Designing a Policy Model for Green Human Resource Management with an Emphasis on Spiritual Leadership in Medical Sciences Universities (Case Study: Shahroud University of Medical Sciences and Health Services)

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Abstract

This article aims to design a policy model for green human resource management (GHRM) with an emphasis on spiritual leadership, using Shahroud University of Medical Sciences as a case study. Philosophically, the study is grounded in an interpretivist paradigm and follows an inductive approach. It is categorized as an applied-developmental study in terms of its objective and is considered descriptive in terms of the time frame for data collection. A qualitative research design was employed. The participant population consisted of faculty members and administrators of Shahroud University of Medical Sciences. Purposeful sampling was used, and theoretical saturation was achieved after 17 interviews. Data were collected using semi-structured interviews and a questionnaire based on a decision matrix. The validity of the interviews was assessed and confirmed according to four criteria: credibility, transferability, confirmability, and dependability, as evaluated by expert reviewers. The reliability of the interviews was estimated using the Holsti method at 0.627. The reliability of the interpretive-structural modeling (ISM) was also assessed, with an internal correlation coefficient of 0.83, indicating acceptable reliability. Thematic analysis of expert interviews was conducted using Maxqda software, and the structural relationships model was designed using interpretive-structural modeling via MicMac software. The findings revealed that spiritual leadership influences supervisory ethical regulations, ethics-oriented culture, and workplace spirituality. These components, in turn, affect green human resource policy. Furthermore, human resource policy impacts legal responsibility, ethical responsibility, and social responsibility. Ultimately, social responsibility, ethical responsibility, and legal responsibility lead to the realization of green human resources in the proposed model.

Keywords: *Policy implementation, human resources, green human resource management, spiritual leadership, Shahroud University of Medical Sciences.*

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1. Introduction

The intersection of environmental sustainability and human resource management has emerged as a transformative focus in contemporary organizational research and practice. In an era marked by climate concerns, stakeholder activism, and regulatory shifts, organizations are increasingly compelled to integrate green principles into every facet of their operations, including the management of human capital. One such integrative approach is Green Human Resource Management (GHRM), which aligns HR practices with environmental objectives to foster both ecological responsibility and organizational resilience [1]. As the discourse surrounding GHRM evolves, it becomes evident that its effectiveness is significantly enhanced when

guided by deeper values such as spiritual leadership, ethical grounding, and a culture of responsibility [2, 3].

Green HRM encompasses a variety of practices including green recruitment, training, performance management, and employee involvement in environmental initiatives [4, 5]. The core idea is to embed sustainability into HR processes to not only reduce environmental footprints but also to enhance organizational citizenship behavior towards the environment [6, 7]. Recent research shows that the adoption of GHRM positively correlates with innovation, environmental performance, and stakeholder satisfaction [8, 9]. However, the success of these initiatives is contingent upon the presence of guiding philosophies and leadership frameworks that promote intrinsic motivation and ethical behavior among employees. In this regard, spiritual leadership has been identified as a pivotal enabler of green behavior in organizations, facilitating the internalization of sustainability values among staff [10, 11].

Spiritual leadership theory posits that leadership driven by purpose, vision, faith, and altruistic love can foster high levels of organizational commitment, ethical conduct, and collective well-being [12, 13]. When integrated with GHRM, spiritual leadership provides the emotional and moral infrastructure needed for sustainable transformations. Empirical studies have demonstrated that organizations led by spiritually-oriented leaders are more likely to witness employee engagement in pro-environmental behaviors, enhanced green knowledge sharing, and greater participation in sustainability initiatives [3, 14]. Furthermore, such leadership fosters a sense of meaning and community within the workplace, conditions that are indispensable for the long-term success of green policies [15, 16].

The shift toward sustainability in human resource systems is not without its challenges. The implementation of GHRM practices often encounters barriers such as lack of institutional readiness, resistance to change, and a gap between policy and practice [17, 18]. The complexity increases in sectors like healthcare and education, where hierarchical structures, compliance-oriented cultures, and limited resource availability may hinder the full realization of green HR goals [19]. However, studies have shown that these barriers can be mitigated by enhancing the readiness of the organization and strengthening its corporate social responsibility (CSR) orientation, both of which are positively influenced by spiritual leadership [18, 20].

Public institutions, especially in developing countries, face additional layers of complexity in embedding green HRM within their governance systems. According to Danaeefard et al. (2023), effective policy design in public settings requires a nuanced understanding of cultural, ethical, and systemic dimensions [21]. In this context, the integration of spiritual values into HRM policy design is not only innovative but necessary to ensure coherence with local belief systems and societal expectations [22]. In Iranian academic institutions, for instance, there is increasing advocacy for models that synthesize green HRM practices with Islamic and indigenous ethical principles, facilitated through spiritual leadership models that resonate with both administrators and academic staff [23, 24].

The literature also indicates a growing interest in modeling and systematizing GHRM policies using analytical frameworks. Scholars like Shayegan et al. (2023) and Murthy et al. (2023) emphasize the importance of data-driven decision-making in green HRM implementation [25, 26]. These approaches are particularly relevant for developing an integrated policy framework that aligns organizational mission, environmental goals, and HR functions. Moreover, bibliometric and conceptual mapping studies have revealed that while GHRM research has expanded significantly over the past two decades, there remains a lack of consensus on the role of spiritual and ethical variables in shaping its trajectory [16, 27]. This gap further reinforces the need for comprehensive models that account for both technical practices and philosophical orientations.

