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Transformation of Environment-Based HR Practices: Investigating Green Commitment and Green Performance in the Hospitality Industry



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ABSTRACT

This study examines the effect of Green Training (GTR), Green Compensation (GCO), Green Inclusive Leadership (GIL), and Pro-environmental Behaviors (PB) on Green Performance (GP), with Green Commitment (GC) as a mediating variable, in the hotel industry in Palembang, Indonesia. A quantitative approach with an explanatory research design was employed. Data were collected through questionnaires distributed to 268 respondents selected using purposive sampling technique. Data analysis was analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) through the SmartPLS application. The results demonstrate that GTR, GCO, and GIL have a significant effect on GP, both directly and through the mediation of GC. In contrast, PB did not show a significant effect on either GC or GP. This finding reinforces the strategic role of Green Human Resource Management in building employee environmental commitment which has an impact on improving organizational environmental performance. This research is based on the perspectives of Ecocentrism Theory and Triple Bottom Line that emphasize the importance of alignment between ecological values and organizational sustainability. The findings offer theoretical and practical implications for the development of environmentally oriented HR management policies in the hospitality industry.

1. INTRODUCTION

The hospitality industry is a strategic sector that makes a significant contribution to economic development, but also generates adverse environmental impacts on the environment, such as high energy consumption, excessive water use, and significant waste production [1-3]. Pressure from stakeholders and global demands for sustainability encourage companies to improve environmental performance (green performance) [4, 5]. Unfortunately, the implementation of green initiatives in the hospitality sector, especially in developing countries such as Indonesia, is still minimal and inconsistent [6, 7].

A number of studies show that Green Human Resource Management (GHRM) plays an important role in creating a pro-environmental organizational culture through training, compensation, and employee engagement [8, 9]. However, most GHRM research is focused on the manufacturing sector overseas, such as in India, China, and Europe. Studies on the service sector-particularly hospitality-are remain limited, even though service characteristics differ significantly from the production sector in terms of service processes, labor intensity, and customer interactions [10, 11].

Meanwhile, Green Inclusive Leadership (GIL) offers strategic approach to encourage employee engagement in achieving sustainability goals [12, 13]. However, this leadership role has rarely been comprehensively studied in the

context of environmental performance, especially in the service sector. In addition, the integration between GHRM practices and inclusive leadership in influencing Green Performance (GP) has not been widely explored in one complete conceptual model.

Based on these conditions, this study aims to fill the literature gap by developing a model that integrates GHRM practices and GIL in improving GP, especially in the hospitality sector in Palembang city, Indonesia. Palembang, as one of the major tourism and industrial cities in Sumatra, faces increasing environmental challenges such as waste management issues, high energy consumption in hotels, and limited public awareness of sustainable practices. Therefore, examining green management initiatives in this context becomes essential to encourage environmentally responsible behavior within the hotel industry. This research contributes to the theoretical understanding by expanding the scope of GHRM and GIL studies into the service sector, while offering practical implications for industry players to cope with sustainability challenges.

2. LITERATURE REVIEW

The Theory of Ecocentrism, particularly through the deep ecology approach [14, 15], asserts that all living things and

environmental elements have intrinsic value worthy of respect, not merely as objects of exploitation. Therefore, organizations should create a symbiotic and responsible relationship with the environment, reflected in both workplace culture and employee behavior. On the other hand, the Triple Bottom Line Theory [16] emphasizes the importance of balance between economic (profit), social (people), and environmental (planet) aspects in creating a sustainable business. In this context, GHRM serves as a bridge to transform ecocentric values and sustainability principles into concrete managerial practices, thus strengthening employees' green commitment as a key to better environmental performance. Empirical studies in Indonesia also support the relevance of these variables and their relationships. For example, research in Indonesian hotels shows that green training and green compensation significantly enhance employees' pro-environmental attitudes and organizational GP [17, 18]. Other studies similarly find that green leadership and GHRM practices increase employees' green commitment, which subsequently improves environmental performance in service-sector organizations [19, 20]. These local empirical findings reinforce the theoretical foundation of this study and justify the selection of variables and their hypothesized relationships.

2.1 Green Training, Green Compensation, GIL and Proenvironmental Behaviors → Green Commitment

Green commitment (GC) is a form of psychological and emotional attachment of employees to organizational sustainability values [21, 22]. To develop this commitment, organizations need to develop GHRM strategies, one of which is through Green Training (GTR). GTR provides knowledge and skills in environmentally friendly practices, enhances their awareness, and reinforces their belief that the organization is committed to environmental issues [23, 24]. Structured and consistent training shapes positive perceptions of organizational values, therby encouraging employees to be more committed to supporting sustainability goals [25].

