Ethical Climate, Psychological Capital.

Purpose: today's environmental In world, sustainability holds significant importance. Employees, particularly those in higher education institutions in China, are strategically positioned to advocate for and implement green practices. Purpose: This study investigates the impact of responsible leadership on the green behaviour of staff in Chinese universities, with psychological capital serving as a mediating variable and organizational ethical climate acting as a moderating factor. Method: A survey involving 568 employees from universities in Jiangsu, Zhejiang, and Shandong provinces was conducted. Data were gathered through a structured questionnaire and analysed using structural equation modelling to evaluate the proposed hypotheses. Findings: The

results reveal that responsible leadership has a significant and positive impact on employees' green behaviours. Psychological capital partially mediates this relationship, and organizational ethical climate positively moderates it. These findings suggest that strengthening responsible leadership, boosting psychological capital, and cultivating a positive organizational ethical climate can effectively enhance the green behaviour of university employees. Implications: University management should focus on recruiting and developing individuals with a strong sense of responsibility, including environmental awareness. Additionally, emphasis should be placed on developing employees' psychological capital and fostering a positive organizational ethical climate. These efforts will contribute significantly to the responsible use of natural resources within the institution and support the broader goal of promoting environmental sustainability.

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Introduction

In recent years, ecosystems are increasingly recognized as networks of interaction and interdependence among all living and non-living factors on Earth, highlighting the essential role of human stewardship in preserving biodiversity and maintaining ecosystem integrity and stability (Klein et al., 2022). Ensuring environmental sustainability has become a critical concern for decision-makers, driving the search for innovative approaches within traditional human resource management. Additionally, Asian countries, with generally lower emphasis on environmental management, are more susceptible to pollution and environmental degradation. As key players in environmental management, numerous institutions and organizations actively engage in various initiatives. However, they often fall short in effectively guiding and encouraging employees to adopt "green" or environmentally friendly behaviours (Khan et al., 2022).

Employees' behaviour patterns and habits significantly influence environmental protection. Daily practices such as energy use in offices, paper consumption, and transportation choices during business trips directly impact an institution's or organization's environmental effectiveness (Al-Swidi et al., 2021). Thus, relying solely on technological and managerial advancements without addressing employee behaviour is inadequate. Institutions and organizations should not only focus on technological and managerial innovation but also prioritize guiding and fostering environmentally conscious behaviours among employees. Through education, incentives, and other strategies, inspiring employees' environmental awareness and initiative is crucial for collectively advancing towards a greener and more sustainable Earth.

In recent years, an increasing number of universities worldwide have focused on integrating environmental management into their core services (Aboramadan, 2022). Higher education institutions are dedicated not only to equipping students with professional skills and knowledge but also to encouraging all members—including faculty, research staff, administrative personnel, and students—to adopt green and environmentally friendly practices in their daily activities. In the context of higher education, employees' behaviours are vital for reducing environmental degradation and achieving effective environmental performance. Moreover, these behaviours play a crucial role in educating students about sustainable practices, potentially fostering a ripple effect that extends to society and communities at large.

When teachers actively engage in green behaviours, they not only serve as role models for students but also integrate environmental concepts into students' daily learning and lives through their actions (Schelly et al., 2012). Additionally, these behaviours enhance the international image and reputation of higher education institutions. In an era where environmental conservation is highly valued, institutions that practice green behaviours are more likely to receive recognition and praise from the global community. This not only boosts the institution's international influence but also attracts outstanding students and faculty. Consequently, higher education institutions should embrace the concept of "green development" and encourage faculty and staff to contribute to environmental conservation and protection (Del-Castillo-Feito et al., 2020). Analysing the antecedents of employees' green behaviours is essential for informing future organizational decisions (Ahmad et al., 2021). Evidence suggests that various leadership styles, such as transformational

leadership (Öğretmenoğlu et al., 2022), inclusive leadership, servant leadership, and green leadership (Nawaz Khan, 2023), can influence employees' green behaviours. While there is increasing academic focus on leadership as a driver of green behaviours in various organizational contexts, research specifically targeting the higher education sector remains limited.

