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Transformational leadership, green innovation and green human resource management: Inputs to listed house property sustainability framework

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Abstract

This study which was conducted among the employees of 5 listed house property companies in Shandong Province of China aimed to assess the extent of transformational leadership practices of the companies' superiors, the green innovation practices, and the green human resource management practices. It also tested the relationship among transformational leadership practices, green innovation practices, and green human resources management practices in the organizations and developed a listed house property sustainability framework. Based on the study findings, the superiors exhibit transformational leadership with moderate evidence; the respondents agree that the companies are able to encourage green management innovation with the policies and practices that are implemented; they also agreed that the company involves the employees in the green human resource management through clear development vision, communication and offering practices that encourages the employees. The results of the study on the association between transformational leadership and green innovation suggest that idealized influence is only strongly connected with green management innovation and green technology innovation. Meanwhile, because all computed p-values were less than the alpha level, intellectual stimulation is unrelated to any of the factors of green innovation. Meanwhile, intellectual stimulation is strongly associated with green performance management and engagement. In terms of the link between green innovation and green human resource innovation, the findings revealed that only the dimension green process innovation has a substantial but weak positive relationship to green engagement, and green technological innovation has a significant but weak positive relationship to green performance management. The developed sustainability framework includes five main phases of transformational leadership strategies that are suggested for an improved transformational leadership behavior that contributes to green innovation in house property companies.

Keywords: transformational leadership, green innovation, human resource management, sustainability, innovation

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1. Introduction

Throughout the last three decades, transformational leadership has acquired credibility and shown to be an effective and impactful agent for changing employee attitudes and behaviors, resulting in enhanced organizational performance. Transformational leadership is a multidimensional variable that is responsive to different cultural backgrounds and work situations. Chinese scholars have also studied transformative leadership behavior in the context of Chinese culture and business qualities. Based on their analysis of Chinese business sectors, Li and Shi created a new Chinese transformational leadership model in 2005. Despite the lack of an indigenous definition of transformational leadership in Mandarin, Chinese researchers have expanded on Bass' theory of transformational leadership in the Chinese business setting by introducing distinctive characteristics such as morality. But Bass' transformational leadership paradigm continues to dominate the transformational leadership area in Chinese academics. Moreover, there is no indigenous transformational leadership paradigm for the education sector in Chinese literature (Liu, 2018). A transformational leader focuses upgrading followers' intrinsic motivation from low-level to high-level requirements, according to the Transformational Leadership Theory. Transformational leadership has been highlighted as a contributor to enhanced employee and organizational outcomes via transformational development. Transformational leadership is distinguished by idealized influence, inspiring motivation, intellectual stimulation, and individual concern (empowerment).

Moreover, Green innovation have evolved to serve as a link between corporate operations leadership and the satisfaction of many stakeholders, including governments, customers, business partners, employees inside the corporation, and communities. Some scholars feel that environmental management or innovation would raise corporate costs, making it an unnecessary expenditure that may even inhibit growth. Others, on the other hand, advocate that corporations employ environmental management and green innovation in order to gain a sustainable competitive edge. In recent years, scholars' focus has steadily switched to the predecessors of corporate green innovation.

Green Human Resource Management practices are strategies, approaches, and processes that a company implements to decrease negative environmental effects or boost positive environmental benefits. Green human resource management practices have been shown to be the best strategy for achieving an organization's environmental performance by developing a "green employee" who appreciates and recognizes the organization's environmental performance through a focus on green recruiting and hiring, green training and development, green compensation, and improving the organization's human capital. Furthermore, by implementing green human resource management methods, a firm may encourage sustainable business practices and pinpoint the cause of environmental concerns at each employee touchpoint. Recruitment and selection, training and development, performance assessment, and pay are all examples of green human resource management techniques.

The current study among listed house property companies in China aims to determine the extent of transformational leadership practices of the superiors, the company's green innovation, and the green human resource management practices towards developing a sustainability model for listed house property companies in Shandong Province. The five selected house property companies used in this research are: Based on the literature review, green innovation practices are important subjects to discuss especially among real estate companies, however, there is no existing study conducted in this locale using the mentioned real estate companies. Therefore, by delving into this research, the research will bridge that gap by evaluating the extent to which leaders practice transformational leadership practices in the company, the green innovation practices, and the human resource management practices of the leaders in the company.