In addition to training, green compensation (GCO) also plays a pivotal role in shaping GC. A compensation system that integrates rewards for green behavior can strengthen intrinsic motivation and clarify the organization's expectations of environmental contributions from employees [26]. When pro-environmental behaviors (PB) are rewarded - either financially or symbolically - employees feel that their efforts are recognized and appreciated, which in turn strengthens their commitment to sustainability goals [27, 28]. In addition, GIL practices also shape GC [12, 29]. Leaders who encourage participation, model environmentally friendly behavior, and show concern for sustainability values foster a work climate conducive to the growth of GC [13, 30].

Furthermore, Proenvironmental Behaviors (PB) of employees contribute directly to GC. These behaviors reflect the internalization of sustainability values in daily actions, both in work and personal contexts [31, 32]. When organizations support these behaviors through fair systems, inspiring leadership, and a supportive culture, employees' engagement in green practices, and therby strengthening their commitment to the organization's environmental goals [33, 34]. Thus, these four factors collectively become an important foundation in building GC as a prerequisite for achieving sustainable GP.

H1. GTR has a positive effect on GC.

H2. GCO has a positive effect on GC.

H3. GIL has a positive effect on GC. **H4.** PB has a positive effect on GC.

2.2 GTR, GCO, GIL, and PB → GP

GTR plays a crucial role in enhancing an organization's GP by equipping employees with knowledge, skills, and awareness necessary for environmentally friendly work practices [24, 35]. The training enables employees to understand the importance of energy conservation, waste management, and resource efficiency. From the perspective of Ecocentrism Theory, GTR is a medium for internalizing ecological moral values, where humans are no longer perceived as the center of nature exploitation, but part of an ecological community that must live in harmony [36, 37]. Meanwhile, within the Triple Bottom Line framework, GTR is aligned with the planetary dimension, as it increases employees' contribution to environmental sustainability, which in turn boosts the company's GP.

GCO serves as a motivational tool that promotes proenvironmental behavior through a GP-based reward system [27]. When companies provide incentives or rewards for contributions toward achieving environmental targets, employees are motivated to actively participate in environmentally friendly practices, such as waste reduction and energy efficiency [38, 39]. Based on the Theory of Ecocentrism, this approach reflects recognition of humanity's role as part of a responsible ecosystem. According to the Triple Bottom Line, GCO integrates profit and planet aspects, demonstrating that investments in green incentives can simultaneously yield business and environmental benefitsboth leading to improved GP. GIL emphasizes leadership that supports the involvement of all organizational members in achieving environmental goals. Inclusive leaders encourage open communication, collaboration, and participation in decision-making related to green policies [40, 41]. Within the framework of Ecocentrism Theory, this leadership style reflects equitable and collective ecological relationships, where each individual plays a role in maintaining environmental balance [42, 43]. In the context of the Triple Bottom Line, GIL strengthens the people dimension by fostering a workplace culture that supports sustainability, which indirectly impacts the improvement of an organization's GP [3, 44].

PB refer to concrete actions taken by individuals at the workplace that support environmental sustainability, such as conserving electricity, sorting waste, or avoiding the use of hazardous materials [45, 46]. These behaviors are an internal reflection of ecological values instilled through training, leadership, and incentives. In Ecocentrism Theory, PB demonstrate human awareness as part of an interdependent natural system. Within the Triple Bottom Line framework, these behaviors strengthen the planetary dimension by directly contributing to the achievement of corporate environmental goals, such as resource efficiency and emissions reduction, which are key indicators of GP.

H5. GTR has a positive effect on GP.

H6. GCO has a positive effect on GP.

H7. GIL has a positive effect on GP.

H8. PB has a positive effect on GP.

$2.3 \text{ GC} \rightarrow \text{GP}$

GC describes an organization's determination to support and

implement environmentally friendly practices in a sustainable manner. In the hospitality industry, this commitment is reflected in operational policies that prioritize energy efficiency, waste management, carbon footprint reduction, and the use of environmentally friendly resources [47, 48]. Previous research shows that hotels with high GC tend to show better GP, including superior regulatory compliance, operational efficiency, and image enhancement among environmentally conscious consumers [49, 50].

From the perspective of Ecocentrism Theory, GC is a form of moral awareness of hotel organizations as part of the ecological community, while according to Triple Bottom Line Theory, such commitment strengthens the planetary dimension in achieving sustainability. Therefore, GC in the hospitality sector is not just a matter of environmental compliance, but an important strategy to improve environmental performance while strengthening competitiveness amid the increasing demand environmentally friendly services.

H9. GC has a positive effect on GP.

2.4 GTR, GCO, GIL, and PB → GP through GC

GTR, GCO, GIL, and PB are important factors that can encourage the improvement of GP in the hospitality industry [51, 52]. GTR equips employees with the understanding and skills to carry out sustainable practices, while GCO incentivizes pro-environmental contributions [53, 54]. Both play a role in strengthening GC-an employee's psychological commitment to the company's environmental goals-which in turn drives consistency in green work behaviors and has a direct impact on energy efficiency, waste reduction, and resource conservation. In addition, inclusive leadership that cares about the environment and individual PB also strengthen employees' commitment to sustainability values [55, 56]. When employees feel involved, valued and supported by the organization in green practices, they are more motivated to support environmental goals internally [57, 58]. This commitment is an important pathway in linking various managerial strategies to improved GP. This is in line with the ecocentrism and Triple Bottom Line approaches, which emphasize the importance of balance between economic, social, and environmental aspects in organizational sustainability.