Responsible leadership integrates ethical values, social responsibility, and leadership principles (Antunes & Franco, 2016). This leadership style emphasizes the importance of community stakeholders, making it particularly relevant for environmental protection. Responsible leadership views the environment as a key stakeholder and prioritizes the sustainability of both society and ecosystems, striving for a harmonious balance among individuals, society, and the environment (Miska & Mendenhall, 2018). This approach aligns with the principles of green behaviour, as responsible leadership goes beyond profitability to champion sustainability, social responsibility, and environmental stewardship as core elements of effective leadership in the contemporary era (Miska et al., 2018).

Drawing on Social Learning Theory, the interaction among individual, behavioural, and environmental factors forms a triadic interplay (Bandura, 2001). The process through which employees perceive responsible leadership and translate it into green behaviour is intricate, with individual psychological factors playing a crucial mediating role. Psychological capital, which encompasses self-efficacy, hope, optimism, and resilience, reflects an individual's positive psychological state. When individuals perceive support from their leaders, these positive psychological resources are activated, prompting them to more proactively adopt environmental strategies and engage in green behaviours to assist the organization in achieving its sustainability objectives.

In addition to individual perspectives, Social Learning Theory can be applied to organizational and collective environments, with the organizational ethical climate representing this team-level social learning perspective. The organizational ethical climate refers to the shared views among members or subsets of an organization regarding what constitutes appropriate behaviour (Martin & Cullen, 2006). Given that perceptions of the organizational climate can vary across different units or organizations (Victor & Cullen, 1988), this study considers the organizational ethical climate as a moderating factor in examining the impact of environmental factors on responsible leadership and employees' green behaviours within educational institutions.

Bush (2017) highlights that leadership theories are often developed and refined in Western contexts before being applied to other regions. Responsible leadership theories, in particular, are predominantly rooted in Western concepts. There are significant differences between Asian and Western perspectives on responsible leadership, which affect their understanding and implementation (Witt & Stahl, 2016). This research focuses on staff in China's tertiary institutions and employs Social Learning Theory to investigate the intricate relationship between responsible leadership and the promotion of green behaviours among staff. It aims to provide empirical insights into the mediating role of psychological capital and the moderating effect of the organizational ethical climate, thus addressing gaps in Asian higher education management research.

Several strategies can be employed to enhance the green behaviour of university employees. Leaders play a crucial role in organizations, and their attitudes and behaviours significantly influence employees. Leaders should lead by example, actively promote green behaviour, encourage employee participation in environmental initiatives, and implement policies and measures that support sustainability. Organizations need to foster a positive ethical environment, ensuring that employees view environmental responsibility as an obligation. To raise awareness and encourage participation in environmental protection, organizations can conduct environmental education and outreach activities. Psychological capital, which encompasses optimism, hope, confidence, and resilience, reflects an individual's positive internal attributes. Organizations can bolster employees' psychological capital through training and development programs, thereby enhancing their confidence and commitment to environmental actions and promoting the adoption of green behaviours. In summary, by leveraging responsible leadership, fostering a positive organizational ethical atmosphere, and enhancing psychological capital, the green behaviour of university employees can be significantly improved, thereby guiding the entire organization toward sustainable development.

Literature Review

Theory and Hypotheses Impact of Responsible Leadership on employees' green behaviours

Employees' green behaviours are measurable actions that contribute to the environmental sustainability of the workplace (Andersson et al., 2013). These behaviours include practices such as double-sided printing, using reusable utensils, and turning off lights in the office (Robertson & Barling, 2013). According to Bandura (2001), Social Learning Theory posits that individual behaviour is shaped by observing and imitating others, with social learning occurring through the observation of role models and their reactions. Leaders, as positive role models, can significantly influence employees by setting examples and encouraging proactive environmental actions. Responsible leadership, which integrates ethical considerations and normative values, focuses on social and environmental objectives, including sustainability and positive change (Miska et al., 2018; Muff et al., 2020). By adopting the Responsible Leadership Model, employees can learn the importance of pro-environmental behaviours by imitating and following their leaders. In a campus environment, responsible management positively impacts the green behaviour of faculty and staff, as leaders exemplify green principles and provide clear guidance, effective communication, and positive encouragement, thereby integrating sustainable practices into daily work routines. Based on this, the research proposes the following hypothesis,

H1: RL plays an active role in EGB.