In addition to fostering green behaviors, GHRM also plays a critical role in shaping organizational culture and climate. Organizations that institutionalize green policies through HR functions tend to experience higher levels of organizational identification, job satisfaction, and retention, especially when leadership supports these efforts through inspirational and ethical communication [5, 28]. The mediating role of organizational identification—where employees see their values aligned with that of the organization—has been identified as a key mechanism in translating GHRM policies into actual behavior change [4, 20]. When spiritual leadership is added to the equation, this identification is further deepened as employees derive a greater sense of purpose and contribution from their roles.

In educational and research-based institutions such as universities, green HRM models have been designed to enhance not just administrative sustainability but also academic impact. For example, Salajegheh et al. (2023) developed a model tailored for government organizations that incorporates information technology into GHRM strategies [23]. Similarly, Tabari et al. (2022) proposed a

green HRM excellence framework specifically for power distribution companies in Iran, emphasizing the replicability of such models across various sectors [24]. These studies illustrate the adaptability of GHRM frameworks when contextualized with sector-specific needs and values. In this light, the present study seeks to develop a policy model for green human resource management based on spiritual leadership within medical universities, with a specific focus on Shahroud University of Medical Sciences.

2. Methodology

The present study is philosophically grounded in the interpretivist paradigm and conducted using an inductive approach. In terms of its objective, it is an applied-developmental study aiming to present and explain a policy-making model for green human resource management (GHRM) based on spiritual leadership in medical sciences universities. From the perspective of data collection timing, the study falls under the category of descriptive research. A qualitative research design was employed to conduct the study.

The participant population in this research consisted of faculty members and administrators at Shahroud University of Medical Sciences who possessed sufficient experience in the area of green human resource management policies. Based on the framework proposed by Miller et al. (2010), five criteria were used to select participants: centrality, prominence, theoretical knowledge, diversity, and motivation to participate. The selection criteria for theoretical experts included at least ten years of teaching experience in the field of human resource management or scholarly contributions in the form of books and articles. Additionally, prominent, motivated, and experienced administrators of Shahroud University of Medical Sciences holding postgraduate degrees were included. In the qualitative section of the study, purposeful sampling and the snowball method were used to select participants. The sampling process continued until theoretical saturation was reached. Accordingly, 17 qualified individuals participated in this study.

In this research, semi-structured interviews with experts were utilized. Subsequently, a questionnaire based on a decision matrix was used for designing the structural model of the study.

The validity of the qualitative section was assessed and confirmed from the perspective of expert reviewers using the four criteria proposed by Lincoln and Guba: credibility, transferability, confirmability, and dependability. For reliability assessment of the qualitative section and coding of the interviews, Holsti's method was applied. In this approach, interview transcripts were coded in two phases. Then, the percentage of agreement observed (PAO) was calculated.

The PAO value obtained in this study was 0.627, which is greater than 0.60; therefore, the reliability of the qualitative section is deemed satisfactory. For determining the reliability of interpretive-structural modeling, the intraclass correlation coefficient (ICC) was estimated at 0.83, which falls within the acceptable range of 0.75 to 0.90, indicating good reliability.

The primary method used in the qualitative section was thematic analysis, through which themes related to policy-making in green human resource management based on spiritual leadership were identified. Thematic analysis was conducted using MaxQDA 20 software. In the second phase, interpretive-structural modeling (ISM) was applied. The ISM computations were performed using MicMac software.

3. Findings and Results

In this study, 17 individuals participated, including 6 faculty members and 11 managers from Shahroud University of Medical Sciences. Regarding gender, 12 participants were male and 5 were female. In terms of age, 1 participant was under 40 years old, 7 were between 40 and 50 years old, and 9 were over 50 years old. Concerning educational attainment, 1 participant held a master's degree and 16 held doctoral degrees. In terms of work experience, 5 had between 15 and 20 years of experience, while 12 had more than 20 years.

Table 1. Demographic Characteristics of Experts

Demographic Characteristics	Frequency	Percentage
Expertise		
Theoretical Experts (Faculty of Shahroud University of Medical Sciences)	6	35%
Practical Experts (Managers of Shahroud University of Medical Sciences)	11	65%
Gender		
Male	12	71%

Female	5	29%
Age		
Under 40 years	1	6%
40 to 50 years	7	41%
50 years and above	9	53%
Educational Qualification		
Master's Degree	1	6%
PhD	16	94%
Work Experience		
15 to 20 years	5	29%
Over 20 years	12	71%
Total	17	100%

To develop the policy model for green human resource management based on spiritual leadership, semi-structured expert interviews were conducted with faculty and managers at Shahroud University of Medical Sciences. The interview protocol consisted of six open-ended questions, and it was anticipated that additional questions could be asked during the interviews if necessary. The interview transcripts were analyzed using thematic analysis (theme analysis) based on the six-step method proposed by Attride-Stirling (2001).

In the first step, familiarization with the data was carried out. To gain an in-depth understanding of the content, the researcher engaged in repeated reading of the transcripts and actively read the data to search for meanings and patterns. For this purpose, the interview texts were reviewed and studied several times.

Subsequently, the meaning units were reviewed multiple times, and appropriate codes were written for each meaning unit. These codes were then categorized based on semantic similarity. This analytical process was repeated with each new interview. Interviews continued until theoretical saturation was reached.

