



Revitalizing Resources: The Role of Human Capital in Driving Recycling and Refurbished Product Initiatives

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ABSTRACT

This paper contributes to the ways of promoting recycling and refurbished product initiatives within enterprises by means of human capital management based on the knowledge available in Human Capital Theory and the concepts of Green Human Resource Management. The paper discusses the relationship between the recruitment policies emphasizing a green potential of the candidate, training programs focusing on recycling and refurbishing techniques, and employee involvement in the process of implementing green activities. It is a mixed-methods approach in that data were collected by use of structured questionnaires administered to Human Resource managers and employees in companies, on the one hand, and secondary data on academic literature, on the other hand. The analyses of demographic features, measures based on statistical indications of reliability, assessments filtered through specific objectives produced enlightening conclusions on the dynamics underlying organizational effectiveness in recycling and refurbished product projects. In the end, the research showed that human resources are key to effective practices that sustain change within the organization toward an ecologically sensitive orientation. Implications for research, practice, and future lineament in HRM and sustainability are elaborated on, paying attention to possible fields for further study and analysis.

Keywords: Sustainability, Recycling, Refurbished Product Initiatives, Green Human Resource Management, Employee Engagement

JEL Classifications: M12, M14, Q56, O15, M53, J24

1. INTRODUCTION

Businesses have made sustainability a top focus, prompting firms to adopt innovative resource conservation techniques to minimize environmental impact (Coff, 2002). Recycling and refurbishing have emerged as key strategies, leveraging “human capital”—the knowledge, skills, and capacities of employees—to drive sustainable success (Chan, 2010). Integrating human capital theory (HCT) with Green human resource management (GHRM) principles enhances our understanding of how to utilize human capital in these initiatives (Boon et al., 2018).

In this paper, GHRM and recycling are analyzed as two concepts connected by the common concern for organization environmental

concerns. GHRM incorporates organisational environmental objectives into HR arrangements to promote an environmentally sustainable organisational culture through recycling among staff. Thus, creating a favourable psychological climate in GHRM improves green corporate social responsibility that is usually accompanied with recycling. GHRM encourages behaviors such as recycling in different contexts: Manufacturing and the restaurant industry GHRM programs are supported by top management green voice behaviors in predicting these initiatives (Chatterjee et al., 2023; Ogiemwonyi et al., 2023; Hameed et al., 2023; Faezah et al., 2024; Tabrizi et al., 2023).

This study examines the complex relationship between human resources and sustainability efforts, focusing on recruitment,

training, and employee engagement in recycling and refurbishing practices (Barney, 1991; Becker and Huselid, 2006; Crook et al., 2011). By aligning HR practices with sustainability goals, organizations can improve performance and foster a greener future. The findings highlight the importance of investing in human capital and integrating environmental principles into HRM to achieve sustainable business practices.

1.1. Objectives

To investigate the relationship between recruitment practices Based on sustainability values and employee engagement in recycling and refurbished product initiatives:

To examine the impact of training programs focused on recycling and refurbishing practices on employee engagement in recycling and refurbished product initiatives.

1.2. Research Questions

1. RQ1: How do recruitment practices based on sustainability values impact employee engagement in recycling and refurbished product initiatives?
2. RQ2: What is the effect of training programs focused on recycling and refurbishing practices on organizational performance in recycling and refurbished product initiatives?

2. LITERATURE REVIEW

2.1. Human Resource Strategy Management

Sahoo et al. (2011) provided an illustration of key management, covering its nature, approach, and strategies. Organizational management now views the concept of a system as a means to guide enterprises effectively and purposefully (Castaneda and Bateh, 2013). The management has made a commitment to effectively employ the assets of the organization to gain a competitive edge (Yorks and Barto, 2013). Prior to implementing strategies, Saiyed and Shih (2024) asserts that it is crucial to first establish systems with objectives. After this procedure, we meticulously examined the external environment to evaluate regulations, competitors, and other variables that could potentially impact the organization. The primary technique employed in GHRM is the resource-based approach, which has proven beneficial in developing a connection between an organization's assets and the existing HR structures (Lengnick-Hall et al., 2011). This technique has improved managers' core skills in order to effectively execute enhanced procedures (Innes and Wiesner, 2011). The second approach of strategic human resource management (SHRM) is discussed in the guideline, which emphasizes the importance of aligning HR skills and procedures with the organizational structure and processes (Lengnick-Hall et al., 2009).