Objectives of the Study **-** The current study aimed to assess the extent of transformational leadership practices of the companies' superiors, the green innovation practices, and the green human resource management practices of the companies. More specifically, this study aimed to determine the superiors' transformational leadership practices as assessed by the employees in terms of idealized influence, inspiration motivation, intellectual stimulation, and individualization consideration; determined the company's commitment to green innovation practices in the company in terms of green management innovation, green process innovation, and green technological innovations; determined the company's commitment to green human resources management practices in terms of green recruitment and selection, training, green performance management, and green involvement; tested the relationship among transformational leadership practices, green innovation practices, and green human resources management practices in the organization and developed a listed house property sustainability framework.

2. Methods

Research Design **-** A descriptive design was used in the study to characterize a population, circumstance, or phenomena correctly and methodically. It provided answers to what, where, when, and how questions. A research questionnaire was the primary and only data collection instrument through the study. The questionnaire was distributed to the employees through emails or WeChat after the necessary authorizations has been secured from the managers of the participating real estate companies. Descriptive research attempts to characterize a phenomenon and its characteristics. This investigation is more concerned with what happened than with how or why it happened. In such investigations, data may be obtained subjectively, but it is typically examined quantitatively, with frequencies, percentages, averages, or other statistical analyses used to discover associations (Nassaji, 2017). Scientists and researchers utilize descriptive study design to obtain knowledge about a certain population or topic. This form of study gives a thorough and accurate picture of a certain population's or subject's features and habits. Descriptive research helps academics obtain a deeper knowledge of a certain subject and gives significant insights that may inspire future studies by watching and collecting data on a given topic (Sirisilla, 2023).

In addition to gathering data, descriptive investigations also involve measurement, categorization, comparison, and interpretation. It gathers and provides three different types of information: what is already there in terms of variables or conditions in a situation; what we want by identifying standards or norms with which to contrast the circumstances at hand or what experts deem desirable; and how to achieve goals by investigating potential solutions based on the experiences of others or the opinions of experts. Researchers who seek to fully comprehend a phenomenon can benefit greatly from descriptive research. It can be used to learn more about a phenomenon's frequency, distribution, and properties. Relationships between variables can also be found via descriptive research. (Creswell, J. W., 2022). In this study, the variables of transformational leadership practices, green innovation practices, and green human resources management practices were described and evaluated using several dimensions.

Participants of the Study **-** The study respondents are employees that are randomly selected from five (5) real estate companies in Shandong Province of China. The five real estate firms are Evergrande Group, Vanke Real Estate, Poly Real Estate, Country Garden, and Greenland Group. Shandong Province is located on China's eastern coast. It is bounded to the north by Tianjin and Hebei, to the west by Henan, and to the south by Anhui and Shandong. The province boasts an extensive rail network that includes the Beijing-Shanghai Railway, the Beijing-Kowloon Railway, and several more high-speed train lines. It also includes eight civil airports and seven seaports, one of which being the Qingdao Port. Shandong's economy was the third biggest in China in 2019, after only Guangdong and Jiangsu. Heavy industry accounts for more than 67 percent of total industrial production in Shandong. Shandong's five major industry sectors are raw chemical materials and chemical products (10.3 percent), processing of oil, coal, and other fuel (10 percent), processing of food from agricultural products (6.1 percent), manufacturing and processing of nonferrous metals (5.1 percent), and production and supply of electric power and heat power (5.1 percent) (5.1 percent). In addition, the province accounts for over

12% of China's total crude oil output. Apples, peanuts, and vegetables are examples of agricultural products (Eye on Asia, 2022). The five participating companies in the current study that are selected from Shandong Province are Evergrande Group, Vanke Real Estate, Poly Real Estate, Country Garden, and Greenland Group.

The respondents of the study are 375 employees from the five real estate companies. There are 100 employee respondents from Vanke Real Estate, 85 employee respondents from Evergrande Group, 70 respondents from Poly Real Estate, 65 from Country Garden, and 55 from Greenland Group. The study aims to also develop a sustainability model for real estate companies which may aid in bridging the gap created by the lack of green innovation practices in China's Shandong Province. The study would be limited to the responses provided on the study's survey questionnaire. The identities of the respondents would be protected by using codes to represent the participants personal information.