In the open coding phase, 196 initial codes were identified. Ultimately, through axial coding, the data were reduced to 3 overarching themes, 9 organizing themes, and 58 basic themes. The themes related to the policy model of green human resource management based on spiritual leadership, extracted via thematic analysis, are presented in Table 2.

Table 2. Themes of the Green Human Resource Management Policy Model Based on Spiritual Leadership

Overarching Theme	Organizing Theme	Basic Themes
Spiritual Factors	Spiritual Leadership	"The leader's heartfelt faith and belief in God"; "Seeking meaning in personal and professional life"; "Transcending desires and ego-driven needs"; "Fostering human and moral virtues at the workplace"; "Leader's work and organizational commitment"; "Altruism and respect for human rights of employees"; "Spirit of hope and patience in achieving goals"; "Honesty and behavioral integrity of the leader"; "Leader's incorruptibility and ethical conduct"
	Supervisory Ethical Regulations	"Formulating clear ethical work-related rules"; "Explicit communication of ethical codes to staff"; "Monitoring ethical performance"; "Decisive action against unethical issues"; "Support for ethical compliance"; "Continuous evaluation and improvement of ethical rules"
	Workplace Spirituality	"Prevalence of ethical leadership at the university"; "Managerial support for ethical work practices"; "Reinforcing ethical performance and behavior"; "Ethics-oriented atmosphere and collaboration in the university"; "Sense of peace and attachment at work"; "Employees' religiosity and search for the divine"
	Ethics-Oriented Culture	"Ethical atmosphere prevailing at the university"; "Clear ethical values at the university"; "Employees' ethical beliefs"; "Ethical norms at the university"; "Institutionalization of ethical orientation"
Policy Factors	Green Human Resource Management Policy	"Clear vision for green HRM policy"; "Defined missions aligned with green HRM policy"; "Long-term goal setting for green HRM"; "Specific strategies aligned with long-term goals"; "Short-term goal setting for green HRM"; "Executional policies for short-term goals"; "Presentation of procedures and operational processes for green HRM policy"; "Development and communication of rules and regulations for green HRM policy"
	Green Human Resources	"Development of employees' green skills"; "Fostering motivation for green initiatives"; "Creating green opportunities"; "Culture of green innovation"; "Green job performance"; "Participation in charity and community service"; "Hosting and supporting social events"; "Contributing to philanthropic activities"; "Active presence in social events"; "Employee responsiveness to social demands"
Responsibility	Legal Responsibility	"Compliance with government laws and regulations"; "Clear ethical legal standards"; "Addressing illegal and unethical issues"; "Moral discipline prevailing at the university"; "Continuous monitoring of ethical compliance"
	Ethical Responsibility	"Attention to the university's code of ethics"; "Ethical conduct of senior managers"; "Employee commitment to ethical issues"; "Evaluation of employee ethics"; "Institutionalization of ethical culture in the university"
	Social Responsibility	"Economic responsibility"; "Legal responsibility"; "Ethical responsibility"; "Humanitarian responsibility"

The next step involved identifying the internal relationships among the identified indicators and presenting the green human resource management policy model based on spiritual leadership. For this purpose, Interpretive Structural Modeling (ISM) was employed. The relationships between identified indicators were determined using the notations presented in Table 3.

Table 3. Symbols Used in Interpretive Structural Modeling

Symbol	Meaning
V	Variable *i* influences *j*
A	Variable *j* influences *i*
X	Mutual influence
O	No relationship

The relationships among the overarching constructs are defined using the four symbols V (i influences j), A (j influences i), X (bidirectional relationship), and O (no relationship). Based on the identified relationships, the Structural Self-Interaction Matrix (SSIM) was constructed and is presented in Table 4.

Table 4. Structural Self-Interaction Matrix of the Green HRM Policy Model Based on Spiritual Leadership

X	C1	C2	C3	C4	C5	C6	C7	C8	C9
Spiritual Leadership (C1)	–	V	V	V	V	V	V	V	V
Supervisory Ethical Regulations (C2)		–	X	X	V	V	O	V	V
Workplace Spirituality (C3)			–	X	V	V	V	V	O
Ethics-Oriented Culture (C4)				–	V	V	V	V	V
Green HRM Policy (C5)					–	V	V	O	V
Green Human Resources (C6)						–	A	O	A
Legal Responsibility (C7)							–	X	X
Ethical Responsibility (C8)								–	X
Social Responsibility (C9)									–

Transforming the Structural Self-Interaction Matrix into a binary (0,1) Reachability Matrix (RM) involved placing a value of 1 on the diagonal elements. Additionally, secondary relationships had to be verified for transitivity. That is, if A leads to B, and B leads to C, then A must also lead to C. If this logical condition was not reflected, the matrix was corrected to include the indirect relationship as well (Azar et al., 2021). The final reachability matrix is shown in Table 5.

