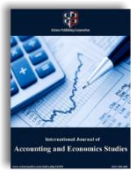
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Research paper



Green Capital and Green HRM: Badung Timber MSME Strategy

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Abstract

Through the lens of green structural capital, green relational capital, and green human capital, this study examines the relationship between green HRM and competitive advantage among SMEs in the wood industry of Badung Regency. An analytical approach employed in this quantitative analysis is structural equation modeling (SEM). In total, 267 wood SMEs participated in the research, with 251 classified as "small players" and 16 as "medium companies". The study found that green human, structural, and relational capital can help a company gain a competitive advantage. There are several advantages to green HRM, including structural, relational, human, and competitive benefits. Competitive advantage mediates the interaction between green HRM and green relational, structural, and human capital factors.

Keywords: *Green Intellectual; Keunggulan; Green HRM.*

1. Introduction

The wooden craft industry holds the top position as a contributor to Bali Province's export value from the craft industry sector, with the most significant number of small and medium-sized timber industries (SMEs) in Badung Regency, comprising 804 business units that can absorb a workforce of 3,327 people. The Badung Regency Government, through the Department of Industry and Manpower, has implemented several policies to help timber SMEs, through coaching and supervision, facilitating access to capital, production and marketing training, as well as e-commerce-based digital marketing training (Suwandana et al., 2023). Changing views on an organization in the era of globalization requires applying management principles that can take the organization in a more advanced direction. Participation in the business world, particularly in HR management, necessitates consideration of environmental issues and social ethics to ensure both business and environmental sustainability (Kim et al., 2019; Wijaya et al., 2022). SME actors in Bali are closely tied to local wisdom because they are Balinese who uphold the values of local wisdom. A company's business strategy is a concept that evolves in response to environmental changes (Yasa et al., 2024). The green management approach is believed to enhance the integration of environmental issues into all aspects of company activities (Kartika et al., 2020a). This condition is supported by purchasing environmentally friendly products, which is currently a trend, represents ethical behavior, and is considered a socially responsible action (Ekawati et al., 2023). One key component of firms' ability to successfully execute sustainable strategies is environmentally friendly HRM, often called green HRM (Kim & Park, 2017). Any business that wants to make it in today's environmentally conscious market needs a competitive edge. In today's digital economy, intangible assets — such as intellectual capital — are more important than monetary capital at any point in history (Chen, 2008). Innovative human resource management strategies can help businesses gain a competitive edge (Kartika et al., 2020b). Yusoff et al. (2019) argue that companies can gain a competitive advantage by prioritizing the development of robust intangible assets.

Green relational capital, structural capital, and green human capital are the three forms of environmentally concerned intellectual capital. This investment is effective, but intellectual capital has not garnered greater attention. Among the wood SMEs in Badung Regency, environmentally conscious business practices have received considerable attention. From gathering raw materials to delivering the finished product, the wood SME artisans in Badung Regency, who manufacture Ketakson goods, do so in an eco-conscious manner. Consequently, the product's worth is enhanced. An ecologically aware workforce can be fostered through "green HRM," or human resource management emphasizing the environment (Rohilla, 2017). This research aims to determine if small and medium-sized wood businesses (SMEs) in Badung Regency benefit from green structural capital, green human capital, and green relational capital in terms of their competitive advantage.

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2. The proposed study

2.1. Conceptual framework

The current movement toward stricter environmental conventions and heightened environmental awareness has had several effects on industrial rivalry patterns and practices, including changes to these patterns and practices. The literature examined here suggests that there are primarily three types of intellectual capital: green human capital, green structural capital, and green relational capital (Bontis, 1999; Johnson, 1999). According to multiple studies that expanded on HRM practices, green intellectual capital is an essential part of human resource management (Kong & Thomson, 2009; Yong et al., 2019; Luftman & Kempaiah, 2007). Utilizing environmentally friendly intellectual capital can give a company a competitive edge in the market. As a result, the myth that environmental preservation slows down a business's growth is dispelled (Stewart, 1997; Chen, 2008). The better an organization's Green HRM, the higher its ability to survive in competition, allowing the organization to continue existing and gain a competitive advantage. This is because the higher the intellectual capital a company has regarding the environment, the better green HRM is related to environmental protection and will provide a higher competitive advantage (Qurota, 2020). The study reveals that the two dimensions of GHRM practice (green recruitment and selection, and green rewards) and green intellectual capital (green human capital, green structural capital, and green relational capital) have a positive impact on the company's sustainability. GHRM practices and green intellectual capital have a positive role in this model. Practitioners, scholars, and academics can all benefit from the study's findings. Limited variables and developing economies are the scope of this study. Future studies may investigate and explore the impact of green HRM practices and the role of management and stakeholder pressure on new areas of sustainability. (Malik et al., 2020)Another finding is that this enriches the existing knowledge base on green intellectual capital, particularly in the context of SMEs, and suggests that green intellectual practices in the SME sector remain relatively underdeveloped. They also imply that SMEs must pay more attention to the relational aspect, as relationships with stakeholders are the primary source of strength in competing effectively. (Fitri et al., 2022)
Based on theoretical exploration and discussion of previous research results, the research conceptual framework can be depicted as in Figure 1.