H10. GTR has a positive effect on GP.

H11. GCO has a positive effect on GP.

H12. GIL has a positive effect on GP.

H13. PB has a positive effect on GP.

3. RESEARCH METHODS

This study uses a quantitative approach with an explanatory research design. This is because this study aims to test and explain the direct and indirect effects of GTR, GCO, GIL, and PB on GP, with GC as a mediating variable. The research location is focused on the star hotel industry in Palembang, as star-rated hotels generally have a more formalized human resource management system and documented environmental policies compared to non-star accommodations. This allows for a more reliable examination of GHRM practices, ensuring that the study captures structured environmental initiatives and their integration into organizational policies and employee behavior. The population in this study were all employees of

star hotels in Palembang, totaling around 812 people. A sample of 268 respondents was determined using the Slovin formula (5% error) and purposive sampling technique. The criteria for respondents are employees who have worked for at least one year, because employees with a minimum of one year of tenure are considered to have sufficient exposure to organizational policies, daily operational routines, and environmental management practices implemented by the hotel. This ensures that respondents have a stable understanding of GHRM practices, leadership styles, and environmental initiatives, allowing them to provide more accurate and reliable assessments related to the variables examined in this study. Primary data was obtained through distributing 1-5 Likert scale questionnaires to respondents directly and through Google Forms.

The research instrument is compiled based on indicators of each variable. GP variables are measured by nine indicators [59], GTR variables are measured by seven indicators [60, 61], GCO variables are measured by five indicators [60, 61], the GIL variable is measured by nine indicators [62-64], the PB variable is measured by six indicators [65, 66], and the GC variable is measured by eight indicators [67]. The data analysis technique was carried out with a quantitative approach using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) through SmartPLS software, to test direct and mediation relationships between variables in the research model.

4. RESULT ANALYSIS

Based on the data on the characteristics of respondents in this study (Table 1), the majority of respondents were male as many as 142 people (53%), while women were 168 people (47%). In terms of age, most respondents are in the range of 25-30 years (93 people or 35%) and less than 25 years (82 people or 31%), which shows that the majority of respondents come from young productive age groups. For education level, most respondents were S1 graduates as many as 108 people (40%) and SMA / SMK as many as 103 people (38%), reflecting the diversity of educational backgrounds with the dominance of secondary and higher education. In terms of marital status, most respondents were unmarried (142 people or 53%), while 122 people (46%) were married. Based on tenure, most respondents have a tenure of 1-5 years (187 people or 70%), indicating that the majority of respondents are a workforce with early to medium work experience. Finally, the distribution of respondents based on hotel origin showed that 84 people (31%) came from other hotels outside the 10 big hotel names mentioned, while the rest were spread across various hotels such as Swarna Dwipa (17%), Sumsel Gemilang (12%), and others, showing the diversity of workplaces in the hospitality industry in Palembang represented in this study.

Based on the results of the convergent validity test (Table 2), all constructs in this study have met the criteria for adequate validity. All indicators have a loading factor value above 0.60, which indicates that these indicators have sufficient contribution to the measured construct. Referring to Hair et al. [68], a loading factor value of ≥ 0.60 is considered to meet the requirements of convergent validity, especially in research with a complex number of indicators. In addition, the Average Variance Extracted (AVE) value for all constructs is above 0.50, in accordance with the provisions of Fornell and Larcker

[69] which state that AVE \geq 0.50 indicates that more than 50% of the indicator variance can be explained by latent constructs. The Cronbach's Alpha (α) and Composite Reliability (CR) values are also above 0.70 each, indicating that each construct has good internal consistency. Therefore, the instruments used in this study are declared valid and reliable to measure the constructs of GTR, GCO, GIL, PB, GC, and GP.

Table 1. Respondent characteristics

| Respondent | Frequency | Percentage (%) |
|------------------------------|-----------|----------------|
| Gender | | _ |
| Male | 142 | 53 |
| Female | 168 | 47 |
| Age | | |
| Less than 25 Years | 82 | 31 |
| 25 - 30 Years | 93 | 35 |
| 31 - 36 Years | 49 | 18 |
| 37 - 42 Years | 28 | 10 |
| More than 42 Years | 16 | 6 |
| Education | | |
| SMA/SMK | 103 | 39 |
| Diploma | 49 | 18 |
| S1 | 108 | 40 |
| S2 | 6 | 2 |
| S3 | 2 | 1 |
| Marriage Status | | |
| Unmarried | 142 | 53 |
| Married | 122 | 46 |
| Previously Married | 4 | 1 |
| Period of Employment | | |
| Less than 1 Year | 3 | 1 |
| 1 - 5 Years | 187 | 70 |
| 5 - 10 Years | 40 | 15 |
| More than 10 Years | 38 | 14 |
| Hotel Origin | | |
| Swarna Dwipa Sumsel | 46 | 17 |
| Gemilang Hotel | 40 | 1 / |
| Beston Palembang | 32 | 13 |
| Hotel 101 Rajawali Palembang | 17 | 6 |
| Amaris Hotel Palembang | 17 | 6 |
| Aston Hotel Palembang | 14 | 5 |
| Santika Radial Palembang | 13 | 5 |
| Algorithm Hotel | 12 | 5 |
| Excelton Hotel | 11 | 4 |
| Hotel Rio | 11 | 4 |
| Royal Asia Hotel | 11 | 4 |
| Others | 84 | 31 |

