

Designing a Paradigm Model for Green Human Resource Management using Data-based Method (Case study on Municipality of Mashhad)

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Abstract

Purpose This paper aims at the establishment of management systems such as the Green Human Resource Management System can be effective in achieving the sustainable development and the use of an environmental management system.

Design/methodology/approach The research strategy used in this study is the Grounded Theory with Qualitative Research Approach. In order to achieve this goal, a semi-structured interview was conducted in the beginning with human resources experts, including management professors and environment and human resources specialists.

Finding Codes of green human resource management in 23 categories including: Green motivation, knowledge, personality, organization, Partnership, Maintenance, compensation, Promotion, Organizational Culture, City, City Council, Rules and Regulations, Government, International Organizations, Suppliers, Media and Green NGOs.

Practical implications Management system in urban areas, Prevention with the environmental crisis, Promoting organizational culture in urban planning, Sustainable urban development using green human resources.

Social implications A more general implication of the proposed argument for GHRM the concept of "green" has been changed in to a norm and "green actions" refer to activities that not only do not harm the environment, but also improve it. Green human resource management suggests that human resources should be redesigned or re-engineered to be sensitive to laws, policies, resources, proper consumption, non-extravagance, and so on so that they provide optimal and targeted consumption of resources and reduce environmental pollution.

Originality/value Designing the model of dimensions of green human resource in 23 categories and in three categories or levels: individual level, organizational level and supra-organizational level.

Introduction

The problem of growing population in the global and national arenas, the concentration of activities in cities and the subsequent unregulated and unplanned growth of cities in developing countries, especially Iran, have shown devastating results. Metropolises face similar problems, such as the widespread use of cars, the spread of suburban areas, environmental pollution, the growth of inequality and social injustice, the destruction of biological systems, and the like. (Rahimi et al., 1398) (An essential part of environmental crises is the lack of knowledge about environmental protection and man's relationship with nature, which is actually a cultural problem. Therefore, we need national and international determination to create a culture of environmental protection among the various segments of society (Shoberi, 2018). Also, people's awareness of the environmental issue corrects their misbehavior towards the environment and

causes them to pursue the right environmental policies when they become politicians and executive managers in the society (Meybodi and Karimzadegan, 2013). Economic decision-makers have described the environmental situation as one of the crises lurking in Iran's economy. Evaluations show that not solving environmental problems may cause political and social consequences in addition to economic consequences (Kamrani Sharif, 1397). These environmental concerns have led to paying attention to sustainable development, which means the development and progress of the present generation while preserving resources for the development of the next generation. The concept of sustainable development has an undeniable role in people's understanding of nature. In the meantime, the topics related to human capital and its impact on sustainable development have been of particular importance. While the strategic management approach of human resources with more than 30 years old is the dominant approach of human resource management policies, a sustainable approach to human resources has emerged in recent decades demanding the link between human resource management and organization's sustainability. (Yaghoubi et. al, 2018). Therefore, human resource managers have recently joined the green movement of the organization. Because human resource management plays an important role in forming organizational culture, structure, strategy, and organizational policy development, human resources also play a key role in achieving sustainable development (Schaler and Jackson, 2014). Green Human Resource Management refers to all the actions that are taken in the evolution, follow-up and continuity of a system so that the human resources of an organization have awareness in their professional and private lives. Green HRM means implementing strategies to be aware of green actions to promote and pursue sustainable business activities that help organizations lead an intimate environment (Agroval and Sharma, 2015). If you consider the city as a living thing, it needs dynamism and vitality to continue living (Bemanian et al., 2009) According to the Statistics Center of Iran, the results of the 2016 General Population and Housing Census show that 74% of the country's population lives in urban areas. However, more and more in Iran, organizations and companies are required to observe the related environmental dimensions along with global standards, which shows an urgent need for the activities of managers in this regard (Rahman et al., 2016). The actions of mother organizations such as municipalities are important and necessary in observing the principles related to environmental management, which can be accompanied by environmentally friendly activities, because municipalities are among the most important institutions that have had the most public referrals And despite the numerous financial and non-financial issues, they are carrying out the most civil and executive actions in the city. Therefore, the urgent need to explain green human resource management programs for sustainable development and to overshadow the performance of these organizations is critical in order to achieve the goals and missions to provide appropriate services. Paying attention to the variables of reward and compensation of services, monitoring and evaluation, training and empowerment of employees, selection of green, managerial relations, participation development, promotion of green organizational culture, green organization can provide a clear path in this regard. Considering that Mashhad is the second largest city in Iran after the capital and with a brief look at its human capital, you will find that it has employed more than 28,000 people in its subordinate organizations (Ebrahimi Yazdi et al., 2014, 33). Due to the high volume of increasing retirement age, the management of human resources in this organization is facing difficulties. Variety of employment in the municipality, the quantity of staffs,

the withdrawal of labor from the municipal body and other such cases reinforces the need to pay attention to the management of green human resources. To achieve this goal, having green employees in the true sense of the word, from the selection and recruitment stage to performance appraisal, which can help the municipal organization to achieve this goal, is very important in establishing a green human resource management system in the municipal organization. Because it is the municipal organization that can adequately address the city's management for sustainable development.