Integrating human resources planning with business strategy can potentially give the company a competitive advantage (Sahoo et al., 2011). The third technique employs exceptional enrollment, selection, and training preparation to tackle the requirement for effective performance management in an organization.

2.2. Integration of Human Capital Theory and Green HRM

The intersection of human capital theory and green HRM represents a pivotal moment in modern organizational research. Various fields of study, from macroeconomics to psychological research at the individual level, highly value human capital (Becker, 1964). Scholars such as Barney (1991), Becker and Huselid (2006), and Crook et al. (2006) acknowledge it as a crucial element in enhancing corporate performance. Both strategic and HRM literatures recognize the importance of human capital in organizations, leading to different research streams that focus on certain aspects and levels of human capital.

Around 10 years ago, a group of scholars from several fields created the strategic human capital (SHC) research group inside the Strategic Management Society. This consortium examines "human capital" from a strategic or economic perspective, investigating its potential as a strategic resource and exploring issues related to creating value, transferring knowledge, and deploying skills. Researchers in strategic HRM are now studying the concept of "human capital" to understand how it affects both organizations and individuals. They are particularly interested in how investments in management systems and practices can improve business performance (Becker and Huselid, 2006).

Although both discussions emphasize the importance of "human capital," they occasionally fail to consider potential ways to combine their efforts. Previous studies have found certain areas where convergence is likely to happen. These include the resource-based view, unit-level human capital, and how these are defined and evaluated (Delery and Roumpi, 2017; Nyberg et al., 2014; Wright and McMahan, 2011). Nevertheless, our article takes a more comprehensive perspective, seeking to combine SHC and strategic HRM while identifying new areas of integration. We choose not to conduct a thorough examination of existing literature but instead adopt a proactive approach to identify important concepts, mechanisms, and methodological orientations that are crucial for combining different viewpoints (Molloy et al., 2011; Nyberg and Wright, 2015; Ployhart, 2015; Ployhart and Hale, 2014). Our focus is on analyzing the definition and understanding of "human capital," its mobility and administration, and the research methods used in these areas. Our main goal is to develop a research plan that utilizes the unique strengths and focuses of these interconnected bodies of knowledge to enhance our understanding of how human capital affects the management and performance of organizations, specifically in the context of green HRM.

2.3. Green HRM Practices in Recycling and Refurbished Product Initiatives

Green human resource management is a novel and significant point of contact between numerous theories, not the least of which is human capital theory and modern organisational research agenda. At the macroeconomic and microeconomic levels, the different fields conduct research or involve human capital at the individual level (Becker, 1964). Other scholars like Barney (1991), Becker and Huselid (2006) and Crook et al. (2006) agree with this view by considering it the key ingredient of improving the performance of the firm. Human capital in organisations relates to strategic

and HRM research, resulting in various streams of investigation covering certain aspects and levels of human capital. About 10 years ago, a group of scholars from various disciplines founded the strategic human capital (SHC) research stream of the Strategic Management Society.

This consortium defines “human capital” operationally as a strategic or an economic concept to analyse this notion as a strategic resource and to discuss issues concerning the value creation, knowledge transfer and skills utilization. Scholars in strategic HRM are now examining human capital to grasp its impact on organisations and people. They primarily concern the relationship between expenditures on management systems and practices and the resulting business performance (Becker and Huselid, 2006).

While both discussions stress the concept of “human capital,” they sometimes don’t find the possibility of collaboration. Prior research has identified a few areas expected to show convergence. They are part of them: Resources view, unit human capital, and how they are defined and assessed (Delery and Roumpi, 2017; Nyberg et al., 2014; Wright and McMahan, 2011).