The Role of Psychological Capital

Social Learning Theory underscores that both external factors, such as the environment, culture, atmosphere, and resources, and internal factors, such as personal cognition and attitudes, influence individual actions (Bandura, 1977a). Employees may gain greater confidence in their abilities to achieve goals by observing exemplary behaviour and

psychological strength in leaders and receiving criticism and feedback constructively (Rego et al., 2012). Positive values or behaviours demonstrated by leaders can contribute to the development of psychological capital. Research by Zhu et al. (2022) indicates that higher psychological capital is associated with better job performance and more positive behaviours. Additionally, Wang et al. (2023) have shown that responsible leadership enhances employees' green behaviour by strengthening their psychological capital. Consequently, the study posits the following research hypothesis,

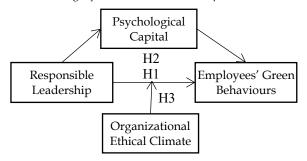
H2: *PC serves as a mediating factor in the association between RL and EGB.*

The Role of Organizational Ethical Climate

Organizational ethical climate helps individuals discern what behaviours are deemed acceptable versus sanctionable within an organization (Teresi et al., 2019). Different organizations develop distinct subcultures that influence interpersonal relationships and regulate behaviour. Since Victor et al. (1988) foundational theory of ethical climate, extensive research has highlighted its significant impact on various aspects of employee behaviour. This includes ethical conduct (Al Halbusi et al., 2021), extra-role service behaviours, and innovative actions among employees. Essentially, the organizational ethical climate plays a crucial role in fostering and promoting positive work behaviours.

However, only a limited number of studies have addressed how an individual's and a group's influence can either enhance or diminish staff work attitudes and behaviours (Danilwan & Dirhamsyah, 2022). According to Social Learning Theory, a positive ethical climate within an organization, where leadership demonstrates concern for the workplace environment, can increase acceptance of the organization's environmental approach and encourage green behaviours (Bandura, 1977b). In a robust ethical climate, team members are more likely to support one another in adhering to rules, fairness, and transparency. Such an environment fosters enhanced ethical reasoning and moral decision-making (Martin et al., 2006), thereby increasing the likelihood of engaging in environmental behaviours. Hence, the study posits the following research hypothesis,

H3: OEC exerts a moderating influence on the relationship between RL and EGB.



Research Methodology

Study Design and Procedure

The study utilized convenience sampling to survey employees at Chinese universities.

Teachers from universities in Jiangsu, Zhejiang, and Shandong provinces were contacted, and the online questionnaire was distributed via WeChat work groups and moments. The questionnaire, created using Questionnaire Star (https://www.wjx.cn), was designed to prevent the submission of incomplete responses. Distribution occurred from October 26, 2023, to November 11, 2023. A total of 568 valid responses were collected, with a gender distribution of 51.58% male and 48.42% female. Of the institutions represented in the sample, 50.70% were public and 49.30% were private.

Measures

Initiative Leader: Voegtlin (2012) Measurement Index comprises five elements. The questionnaire utilized a 5-point Likert scale for responses. The reliability of the instrument was confirmed with a Cronbach's Alpha of 0.898, indicating high internal consistency.

Green Behaviour of Employees: The Workplace Environmental-Friendly Behaviour Scale, proposed by Robertson et al. (2013), is a unidimensional scale consisting of seven items. The questionnaire used a 5-point Likert scale for responses. In this study, the scale demonstrated high reliability, with a Cronbach's Alpha coefficient of 0.920.

Psychological Capital: In this research, the psychological capital measure developed by Luthans et al. (2007) and subsequently adapted by Wen et al. (2009) was used. The scale encompasses four dimensions with a total of 16 items. The Cronbach's Alpha for the overall scale was 0.922, with individual dimension reliabilities as follows: Self-Efficacy at 0.879, Hope at 0.875, Resilience at 0.874, and Optimism at 0.864.

Organizational Ethical Climate: The Ethical Climate Questionnaire, developed by Victor et al. (1988), comprises 26 items across five dimensions. A 5-point Likert scale was employed for responses. The overall Cronbach's Alpha for the scale was 0.929, with individual dimension reliabilities as follows: Caring Climate at 0.918, Law-and-Code Data at 0.871, Rules Climate at 0.869, Instrumental Climate at 0.908, and Independence-Dependent Climate at 0.868.