Research Background

In recent years, various concepts of sustainable development paradigm have been proposed, As concepts such as green city, ecosystem, livable city and urban environment have been coined in the framework of sustainable urban development (Rahnama et al., 2009) But in general if taking action to increase welfare, is not accompanied by environmental considerations, it will cause irreparable damage, including rapid climate change and environmental degradation (Pourali et al., 2019). Because according to studies, environmental issues cover the integrity of cities (Shukri and Behzadfar, 2019) Thus, today, the concept of "green" has been changed in to a norm (Margarta and Saragi, 2013). And "green actions" refer to activities that not only do not harm the environment, but also improve it.

, there is a growing literature in the field of management considering green marketing, green accounting, green management and green human resource management (Renwick et al., 2013). Human resource management is one of the main responsibilities of management in any organization and all managers of various levels of the organization have some kind of responsibility. Therefore, human resource management is considered to be the exploitation of the company's human capital to achieve organizational goals (Seyed Javadin et al., 2016). The term green human resource management was introduced in 2011 as a completely new approach and has been accepted worldwide since 2000 as a concept that manages the environment within the organization by adopting green human resource policies and practices (Ahmad, 2015). Adahikari et al. (2013) state that green human resource management provides an efficient and effective use of natural resources in any business by using human resource management methods and practices. (Bhutto and Uranzb, 2016) one of the most important roles for creating green thinking among the employees in green organizations is the role of managers and human resource experts, which should turn employees into people who are committed to environmental issues.

To achieve environmental goals, environmental issues must be defined and implemented in various human resource management policies, including recruitment and employment, training, performance appraisal, and reward (Notron et al., 2019). In general, green human resource management suggests that human resources should be redesigned or re-engineered to be sensitive to laws, policies, resources, proper consumption, non-extravagance, and so on so that they provide optimal and targeted consumption of resources and reduce environmental pollution. The success of green human resource management depends on re-reading the concept of being green and reflecting it in all human resource processes. Therefore, the concept of greenness must be applied in organizational strategies and subsequently in

human resource management strategies. In order to achieve the alignment of green resources and human resource strategies, we need synergistic coherence and interaction between human resource management subsystems, and this synergy can be achieved with factors such as green culture, productive and dynamic. Dissemination of green organizational culture is the basis for the formation of strategic goals of green human resource management and then the strategic goals of the organization. The transition from human resource management without a green approach to managing green human resources has many challenges. One of these challenges is the type of interaction of different human resource subsystems with green human resource management (Tavakoli et al., 1397). Behavior, knowledge, and environmental attitudes are among the factors that play an important role in environmental culture. Environmental behavior is the behavior of an individual in dealing with the environment that each person has a different approach to the environment according to their specific social, cultural and personality conditions and needs (Nawah et al., 2012). Environmental knowledge is the practical information that people have about the environment, the ecology of the planet Earth and the impact of human actions on the environment (Mehdi Karami et al., 2016). Motivation has been defined by researchers as a force that reinforces and directs behavior. Therefore, it is obvious that employees must be sufficiently motivated to achieve goals. Awareness of the management of green human resources and involvement of its activities along with the activities of people within the organization, as an important motivating factor can be effective. On the other hand, the lack of alignment in the attitude of managers and employees about the needs and motivations of employees is one of the important factors in causing problems in organizations. (Data, 2012). Here are some activities and factors related to green human resource management: Green Human Resource Planning: Green human resource planning means anticipating the number and types of employees needed to successfully implement the organization's programs and activities (Arrolrajah et al., 2015). Thus, leading organizations need to plan in such areas to respond to environmental demands in order to manage their environmental issues (Yaleh, 2017).

Green Recruitment: Green Recruitment refers to providing or creating transparency about the organization's environmental performance (past and present) when sending recruitment messages. In fact, this process reflects the organization's environmental policies and strategies in recruitment (Arrolrajah et al., 2015).

Green Education: Education is the beginning of development (Ramezani et al., 2009) In order to preserve nature, appropriate educational approaches are needed to move in the direction of growing knowledge, behavior and environmental attitudes. So that along with developing the required knowledge and skills, it will lead to a secure future. One of the most important tools is environmental education, which affects the culture of communities and, in fact, provides the necessary conditions for results. In fact, environmental education is the most fundamental method in environmental protection and its goal is to find the most appropriate and best way to present content and activities and implement a structure that promotes environmental awareness in society. The objectives of this training, which is typically (long-term and sustainable) to increase environmental knowledge and attitudes and in the same direction, the development of friendly environment behavior and is considered as a necessary basis for friendly environmental behavior (Azadkhani et al., 1397).