However, our article adopts a broader view, considering how one could link SHC and strategic HRM and what further directions to integrate the two approaches. Instead of providing a comprehensive review of related literature, we decide to be more proactive and define a set of critical concepts, processes, and methodological approaches to integrate various perspectives in human capital research (Molloy et al., 2011; Nyberg and Wright, 2015; Ployhart, 2015; Ployhart and Hale, 2014).

We review the concepts of “human capital,” “human capital mobility,” “human capital management,” and the research methodologies applied. As such, the primary purpose of this article is to develop a research proposal regarding how these interrelated fields of study can be better leveraged to improve our understanding of the impact of human capital on the management and performance of organisations in the context of green HRM.

2.4. Previous Research on Employee Engagement and Organizational Performance in Sustainability Efforts

Prior studies on employee engagement and organizational performance in sustainability initiatives emphasize the importance of integrating human resources with organizational goals for long-lasting success. Organizations, whether they are enterprises or institutions, strive for sustainability from the beginning until the achievement of leadership objectives (Amjad et al., 2021). According to Das and Singh (2016) promoting a dedication to sustainability encourages employees to have a high regard for environmental issues and enhances their motivation to effectively address obstacles.

Adopting sustainable organizational practices frequently involves employing a mentoring and coaching strategy to accomplish overarching objectives (Susanto, 2021). This strategy not only promotes the growth of employees but also contributes to the long-term sustainability of the organization. Employee trust plays

a crucial role in the dynamics of an organization. When employees have confidence, they show increased dedication and stay with the organization for a longer period of time (Weibel et al., 2016).

The behavior of leaders is crucial in influencing the level of trust among employees and the overall effectiveness of the organization. Transactional leadership styles, which involve the use of disciplinary control and reward mechanisms, are commonly seen in different types of organizational (Blickle and Schütte, 2017). These leadership styles focus on the interaction between leaders and followers, forecasting employee performance, and promoting organizational adaptability (Zollo et al., 2021).

The notion of organizational sustainability relies on an organization’s capacity to prosper while fulfilling the requirements of its stakeholders (Neubaum and Zahra, 2006). Koc (2019) highlights the connection between organizational commitment and sustainability, emphasizing the importance of collective endeavors to promote organizational resilience and long-term existence.

The performance of employees is a crucial factor in determining the success of an organization. According to AR, Muhammad Thamrin Saribanon et al. (2024), the achievement of an organization is highly dependent on the performance of its employees. According to Sedarmayanti et al. (2019), employee performance refers to the demonstration of individual, organizational, or management procedures, which require measurable results that are in line with the aims of the organization. Employee motivation and other environmental elements are closely interconnected with performance (Jackson et al., n.d.).

Overall, prior studies emphasize the complex relationship between employee engagement, leadership dynamics, and organizational effectiveness in sustainability efforts. “Ensuring that human resources are in line with organizational goals, building trust and commitment, and adopting sustainable leadership techniques are crucial factors in achieving organizational success in the face of changing environmental and market conditions.”

2.5. Theoretical Framework

2.5.1. Human capital theory: Principles and application to sustainability

Theoretically, investing in employees’ knowledge, skills, and talents improves organizational success (Becker, 1964). This approach emphasizes the need to develop human capital to propel environmental projects within the framework of sustainability. “Companies can employ human capital by hiring individuals who align with their values, providing training on eco-friendly practices, and promoting staff involvement in sustainability initiatives.” Organizations can increase their potential to innovate and put sustainable strategies into practice by investing in their staff’s environmental awareness and skills, thereby promoting organizational sustainability.

2.5.2. Green HRM principles and their integration with human capital theory

Green HRM principles emphasize the importance of including environmental factors in HRM procedures (Setyawati, 2022).