Table 5. Final Reachability Matrix of the Green HRM Policy Model Based on Spiritual Leadership

TM	C1	C2	C3	C4	C5	C6	C7	C8	C9
Spiritual Leadership (C1)	1	1	1	1	1	1	1	1	1
Supervisory Ethical Regulations (C2)	0	1	1	1	1	1	1*	1	1
Workplace Spirituality (C3)	0	1	1	1	1	1	1	1	1*
Ethics-Oriented Culture (C4)	0	1	1	1	1	1	1	1	1
Green HRM Policy (C5)	0	0	0	0	1	1	1	1*	1
Green Human Resources (C6)	0	0	0	0	0	1	0	0	0
Legal Responsibility (C7)	0	0	0	0	0	1	1	1	1
Ethical Responsibility (C8)	0	0	0	0	0	1*	1	1	1
Social Responsibility (C9)	0	0	0	0	0	1	1	1	1

After forming the reachability matrix, it was necessary to identify the “reachability set” and “antecedent set” for each variable to determine their relationships and hierarchical levels. The *reachability set* (outputs or influences) includes all variables that can be reached from a given variable. The *antecedent set* (inputs or influences received) includes all variables that influence the given variable.

Table 6. Input and Output Sets for Level Determination

Variables	Output: Influencing	Input: Being Influenced	Intersection

Spiritual Leadership (C1)	C1, C2, C3, C4, C5, C6, C7, C8, C9	C1	C1
Supervisory Ethical Regulations (C2)	C2, C3, C4, C5, C6, C7, C8, C9	C1, C2, C3, C4	C2, C3, C4
Workplace Spirituality (C3)	C2, C3, C4, C5, C6, C7, C8, C9	C1, C2, C3, C4	C2, C3, C4
Ethics-Oriented Culture (C4)	C2, C3, C4, C5, C6, C7, C8, C9	C1, C2, C3, C4	C2, C3, C4
Green HRM Policy (C5)	C5, C6, C7, C8, C9	C1, C2, C3, C4, C5	C5
Green Human Resources (C6)	C6	C1, C2, C3, C4, C5, C6, C7, C8, C9	C6
Legal Responsibility (C7)	C6, C7, C8, C9	C1, C2, C3, C4, C5, C7, C8, C9	C7, C8, C9
Ethical Responsibility (C8)	C6, C7, C8, C9	C1, C2, C3, C4, C5, C7, C8, C9	C7, C8, C9
Social Responsibility (C9)	C6, C7, C8, C9	C1, C2, C3, C4, C5, C7, C8, C9	C7, C8, C9

Based on the results of interpretive structural modeling (ISM), *Green Human Resources (C6)* is positioned at the first level. *Legal Responsibility (C7)*, *Ethical Responsibility (C8)*, and *Social Responsibility (C9)* are situated at the second level. *Green HRM Policy (C5)* is located at the third level. *Supervisory Ethical Regulations (C2)*, *Workplace Spirituality (C3)*, and *Ethics-Oriented Culture (C4)* are placed at the fourth level. *Spiritual Leadership (C1)* resides at the fifth level.

After determining the relationships and levels of the identified indicators, these can be configured into a model. To this end, the indicators were arranged from top to bottom according to their levels. The green human resource management policy model based on spiritual leadership is illustrated in Figure 1.

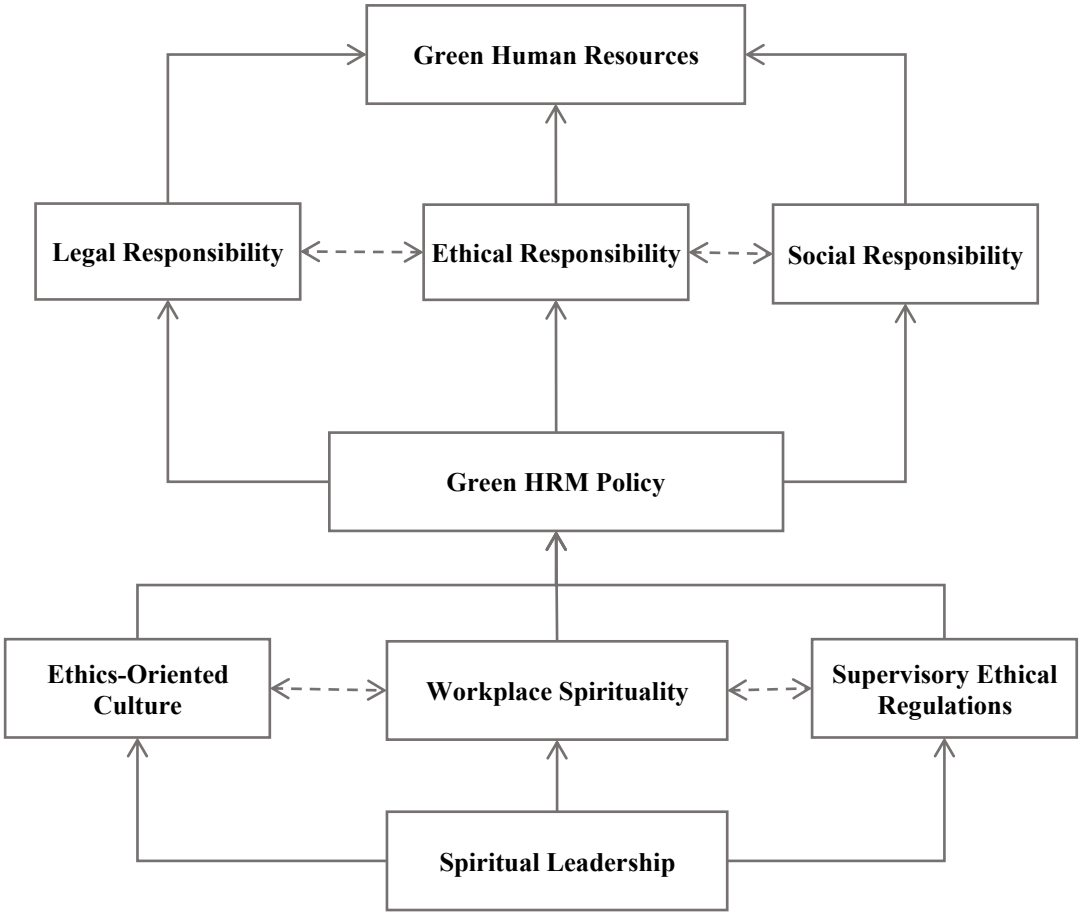

Figure 1. Green Human Resource Management Policy Model Based on Spiritual Leadership