Green Evaluation: In fact, creating and applying green performance which means forming a set of green criteria such as environmental responsibilities, reducing costs, and environmental concerns to assess employee performance is inevitable (Tang et al., 2017).

Green Service Rewards and Compensation: One of the effective systems in human resource management system is service compensation, payments and the organization's reward system (Giancola, 2009). The reward management system in the context of each organization guarantees the provision of financial and non-financial needs of employees and rewards them according to their level of participation in achieving the goals of the organization (Tavakoli et al., 1397).

Green Organizational Culture: Studies show that organizational culture affects all aspects of the organization. In other words, in the organization, the phenomenon is not far from culture (Rastegar and Kooshesh Tabar, 2017). Researchers have shown that green resource management practices improve a company's environmental performance. However, existing studies do not explain how green human resource management initiatives can activate a green organizational culture or how such a culture affects the company's environmental performance and sustainable development (Samuel et al., 2019).

Economic factors: Because the economy is an open system, the three main processes (extraction, processing, or production and consumption) involve the production of waste that is eventually returned to the environment (air, water, or land). Excessive waste in inappropriate places and times will cause biological changes in the environment, which in turn will harm animals, plants and the ecosystem. Due to the spread of polluted substances in the air, their discharge into water or land and as a result of imposing an external cost, irreparable damage (health damage, increase in disease or death, reduction of recreation and entertainment, etc.) is done to human well-being. (Kamrani Sharif, 1397).

Green Suppliers: Sustainable Supply Chain Management is one of the most important issues in the areas of sustainability and supply chain management (Hassani Bamkan et al., 2009) The selection of suppliers plays an important role in supply chain management. Paying attention to sustainability in the supply chain has made the issue of selecting suppliers a challenging issue. At present, in literature, more focus has been on paying attention to economic indicators in order to select and evaluate suppliers and less attention has been paid to the three economic, environmental and social factors as sustainability factors (Ardavan et al., 1397).

Media: Today, environmental protection is recognized as the most effective mechanism for society to face the greatest challenge of the century, sustainable development. Meanwhile, the media plays a very important role in socializing and internalizing the resources that make up social capital, especially participation, and this media function can have a very significant impact on sustainable national development (Taghavi et al., 2016). Mass media, as new communication channels and introducing an important role in the process of informing different individuals and communities, strengthen the intellectual and cultural foundations of society (Meshkini et al., 1397).

Technology: Today, with the arrival of the third millennium and the beginning of the virtual era and the introduction of nanotechnology and the emergence of information and communication technology, most societies have undergone fundamental changes (Sarai and Khavarian, 1397). In the 21st century, energy consumption has received more attention. Because energy loss causes damage to capital waste and increases the problem of global warming. In today's society, as the number of computers is increasing day by day, the amount of electricity consumed by them also increases the carbon content in the Earth's atmosphere. This problem is understood by governments and organizations, and steps are being taken to minimize the use of computer power. By using green information technology, energy consumption can be reduced through green computing techniques, which means less carbon dioxide emissions from fossil fuels in power plants and transportation. This will also save money and energy. Developed countries have taken great steps in controlling environmental pollution by investing in renewable energy, improving energy efficiency and new technologies, but developing countries still face serious challenges, and Iran is no exception. Today, the use of solar energy to generate electricity as a source of free, clean and sustainable energy has grown significantly around the world. The results of the Energy Consumption Survey around the world show that about one-third of this consumption belongs to buildings (Thomson, 2016). Today, buildings called green buildings are designed to take into account architectural conditions and patterns in order to have the lowest energy consumption in terms of mechanical and electrical facilities. The use of solar panels in residential and office buildings is one of the practical applications of green building theory, which causes optimal consumption and energy protection in buildings through the absorption of solar energy. It should be noted that the highest consumption of an office building is during office hours and during the day when solar radiation is available and it is possible to directly convert sunlight into electricity and consume it by consumers at the same time. In this way, it is possible to consider the energy optimization process, which is economical and environmentally friendly. (Nasirzadeh and Shafiee, 1397) In general, the use of information and communication technology according to the social approach of sustainable development increases the productivity of organizations (Bastami et al., 2017). Government: Governments may not be able to obtain the information needed to track all the consequences of an activity, and often policymakers do not realize that activities that do not seem to be related to the environment will affect the environment. Third, government policymakers may make good decisions and provide a good framework for environmental law, but those laws must be enforced, and this requires the use of the knowledge of experts who are part of the state bureaucracy. The role of bureaucrats is very important and they can easily influence the nature of the rules in implementation. However, in many cases, the bureaucrats have not been elected and may not feel motivated to do their duty and serve the community, unless they are under the control of the relevant authorities, and this is very difficult (Kamrani Sharif, 1397). Participation: Protecting the environment is a public and national duty, and every individual and organization must be sensitive and participatory in protecting the environment within the scope of their individual and social duties and responsibilities (Ahangari Kiasari and Charmchian Langroudi, 1397). The choice of the type of urban management model reflects the prevailing attitude in regulating the relations between the council and the municipality and, most importantly, the level of participation and executive power. The model of city administration is closely related to solving or creating urban problems (Nazari and Rahimi, 2012). One of the best platforms for