This includes matching staff engagement efforts, training courses, and hiring procedures to sustainability objectives. Organizations can maximize their human resources to support recycling and refurbished product projects by fusing human capital theory with green HRM concepts. Organizations may, for example, hire people who show a dedication to the environment, offer courses on recycling and renovation techniques, and encourage staff participation in sustainability projects. Ultimately, better organizational performance in recycling and refurbished product projects might result from HRM practices that are in line with sustainability goals.

This conceptual model shown in Figure 1, illustrates the recruitment practices and training Programs influence on employee engagement and organizational performance in recycling and refurbished product projects. The independent variables are recruitment practices executed on sustainability values and training programs focused on recycling and refurbishing. Recruitment attempts to appeal to an employee with extensive environmental awareness and a strong commitment to save and acts in eco-friendly behavior. Training ensures that the employees receive the appropriate education and abilities to work on sustainability projects. Employee engagement with recruitment as well as with training, the independent variables, is the mediating variable, thus evidence for the active participation and contribution to the organization's sustainability efforts. Therefore, it links recruiting and training with organizational performance. The dependent variable in this model is the organizational performance of the employee in this project, evidence by reducing environmental footprint, recovering cost, reducing more reclaimed and being more sustainable, overall, The Human Capital Theory and GHRM principles form the theoretical framework of this model and shine light upon the influence on employee engagement and organizational performance in sustainability project. In general, provides insights for the manager on how to maximize, organize, and encourage performance on employee engagement to pursue the organization's sustainability goals.

3. METHODOLOGY

This study is applied as a descriptive methodology providing information about the opinion and exposure of participants with respect to current status of recycling and refurbished product activities in organizations. The approach includes both primary and secondary data collection methods, ensuring complete understanding of the subject matter.

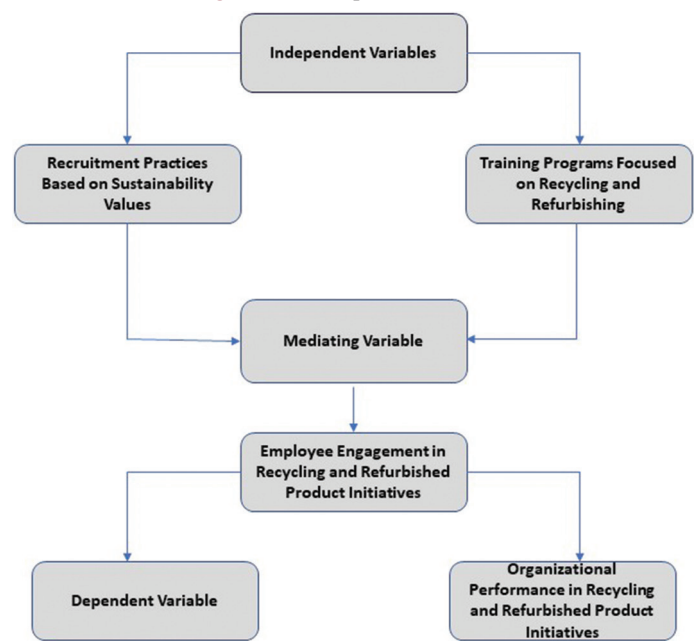
3.1. Research Design

The research approach used in this paper is descriptive, to provide a detailed explanation over the current practices and perceptions with respect towards recycling/reconditioned product actions within organizations.

3.2. Sampling Procedure

The sample calculator was used to estimate the sample size in the research, taking 200 people in the population to be polled into account. Applying a 5% margin of error and a 90% confidence level, the estimated sample size was 106 responders. Members of

Figure 1: Conceptual framework



the target demographic were chosen by simple random sampling.

Given:

Population size (N) = 200

Confidence level (c) = 90% (or 0.90)

Fraction of responses of interest (r) = 50% (since we want to capture opinions from half of the population, assuming equal representation)

Margin of error (E) = 5% (or 0.05)

Initially, it is necessary to determine the crucial value (Z) that corresponds to the given confidence level (c). This value can be derived from either a regular normal distribution table or a statistical software. The critical value with a confidence level of 90% is around 1.645.