The input and output sets for each element are also utilized to construct the Power–Dependence Matrix (MICMAC analysis). This matrix is presented in Table 6. The ISM model clearly depicts the interrelationships and interactions among criteria, as well as the links between criteria at different levels, thereby enhancing managers'

understanding of the decision-making landscape. To determine the key criteria, the power of influence and dependence for each criterion is derived from the final reachability matrix.

Table 7. Power and Dependence in the Green HRM Policy Model Based on Spiritual Leadership

Research Variables	Dependence	Power of Influence	Level
Spiritual Leadership (C1)	1	9	5
Supervisory Ethical Regulations (C2)	4	8	4
Workplace Spirituality (C3)	4	8	4
Ethics-Oriented Culture (C4)	4	8	4
Green HRM Policy (C5)	5	5	3
Green Human Resources (C6)	9	1	1
Legal Responsibility (C7)	8	4	2
Ethical Responsibility (C8)	8	4	2
Social Responsibility (C9)	8	4	2

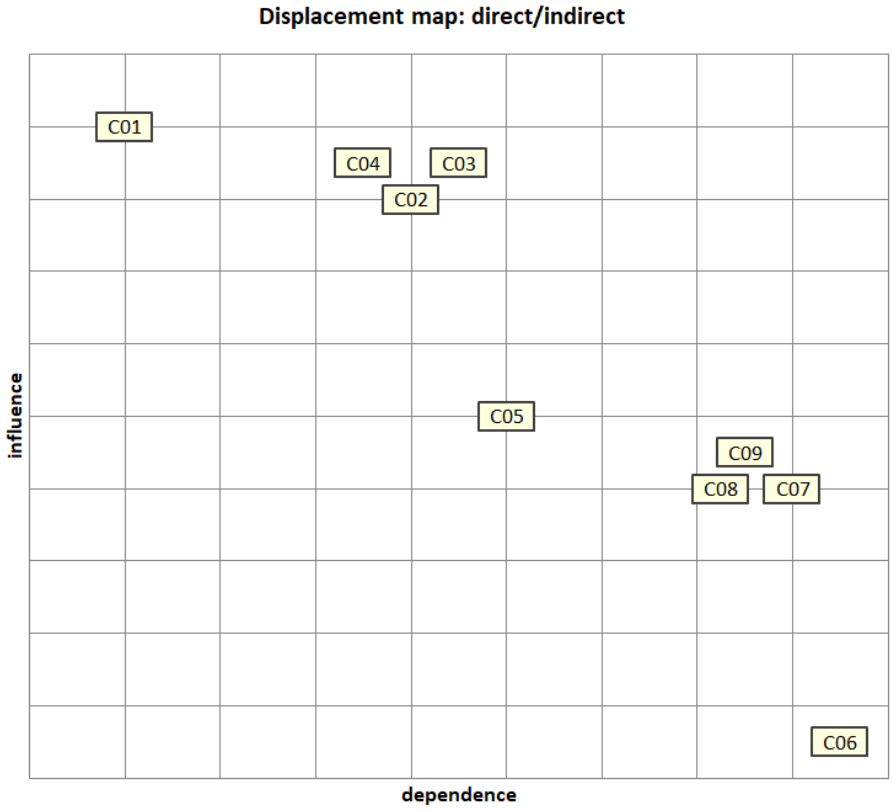

Figure 2. Power–Dependence Diagram of the Green HRM Policy Model Based on Spiritual Leadership

According to the power–dependence diagram, the constructs *Spiritual Leadership (C1)*, *Supervisory Ethical Regulations (C2)*, *Workplace Spirituality (C3)*, and *Ethics-Oriented Culture (C4)* possess high influence and low dependence, and are thus categorized as independent variables. In contrast, the constructs *Green Human Resources (C6)*, *Legal Responsibility (C7)*, *Ethical Responsibility (C8)*, and *Social Responsibility (C9)* exhibit high dependence and low influence, classifying them as dependent variables. The construct *Green HRM Policy (C5)* displays an equal level of influence and dependence and is considered a linkage variable. Notably, no variables fall within the first quadrant, i.e., the autonomous zone.

4. Discussion and Conclusion

The present study aimed to design a green human resource management (GHRM) policy model grounded in spiritual leadership, using Shahroud University of Medical Sciences as a case study. Thematic analysis and interpretive structural modeling revealed three overarching

dimensions—spiritual factors, policy-related constructs, and responsibility-related outcomes—that interactively form a conceptual framework for embedding sustainability in HR practices. The findings indicate that spiritual leadership serves as the most foundational and influential variable in the model. It exerts direct influence on supervisory ethical regulations, workplace spirituality, and an ethics-oriented culture. These intermediate constructs then impact the formulation and operationalization of green HRM policies, which in turn determine the development of green human capital and drive legal, ethical, and social responsibility outcomes. This cascading structure suggests a deeply interdependent relationship between leadership philosophy, ethical systems, HR policy architecture, and sustainable outcomes—one that aligns closely with recent advancements in the field.