Data Gathering Instrument **-** In this study, a questionnaire was utilized as a data collecting method to analyze the link between transformational leadership practices, the companies' commitment to green innovation practices, and the companies' commitment to green human resource management practices, which are aimed at employees from selected companies in Shandong Province. As a supplement to the data collection instrument, the researcher spent the majority of his time in this study reading information from journals, papers, the internet, theses, and books. In addition, the researcher created appropriate questionnaire items based on personal experiences and observations. The primary data gathering tool in this study was a four-section questionnaire. The questionnaire was fully evaluated by subject-matter experts as well as the dissertation adviser from Lyceum of the Philippines.

In the first part of the study, the researcher determined the demographic profile of the respondents according to their age (18-25, 26-33, 34-41, 42 and above); gender (male and female); number of years working in the firm (1-5 years, 6-10 years, 11-15 years, 16-20 years, and 20 years above); and in terms of their educational attainment (high school graduate, college graduate, post graduate, and others). In the second part, the employee respondents assessed the transformational leadership practices of their superiors. This was achieved through four (4) dimensions – idealized influence, inspiration motivation, intellectual stimulation, and individualization consideration. In the third part, the companies' commitment to green innovation practices in the organization was assessed, including dimensions of green management innovation, green process innovation, and green technological innovations. The fourth part, the companies' commitment to green human resources management was assessed by the employees, including the dimensions of green recruitment and selection, training, green performance management, and green involvement. All parts of the questionnaire were self-constructed by the researcher based on the literature studied, which provided insights on concepts related to the variables being investigated.

Likert scale questions was used in this study, which was a psychometric scale that was considered essential in measuring a respondent's opinion or attitude toward a given subject. This survey type simplified complex ideas, opinions, and questions. The survey instrument consisted of 4-Likert scale questions with response options of "Strongly Agree," "Agree," "Disagree," and "Strongly Disagree." The data collected from the respondents was weighted on a scale of 1-4, with 1 being the lowest and 4 being the highest value, which quantitatively measured all the three variables in the study. The Likert Scale grading for this study will be 3.5-4 for Strongly Agree, 2.5-3.49 for Agree, 1.5-2.49 for Disagree, and 1.00-1.49 for Strongly Disagree. When the research consultant had read the questionnaire, it was also evaluated and verified. To guarantee that the item's content was clear and thorough, the researcher provided the draft for content validation. While updating the instrument, the validation comments and recommendations will be considered. At least 20 employees from the research locale were given the questionnaire to be answered which was used for a reliability test. After testing the questionnaire in a pilot study, the results obtained is attached below:

Table 1

Reliability Summary Table –Transformational Leadership, Green Innovation and Green Human Resource Management

Indicators	Cronbach Alpha	Remarks
Transformational Leadership, Green Innovation and Green Human Resource Management Instrument	.991	Excellent
Per variable		
Transformational leadership	.966	Excellent
Idealized Influence	.885	Good
Inspirational Motivation	.930	Excellent
Intellectual Stimulation	.925	Excellent
Individual Consideration	870	Good
Green Innovation	.970	Excellent
Green Management Innovation	.906	Excellent
Process Innovation	.950	Excellent
Technological Innovation	.952	Excellent
Green Human Resource Management	.984	Excellent
Green Recruitment and Selection	.945	Excellent
Green Training	.936	Excellent
Green Performance Management	.932	Excellent
Green Involvement	.940	Excellent

George and Mallery (2003) provide the following rules of thumb: "_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable"

Based on result, the Transformational Leadership, Green Innovation and Green Human Resource Management Instrument has an excellent consistency as exhibited by the Cronbach's Alpha value of (.991). This was validated by the Excellent remarks from Transformational Leadership (.966); it was confirmed by the good results from Idealized Influence (.885), and Individual Consideration (.870), and Excellent results from Inspirational Motivation (.930) and Intellectual Stimulations (.925); Also, it was validated by the Excellent remarks from Green Innovation (.970); it was confirmed by the Excellent results from Green Management Innovation (.906), Green Process Innovation (.950), and Green Technological Innovation (.952). Moreover, it was further validated by the Excellent results from Green Human Resource Management (.984); it was confirmed by the Excellent result from Green Recruitment and Selection (.945), Green Training (.936), Green Performance Management (. 932) and Green Human Resource Management (.984), which shows that the instrument at hand passed the reliability index test. Thus, the researcher can now proceed to the actual survey using the aforementioned instrument.