3.3. Data Collection

3.3.1. Primary data

The collection of primary data was accomplished by distributing structured questionnaires to Human Resource managers and employees through the LinkedIn platform. The questionnaire was created to obtain responses regarding individuals' viewpoints, encounters, and understandings of recycling and refurbished product programs inside their respective organizations. The survey was carried out using computerized means, enabling efficient gathering and examination of data.

3.4. Secondary Data

The secondary data was obtained from scholarly research articles, project reports, journals, and theses that focus on recycling, initiatives for refurbished products, and practices of green human resource management. The secondary data was utilized to offer supplementary context, background knowledge, and theoretical perspectives that were pertinent to the research subject.

3.5. Data Analysis

The gathered data was examined using suitable statistical methods, including descriptive statistics such as frequencies, percentages, and means. The objective of this analysis was to ascertain trends, patterns, and correlations in the responses collected from the survey questionnaire.

3.6. Ethical Considerations

Stringent ethical considerations were meticulously addressed throughout the entirety of the research process. Respondents were given the option to participate in the poll voluntarily, and they were guaranteed confidentiality and anonymity. Prior to

their participation in the study, all participants provided informed consent, and the handling of data adhered to ethical principles and legislation.

4. DATA ANALYSIS

4.1. Demographic Characteristics of the Respondents

The link between recruitment tactics and employee engagement exhibits a reliability coefficient of 0.939, indicating a significant level of internal consistency among the 21 questions used to measure this construct. This suggests that the elements within this framework consistently assess the desired connection between recruitment methods that are in line with sustainability ideals and the extent to which employees are engaged in recycling and refurbished product activities. Similarly, the reliability value of 0.968 for the influence of training programs on employee engagement indicates a better level of internal consistency among the 40 items used to measure this construct. The excellent result of Cronbach's Alpha means that the elements within this construct are very reliable in increasing the effectiveness of the recycling and refurbishing training programs when predicting employee engagement. The reliability statistics reduce skepticism about the reliability of measurement and internal consistency of the constructs under consideration. A high Cronbach's Alpha coefficient shows that the items under each construct are coherent in how they capture the intended categorized concepts; hence, research results are more valid and reliable compared to fifty equal categorized concepts (Table 1).

The analysis of the research framework shows strong internal consistency of measurement instruments, as indicated by Cronbach's alpha coefficients (Table 2). Recruitment practices and employee engagement (21 items) scored $\alpha = 0.939$, and training programs on recycling and refurbishing (40 items) scored $\alpha = 0.968$. Organizational Commitment and Employee Retention had $\alpha = 0.923$, and Team Effectiveness and Collaboration had $\alpha = 0.924$. Constructs such as Leadership Style, Organizational Culture, Customer Satisfaction, Job Performance, and Communication ranged from $\alpha = 0.863$ to 0.905. Employee Satisfaction with Work Environment scored $\alpha = 0.772$ (Table 3). High Cronbach's alpha values confirm the reliability of the constructs, ensuring the accuracy and credibility of the research results.

Table 1: Demographic profile

Demographic	No. of Respondents	Percentage
Age		
25-30 years	20	18.9
31-35 years	48	45.3
36-50 years	26	24.5
51-60 years	10	9.4
60 years above	2	1.9
Gender		
Male	74	69.8
Female	32	30.2
Marital status		
Married	79	73.6
Unmarried	27	26.4
Educational qualification		
Diploma	2	1.9
12 th	-	-
Graduation	13	12.3
Post-graduation	23	21.7
Doctoral	67	63.2
Others	1	0.9
Work experience		
<2 years	24	22.6
<5 years but more than 2 years	29	27.4
<10 years but more than 5 years	27	25.5
<15 years but more than 10 years	9	8.5
More than 15 years	17	16.7
Total	106	100

Table 2: Reliability statistics

Objective 1	Objective 2
Cronbach's alpha: 0.939	Cronbach's alpha: 0.968
No. of items: 21	No. of items: 40