The central role of spiritual leadership in the model supports the findings of previous research that emphasize the value of purpose-driven, ethically grounded leadership in driving green behavior among employees. For instance, studies have demonstrated that spiritual leaders inspire intrinsic motivation, enhance workplace climate, and foster behaviors aligned with ecological consciousness [11, 13]. The present study confirms this by showing how spiritual leadership influences not only individual attitudes but also institutional processes and governance systems. This aligns with findings from Farhadi Mahalli (2023), who highlighted the moderating effects of spiritual leadership on green HR behaviors within organizations [2], and with Li et al. (2023), who identified spiritual leadership as a key moderator in the relationship between GHRM practices and green role behavior [3]. Moreover, Vedula and Agrawal (2024) emphasized in their bibliometric review that spiritual leadership, while still underexplored in sustainability contexts, holds immense promise for ethical HRM reform [12].

A pivotal result in the current study is the mediating role of workplace spirituality, ethical climate, and regulatory ethics in linking leadership values with actionable green HR policies. These intermediate constructs serve to translate vision into structure, enabling policy design that is both philosophically consistent and functionally coherent. The importance of ethical structures in HR policy-making has also been affirmed by Bahuguna et al. (2023), who showed that the success of GHRM is largely contingent on institutional ethics and clarity of procedures [27]. In addition, Pan et al. (2023) emphasized that regulatory frameworks must support innovation and ethical responsibility to effectively implement green strategies [15]. The current model demonstrates this by showing how supervisory ethical regulations act as both a conduit and a barrier—depending on their coherence and enforcement—for the transition from leadership values to tangible HR practices.

The study's findings further reinforce the growing consensus that GHRM, when isolated from cultural and spiritual variables, risks becoming a compliance-oriented mechanism rather than a transformative one. The green HRM policy in the model is shown to have both upward and downward linkages—it is influenced by the ethical and spiritual climate fostered by leadership, and it influences the development of green human capital and organizational responsibility. This dynamic interaction reflects the conclusions drawn by Yuan et al. (2024), who proposed an integrated model where GHRM shapes voluntary workplace green behaviors through institutional values and leadership communication [20]. Similarly, Awan et al. (2023) demonstrated that the presence of green transformational leadership significantly enhances the outcomes of green HRM practices, particularly in environmental performance and green innovation [4]. The feedback loop implied in our model—where green HRM both reflects and reinforces organizational culture—mirrors such interactive frameworks.

Responsibility-related outcomes emerged as the ultimate indicators of the model's success. Legal, ethical, and social responsibilities were placed in the second tier of influence, directly shaped by HR policy and indirectly by the spiritual-ethical foundation. This hierarchical placement confirms that sustainable outcomes are not automatic byproducts of policy but rather the result of cumulative alignment among leadership, culture, and operational practices. This perspective resonates with Ribeiro et al. (2022), who found that employees are more likely to engage in eco-friendly behavior when they identify with an organization's environmental values and ethical stance [5]. Moreover, Salajegheh et al. (2023) highlighted the effectiveness of integrating IT-driven green HRM with institutional values in governmental organizations, suggesting that structural interventions must be ethically anchored to achieve lasting change [23].

The interpretive structural modeling (ISM) results also provide insight into the systemic importance of each construct. Spiritual leadership, with the highest degree of influence and lowest level of dependence, was classified as an independent variable, shaping every other construct in the

model. In contrast, green human resources and responsibility variables had the highest dependency scores, indicating their position as output indicators. This structure is supported by Zihan et al. (2024), who argued that organizational readiness and CSR orientations serve as mediators between leadership values and successful green transformation [18]. Furthermore, the power-dependence analysis reveals that GHRM policy is a linkage variable, situated between foundational values and performance outcomes, reinforcing the idea that HRM is the operational expression of institutional ethics.

The model presented in this study also addresses the cultural and contextual specificity of green HRM. As shown in prior research by Sadeghi (2022) and Danaeefard et al. (2023), public policy frameworks in contexts like Iran are highly influenced by cultural, religious, and moral paradigms [21, 22]. The integration of spiritual leadership into green HRM aligns with these paradigms and offers a viable pathway for sustainable transformation in higher education and public health sectors. The policy model, therefore, serves not only as a technical framework but also as a culturally adaptive tool for organizational change.

Finally, the importance of technology and analytical tools in shaping green HRM policies is reaffirmed. As Shayegan et al. (2023) emphasized, the convergence of green practices and modern technologies amplifies sustainable organizational performance [25]. Likewise, Murthy et al. (2023) illustrated how HR policies, when aligned with marketing and business strategies, become levers for broader institutional sustainability [26]. The current model, while focused on policy and leadership, acknowledges the critical role of strategic implementation and suggests that future iterations must embed digital and strategic dimensions to scale up impact.