Data Analysis and Availability

SPSS 26.0 was used for descriptive analysis, reliability analysis, common method bias testing, and correlation analysis of variables. Structural equation modelling was performed using AMOS to validate the proposed hypotheses. The Bootstrap method was employed to assess the effectiveness of mediation. Data supporting the findings of this study are available from the corresponding author upon request.

Research Ethics

This study adheres to the Ethical Guidelines for Research on Human Subjects in Thailand, 2015, specifically Section 3.2.2, Article 10, which pertains to informed consent procedures, and Article 21, concerning privacy and confidentiality protection. Participants were required to sign an informed consent form before participating in the survey, and they were informed of their right to withdraw from the study at any time. Additionally, all questionnaire responses will be kept confidential and used solely for research purposes to ensure the privacy of the participants. In compliance with the ethical guidelines, the informed consent procedure was structured as

follows: A. Title of the research; B. Rationale for inviting subjects to participate in the study; C. Objectives and procedures for both researchers and subjects; D. Duration of participation required from subjects; E. Expected benefits of the study, with potential direct advantages for students and universities; F. Confidentiality measures and protection of subjects' records; G. Disclosure of research findings to subjects and the method of such disclosure; H. The right of subjects to refuse or withdraw from the study at any time without forfeiting benefits, I. Approval of the research protocol by the Human Research Ethics Committee. In adherence to these principles, all aspects of the study underwent ethical review procedures as mandated by the Ethics Committee of Dhurakij Pundit University, with data collection commencing only after obtaining the university's approval.

Data Analysis and Results

Test for Common Method Bias

In this study, Harman's single-factor test was employed to assess the potential impact of common method bias. The factor analysis conducted using SPSS revealed 11 factors with eigenvalues exceeding 1. The first factor accounted for 23.776% of the variance, which is below the critical threshold of 40% as established by Podsakoff et al. (2003). Consequently, the data collected through the questionnaire in this study did not display significant common method bias.

Descriptive Statistics and Correlation Analysis

As presented in Table 1, significant positive correlations were observed among responsible leadership, employees' green behaviours, psychological capital, and organizational ethical climate, with all correlation coefficients exceeding zero. This finding underscores the importance of the positive relationships among these variables. The correlation analysis revealed that the correlations between the variables ranged from low to moderate, with no exceptionally high correlations detected. This absence of high correlations suggests that collinearity issues are not present and supports the feasibility of conducting further analyses (Benesty et al., 2009).

Table 1The Analysis of Descriptive Statistics and Pearson Correlation Analysis of the Variable

	M	SD	Responsible Leadership	employees' Green Behaviours	Psychological (Capital	Organizational Ethical Climate
Responsible	3.249	0.883	1			
Leadership	3.249	0.003	1			
Employees'	3.225	0.856	0.537***	1		
Green Behaviours	3.223	0.656	0.557	1		
Psychological	3.222	0.710	0.595***	0.630***	1	
Capital	3.222	0.710	0.595	0.030	1	
Organizational	3.108	0.610	0.357***	0.153***	0.080***	1
Ethical Climate	5.100	0.010	0.557	0.133	0.000	1
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^{*} p<0.05 ** p<0.01

Structural Equation Modelling

In this study, the fit indices for the structural equation model indicated a favourable model fit. Specifically, the χ^2/df ratio was 1.311, which is below the threshold of 3. The CFI was 0.946, the TLI was 0.988, and the IFI was 0.989, all exceeding the benchmark of 0.9. Additionally, the RMSEA was 0.023, which is below the acceptable limit of 0.1. These results collectively demonstrate a good fit of the model. As shown in Table 3, all p-values are less than 0.05, affirming the significance of the paths examined. This indicates that responsible leadership has a significant and positive effect on employees' green behaviours. Furthermore, responsible leadership significantly and positively influences psychological capital, which in turn significantly and positively impacts employees' green behaviours. Consequently, H1 is supported by the findings of this study.