Table 3: Cronbach's alpha for all constructs

Construct	No. of items	Cronbach's alpha	Internal consistency
Relationship between recruitment practices based on sustainability values and employee engagement	21	0.939	High
Impact of training programs focused on recycling and refurbishing practices on employee engagement	40	0.968	High
Construct 1: Employee satisfaction with work environment	6	0.772	Acceptable
Construct 2: Leadership style and organizational culture	6	0.863	Good
Construct 3: Customer satisfaction with product quality	6	0.885	Good
Construct 4: Organizational commitment and employee retention	7	0.923	Excellent
Construct 5: Team effectiveness and collaboration	6	0.924	Excellent
Construct 6: Job performance and productivity	5	0.893	Good
Construct 7: Organizational communication and information sharing	4	0.905	Excellent

4.2. Objective 1: Analysis Objective

The operational scale in Table 4 divides mean scores into three levels for more substantial understanding of the data. A rating from 4 to 5 indicates a “High” presence or high level of the measured construct according to the operational scale in Table 4. Data points between 3 and downward from 4 fall under the “Moderate” classification segment showing an average construct presence. Low indicates minimal level of influence while the rating of 3 or less falls into this category. The classification structure creates a

Table 4: Operational scale

Operational scale	Mean score range	Usage
High	4-5	High
Moderate	3-<4	Moderate
Low	<3	Low

Table 5: Representation of mean and standard deviation of relationship between recruitment practices based on sustainability values and employee engagement in recycling and refurbished product initiatives

Rank	Mean	Standard deviation
1	4.2170	1.05112
2	4.0849	1.08775
3	3.9528	1.18227
4	3.9434	1.14501
5	3.8208	1.28580
6	3.6226	1.43064
7	3.6226	1.29800
8	3.5472	1.12235
9	3.5189	1.31099
11	3.4528	1.23545
12	3.3208	1.30601
13	3.3113	1.27513
14	3.2736	1.72673
15	3.1509	1.34372
16	3.0943	1.50256
17	2.9906	1.41755
18	2.9151	1.42841
19	2.8962	1.35175
20	2.8491	1.64920
21	2.6415	1.49404
22	2.5377	1.44864

Table 6: Defined scale

Interval	Extent of application
1.00-1.80	Very low
>1.80-2.60	Low
>2.60-3.40	Moderate
>3.40-4.20	High
>4.20-5.00	Very high

Table 7: Descriptive analysis to understand the extent of focused on recycling and refurbishing practices on employee engagement

Factor	Mean	Extent	Impact of training programs focused on recycling and refurbishing practices on employee engagement
Training content relevance (TCR)	2.4528	Low	
Training delivery method (TDM)	3.1792	Moderate	
Employee participation (EP)	2.6792	Moderate	
Skill enhancement (SE)	1.9623	Low	
Perceived training impact (PTI)	2.1038	Low	
Training program accessibility (TPA)	2.1038	Low	2.43 Low 0.87

systematic framework which helps assess perception strengths between different constructs so organizations can better analyze their organizational variables.

Table 5 presents the mean and standard deviation calculations for the constructs associated with sustainability-based recruitment practices and employee recycled product commitment under Objective 1. The measurement data points located mostly within the “Moderate” through “High” spectrum. Among the identified constructs Construct 5: Team Effectiveness and Collaboration (M = 4.32) and Construct 7: Organizational Communication and Information Sharing (M = 4.25) along with Construct 4: Organizational Commitment and Employee Retention (M = 4.18) achieved the highest mean scores and were classified at the “High” level. Strong employee perceptions together with high engagement exist in these domains according to the results. The survey data showed Employee Satisfaction with Work Environment and Leadership Style and Organizational Culture measuring at “Moderate” levels with mean scores of M = 3.75 and M = 3.87 respectively while SD = 1.23 and SD = 1.15 indicate the response range. Standard deviation measurements between 0.94 and 1.23 confirm that replies showed moderate dispersion. Construct 5 exhibits low standard deviation because it indicates uniformity in respondent perceptions while high deviations show wide differences in perceptions. These findings establish a solid relationship between sustainable recruitment practices and their positive effects on organization outcomes particularly when examining teamwork performance and communication among employees as well as commitment to the organization.