Data Gathering Procedure - The researcher utilized the authorized final questionnaire as his data collection method after incorporating comments and recommendations from the school adviser. Following passing the reliability test, the results were encoded and submitted to Human Province's largest questionnaire platform, where they were ready for administration. Prior to administering the questionnaire, the researcher addressed a formal letter to the managers of the participating real estate companies requesting permission to administer the questionnaire to the research participants of the various firms. Meanwhile, prior to sending the formal letter the researcher had established communication links through emails with the study locales which includes Evergrande Group, Vanke Real Estate, Poly Real Estate, Country Garden, and Greenland Group. Upon consultation, the aforementioned companies were all willing to participate in the study. After final approval for participation were obtained from the study locales, the questionnaire was sent to the employees of the companies through an open link created by the researcher and forwarded to over 375 participating employees through WeChat and QQ.

Ethical Considerations - This study followed ethical guidelines and will be open about the research procedure and outcomes. Respondents were also notified that their replies and information will be treated confidentially and utilized solely for academic reasons. Participants were advised that they might opt out of the study at any moment. They were also included in the first introduction portion of the online questionnaire.

Scientific integrity, human rights and dignity, and science-society partnership all depended on research ethics. These criteria were used to guarantee that study participants participated voluntarily, in good faith, and in a safe environment. The research proposal, which included a survey questionnaire, were submitted for ethics approval to the university.

Data Analysis - In order to evaluate and interpret data gathered from respondents, the following statistical techniques and processes were employed to examine the study's data. All statistical computations will be done using SPSS 25.0.

Frequencies and Percentage This was used to characterize the values for each demographic subgroup of respondents, such as age, sex/gender, number of years working in the firm, and educational attainment.

Weighted Mean. This was used in the study to calculate the average assessment of the participants' responses in parts two, three, and four of the survey questionnaires, which were designed to uncover any relationship between transformational leadership practices, green innovation practices, and green human resource management practices.

Verbal Interpretation. This were used throughout the survey in conjunction with the weighted mean from the study's various tabular data presentations to indicate whether the results of each item or section equaled "Agree" or "Disagree."

Test of Hypothesis. The null hypothesis is rejected in this study if the estimated significance (Sig.) value is less than or equal to the significance threshold of 0.05, indicating a significant difference. If the estimated significance value (Sig.) exceeds the significance level of 0.05 (Sig. 0.05), the null hypothesis is accepted, indicating that no significant difference exists.

Pearson Correlation Analysis. This study employed the method of covariance to assess the statistical relationship, or association, between two continuous variables. It also provided information on the magnitude of the association, or correlation, as well as the relationship's direction. Pearson Correlation Analysis was used in this study to investigate the relationship between transformational leadership practices, green innovations practices, and green human resources management practices.

Standard Deviation. A low standard deviation implies that the data are concentrated around the mean, while a large standard deviation shows that the data are more dispersed.

3. Results and Discussion

Table 2

Summary Table on Transformational Leadership

Indicators	Weighted Mean	Verbal Interpretation	Rank
Idealized Influence	2.52	Agree (with moderate evidence)	3
Inspiration Motivation	2.54	Agree (with moderate evidence)	2
Intellectual Stimulation	2.55	Agree (with moderate evidence)	1
Individualized Consideration	2.51	Agree (with moderate evidence)	4
Composite Mean	2.53	Agree (With Moderate Evidence)	

Legend:3.50-4.00=Strongly Agree(with great evidence);2.50-3.49=Agree (with moderate evidence) ;1.50-2.49=Disagree (with little evidence);1.00-1.49=Strongly Disagree (without evidence)

Table 2 presents the summary table on transformational leadership as regards to idealized influence, inspiration motivation, and intellectual stimulation with a composite mean of 2.53. The assessment depicts that the highest assessed indicator is the intellectual stimulation with a mean of 2.55 suggesting that the respondents agree that the superiors are able to encourage creativity and intellectual innovation among the employees. According to Breaux (2021), a leader who stimulates invention and creativity, as well as critical thinking and problem solving, is classified as intellectual stimulation. Arousing followers' ideas and imaginations, as well as boosting their abilities to discover and solve issues creatively, is what intellectual stimulation entails.

The second-highest indicator is the inspiration motivation with a mean of 2.55 suggesting that the respondents agree that the superiors are able to inspire and motivate them in the workplace. When employees share a common vision, they recognize that any assistance they provide to colleagues in completing tasks also contributes to the accomplishment of their shared objectives. Moreover, leaders with the trait of inspirational motivation are able to successfully shift the focus of their followers from self-interests to integral collective concerns and inspire them to go above and beyond their responsibilities and engage in altruistic behaviors (Yin et al., 2019).