public participation in the field of environment and natural resources is the formation of non-governmental organizations (NGOs). Despite their long history, these organizations need to examine the relationship between flexibility and natural resources and cooperation in real-world conditions (Fisher et al., 2018). Non-governmental organizations play an important role in the management of natural resources of developing countries (Ariti et al., 2018). Participation is the process by which individuals, groups, and organizations play an active role in making and implementing decisions that directly affect them. In general, we can define participation as a process of people's participation in determining their own destiny. (Ahangari Kiasari and Langroudi, 1397) Participation refers to a set of attitudes, methods, and behaviors that enable people to examine and discuss the reality of their lives and living conditions. This helps them plan and know what to do and evaluate and view the results (Yasuri et al., 2017). According to the importance of man as the goal of development on the one hand and the importance of natural resources as a suitable platform for human activity on the other hand, the issue of having a healthy environmental right for the current and future generations of human beings was seriously raised. In such an environment, the role of public participation as one of the key tools in the realization of human development and the preservation of the environment and natural resources was considered. What is certain is that NGOs continue to operate as spontaneous and organized forces. Therefore, it is suggested that in order to be more productive in the activities of the public and non-governmental sectors, the use of these public capacities should be aimed at sustaining the development goals and accelerating the achievement of the 20-year vision. NGOs can play an important role in information activities. If the necessary basis for the connection of these organizations to domestic, regional and international networks related to natural resources is done, this can lead to the improvement of information management in these organizations (Khosravipoor et al., 2009).

Green designing: Green designing is a practical solution to problems in which natural resources before, after and during the production and manufacturing process are damaged to a minimum level. In addition, in the course of this operation, the materials must be useful, have a long useful life and can be returned to the cycle of nature (Darban and Javadnia, 1397). Therefore, achieving spatial desirability and creating a better-quality environment to improve the quality of life of individuals is always considered as one of the highest design goals (Taghipour and Heidari, 2009). The following is a summary of recent human resource management research:

In their research, Zayd et al. (2016) showed that green human resource management practices have a direct impact on sustainable performance, and green supply chain management methods mediate this. Green resources management provides a positive intermediary between human resource management practices and sustainable performance (Yaghoubi et al., 1397). Studies by Kim et al. (2019) showed that green human resource management increases employee organizational commitment, and environmental performance. Aibaghi Esfahani et al. (2016) in a study entitled Green Human Resource Management: A Model for Sustainability in Sports Organizations, showed that the activities carried out in the General Directorate of Sports and Youth of North Khorasan Province with a rate of 63% are most in line with green human resource management standards. However, awareness of green human resource standards has been at a lower than average level and it has been suggested that the North Khorasan Sports and Youth

Organization try to strengthen this dimension by holding appropriate training and information courses on green human resources. Tavakoli et al. (1397) in a study entitled Structural model of green human resource management based on human resource management systems, showed that the order of effectiveness of variables to achieve green human resource management is: maintenance, service compensation, performance management and human resource development, And the relationship between these systems and green human resource management is significant. Rosco et al. (2019) in a study entitled "Green human resource management and enabling organizational green culture with the aim of increasing environmental performance in line with sustainable development" say that activities related to green human resource management increase organizational environmental performance. The study was conducted among 204 employees of Chinese construction companies. The research findings suggest that human resource management activities, including recruitment, training, evaluation, and reward systems, lead to the flourishing of organizational green culture, including leadership, employee engagement in organizational goals, and employee empowerment. In a study titled "The Impact of Green Human Resource Management on Organizational Environmental Performance in Jordanian Health Services Organizations", Ranan Ravashedeh (2019) showed that the performance of a group of green jobs in those organizations was moderate, and there was a positive statistical relationship between individual green human resource management work and environmental performance. The strongest correlation was related to the employment and green selection, while the weakest correlation was related to education and development.

Methodology

In this research, a qualitative approach was used to answer the research questions and present the research model. The method of data-based theorizing is the qualitative method in this study. Data-based method is a systematic and qualitative way to create a theory that broadly explains the process of interaction with a given identity. The statistical population of this study include Employees of the Department of Human Resources Development and Planning, and the General Department of Human Resources of Mashhad Municipality, consisting of 150 managers and supervisors. Based on the data-based methodology, using semi-structured snowball sampling method, semi-structured interviews were conducted with fifteen human resources experts and environment experts, including professors of management and human resources specialists in Mashhad Municipality. In the process of selecting a sample, qualitative researchers can use a snowball sampling method in which a participant in our research directs us to other participants or snowballs. In selecting this number of samples, issues such as time, availability of interviewees and their interest in cooperation have also been considered. The method of collecting information to formulate theoretical foundations and backgrounds is of the library type based on the sources of the last ten years. Based on the data collected from the experts, using the data-based method and Max Kyoda software version 10, the components of green human resource management were identified.