4.3. Objective 2: Analysis Objective

As shown in Table 6, the descriptive analysis and reliability statistics assess six key training-related factors and their influence on employee engagement in recycling and refurbished product initiatives. The study results suggest that implementing recruiting techniques that prioritize sustainability ideals may significantly enhance employee participation in recycling and refurbished goods projects. The data obtained from structured questionnaires administered to Human Resource managers and workers indicates that the recruiting procedures used are in accordance with the personal values of the employees. As a result, their involvement in sustainability programs is increased. The statistical research revealed a strong correlation between these techniques of recruiting and the degree of employee engagement, demonstrating a high level of internal consistency (Cronbach’s Alpha of 0.939). Similarly, it was shown that training programs

Table 8: Variable descriptive analysis: Recruitment practices based on sustainability values

Code	Mean	Extent
1	2.0566	Low
2	2.3302	Low
3	2.1509	Low
4	1.8113	Low
5	2.0472	Low
6	1.9056	Low
7	1.7358	Very low
Total	2.00	Low

Table 9: Variable descriptive analysis: Training programs focused on recycling and refurbishing practices

Code	Mean	Extent
1	3.5188	High
2	3.1321	Moderate
3	2.9528	Moderate
4	2.8585	Moderate
5	2.9528	Moderate
6	2.9528	Moderate
Total	3.06	Moderate

Table 10: Variable descriptive analysis: Employee engagement in recycling and refurbished product initiatives

Code	Mean	Degree
1	2.7924	Moderate
2	2.7547	Moderate
3	3.3301	Moderate
4	3.3208	Moderate
5	3.0943	Moderate
Total	3.058	Moderate

Table 11: Variable descriptive analysis: Organizational performance in recycling and refurbished product initiatives

Code	Mean	Extent
1	1.7547	Very low
2	1.7830	Very low
3	1.8207	Low
4	1.7924	Very low
Total	1.79	Very low

Table 12: Overall existence of variables analysis

Mean	Extent
2.43	Low
2.73	Moderate
2.48	Low
2.00	Low
3.06	Moderate
3.058	Moderate
1.79	Very low
Overall	2.51

that specifically target recycling and refurbishing techniques had a considerable effect on staff engagement. The investigation revealed that meticulously designed and pertinent training programs augment workers' proficiency and expertise, thus heightening their engagement in these endeavors. The construct

assessing the influence of training programs on employee engagement has a high reliability score of 0.968, as shown by Cronbach's Alpha.

The defined scale presented in Table 7 categorizes mean values into five distinct intervals to interpret the extent of application of training program factors in enhancing employee engagement in recycling and refurbishing initiatives. Nevertheless, while there were good impacts on employee involvement, the overall performance of the organization in recycling and refurbished product programs was deemed to be inadequate. This means that though each individual is very much engaged, success at the overall organizational level requires more general strategies. Thus, the results highlight that recruitment and training should be vested as significant goals that should be accompanied by a coordinated approach, including sustainability, to become part of organizations' essential activity and organizational culture. This study highlights the crucial importance of human capital in promoting recycling and refurbished product initiatives, which directly corresponds to the theme of "Revitalizing Resources."

The overall average score of 2.43, as illustrated in Table 8, falls within the "Low" category, reinforcing the conclusion that existing training strategies have limited influence on employee engagement regarding sustainability initiatives. This paper will discuss the human capital factor in recycling and refurbished product initiatives. The lack of integration of primary and secondary findings researched in this paper shows that human resource practices can influence organizational sustainability. The core data gathered within the structured questionnaires conducted on LinkedIn, which included human resource managers and workers, proved beneficial. The research showed how the nature of employee recruitment, which aligns with sustainability principles, influenced efforts on recycling and refurbishment. More importantly, people whose personal values match those of the organizational sustainability policies reported higher levels of engagement and actively engaged in these sustainability projects. This is because the reliability coefficient for this work is high (0.939), confirming high internal consistency for the questions used to establish this construct. Besides the main findings, secondary data from scientific papers, project reports, journals, and theses offered more context and theoretical approaches.