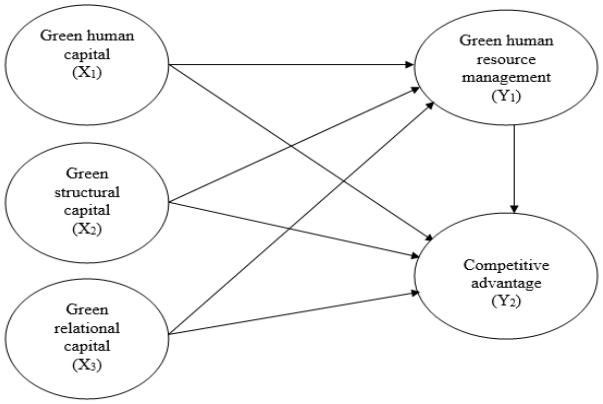


Fig. 1: Conceptual Framework.

2.2. Research hypothesis

H1: Green human capital, green structural capital, and green relational capital positively affect green human resources management. Investing in all three types of Green Intellectual Capital is essential for building strong Green HRM systems. These systems then enable organizations, including UKM kayu di Badung, to effectively recruit, train, appraise, and reward employees in alignment with environmental sustainability goals, creating a more decisive competitive advantage.(Yong et al., 2022)(Ali et al., 2022)
H2: Green human capital, green structural capital, green relational capital, and green human resources management have a positive effect on competitive advantage. Green Human, Structural, and Relational Capital provide a strong foundation for implementing Green HRM. Green HRM encourages innovation and green value creation through various practices (recruitment, training, awards, participation). The result is an increase in Green Competitive Advantage, both directly and indirectly (via innovation, knowledge sharing, green culture).(Mustafa et al., 2023)(Ullah et al., 2023)(Xin & Wang, 2023)
H3: Green human resources management plays a mediating role in the influence of green human capital, structural capital, and relational capital on competitive advantage. Green HRM has consistently mediated the influence of green capital on competitive advantage in many studies and contexts. The mediation style can be simple (direct) or complex (serial, involving knowledge sharing and innovation). Supporting research at Badung Timber UKM to empirically test this mediation model using SEM has the potential to produce substantial academic contributions.(Yong et al., 2022)(Mustafa et al., 2023)(Munawar et al., 2022)(Ullah et al., 2023)

3. Research methods

The small and medium-sized enterprise (SME) sector in Badung Regency's wood crafts industry was the focus of this research. This study reveals three distinct kinds of latent variables. Green human capital (X1), green structural capital (X2), and green relational capital (X3) are all examples of endogenous latent variables that are impacted by or caused by exogenous latent factors (Sugiyono, 2018). To prevent changes in the endogenous latent variable, in this case green HRM (Y1), from being caused by changes in the exogenous latent variable, a mediating variable is employed (Sugiyono, 2018). A competitive advantage (Y2) is an example of an exogenous latent variable that influences or results from an endogenous latent variable (Sugiyono, 2018).
According to the data collected in December 2023, out of 804 timber SMEs in Badung Regency, 757 (or 94.15%) were small-scale companies in the industry, and 47 (or 5.85% of the total) were medium-sized. The number of indicators employed for all latent variables determines the sample measurement criteria. According to Fernand (2014), the sample size is determined by multiplying the number of

indicators by 5-10. A sample size of 150–300 timber SMEs was used for this research, as all latent variables were comprised of 30 parameters. The sample comprised 267 timber SMEs, consisting of 251 small and 16 medium-sized enterprises, as calculated using the Slovin formula (35). Suppose the population is not homogeneous and contains proportional strata; proportionate stratified random sampling can be employed to determine the sample (Sugiyono, 2018). Factors such as product type, village area in Badung Regency, and the numerous subpopulations that comprise the SME community informed this. Each respondent's answer was given a score to quantify the questionnaire data. This study used a Likert scale for data collection, with the following weights: STS = 1, TS = 2, CS = 3, Agree = 4, and SS = 5. With a correlation value (r) greater than 0.3 and an alpha level of 0.05, all instruments are deemed legitimate according to the validity test results. According to Sugiyono (2018), all instruments were reliable in the reliability test because their Cronbach Alpha (α) values were higher than 0.60. Descriptive and inferential statistics are utilized in data analysis procedures. For hypothesis testing, inferential statistics utilize structural equation modeling (SEM) with the alternative Partial Least Squares (PLS) algorithm (Ghozali, 2015).

4. Results

4.1. Description of respondent characteristics

The characteristics of the respondents are evident in terms of age, gender, education, socioeconomic status, and household position.