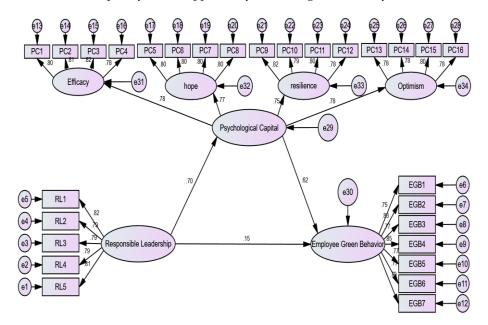


Table 2 *Indicators of Model Fit*

Indicators of Model Fit									
Common Indicators	<i>X</i> ²	df	p	χ²/df	GFI	RMSEA	RMR	CFI	NFI
Standard of			>0.05	<3	>0.9	< 0.10	<0.05	>0.9	>0.9
Determination	n -	-	~0.03	\ 3	70.9	\0.10	\0.03	~ 0.9	~ 0.9
Value	449.589	343	0.000	1.311	0.946	0.023	0.027	0.989	0.956
Other	TLI	AGFI	IFI	PGFI	PNFI				
Indicators	11.1	AGFI	1171	rGri	LINLI				
Standard of	>0.0	>0.0	>0.0	>0 F	>0 F				
Determination	>0.9 n	>0.9	>0.9	>0.5	>0.5				
Value	0.988	0.936	0.989	0.799	0.867				

Table 3

Direct Path Test

	Path		Std.Estimate	e Estimate	S.E.	C.R.	P
Psychological Capital	<	Responsible Leadership	0.698	0.540	0.043	12.45	***
Employees' Green Behaviours	<	Psychological Capital	0.619	0.709	0.081	8.719	***
Employees' Green Behaviours	<	Responsible Leadership	0.155	0.137	0.051	2.696	0.007

^{***} p<0.001

Mediation Test

The Bootstrap sampling method, using 5000 samples, was employed to assess the mediation effects. The results demonstrated that at the 95% confidence interval, neither the indirect effect nor the direct effect includes zero, indicating the presence of a mediating effect. Specifically, the mediation is partial. Therefore, H2 is supported.

Table 4 *Mediation Effect Test*

Effect	Parameter	Std.Estima te	er Upper	ע	Effect oportion
Direct Effect	$RL \rightarrow EGB$	0.155 0.00	0.290	0.048	58.94%
Indirect Effect	$RL \rightarrow PC \rightarrow EGB$	0.108 0.00	0.203	0.042	41.06%
Total Effect	$RL \rightarrow EGB$	0.263 0.00	05 0.491	0.045	-

Moderation Test

Further analysis, as detailed in Table 5, explores the moderation effect through three distinct models, each building on the previous to clarify the relationship being examined. Model 1 establishes the impact of the independent variable, responsible leadership, while controlling for two variables: gender and school type. Model 2 expands this analysis by incorporating the moderating variable, organizational ethical climate, in addition to the variables from Model 1. Finally, Model 3 enhances the investigation by introducing an interaction term, which represents the product of the independent variable and the moderating variable, thereby refining the analysis conducted in Model 2.

To assess the significance and nature of the moderation effect, the focus is placed on the interaction term within Model 3. The data presented in the table demonstrate that the interaction term involving responsible leadership and organizational ethical climate is statistically significant (t = -6.143, p = 0.000 < 0.05). This indicates that the influence of responsible leadership on employees' green behaviours is dependent on the levels of organizational ethical climate. This intricate relationship can be further illustrated through a simple slope graph. Clearly, the organizational ethical climate acts as a crucial moderator

in influencing the relationship between responsible leadership and employees' engagement in green behaviors, thereby supporting the hypothesis proposed in H3.