The third indicator is the idealized influence with a mean of 2.52 suggesting that the employees agree that the superiors exhibit an idealized influence in their transformational leadership behaviors. Idealized influence, also known as charisma, is the trait exhibited by a transformational leader who attempts to serve as a role model for followers who, as a result, respect and trust the leader and try to imitate his or her behaviors (Yin et al., 2019). Transformational leaders can effectively navigate a dynamic and complex work environment. These leaders serve as idealized examples of transformational leadership for their subordinates by articulating the organization's vision, evoking emotion, and providing support. Transformational leadership contributes to enhanced employee job performance and service quality. It has also been demonstrated empirically to promote personal growth and performance (Chu et al., 2021).

The least indicator is the individualized consideration with a mean of 2.51. This indicates that the employees agree that the superiors exhibit a moderate level of individualized consideration towards their needs in the workplace. Under individual considerations, the leader recognizes that every follower has a unique presence and characteristics that influence the differences in treatment when coaching, because every individual requires self-actualization, self-esteem, and the satisfaction of various personal desires (Andriani et al, 2018). Individualized Consideration entails comprehending and sharing the concerns and developmental needs of others, as well as treating each individual follower in an individualized manner. Leaders serve as mentors and advisors to not only identify and satisfy each individual follower's current needs, but also to attempt to expand and elevate those needs to help followers become fully realized. Leaders can increase followers' commitment by emphasizing their personal career needs and providing them with a sense of increased competence in performing their duties (Liu, 2018).

Table 3

Summary Table on Green Innovation

Indicators	Weighted Mean	Verbal Interpretation	Rank
Green Management Innovation	2.58	Agree (moderately committed)	1
Green Process Innovation	2.53	Agree (moderately committed)	2.5
Green Technological Innovation	2.53	Agree (moderately committed)	2.5
Grand Composite Mean	2.54	Agree (With Moderate Evidence)	

Legend:3.50-4.00=Strongly Agree(with great evidence);2.50-3.49=Agree (with moderate evidence) ;1.50-2.49=Disagree (with little evidence);1.00-1.49=Strongly Disagree (without evidence)

Table 3 presents the summary table on transformational leadership as regards to green management innovation, green process innovation, and green technological innovation with a composite mean of 2.54. The assessment depicts that the highest assessed indicator is the green management innovation with a mean of 2.58 suggesting that the respondents agree that the companies are able to encourage green management innovation with the policies and practices that are implemented. Green management innovation focuses on green management practices within organizations, such as environmental management, energy management, and quality management. Green management innovation is a management practice that is new to the focal firm, whether it was created by the firm or adopted from other firms (Ma et al., 2018). Green management is the firm's approach to addressing environmental issues through the adoption of green product innovations. Green management decreases the costs associated with capital, labor, and materials used in green products and increases firm revenues via preferential market access, product differentiation, and the transfer of less polluting technologies. As green management reshapes the entire business operation, it encourages radical innovation

within the organization. Green management has a positive effect on product innovation, but its effect is greater on radical green product innovations (Khan et al., 2021).

The second-highest indicators are the green process innovation and the green technological innovation with a mean of 2.53 suggesting that the respondents agree that the companies are able to encourage green innovation through their processes, equipment, and advanced technological usage and management. The production process is the intended focus of green process innovation. Even though it is new to the local company, it can reduce environmental risk and other hazardous outcomes. Adopting clean technology and eco-saving equipment to improve energy efficiency, maximize resource utilization, and eliminate greenhouse gas emissions is the beginning of green process innovation. It focuses on mitigating negative environmental impacts through waste management, water management, and sustainable raw material procurement. In addition, it improves organizational performance and reduces operating costs, enabling the generation of revenue and the development of trust among internal stakeholders. As it eliminates incidents within the company, it provides a safe working environment for employees. It also benefits companies financially and draws the attention of external stakeholders to their firm's performance (Khan et al., 2021).