Table 2. Convergent validity test

| Construct | Items | Loading Factor | α | C.R | AVE |
|-----------|-------|-----------------------|-------|-------|-------|
| | GC1 | 0.805 | | | |
| | GC2 | 0.743 | | | 0.617 |
| | GC3 | 0.877 | | | |
| GC | GC4 | 0.787 | 0.911 | 0.928 | |
| GC | GC5 | 0.696 | 0.911 | 0.928 | |
| | GC6 | 0.784 | | | |
| | GC7 | 0.841 | | | |
| | GC8 | 0.735 | | | |
| | GCO1 | 0.809 | | 0.883 | 0.601 |
| | GCO2 | 0.767 | | | |
| GCO | GCO3 | 0.789 | 0.834 | | |
| | GCO4 | 0.791 | | | |
| | GCO5 | 0.717 | | | |
| | GIL1 | 0.743 | | | |
| GIL | GIL2 | 0.774 | 0.899 | | 0.554 |
| | GIL3 | 0.775 | | 0.918 | |
| | GIL4 | 0.786 | | | |
| | GIL5 | 0.728 | | | |

| | GIL6 | 0.749 | | | |
|-----|------|-------|---|-------|-------|
| | GIL7 | 0.722 | | | |
| | GIL8 | 0.683 | | | |
| | GIL9 | 0.736 | | | |
| | GP1 | 0.785 | | | |
| | GP2 | 0.823 | | | |
| | GP3 | 0.817 | | | |
| | GP4 | 0.807 | | | |
| GP | GP5 | 0.716 | 0.934 | 0.945 | 0.655 |
| | GP6 | 0.845 | | | |
| | GP7 | 0.846 | | | |
| | GP8 | 0.829 | | | |
| | GP9 | 0.807 | | | |
| | GTR1 | 0.725 | | | |
| | GTR2 | 0.743 | | | |
| | GTR3 | 0.843 | | | |
| GTR | GTR4 | 0.729 | 0.869 | 0.899 | 0.561 |
| | GTR5 | 0.713 | | | |
| | GTR6 | 0.707 | | | |
| | GTR7 | 0.773 | | | |
| | PB1 | 0.626 | | | |
| | PB2 | 0.727 | | | |
| PB | PB3 | 0.799 | 0.837 | 0.879 | 0.550 |
| PD | PB4 | 0.753 | 0.837 | 0.879 | 0.550 |
| | PB5 | 0.741 | | | |
| | PB6 | 0.791 | | | |
| 3.7 | | | • | (00) | |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

Discriminant validity is tested using two approaches (Table 3), namely the Fornell-Larcker Criterion and the HTMT Ratio. Based on the Fornell-Larcker principle, discriminant validity is met if the square root value of AVE (diagonal value) is greater than the correlation between constructs. The results show that all constructs (GC, GCO, GIL, GP, GTR, PB) meet this criterion, because the diagonal value is higher than the correlation value with other constructs. The HTMT (Heterotrait-Monotrait Ratio) test also showed satisfactory results. All HTMT values were below the threshold of 0.85 [70], such as GC-GIL (0.794) and GTR-GIL (0.722), indicating no discrimination issues between constructs. Thus, both approaches confirm that the constructs in this model have good discriminant validity.

Table 3. Fornell-Larcker criterion & HTMT discriminant validity test

| Fornell-Larcker Criterion | | | | | | |
|---------------------------|--------------|------------|------------|----------|-------------|-------|
| | GC | GCO | GIL | GP | GTR | PB |
| GC | 0.785 | | | | | |
| GCO | 0.653 | 0.775 | | | | |
| GIL | 0.731 | 0.605 | 0.745 | | | |
| GP | 0.550 | 0.468 | 0.553 | 0.809 | | |
| GTR | 0.641 | 0.535 | 0.641 | 0.538 | 0.749 | |
| PB | 0.586 | 0.542 | 0.602 | 0.371 | 0.565 | 0.742 |
| | | Н | TMT Ra | tio | | |
| | GC | GCO | GIL | GP | GTR | PB |
| GC | | | | | | |
| GCO | 0.735 | | | | | |
| GIL | 0.794 | 0.694 | | | | |
| GP | 0.581 | 0.524 | 0.599 | | | |
| GTR | 0.709 | 0.623 | 0.722 | 0.588 | | |
| PB | 0.659 | 0.637 | 0.680 | 0.392 | 0.642 | |
| Not | te. Variable | abbreviati | ons: Green | Commitme | ent (GC), G | reen |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