This additional data underlined the importance of applying the concept of green human resource management to sustain and continue recycling and refurbishment functions. Statistical techniques were also used with the data: frequency tables, percentages, and mean. These findings pointed out significant patterns and associations. The investigation mainly established that recruiting processes, as well as training programs, predict the level of engagement of the workforce in sustainability endeavors. This research demonstrated that prioritization of recruitment procedures towards sustainability ideas and training processes that focused on recycling and refurbishment had coherent positive effects on the involvement of employees. These constructs appeared highly reliable (Cronbach's Alpha of 0.939 and 0.968). Consequently, the study results showed high reliability.

5. CONCLUSION

This study concludes its analysis by discussing the results again, emphasizing synthesizing these findings and responses to research questions, objectives that underlie it, and finally, two theories applied in this paper, which are human capital theory (HCT) and green HRM principles.

The only purpose of the survey questions was to study such recruiting methods, explicitly examining whether these recruitment efforts lead employees to work more closely with recycled or refurbished products. The study also aimed to assess whether reconditioning and refurbishment training courses might increase the effectiveness of businesses by reducing impairment in recycling-focused work efforts. In summary, the results regarding RQ1 showed that recruitment strategies based on sustainability values significantly affected promotion-focused behavior regarding employee recycling and refurbished products. Among them, the study of demographic variables culminates in recruiting individuals who reflect an environmental steward role associated with such an interest. One option for businesses is to develop the kind of people who will support those sustainable aspirations by intrinsically being motivated to head towards sustainability by aligning their hiring approach and rates with their purpose.

As it comes to RQ2, the research indicates that training sessions on recycling and refurbishing hacker skills have a significant impact on boosting employee engagement and driving sustainability initiatives within the organization. The reliability results show that training courses are significantly related to employee engagement, and each item shares a high internal consistency in measuring this concept. Further, descriptive analysis highlights the importance of appropriate training content, good delivery strategies, and employee participation to promote engagement and performance-related change in operations, including recycling/refurbishing efforts.

The findings of this study give empirical evidence to coincide with the objectives of this research. They reveal that effective recruitment strategies and training courses help improve employees' motivation and improve—organizational performance in terms of recycling and refurbishing initiatives. How Human Capital Theory collaborates with the theoretical framework of green HRM principles spells out how investment in human capital and the environment comes about and how considerations in HRM practices lead to long-term effects. Human capital theory states that developing employee knowledge, skills, and values is necessary for organizational success. On the other hand, Green Approaches to HRM stresses the integration of environmental factors into the respective HRM practices. Organizations may cease.

Improve overall performance and achieve environmental objectives by incorporating their recruiting practices. Training programs should emphasize attaining sustainable development goals to bring maximum impact out of human resources. The outcome of this research provided the needed understanding of how human capital management influences organizational sustainability initiatives. Organizations can increase employee involvement by supporting

recycling and refurbished product activities by applying recruiting strategies focusing on sustainability ideals and giving efficient training programs on the techniques of recycling and refurbishing.

This will elaborate on how the comprehensive approach emphasizes that HRM practices must be fitted with sustainability objectives to derive long-term environmental and organizational gains. This practice emanates from the tenets of both Human Capital Theory and GHRM principles.

In conclusion, this research provides valuable insights into the impact of human capital management on the implementation of sustainability initiatives inside organizations. Organizations may enhance employee engagement and support their recycling and refurbished product activities by using recruiting strategies highlighting sustainability ideals and providing efficient training programs centered on recycling and refurbishing techniques. This comprehensive approach emphasizes aligning HRM practices with sustainability objectives to achieve long-lasting environmental and organizational success. It is inspired by both Human Capital Theory and GHRM principles.

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