Table 4

Summary Table on Green Human Resource Management

Indicators	Weighted Mean	Verbal Interpretation	Rank
Green Recruitment and Selection	2.54	Agree (moderately committed)	2.5
Training	2.48	Disagree (slightly committed)	4
Green Performance Management	2.54	Agree (moderately committed)	2.5
Green Involvement	2.55	Agree (moderately committed)	1
Grand Composite Mean	2.53	Agree (Moderately Committed)	

Legend:3.50-4.00=Strongly Agree(with great evidence);2.50-3.49=Agree (with moderate evidence) ;1.50-2.49=Disagree (with little evidence);1.00-1.49=Strongly Disagree (without evidence)

Table 4 presents the summary table on green human resource management as regards to green recruitment and selection, training, green performance management, and green involvement with a composite mean of 2.53. The assessment shows that the highest assessed indicator is the green involvement with a mean of 2.55 suggesting that the respondents agree that the company involves the employees in the green human resource management through clear development vision, communication and offering practices that encourages the employees. Employee participation in green involvement is essential for environmental and social responsibility because it encourages employee obligations to environmental goals, which is regarded as a critical factor in enhancing the outcomes of environmental management systems (Mousa & Othman, 2020). Engaging and empowering employees to engage in green initiatives at work is essential to greening a company's human resources. Through employee participation in green initiatives, organizations provide employees with opportunities, as defined by the 'Opportunity' component of the AMO framework. When people are provided with green opportunities, the decision-making process becomes much simpler, and the end result is a competitive workforce with high green values that is advantageous to forward-thinking organizations. Green-empowered employees comprehend the necessity of eco-initiatives and the significance of environmental protection more thoroughly (Amrutha & Geetha, 2020).

The second-highest indicator is the green recruitment and selection and green performance management with a total mean of 2.54 which suggests that the companies consider green resource management in their recruitment and selection criteria and polices. To practice effective green recruitment and selection, it is necessary to establish a candidate's green consciousness, the company's green branding, and appropriate green evaluation criteria. Candidates' green awareness is the first component of green recruitment and selection, and it includes personality traits that facilitate the achievement of corporate environmental goals, such as candidates' green awareness, conscientiousness, and agreeableness. Environmentally valuable employees have been found to actively increase their environmental knowledge during the operational process, thereby enhancing the environmental performance of their companies. Green employer branding refers to an organization's image and reputation in relation to environmental management, which can be shaped by green human resource management

practices (Tang et al., 2017).

The least indicator is training with a total mean of 2.48 which suggests that training is regarded as an essential priority for the businesses, as it contributes to sustainable development and is necessary for implementing successful environmental management and cleaner production activities. Adopting an environmental approach in organizations necessitates enhancing employees' skills, awareness, and knowledge regarding both materials and processes. It in turn, prompts environmental sustainability preparation to promote employee engagement and involvement in environmental matters (Mousa & Othman, 2020)