This study, while grounded in a robust interpretive methodology, is not without limitations. First, the data were collected from a single institutional case—Shahroud University of Medical Sciences—limiting the generalizability of the findings. Cultural, institutional, and organizational dynamics specific to this setting may not fully represent those in other medical universities or sectors. Second, the sample size, though sufficient for qualitative saturation, may not capture the full diversity of perspectives, particularly from mid-level employees or students who also experience the outcomes of HR policies. Lastly, the model, though comprehensive, is conceptual and requires empirical validation across various contexts using quantitative and longitudinal methods.

Future research should focus on testing the proposed policy model quantitatively across multiple universities and sectors, both within and beyond Iran, to validate its generalizability and refine its constructs. Comparative studies between public and private institutions could illuminate how institutional type moderates the relationship between spiritual leadership and green HRM outcomes. Further, integrating digital transformation variables into the model may provide a more holistic understanding of how modern HR tools (e.g., AI-based recruitment, e-learning, and green analytics) interact with spiritual and ethical constructs to enhance sustainability. Mixed-method approaches could also offer richer insights into both the mechanisms and perceptions underpinning green HRM adoption.

Organizations, particularly in education and healthcare, should prioritize the integration of spiritual leadership values into HRM structures and policies to drive meaningful sustainability outcomes. HR departments should collaborate with leadership teams to co-design ethical guidelines, promote workplace spirituality, and develop training programs that cultivate both green competencies and moral responsibility. Moreover, institutions must create mechanisms for feedback, monitoring, and continuous improvement to ensure that green HR policies evolve with employee needs, technological advances, and environmental imperatives. Embedding these practices within a broader organizational strategy can enhance employee engagement, institutional legitimacy, and long-term ecological resilience.

Authors' Contributions

Authors equally contributed to this article.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

All procedures performed in this study were under the ethical standards.

References

[1] S. Alavi and H. Aghakhani, "Identifying the effect of green human resource management practices on lean-agile (LEAGILE) and prioritizing its practices," *International Journal of Productivity and Performance Management,* vol. 72, no. 3, pp. 599-624, 2023, doi: 10.1108/IJPPM-05-2020-0232.

[2] A. Farhadi Mahalli, "The Effect of Spiritual Leadership on Environmental HR Behaviors: The Moderating Role of Perceived Organizational Support and Environmental Awareness," *Green Management,* vol. 3, no. 2, pp. 100-121, 2023. [Online]. Available: https://dorl.net/dor/20.1001.1.28210050.1402.3.2.6.0.

[3] W. Li, A. A. Abdalla, T. Mohammad, O. Khassawneh, and M. Parveen, "Towards examining the link between green HRM practices and employee green in-role behavior: Spiritual leadership as a moderator," *Psychology Research and Behavior Management,* pp. 383-396, 2023, doi: 10.2147/PRBM.S396114.

[4] F. H. Awan, L. Dunnan, K. Jamil, and R. F. Gul, "Stimulating environmental performance via green human resource management, green transformational leadership, and green innovation: a mediation-moderation model," *Environmental Science and Pollution Research,* vol. 30, no. 2, pp. 2958-2976, 2023, doi: 10.1007/s11356-022-22424-y.

[5] N. Ribeiro, D. R. Gomes, E. Ortega, G. P. Gomes, and A. S. Semedo, "The impact of green HRM on employees' eco-friendly behavior: The mediator role of organizational identification," *Sustainability,* vol. 14, no. 5, p. 2897, 2022, doi: 10.3390/su14052897.

[6] A. M. Wain, U. Javed, A. A. Ashraf, and I. Bashir, "Impacts of green HRM on organizational citizenship behavior towards environment: Mediating role of workplace spirituality and organizational engagement," *ITJEMAST (International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies),* vol. 13, no. 6, pp. 1-12, 2022, doi: 10.14456/ITJEMAST.2022.119.

[7] N. Sayyad, M. Haghighi, and R. Zolfaghari Zafarani, "Exploring the Concept of Green Human Resource Management with a Green Organizational Citizenship Behavior Approach," *Human Resource Management Research,* vol. 15, no. 52, pp. 123-150, 2023. [Online]. Available: https://dorl.net/dor/20.1001.1.20084528.1402.15.2.2.2.

[8] Z. Wang, S. A. Cai, S. Ren, and S. K. Singh, "Green operational performance in a high-tech industry: Role of green HRM and green knowledge," *Journal of Business Research,* vol. 160, pp. 743-761, 2023, doi: 10.1016/j.jbusres.2023.113761.

[9] S. Altuntas, P. Manigandan, M. S. Alam, M. Murshed, I. Ozturk, and M. M. Alam, "Promoting sustainable economic growth through natural resources management, green innovations, environmental policy deployment, and financial development: Fresh evidence from India," *Resources Policy,* vol. 90, pp. 664-681, 2024, doi: 10.1016/j.resourpol.2024.104681.

[10] R. J. Pio, "The mediation effect of quality of worklife and job satisfaction in the relationship between spiritual leadership to employee performance," *International Journal of Law and Management,* vol. 64, no. 1, pp. 1-17, 2022, doi: 10.1108/IJLMA-07-2018-0138.

[11] A. A. Kaddam, A. Alzghoul, K. Khawaldeh, S. M. Alnajdawi, and O. Al-Kasasbeh, "How spiritual leadership influences creative behaviors: The mediating role of workplace climate," *International Journal of Professional Business Review,* vol. 8, no. 2, pp. 1106-1116, 2023, doi: 10.26668/businessreview/2023.v8i2.1106.