Area To Be Studied

Mashhad metropolitan city in northeastern Iran is located at a geographical position of 36 degrees and 30 minutes north latitude and 59 degrees and 57 minutes east longitude and at an altitude of 1050 meters above sea level and is the capital of Khorasan Razavi province. During the Afshari era, the city was the capital of Iran, and due to the presence of the shrine of Ali ibn Musa al-Reza, the eighth Shiite Imam, which annually receives 27 million local and 2 million foreign pilgrims, it is called the spiritual capital of Iran. With an area of 351 square kilometers and a population of more than 3 million, according to the 2016 census, Mashhad is the second largest and most populous city in Iran after Tehran and it is the ninety-fifth most populous city in the world. The scope of the present study is shown in Figure (1).

Data analysis

To achieve the initial codes, each interview was examined sentence by sentence after the implementation of their text, and then the main message was extracted with the key concept that was hidden in each phrase. In most of the sentences, the interviewees used terms that could be used directly as code, in some cases, the concept was hidden behind the sentences that the researcher attributed to a concept according to the speaker's intent and considered it as an initial code. For example, when an interviewee says, "Green performance appraisal is not seen in the municipality, but should be defined as an important and priority issue," the conceptual label for green appraisal can be directly deduced as a code. The initial codes are refined after each interview and, given the suitability and consistency with the other codes discovered, are placed below a larger concept. And this process was repeated several times so that after repeated refinements, the original codes became concepts, and the concepts were each organized based on conceptual homogeneity in the form of broader concepts as categories. In this study, 318 initial concepts were obtained and initially classified in 108 categories, which were re-merged and some were deleted due to their irrelevance. These concepts were then placed in a related category by examining the back and forth that exist in the data-based theory. This selection and classification were edited several times, and by re-examining the text of the interviews and the concepts and categories in coordination with the professors and experts, the categories were stabilized in 16 cases. The codes and concepts obtained from the analysis of the interviews in open and selective coding are given in Table 1 below.

Table 1 Examples of codes and concepts from the analysis of interviews in open and selective coding

Axial coding	Open coding	Axial coding	Open coding
Green Recruitment	<p>Applicant's environmental behavior records</p> <p>Environmental Research Records</p> <p>Green Job Interviews</p> <p>Use of electronic absorption method</p> <p>Applicant`s environmental knowledge</p> <p>Applicant's environmental attitude</p> <p>Matching jobs with people's expertise</p> <p>Membership in environmental groups</p>	Reward and green service compensation	<p>appreciating the organization's top green staff</p> <p>Improving employee motivation</p> <p>Green appreciation system design</p> <p>Support employee creativity and innovation</p> <p>Pay rewards to hard-working green employees</p> <p>Salaries based on the progress of green projects</p> <p>Annual Green Award</p> <p>balance between reward and greenery</p>
Green organizational culture	<p>Culturing in school and family</p> <p>Organizational green values</p> <p>Organizational green logo</p>	Green monitoring and evaluation	<p>collecting room waste</p> <p>Paper printing amount</p> <p>Card usage amount</p> <p>Provide green designs and suggestions</p> <p>Use one-sided white papers</p> <p>Turn off the computer at rest</p> <p>Workplace beautification</p>

	<p>Green symbols and elements in the organization</p> <p>Organizational norms</p> <p>Annual appreciation ceremony of green workers</p> <p>Managers and employees use of public devices</p>		<p>Avoid unnecessary missions</p> <p>The amount of passing the green training course</p> <p>The amount of bicycle use by the employee</p> <p>Energy consumption in the employee's room</p> <p>The amount of green published articles and books</p>
Green participation	<p>Employee participation in green programs</p> <p>green suggestion system</p> <p>green work teams</p> <p>Determining the Green Participation Award</p>		
Green maintenance	<p>Green tourism tours</p> <p>Practical support for employees' green comments</p> <p>Introducing green staff to others</p> <p>The Necessity to determine the green promotion criterion</p> <p>Necessity of determining green management appointment criteria</p> <p>Definition of green business card</p>	Green education	<p>The importance of the environment Online learning</p> <p>Demonstrate the destination and aspirations of the organization</p> <p>Organizational green training courses</p> <p>Familiarity with the concepts of smartification</p> <p>Familiarity of shopping Authorities with green products</p> <p>Optimal use of equipment and facilities</p> <p>Regular and appropriate job training</p>
Green characteristics	<p>Being dutiful</p> <p>environment lover</p> <p>Conscientiousness</p>	Green organizing	<p>Use of energy saving lamps</p> <p>Electronic employing system</p> <p>Optimal use of natural light in the workplace</p> <p>Install smart water meters</p>