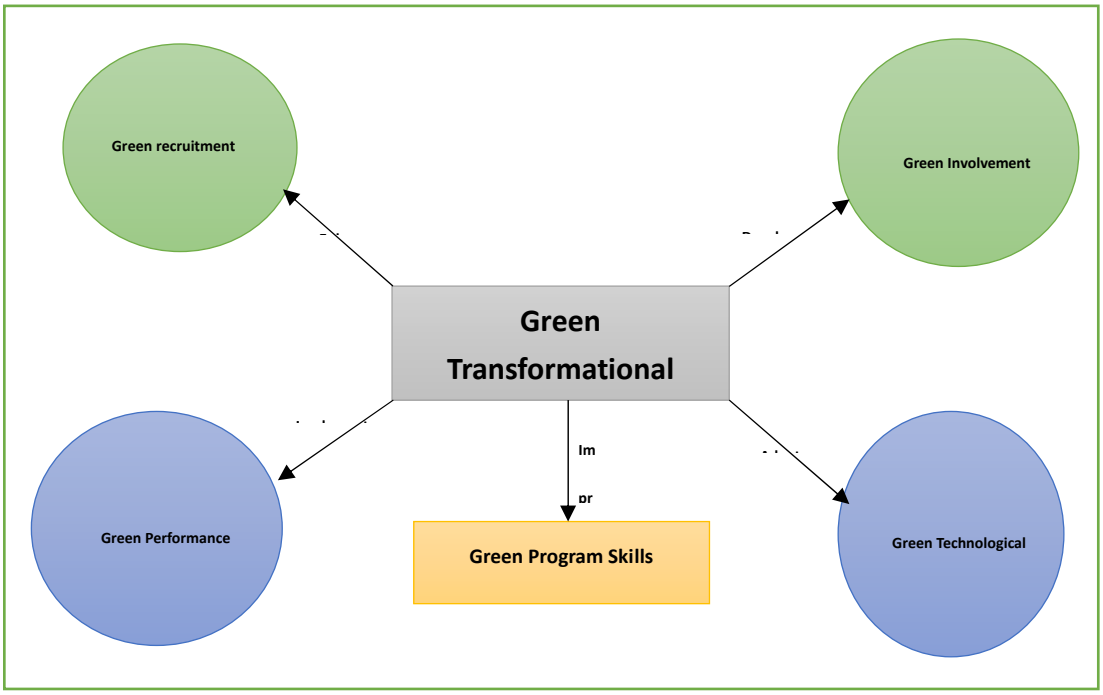

Figure 1. Listed House Property Sustainability Framework.

Figure 1 shows the Listed House Property Sustainability Framework it shows the sustainability model of listed house property model that was developed based on the study findings has five main phases of transformational leadership strategies that are suggested for an improved transformational leadership behavior that contributes to green innovation in house property companies. The first phase involves the enhancement of the green recruitment procedures of the house property companies where superiors are encouraged to enhance green employer branding to attract green employees, recruit employees who have green awareness, and hire candidates with knowledge, skills and behavior that conform to environmental management. The second phase is the green involvement where superiors are encouraged to development clear vision to guide the employees' actions in environment management, build mutual learning climate among employees for green behavior and awareness in the company, and establish practices for employees to participate in environment management. The third phase is the green technological innovation which involves that adoption of technology in the green innovation processes.

This suggests that the superiors should invest in green equipment and technology, implement comprehensive material saving plan, and supervise system and technology transfer. The fourth phase the green performance management which involves the implementation of green performance indicators in the performance management system and appraisals, setting more objectives on achieving green outcomes included in appraisals, and setting green targets, goals and responsibilities for employees. Lastly, the model for listed house property companies suggests the green program skills training in order to improve green training that instills in the employees about friendly environmental management, develop training programs in environment management to

increase environmental awareness, skills and expertise of employees, and designing the green training to educate and create awareness among employees and integrating environmental sustainability goals and objectives.

4. Conclusions and Recommendations

On transformational leadership, the finding suggests that the superiors exhibit transformational leadership with moderate evidence. The assessment on intellectual stimulation suggests that the respondents agree that the superiors can encourage creativity and intellectual innovation among the employees. The inspiration motivation assessment indicates that the respondents agree that the superiors can inspire and motivate them in the workplace. The assessment of idealized influence shows that the employees agree that the superiors exhibit an idealized influence in their transformational leadership behaviors. The result on the individualized consideration concludes that the employees agree that the superiors exhibit a moderate level of individualized consideration towards their needs in the workplace. Under individual considerations, the leader recognizes that every follower has a unique presence and characteristics that influence the differences in treatment when coaching, because every individual requires self-actualization, self-esteem, and the satisfaction of various personal desires. While the company's commitment to green innovation practices, the assessment on green management innovation suggests that the respondents agree that the companies can encourage green management innovation with the policies and practices that are implemented. Green management innovation focuses on green management practices within organizations, such as environmental management, energy management, and quality management. The findings on the green process innovation and the green technological innovation suggests that the respondents agree that the companies are able to encourage green innovation through their processes, equipment, and advanced technological usage and management.

Therefore, the assessment of the company's commitment to green human resource practices, the findings on the green involvement shows that the respondents agree that the company involves the employees in the green human resource management through clear development vision, communication and offering practices that encourages the employees. The findings on green recruitment and selection suggests that the companies consider green resource management in their recruitment and selection criteria and polices. Moreover, the findings on training suggests that training is regarded as an essential priority for the businesses, as it contributes to sustainable development and is necessary for implementing successful environmental management and cleaner production activities. Furthermore, the relationship among transformational leadership practices, green innovation practices, and green human resources management practices in the organization, the results of the study on the association between transformational leadership and green innovation suggest that idealized influence is only strongly connected with green management innovation and green technology innovation. Meanwhile, because all computed p-values were less than the alpha level, intellectual stimulation is unrelated to any of the factors of green innovation.