Continuing from the results of the Fornell-Larcker and HTMT Ratio tests which have shown the fulfillment of discriminant validity, the cross loading test results also support these findings (Table 4). The principle of this test states that discriminant validity is achieved if the loading value of the indicator on its own construct is higher than its loading on other constructs. In Table 4, each item from constructs such as GC, GCO, GIL, GP, GTR, and PB has the highest loading value on its original construct. For example, item GC3 has a loading of 0.877 on GC and lower on other constructs, while GTR3 has a loading of 0.843 on GTR, which is also higher than its correlation with other constructs. Thus, all indicators are declared to have good discriminant validity, because they are able to clearly distinguish their respective constructs and do not show overlapping meanings between constructs in the measurement model.

Table 4. Cross loading discriminant validity test

| | | | 8 | | J | |
|------|-------|-------|-------|-------|-------|-------|
| | GC | GCO | GIL | GP | GTR | PB |
| GC1 | 0.805 | 0.534 | 0.621 | 0.425 | 0.480 | 0.439 |
| GC2 | 0.743 | 0.492 | 0.503 | 0.349 | 0.452 | 0.436 |
| GC3 | 0.877 | 0.540 | 0.626 | 0.467 | 0.537 | 0.529 |
| GC4 | 0.787 | 0.553 | 0.628 | 0.512 | 0.571 | 0.454 |
| GC5 | 0.696 | 0.493 | 0.380 | 0.304 | 0.367 | 0.425 |
| GC6 | 0.784 | 0.496 | 0.565 | 0.503 | 0.559 | 0.462 |
| GC7 | 0.841 | 0.564 | 0.693 | 0.477 | 0.581 | 0.532 |
| GC8 | 0.735 | 0.418 | 0.504 | 0.359 | 0.426 | 0.387 |
| GCO1 | 0.612 | 0.809 | 0.541 | 0.375 | 0.426 | 0.408 |
| GCO2 | 0.375 | 0.767 | 0.412 | 0.318 | 0.355 | 0.341 |
| GCO3 | 0.529 | 0.789 | 0.442 | 0.362 | 0.421 | 0.415 |
| GCO4 | 0.513 | 0.791 | 0.439 | 0.397 | 0.440 | 0.466 |
| GCO5 | 0.459 | 0.717 | 0.499 | 0.353 | 0.420 | 0.459 |
| GIL1 | 0.646 | 0.506 | 0.743 | 0.305 | 0.480 | 0.513 |
| GIL2 | 0.520 | 0.458 | 0.774 | 0.396 | 0.458 | 0.538 |
| GIL3 | 0.593 | 0.491 | 0.775 | 0.406 | 0.441 | 0.445 |
| GIL4 | 0.571 | 0.515 | 0.786 | 0.424 | 0.502 | 0.466 |
| GIL5 | 0.476 | 0.463 | 0.728 | 0.433 | 0.445 | 0.496 |
| GIL6 | 0.559 | 0.409 | 0.749 | 0.480 | 0.504 | 0.413 |
| GIL7 | 0.525 | 0.389 | 0.722 | 0.381 | 0.478 | 0.364 |
| GIL8 | 0.476 | 0.407 | 0.683 | 0.400 | 0.474 | 0.441 |
| GIL9 | 0.514 | 0.414 | 0.736 | 0.479 | 0.511 | 0.369 |
| GP1 | 0.503 | 0.431 | 0.446 | 0.785 | 0.407 | 0.340 |
| GP2 | 0.348 | 0.309 | 0.389 | 0.823 | 0.380 | 0.228 |
| GP3 | 0.520 | 0.442 | 0.498 | 0.817 | 0.416 | 0.286 |
| GP4 | 0.496 | 0.439 | 0.456 | 0.807 | 0.461 | 0.385 |
| GP5 | 0.402 | 0.402 | 0.384 | 0.716 | 0.376 | 0.315 |
| GP6 | 0.502 | 0.356 | 0.520 | 0.845 | 0.467 | 0.269 |
| GP7 | 0.376 | 0.292 | 0.407 | 0.846 | 0.450 | 0.269 |
| GP8 | 0.434 | 0.392 | 0.477 | 0.829 | 0.529 | 0.347 |
| GP9 | 0.374 | 0.319 | 0.418 | 0.807 | 0.411 | 0.243 |
| GTR1 | 0.536 | 0.506 | 0.592 | 0.289 | 0.725 | 0.591 |
| GTR2 | 0.483 | 0.437 | 0.506 | 0.423 | 0.743 | 0.469 |
| GTR3 | 0.544 | 0.409 | 0.572 | 0.390 | 0.843 | 0.476 |
| GTR4 | 0.438 | 0.310 | 0.427 | 0.545 | 0.729 | 0.322 |
| GTR5 | 0.413 | 0.351 | 0.400 | 0.416 | 0.713 | 0.366 |
| GTR6 | 0.398 | 0.317 | 0.371 | 0.306 | 0.707 | 0.290 |
| GTR7 | 0.532 | 0.466 | 0.475 | 0.422 | 0.773 | 0.435 |
| PB1 | 0.344 | 0.314 | 0.321 | 0.037 | 0.259 | 0.626 |
| PB2 | 0.439 | 0.313 | 0.451 | 0.308 | 0.403 | 0.727 |
| PB3 | 0.375 | 0.419 | 0.359 | 0.245 | 0.397 | 0.799 |
| PB4 | 0.462 | 0.467 | 0.500 | 0.253 | 0.432 | 0.753 |
| PB5 | 0.464 | 0.424 | 0.474 | 0.296 | 0.421 | 0.741 |
| PB6 | 0.485 | 0.449 | 0.517 | 0.399 | 0.533 | 0.791 |
| GC1 | 0.805 | 0.534 | 0.621 | 0.425 | 0.480 | 0.439 |
| GC2 | 0.743 | 0.492 | 0.503 | 0.349 | 0.452 | 0.436 |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