		<p>Organizing office spaces</p> <p>Organizing the lighting system of the rooms</p> <p>Use of New Energy (Solar)</p> <p>Organizing the cooling and heating system</p> <p>Employee changes for greening</p>
Green attitude	<p>Positive environmental perception of employees</p> <p>Positive environmental perception of managers</p> <p>Emotional response to environmental issues</p> <p>membership in green NGOS</p>	
Green motivation	<p>The desire to win an environmental award</p> <p>Possibility of green competition</p> <p>The desire to do creative green work</p>	
Green rules and regulations	<p>Constitution of the country (Article 50)</p> <p>Budget law</p> <p>Environmental regulations</p> <p>Global Environmental Regulations</p>	
Green city	<p>Designing green buildings</p> <p>Green public transport</p> <p>electronic City</p> <p>Organizing jobs</p> <p>Green elements</p> <p>Green ads</p> <p>Pedestrian and bicycle-based design</p>	<p>Insulation of water pipes</p> <p>Environmental attachment for all projects</p> <p>Identify high-consumption areas</p>

			Holding e-conferences Minimize paperwork Use high-efficiency equipment Install timers and energy sensors Installation of double glazing Embedding a place to park a bike Water recirculation in buildings Optimal elevator usage guide Scan documents instead of using paper Use of intelligent irrigation systems
	Green Supervision and Appointments of the City Council		
Green NGOs	Urban green NGOS	Green knowledge	The number of environmental books studied Teach the importance of the environment to others Membership in environment-friendly groups Green University Education Membership in environmental magazines Articles and books published in green
	National green NGOS		
	International green NGOS		
Green medias	Written media (newspapers, magazines, etc.) Radio, television, satellite Internet and cyberspace		

Examples of codes and concepts from the analysis of interviews in open and selective coding

The data from the interviews were upgraded to more abstract levels after detailed analysis and continuous comparisons based on semantic similarities, and again, with the guidance of professors and experts in management, environment, and literature, they were finally categorized in three general levels: individual level, organizational level, and supra-organizational level. Categories, in turn, form classes. The researcher has allocated them to specific classes, considering what common themes are formed, and, in fact, an inductive process that moves from raw data to concepts, categories, and abstract classes can be seen in the context of the data that emerges in this classification. In this study, green human resource management has three dimensions: individual level, organizational level and supra-organizational level.

For example, the green attitude component is in the individual dimension, the green reward and compensation component is in the organizational dimension, and the concept of suppliers is placed in the meta-organizational dimension of green human resource management in the municipality. These are shown in Table 2.

Table 2: Dimensions of green human resource management

Axial category	Levels (Dimensions)	Categories	Row
Green Human Resource Management	Individual level	Green attitude	1
		Green motivation	2
		Green knowledge	3
		Green characteristics	4
		Green behavior	5
	Organizational level	Green employment	7
		Green education	8
		Green evaluation	9
		Green organizing	10
		Green participation	11
		Green maintenance	12
		Green compensation service	13
		Green appointment	14
		Green organizational culture	15
	supra-organizational level	Green city	16
		City council	17
		Rules and regulations	18
		Government	19
		International organizations	20
		suppliers	21
		Media	22
		Green NGOs	23

Dimensions of green human resource management

After classifying the categories into three categories: individual, organizational and supra-organizational, and the emergence of the axial category, the green human resource management model in Mashhad Municipality are presented according to Fig. 2. It is noteworthy that all these categories at all three levels

are individual, organizational and trans-organizational, are surrounded by political, geographical, economic, technological, social and cultural factors. We can mention the real slogan and priority of governments, political officials of the country, province and city according to research findings from political factors affecting human resources. So that if the attitudes and behaviors of political managers towards the environment are positive, this issue will be observed at all times. For instance, they use less paper and banners during election campaigns or pay special attention to environmental issues during celebrations and opening ceremonies of projects. Regarding the geographical factors, we can point to the weather conditions of the city, so that in the city of Mashhad, due to the hot and dry weather and on the other hand, the air pollution of this metropolis, the employees are more inclined to protect the environment. According to the researcher's observations, small natural pots and aquariums were used in most of the municipal staff rooms. It is noteworthy that from the perspective of economic factors, it can be said that the financial situation and good income of the municipality cause the environmental projects to be well followed and implemented. Because any project needs financial resources to run. For example, the water recycling project in the municipal building was underway. Or a plan to reorganize the Kashafrud river that is practically in the area of regional water duties, but the municipality is pursuing the issue due to its high financial capacity. In terms of technological factors, technology platforms and infrastructures should be provided, both in the field of Internet and telecommunications and in the field of designing smartification and cyber systems, in order to provide services such as telecommuting and remote service. We can refer to influential social factors including influential social and sociology groups, and effective cultural factors in this regard include beliefs, values of individuals, citizenship culture, family culture and lifestyle of individuals. Regarding cultural factors, it should be said that what threatens the environment of our cities is not only due to the lack of environmental awareness, but also due to the wrong culture and improper use of the environment. (Mirzaeian and Rahmani, 1398)

Discussion And Conclusion

One of the missions of the Municipalities Organization is to have a purposeful and efficient planning system, relying on capable human resources in order to achieve attractive, diverse and sustainable green spaces with balanced distribution. In this regard, the purpose of this study was to explain and design the model of dimensions of green human resource management in Mashhad Municipality to address appropriate strategies for green human resource management in Mashhad Municipality. The strategy used in this research is the data-based theory. In this study, the dimensions of human resources management of Mashhad Municipality are categorized in 23 categories and in three categories or levels: individual level, organizational level and supra-organizational level.