Furthermore, the results of the transformational leadership and green human resource innovation relationship demonstrate that the aspects of idealized influence under transformational leadership have a modest positive link, except for green recruiting and selection. Finally, intellectual stimulation is strongly associated with green performance management and engagement. In terms of the link between green innovation and green human resource innovation, the findings revealed that only the dimension green process innovation has a substantial but weak positive relationship to green engagement, and green technological innovation has a significant but weak positive relationship to green performance management. Finally, the developed listed house property sustainability framework was based on the study findings, and it has five main phases of transformational leadership strategies that are suggested for an improved transformational leadership behavior that contributes to green innovation in house property companies.

At the end of this study, the researcher recommends that the managers of the five participating companies in Shandong Province which includes Evergrande Group, Vanke Real Estate, Poly Real Estate, Country Garden, and Greenland Group, and all other similar companies may implement this study's model to improve

transformational leadership of their superiors in tandem with green innovation and green human resource management. Green innovation should be studied by company leaders and managers in conjunction with other industries that are not house property companies, especially manufacturing companies so as to ensure the level of green management practices in such firms. The study output is recommended for company leaders, managers, supervisors, and other employees with managerial or leadership functions especially in listed house property companies in China. Future researchers may also expand the study population or participating companies to include more companies from other provinces that are not in Shandong province.

5. References

Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on Green Human Resource Management: Implications for Social Sustainability. *Journal of Cleaner Production, 247*, 119131. https://doi.org/10.1016/j.jclepro.2019.119131

Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of the transformational leadership and work motivation on teachers performance. *International journal of scientific & technology research, 7*(7), 19-29.

Breaux, A. O., & Williams, M. (2021). Transformational leadership and organizational citizenship behavior: A study of public sector employees. *Public Administration Quarterly, 45*(1), 3-26.

Chu, H., Qiang, B., Zhou, J., Qiu, X., Yang, X., Qiao, Z., Song, X., Zhao, E., Cao, D., & Yang, Y. (2021). The impact of transformational leadership on physicians' performance in China: A Cross-Level Mediation Model. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.586475

Creswell, J. W. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

Khan, P. A., Johl, S. K., & Akhtar, S. (2021). Firm sustainable development goals and firm financial performance through the lens of Green Innovation Practices and Reporting: A Proactive Approach. *Journal of Risk and Financial Management, 14*(12), 605. https://doi.org/10.3390/jrfm14120605

Khan, S. J., Dhir, A., Parida, V., & Papa, A. (2021). Past, present, and future of Green Product Innovation. *Business Strategy and the Environment, 30*(8), 4081–4106. https://doi.org/10.1002/bse.2858

Li, D., Zhao, Y., Zhang, L., Chen, X., & Cao, C. (2018). Impact of quality management on green innovation. Journal of Cleaner Production, 170, 462–470. https://doi.org/10.1016/j.jclepro.2017.09.158

Li, M., Tian, Z., Liu, Q., & Lu, Y. (2022). Literature review and research prospect on the drivers and effects of Green Innovation. Sustainability, 14(16), 9858. https://doi.org/10.3390/su14169858

Liu, P. (2018). Transformational Leadership Research in China (2005–2015). Chinese Education & Society, 51(5), 372–409. https://doi.org/10.1080/10611932.2018.1510690

Ma, Y., Hou, G., Yin, Q., Xin, B., & Pan, Y. (2018). The sources of Green Management Innovation: Does internal efficiency demand pull or external knowledge supply push? Journal of Cleaner Production, 202, 582–590. https://doi.org/10.1016/j.jclepro.2018.08.173

Mousa, S. K., & Othman, M. (2020). The impact of Green Human Resource Management Practices on sustainable performance in healthcare organisations: A conceptual framework. Journal of Cleaner Production, 243, 118595. https://doi.org/10.1016/j.jclepro.2019.118595

Nassaji, H. (2017). Qualitative and descriptive research: Data type versus data analysis. Language Teaching Research, 21(1), 1-10.

Sirisilla, P. (2023). Descriptive research: An overview. In P. Sirisilla (Ed.), Research methods in education (pp. 1-15). SAGE Publications.

Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2017). Green Human Resource Management Practices: Scale Development and validity. Asia Pacific Journal of Human Resources, 56(1), 31–55. https://doi.org/10.1111/1744-7941.12147

Yin, J., Ma, Z., Yu, H., Jia, M., & Liao, G. (2019). Transformational leadership and employee knowledge sharing: Explore the mediating roles of Psychological Safety and team efficacy. Journal of Knowledge Management, 24(2), 150–171. https://doi.org/10.1108/jkm-12-2018-0776