Table 5. Multicollinearity test & common method bias

| | GC | GCO | GIL | GP | GTR | PB |
|-----|-------|-----|-----|-------|-----|----|
| GC | | | | 2.756 | | |
| GCO | 1.764 | | | 1.948 | | |
| GIL | 2.203 | | | 2.614 | | |
| GP | | | | | | |
| GTR | 1.913 | | | 2.021 | | |
| PB | 1.806 | | | 1.835 | | |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

The multicollinearity test results (Table 5) show that all variables in the model have Variance Inflation Factor (VIF) values below the common threshold of 5, with the highest values recorded for GC at 2.756 and GIL at 2.614. These values are within the tolerance limits, indicating that there is no serious multicollinearity problem among the predictor variables. This means that each independent variable can stand alone without experiencing a high correlation that could interfere with the model estimation results. In addition, the VIF value can also be used to detect potential common method bias (CMB) when all constructs are measured from the same data source (e.g. same respondent and same time). According to Kock [71], if the VIF value between latent constructs is below 3.3, then common method bias is not a significant issue. In this study, all VIF values both in the structural model and between the main constructs are below this value, so it can be concluded that there is no indication of common method bias that threatens the validity of the research results.

The results of the predictive relevance (Q2) test using the Stone-Geisser method (Table 6) show that the two endogenous variables in the model, namely GC and GP, have Q2 values of 0.373 and 0.249 respectively. The Q2 value is obtained from the formula $Q^2 = 1$ - (SSE / SSO), where values above 0 indicate that the model has good predictive ability (predictive relevance). Interpretatively, the Q² value of 0.373 on GC indicates that the model is able to predict about 37.3% of the variance of this construct relevantly. Similarly, the Q² value of 0.249 on GP indicates a predictive ability of 24.9%, which is also still in the relevant category according to the criteria of Hair et al. [72], which states that $Q^2 > 0$ indicates predictive relevance, with categories of 0.02 (low), 0.15 (medium), and 0.35 (high). Meanwhile, other variables such as GCO, GIL, GTR, and PB do not have Q2 values because they are exogenous (independent) variables in the model, so they are not tested for their predictive power. Thus, the structural model in this study has a fairly good predictive ability of the endogenous variables.

Table 6. Predictive relevance (Q2)

| | sso | SSE | Q ² (= 1 - SSE/SSO) |
|-------------------|-------------------|------------|-----------------------------------|
| GC | 2144.000 | 1344.043 | 0.373 |
| GCO | 1340.000 | 1340.000 | |
| GIL | 2412.000 | 2412.000 | |
| GP | 2412.000 | 1811.363 | 0.249 |
| GTR | 1876.000 | 1876.000 | |
| PB | 1608.000 | 1608.000 | |
| Note Variable abl | reviations: Green | Commitment | (GC) Green |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

Table 7. Path coefficients direct effects test

| | β | STDEV | T Statistics | P Values |
|---------------------------|-------|-------|--------------|----------|
| $GTR \rightarrow GC (H1)$ | 0.198 | 0.067 | 2.938 | 0.003 |
| $GCO \rightarrow GC (H2)$ | 0.258 | 0.053 | 4.873 | 0.000 |
| $GIL \rightarrow GC (H3)$ | 0.386 | 0.065 | 5.937 | 0.000 |
| $PB \rightarrow GC (H4)$ | 0.102 | 0.084 | 1.207 | 0.228 |
| $GTR \rightarrow GP (H5)$ | 0.254 | 0.078 | 3.239 | 0.001 |
| $GCO \rightarrow GP (H6)$ | 0.111 | 0.056 | 1.982 | 0.048 |
| $GIL \rightarrow GP (H7)$ | 0.233 | 0.078 | 3.007 | 0.003 |
| $PB \rightarrow GP (H8)$ | 0.087 | 0.069 | 1.265 | 0.206 |
| $GC \rightarrow GP (H9)$ | 0.195 | 0.085 | 2.293 | 0.022 |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB). The corresponding t-statistics values can be clearly observed in Figure 1.