Individual level

Many people make decisions and behaviors based on their personal values. Managers of organizations, as the main guides and actors of the organization, have personal values that help them to diagnose well or badly. Therefore, it can be said that in order to achieve sustainable growth and development of the organization in the field of human resources, the necessary planning should be done to attract people

with green knowledge, attitude, motivation and personality. This dimension is consistent with the research of the Shorakayi et al. (2016), Farrokhi et al. (2017), Norton Research (2015). However, in this research, knowledge and personality have been added to them.

Organizational level: The organization has a performance and affects human life in its internal and external environment. The organization is much more important than the individual and therefore can be constructive or destructive (Gharamlaki, 1397) At the organizational level, the components of green human resource management that have been obtained from data analysis and open and selective coding of the data-based theory include: green employment, green education, green evaluation, green organizational culture, green promotion, green reward And compensation services, green organizational structure, green maintenance. Green employment can be a great help for the organization to become and stay green. Employing green people with knowledge, attitude, motivation, personality and green behaviors into the organization can be effective in environmental issues. The results of research by Baena et al. (2015), Schaller and Jackson (2014) are consistent with this category. Green training of human resources can increase the capabilities of employees in line with the environmental goals of the organization and lead to greater productivity of the organization. The results of this dimension are consistent with the researches of Tavakoli et al. (1397), and Farrokhi et al. (1396). Rewards and compensation for green services can motivate and achieve the goals and programs of green human resource management in the organization. In fact, financial payments, and the promotion of green managerial positions, based on green standards and the definition of green business careers, can help increase the green motivation of employees and increase their efficiency in managing green human resources. This category is consistent with the research of Asgharzadeh Shirazi Fard et al. (2015) and Renwick et al. (2013). Therefore, paying attention to this important issue and considering rewards and compensation for employees' green actions can be one of the key policies in order to properly implement new perspectives in the organization and specially to pay attention to sustainable development and the environment. Evaluating green performance enables the organization's management to make the necessary reforms for sustainable development, and the organization's members to have the necessary motivation to achieve the organization's green goals while being aware of the progress of programs and achieving organizational goals. Arrolrajah et al. (2015) and Masri and Jaron (2017) confirm it. Therefore, it can be said that one of the most important factors affecting the optimal performance of the organization in the direction of sustainable development is the implementation of a monitoring system and evaluation of green performance. According to Ranwick et al.'s (2013) research, the goal of green human resource management is to create, strengthen and maintain the insight in the organization's staff so that they can contribute the most to each of the environmental protection roles in favor of conserving natural resource, and not polluting the environment. Therefore, green actions seem necessary for the maintenance of green employees. Respondents repeatedly mentioned that if managers themselves followed certain behaviors; these behaviors could become a culture in the organization that other employees would follow. Organizational green values, having green organizational symbols, organizational green norms, annual green award and managers and employees use of public transport can help the organization's human resource management achieve green and sustainable development. The results of Masari and Jaron's

(2017), Wenger's (2015), and Rousseau et al.'s (2019) research findings are somewhat consistent with this category. It should be noted that another special point that the interviewees repeatedly mentioned in their comments was some of the issues that, although they may not seem to be big movements, but have a special impact on the movement of the organization towards sustainable development and attention to natural resources and the environment. These include organizing the use of energy-saving lamps, minimizing the use of paper in the organization's affairs, examining pipe insulation and repairing and replacing damaged and high-consumption electronic devices, scanning documents instead of using physical documents, and optimal use of natural light in the workplace, the design of green work processes, etc., done by the organization's management. Following up on these issues could be the starting point to pay attention to the issue of sustainable development and the environment from within the organization itself and moving it towards other organizational functions in urban environments.

supra-organizational level

Topics such as government decisions, city councils, NGOs, green laws and regulations, and international organizations can be very effective in sustainable development and green human resource management, and researches by Lloyd et al. (2016) and Arrolrajah (2014) and Opta. Renwick (2012), Milman (2013), Farrokhi et al. (2017) and Rahman et al. (2016) also confirm this. Islamic councils have been the guides of urban projects that play an important role in the city in terms of credits as well as program management (Yaghoubi and Shams, 1398). Research, surveys and implemented projects indicate that the application of the principles of ecological and basophilic architecture, causes the qualitative improvement of the building in terms of environmental, functional, and structural improvements (Bitraf et al., 1397) And it helps to make the city of Mashhad green. Planning from bottom to top especially in metropolitan areas such as Mashhad, can be created by forming people's associations which are consisted of people and managers (Noghani and Masoudi, 1397). Therefore, it is suggested that decision-making institutions be more sensitive to issues related to sustainable development and environmental protection, especially in the field of human resources.