Table 5 *Results of Moderating Effects Analysis*

·	Model 1	Model 2	Model 3
Gender	-0.028	-0.027	-0.031
Gender	(-0.770)	(-0.745)	(-0.896)
Calara I Nationa	0.014	0.018	0.021
School Nature	(-0.388)	(-0.491)	(-0.594)
D 111 1 1 1	0.535***	0.552***	0.541***
Responsible Leadership	(-15.006)	(-14.440)	(-14.605)
Organizational Ethical		-0.046	0.031
Climate		(-1.203)	(-0.784)
Responsible Leadership		, ,	0.224***
*Organizational Ethical Climate			(-6.143)
R ²	0.290	0.292	0.336
Adjusted R ²	0.286	0.287	0.330
Ý Value	76.685, <i>p</i> =0.000	57.922, <i>p</i> =0.000	56.909, p=0.000
Depende	,	oyees' Green Behav	iours

* p<0.05 ** p<0.01, inside the parentheses is the value of t

Discussion

Responsible leadership significantly positively predicts employees' green behaviours,

thereby confirming Hypothesis 1 (H1). This finding is consistent with the studies of Afsar et al. (2020) and Lu et al. (2022). According to Social Learning Theory, individual behaviour is shaped by observing, imitating, and receiving feedback from others (Koutroubas & Galanakis, 2022). Responsible leaders often take the initiative and demonstrate a strong commitment to environmental protection and sustainable development. Their actions and behaviours typically influence employees, who, upon observing their leaders' positive environmental actions, are more likely to emulate these behaviours.

Psychological capital connects responsible leadership with employees' green behaviours, thereby validating Hypothesis 2 (H2). This finding aligns with the research of Wang et al. (2023). The mediating role of psychological capital facilitates employees' acceptance of positive environmental messages and role modelling from responsible leadership, which subsequently alters and enhances their psychological state. As a result, this positive psychological state influences employees' decision-making and behaviours, making them more inclined to engage in pro-environmental actions that align with their leader's expectations.

Organizational ethical climate positively moderates the relationship between responsible leadership and employees' green behaviours, supporting Hypothesis 3 (H3). This finding aligns with the research of Hussain and Attiq (2017). When the organizational ethical climate emphasizes environmental protection, sustainability, and social responsibility, it can amplify the influence of responsible leadership on employees' green behaviours. In such a positive ethical environment, employees are more likely to resonate with their leader's environmental advocacy and embrace the value of sustainable development. Consequently, the impact of responsible leadership becomes more pronounced, motivating employees to actively engage in green behaviours (Shin, 2012).

Conclusion

This research aims to investigate the effects of responsible leadership, ethical climate, and organizational psychological capital on the green behaviour of employees in Chinese universities. The study, which involved 568 university employees from Jiangsu, Zhejiang, and Shandong provinces, is based on survey data and yields the following insights. The findings indicate that responsible leadership promotes the adoption of green behaviours among employees. Psychological capital partially mediates this relationship, while the organizational ethical climate acts as a positive moderator. The major findings reveal that promoting and sustaining environmental behaviours among staff in university settings necessitates responsible leadership. Managers who demonstrate environmental responsibility can similarly influence their employees, underscoring the importance of leading by example. Psychological capital, comprising self-efficacy, hope, optimism, and resilience, plays a crucial role in mediating this relationship. This suggests that enhancing these psychological traits may further encourage green behaviours. Additionally, a positive organizational ethical climate amplifies the impact of responsible leadership, highlighting the critical role of ethics in fostering organizational sustainability. In practice, university administrators should prioritize fostering responsible leadership standards among their staff, enhance psychological capital through targeted training and support programs, and cultivate a positive organizational ethical climate. These efforts collectively

contribute to increasing green behaviours among university employees and advancing sustainability within the institution. Additionally, the study highlights the need for future research using different methodologies, such as longitudinal studies, to establish causal relationships and explore various organizational contexts and background variables affecting employees' green behaviours. Consequently, this research offers valuable theoretical and practical insights, beneficial for university management aiming to improve environmental sustainability in educational institutions.

Research Contributions

Theoretical Contributions

Firstly, this study clarifies the mechanisms by which responsible leadership affects employees' green behaviours by examining the mediating role of psychological capital. As a positive psychosocial resource, psychological capital significantly influences employees' motivation for pro-environmental behaviour. The findings demonstrate that responsible leadership promotes green behaviours among employees by enhancing their self-efficacy, optimism, hope, and resilience. This deepens our understanding of how psychological capital mediates the impact of responsible leadership. Additionally, it offers theoretical insights for university administrators on how to encourage green behaviours by strengthening employees' psychological capital. This paper also examines the role of organizational ethical climate and its relevance in educational environments. It finds that the effect of responsible leadership on employees' green behaviours varies with different ethical climates. This highlights the need for university administrators to cultivate a positive ethical climate to enhance the impact of responsible leadership and build a green campus culture.