Hypothesis testing results for direct effects (Table 7) show that most of the influence paths in this model are statistically significant. GTR (H1), GCO (H2), and GIL (H3) are proven to have a positive and significant effect on GC, with p values < 0.05 and t values > 1.96. However, PB (H4) has no significant effect on GC (p = 0.228), so the hypothesis is rejected. Furthermore, GTR (H5), GCO (H6), GIL (H7), and GC (H9) have a significant direct influence on GP, as indicated by the p-value < 0.05. In contrast, PB (H8) again showed no significant influence on GP (p = 0.206), so this hypothesis was also rejected. Thus, these results confirm the important role of training, compensation, inclusive leadership, and GC in

improving environmental performance in the hospitality industry.

The results of the indirect effect hypothesis test (Table 8) show that not all mediation paths through GC have a significant effect on GP. The GCO \rightarrow GC \rightarrow GP (H11) and $GIL \rightarrow GC \rightarrow GP$ (H12) pathways proved significant, with p values = 0.038 and 0.032, respectively, and t values > 1.96. This means that GC successfully mediates significantly the influence of the two variables on GP. However, the paths GTR \rightarrow GC \rightarrow GP (H10) and PB \rightarrow GC \rightarrow GP (H13) are not significant because the p value > 0.05 and t value < 1.96, namely p = 0.070 and 0.283. This indicates that GC has not strongly bridged the influence of GTR and PB on GP. Overall, these results highlight the important role of GC as an effective mediating mechanism especially for green leadership and compensation aspects in improving environmental performance in the hospitality industry.

Table 8. Path coefficients indirect effects-sobel test

| | T Statistics | STDEV | P Values |
|---|--------------|-------|----------|
| $GTR \rightarrow GC \rightarrow GP (H10)$ | 1.812 | 0.021 | 0.070 |
| $GCO \rightarrow GC \rightarrow GP (H11)$ | 2.075 | 0.024 | 0.038 |
| $GIL \rightarrow GC \rightarrow GP (H12)$ | 2.140 | 0.035 | 0.032 |
| $PB \rightarrow GC \rightarrow GP (H13)$ | 1.073 | 0.019 | 0.283 |

Note. Variable abbreviations: Green Commitment (GC), Green Compensation (GCO), Green Inclusive Leadership (GIL), Green Performance (GP), Green Training (GTR), Pro-environmental Behaviors (PB).

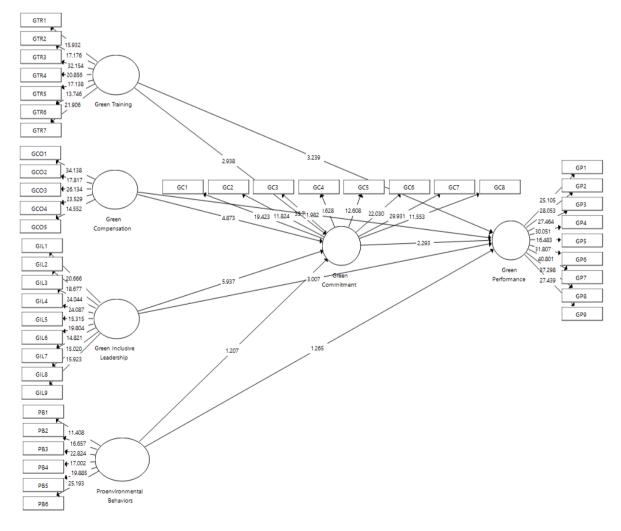


Figure 1. Inner model of the transformation of environment-Based HR practices

5. DISCUSSION

The results showed that GTR, GCO and GIL have a significant influence on GP, both directly and through GC. This supports the theory and previous research from several experts. GTR is proven to increase one's knowledge and skills. Employees are increasingly aware and believe in the importance of caring for the environment so that they can increase their commitment to the organization [24], especially in supporting the achievement of sustainable environmental performance as well [25]. Apart from training, GCO also plays a crucial role in increasing GC. Employees who are compensated can contribute and pay attention to environmental aspects [27].

This finding confirms that organizational success in achieving sustainable performance depends not only on technical systems, but also on the strategic role of human resources and leadership. Theoretically, this finding reinforces the Triple Bottom Line [16] which requires a balance between the aspects of profit, people, and planet. When organizations empower their employees through GTR, compensation for environmental contributions, and the proactive role of inclusive leaders who care about the environment, sustainability values should not only be a slogan but also be implemented in real actions.