Declarations

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Authors' Contributions

M.J. is a Major Contributor in writing the manuscript and carried out statistical analyses of the data and involved in the interpretation of data physicians. A.K. designed the study and performed the approach of the Analysis for Exploring Career Boundaries, A.R & M.S directed and approved the final manuscript.

Abbreviations

Not applicable

Declarations

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Availability of data and materials

Data and materials are confidential but they will be available upon reasonable request from the corresponding author.

Ethics approval and consent to participate

This study was conducted in Vice president for Research & Technology of Islamic Azad University of Bojnourd, Iran. The participants filled out and signed a consent form for participating in the study, and permitting publication of the relevant data in the form of an article. (reg. no. 98/346).

Consent for publication

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Competing interests

The authors declare that they have no competing interests.

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Figures



Figure 1

Location map of Mashhad city in Iran and Khorasan Razavi province

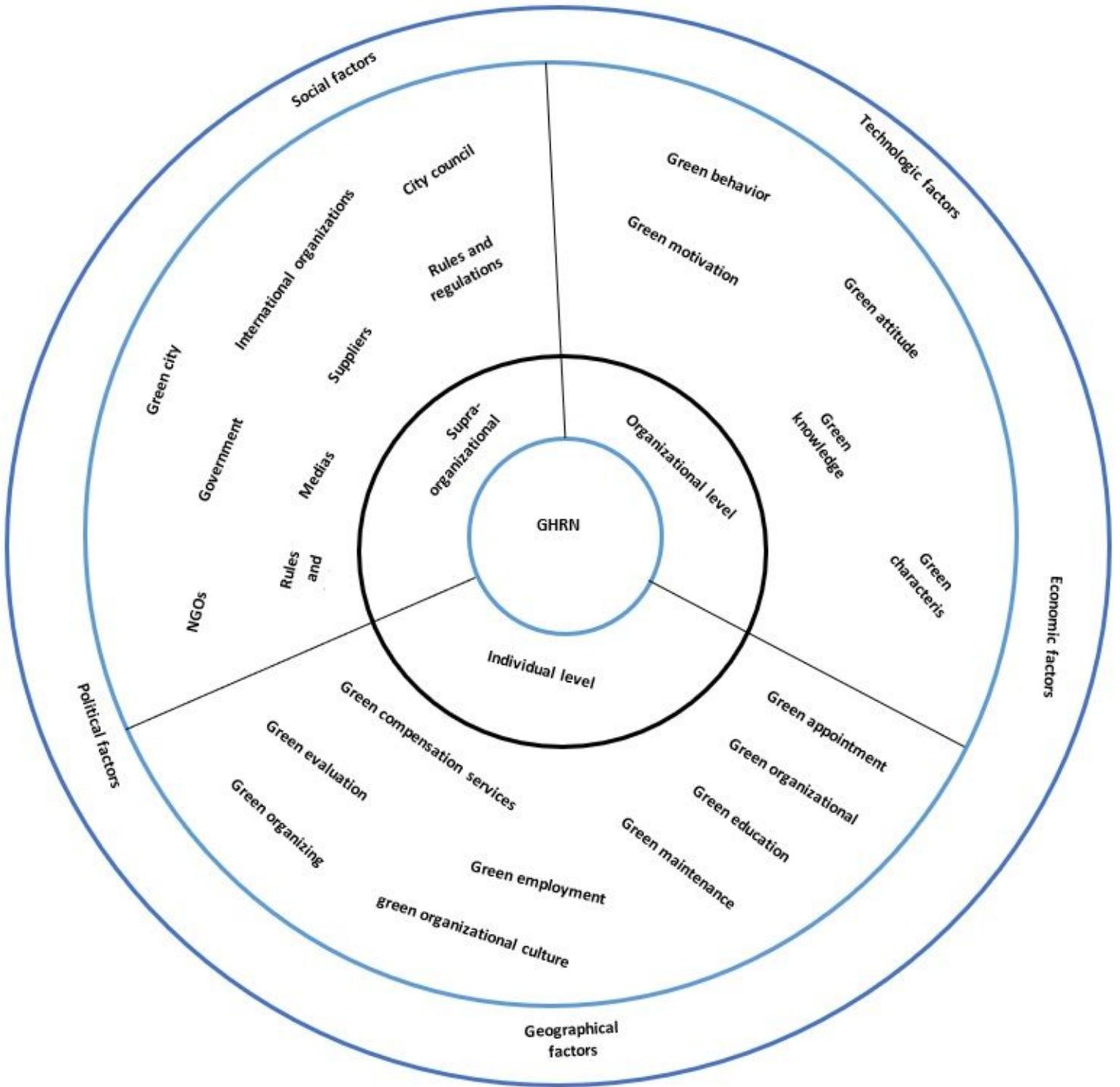


Figure 2

Conceptual research model