Practical Contributions

Firstly, this study underscores the importance of responsible leadership in fostering green behaviours among staff. The findings confirm that responsible leadership significantly and positively influences employees' green behaviours. This contributes to leadership literature and offers practical recommendations for university administrators. It is crucial for administrators to recognize the value of responsible leadership principles, actively recruit and support leaders with a commitment to responsibility and environmental accountability, and lead by example. This approach helps create a supportive environment for promoting environmentally friendly actions within the organization.

Additionally, this study provides empirical support for the positive impact of organizational ethical climate on workplace behaviour. The results show that the ethical environment affects how employees perceive and react to management practices, influencing their environmental behaviour. In positive ethical climates, employees adhere to organizational ethics and act in ways that benefit the environment. This research offers valuable insights for university managers in developing a green campus culture and improving environmental literacy among staff. It is recommended that administrators manage and enhance the ethical climate by formalizing ethical standards, improving

ethical education, and promoting ethical leadership to foster a supportive organizational culture for green behaviours.

Suggestions

With on the conclusions of this study, three targeted recommendations are proposed: strengthening responsible leadership, stressing the cultivation of psychological capital and creating a positive organizational ethical climate.

Strengthen Responsible Leadership: Universities can implement training programs focused on responsible leadership, which encompass enhancing environmental awareness, developing communication skills, and employing strategies to motivate teams to adopt green behaviours. The aim is to cultivate environmentally responsible leaders who can effectively practice responsible leadership and integrate environmental behaviours into daily operations. Additionally, an incentive mechanism can be established to reward leaders for their proactive efforts and exemplary actions in environmental protection. Successful strategies and notable achievements should be highlighted on the university's official website and WeChat public account, showcasing the leadership's contributions to environmental initiatives and fostering greater environmental awareness among faculty and students.

Focus on the Cultivation of Psychological Capital: Given the demanding and high-pressure work environment faced by university employees, universities can organize interest-based classes after work from Monday to Friday. These classes could include courses such as yoga, self-defence, and handicrafts, led by experienced instructors. This initiative can help staff alleviate work-related stress and anxiety, enhance psychological capital, build a supportive network, and provide a space for emotional release and the cultivation of optimism.

Create a Positive Organizational Ethical Climate: Universities serve not only as employers for faculty but also as a crucial developmental phase for students before they enter society. Therefore, institutions should disseminate and establish ethical standards for teaching, research, administration, and other aspects of higher education. These standards should be made accessible to both faculty and students in the form of booklets. Implementing these guidelines can help regulate internal activities, ensuring uniformity and fairness. Additionally, universities should conduct regular ethical awareness sessions for teachers and students, including discussions of ethical cases and training courses. These initiatives will enhance sensitivity to ethical issues and improve problem-solving skills.

Limitations

Primarily, the use of a cross-sectional research design limits the ability to definitively establish causal relationships. Future research should consider adopting a longitudinal approach, which involves collecting data points over an extended period to create a comprehensive dataset. This methodological refinement is likely to provide deeper insights into the long-term effects of responsible leadership on employees' green behaviours, allowing for more robust inferences about causal relationships and enhancing both the scientific rigor and practical relevance of the study. Secondly, management styles in

corporations and universities often differ, with corporations typically emphasizing market competition and economic efficiency, while universities may prioritize academic values and social responsibility. Future research should compare the emphasis on sustainable development between corporations and universities, exploring how the focus on sustainability goals in these different contexts influences employees' environmental performance. Thirdly, this study did not examine how different background variables might influence the green behaviours of Chinese university staff. Such variables could affect staff perceptions, attitudes, and behaviours towards environmental protection in various ways. For instance, age differences may lead to varying sensitivities and attitudes toward environmental issues, with younger individuals potentially being more environmentally conscious than older individuals who may be more focused on practical aspects. Cultural differences may also impact environmental behaviour, such as variations in engagement with environmental activities among different genders. Future research should investigate how various background factors relate to green behaviours among Chinese university staff by comparing and analysing the environmental behaviours of staff members from diverse backgrounds.

Interest Statement

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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