Environmentally-oriented inclusive leadership practices can also increase GC [12, 29]. This is because leaders can encourage participation and model environmentally friendly behavior and create a conducive work climate [13, 30]. Furthermore, the significant effect of GIL on GC and GP embodies the importance of the values and care approach in leadership. Leaders who adopt ecocentric principles - that nature is not just a resource but an entity worthy of respect are likely to encourage employees to engage more in environmentally friendly practices. This is in line with deep ecology [14, 15] which teaches the importance of harmonious relations between humans and the environment. In the context of hospitality, this appears in the form of active encouragement to employees to minimize waste, save energy, and maintain the ecosystem around the workplace. GCO also shows a significant influence, both directly on GP and indirectly through GC. This shows that when organizations provide fair rewards for employee contributions to environmental goals, employee loyalty and performance also increase. Compensation becomes a tool to translate the value of ecocentrism into an incentive system that supports sustainability. In line with the Triple Bottom Line view, compensation is not only judged by financial contributions, but also by social and ecological contributions.

Another interesting finding is the significant influence of GTR on GP, although the indirect influence through GC is not proven. This shows that the training provided to employees has equipped them with technical skills in carrying out environmentally friendly practices, but has not fully touched the aspects of values and deep commitment. From the perspective of deep ecology, this reflects that organizations still need to strengthen the spiritual and ethical dimensions of GTR in order to foster ecological attachment, not just technical skills.

In contrast, insignificant results were found in the effect of PB on GC and GP, both directly and indirectly. This finding is quite surprising, as theoretically, individual PB are expected to be the foundation for cultivating a green work culture. However, in practice, these behaviors tend to remain personal

and are not yet institutionalized or structurally supported by the organization. This indicates a gap between employees' ecological awareness and the organizational system—a gap that requires integration through a more comprehensive GHRM framework. From the lens of ecocentrism, the intrinsic value of individual environmental behavior cannot flourish unless ecological consciousness is embedded collectively at the organizational level. In addition, within the context of the hospitality industry in developing countries such as Indonesia, environmental behavior is often constrained by operational pressures, limited resources, and the absence of formal incentives. Without a supportive institutional framework, individual efforts become fragmented and fail to transform into organizational outcomes. This underscores the necessity of embedding planetary values within the "people" and "profit" dimensions of the Triple Bottom Line, ensuring that green behavior is not only encouraged but also rewarded and sustained structurally.

Indeed, comparable findings in the ASEAN hospitality context support and nuance these results. For instance, a Malaysian hotel-industry study found that green HRM practices such as GTR and compensation significantly impacted environmental performance in 3-, 4- and 5-star hotels [73, 74]. Similarly, a Thai hospitality investigation reported barriers to green HRM and green culture adoption that moderated the relationship between leadership, employee behavior, and GP [75]. These regional studies reinforce that while green HRM and leadership are effective levers, contextual constraints and structural enablers vary by region and organizational maturity.

Overall, the results of this study show that an organization's success in achieving GP is highly dependent on how far it is able to translate sustainability principles and ecocentrism values into the human resource management system. GHRM in this case becomes the main instrument to transform values into practices, and GC becomes an important node that connects values and actions. Therefore, future organizational strategies need to strengthen the value dimensions and systems that support sustainability as a whole, not only at a technical level, but also at an ethical and spiritual level. Even reinforced the finding that having GC can increase organizational sustainability [22].

6. CONCLUSIONS

This study analyzed the effect of GHRM—comprising GTR, GCO, and GIL—along with PB on GP, mediated by GC. The findings demonstrate that GTR, GCO, and GIL significantly enhance GC and GP, both directly and indirectly, thereby confirming the strategic role of GHRM in embedding sustainability values within organizational practices. Conversely, PB were found to have no significant impact, suggesting that individual efforts alone are insufficient without structural support and a supportive organizational culture. These results reaffirm the relevance of Ecocentrism Theory and the Triple Bottom Line in hospitality management, highlighting that consistent integration of sustainability values into HR policies is essential for strengthening employee commitment and improving environmental performance.

Despite these contributions, the study has limitations that warrant consideration. The cross-sectional design restricts the ability to capture the dynamic nature of the relationships over time. Furthermore, the research scope was limited to the hotel industry in Palembang, which may constrain the generalizability of findings across different sectors and regions. Additionally, other contextual drivers—such as organizational culture, regulatory pressures, or digital transformation—were not examined. Future research should therefore employ longitudinal or mixed-method approaches, extend the scope to diverse industries and geographical contexts, and integrate additional variables such as environmental leadership or digital green HRM. Such efforts will provide a deeper and more comprehensive understanding of how GHRM can sustainably enhance organizational GP.

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NOMENCLATURE

Abbreviation

GP Green Performance GC Green Commitment

PB Pro-environmental Behaviors
GIL Green Inclusive Leadership

GTR Green Training
GCO Green Compensation