[12] S. B. Vedula and R. K. Agrawal, "Mapping spiritual leadership: A bibliometric analysis and synthesis of past milestones and future research agenda," *Journal of Business Ethics,* vol. 189, no. 2, pp. 301-328, 2024, doi: 10.1007/s10551-023-05346-8.

[13] N. Imani, R. Davari, and M. Oladvaladi, "Designing a Model for the Development of Spiritual Leadership in School Principals," *Trends in Basic Sciences Education,* vol. 9, no. 31, pp. 1-21, 2023, doi: 10.22034/trj.2023.62692.

[14] A. Mohabbi, H. Hamzavi, A. e. Khademi, and M. J. Kameli, "The Impact of Green Human Resource Management on Social Responsibility in Educational Organizations: Mediating Role of Green Behavior of Employees," *University Management,* vol. 2, no. 2, pp. 97-122, 2023. [Online]. Available: https://jam.uok.ac.ir/article_62868.html.

[15] W. Pan, H. Cao, and Y. Liu, "Green innovation, privacy regulation and environmental policy," *Renewable Energy,* vol. 203, pp. 245-254, 2023, doi: 10.1016/j.renene.2022.12.025.

[16] P. Shah, R. Singh Dubey, S. Rai, D. W. Renwick, and S. Misra, "Green human resource management: A comprehensive investigation using bibliometric analysis," *Corporate Social Responsibility and Environmental Management,* vol. 31, no. 1, pp. 31-53, 2024, doi: 10.1002/csr.2589.

[17] M. I. Tanveer, M. Y. Yusliza, and O. Fawehinmi, "Green HRM and hospitality industry: challenges and barriers in adopting environmentally friendly practices," *Journal of Hospitality and Tourism Insights,* vol. 7, no. 1, pp. 121-141, 2024, doi: 10.1108/JHTI-08-2022-0389.

[18] W. Zihan, Z. K. M. Makhbul, and S. S. Alam, "Green human resource management in practice: Assessing the impact of readiness and corporate social responsibility on organizational change," *Sustainability,* vol. 16, no. 3, p. 1153, 2024, doi: 10.3390/su16031153.

[19] M. Kailay and K. K. Paposa, "Sustainable human resource management in the hospital sector: A review of literature," *Journal of Health Management,* vol. 97, no. 2, pp. 649-662, 2024, doi: 10.1177/09720634231216062.

[20] Y. Yuan, S. Ren, G. Tang, H. Ji, F. L. Cooke, and Z. Wang, "How green human resource management affects employee voluntary workplace green behaviour: An integrated model," *Human Resource Management Journal,* vol. 34, no. 1, pp. 91-121, 2024, doi: 10.1111/1748-8583.12510.

[21] H. Danaeefard, S. K. Hosseini, and H. Kazemi, "The Method of Problem Understanding in Public Policy Studies: Concepts and Applications," *Methodology of the Humanities,* vol. 29, no. 114, pp. 35-51, 2023, doi: 10.30471/mssh.2023.8958.2382.

[22] H. Sadeghi, "Examining the Impact of Culture on Public Policy in Iran," *New Research Approaches in Management and Accounting,* vol. 6, no. 84, pp. 102-112, 2022. [Online]. Available: https://majournal.ir/index.php/ma/article/view/1388.

[23] S. Salajegheh, S. Maddahian, and A. Peyvand, "Designing a Green Human Resource Management Model Based on Information Technology (Case Study: Governmental Organizations in Kerman City)," *Green Management,* vol. 3, no. 2, pp. 36-58, 2023. [Online]. Available: https://dorl.net/dor/20.1001.1.28210050.1402.3.2.3.7.

[24] M. Tabari, M. Yahyapour, M. R. Bagherzadeh, E. Balooei Jamkhaneh, and A. Mehrara, "Designing a Green HRM Excellence Model in Northern Iranian Power Distribution Companies," *Ethical Researches,* vol. 12, no. 48, pp. 287-304, 2022. [Online]. Available: https://dorl.net/dor/20.1001.1.23833279.1401.12.48.10.4.

[25] S. Shayegan, A. Bazrkar, and M. Moradzad, "The Role of Modern Technologies and Green HRM Practices in Achieving Sustainable Organizational Performance," *New Research Approaches in Management,* vol. 7, no. 24, pp. 622-640, 2023. [Online]. Available: https://majournal.ir/index.php/ma/article/view/1909.

[26] Y. S. Murthy, I. Goswami, A. G. B. Hamida, S. P. Gopal, and V. Jalaja, "Effective role of human resource management policies within marketing organization: The impact on business and marketing strategy implementation," *International Journal of Professional Business Review,* vol. 8, no. 7, pp. 41-59, 2023, doi: 10.26668/businessreview/2023.v8i7.997.

[27] P. C. Bahuguna, R. Srivastava, and S. Tiwari, "Two-decade journey of green human resource management research: a bibliometric analysis," *Benchmarking: An International Journal,* vol. 30, no. 2, pp. 585-602, 2023, doi: 10.1108/BIJ-10-2021-0619.

[28] Y. Chen, Y. Chung, and J. Xede, "The effect of frontline employee participation in strategic planning on managers' budget slack creation and evaluation: a lab-in-the-field experiment," *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad,* vol. 52, no. 4, pp. 528-558, 2023, doi: 10.1080/02102412.2022.2109840.