Table 1: Respondent Characteristics

No	Variable	Classification	Number of samples	Percentage (%)
1	Age	15-25 years	18	6.74
		26-35 years	40	14.98
		36-45 years	91	34.08
		46-55 years	60	22.47
		56-65 years	46	17.23
		> 65 years	12	4.49
		Total	267	100.00
2	Sex	Male	252	94.38
		Female	15	5.62
		Total	267	100.00
3	Level of education	Elementary school	39	14.61
		Junior high school	44	16.48
		Senior high school	159	59.55
		Diploma/bachelor	25	9.36
		Total	267	100.00
4	Marital status	Single	49	18.35
		Married	218	81.65
		Total	267	100.00
5	Position in the household	Head of household	198	74.16
		Wife	10	3.74
		Son/ daughter	59	22.10
		Total	267	100.00

Source: Respondent, 2024.

Table 1 shows that most respondents were 36-45 years old, at 34.08 percent, followed by those 46-55 years old, at 22.47 percent, 56-65 years old, at 17.23 percent, 26-35 years old, at 14.98 percent, and 15-25 years old, at 14.98 percent. The annual inflation rate was 6.74 percent, and for those aged 65 and above, it was 4.49 percent. Timber SMEs are predominantly dominated by male respondents, comprising 252 people (94.38%), compared to 15 female respondents (5.62%). The latest level of education is dominated by high school at 59.55 percent, followed by junior high school at 16.48 percent, elementary school at 14.61 percent, and diploma/bachelor's degree at 9.36 percent. Most respondents were married, comprising 218 people (81.65%), while 49 people (18.35%) were unmarried. Most of those who are married, namely 198 people or 74.16 percent, are heads of household. Next are children, comprising 59 people or 22.10 percent, and finally, as wives, there are 10 people or 3.75 percent.

4.2. Evaluation of the outer model (measurement model)

An outer model analysis, also known as an outer measurement model, aims to identify the connection between latent variables or constructs and the indicators that measure them. Smart PLS employs the PLS Algorithm technique to analyze this outer model.

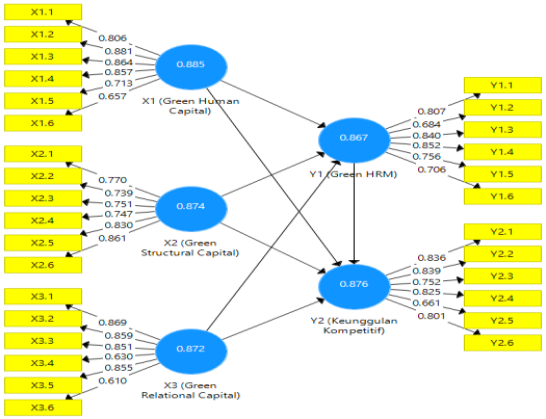


Fig. 2: Outer model.

When assessing internal consistency reliability, Cronbach's alpha is a good indicator, while outside loadings suggest that the outer model analysis was successful.

The goal of convergent validity is to establish the validity of each indicator's link to its latent construct or variable. The Average Variance Extracted (AVE), along with outer loadings and loading factors, can be used to evaluate convergent validity tests. Each measurement (indicator) strongly correlates with the construct, as indicated by the outer loadings values exceeding 0.5 and the total statistical t-value greater than 1.96. The high correlation between each indicator and the construct is demonstrated by all constructions having outer loading values more than 0.6.

Table 2: Average Variance Extracted (AVE)

Variabel	(AVE)
Green human capital (X_1)	0.641
Green structural capital (X_2)	0.615
Green relational capital (X_3)	0.619
Green human resources management (Y_1)	0.603
Competitive advantage (Y_2)	0.622

Source: Smart PLS data processing, 2024.

The fact that all the constructions' AVE ratings are higher than 0.50 indicates that they have all fulfilled the criteria. Overall, the indicators may be explained by one latent variable accounting for over 50% of the variation, a result of appropriate convergent validity, as shown by this score.

The goal of discriminant validity testing is to determine how distinct the latent construct is from other constructs. The cross-loading approach was used to conduct discriminant validity testing.

Table 3: Cross-Loading of Each Indicator on Research Constructs

No		X_1	X_2	X_3	Y_1	Y_2
1.	$X_{1.1}$	0.806	0.411	0.374	0.527	0.551
2.	$X_{1.2}$	0.881	0.440	0.449	0.526	0.580
3.	$X_{1.3}$	0.864	0.377	0.392	0.489	0.526
4.	$X_{1.4}$	0.857	0.383	0.313	0.433	0.514
5.	$X_{1.5}$	0.713	0.381	0.414	0.472	0.517
6.	$X_{1.6}$	0.657	0.324	0.307	0.423	0.442
7.	$X_{2.1}$	0.349	0.770	0.407	0.418	0.438
8.	$X_{2.2}$	0.262	0.739	0.381	0.333	0.424
9.	$X_{2.3}$	0.420	0.751	0.466	0.483	0.537
10.	$X_{2.4}$	0.314	0.747	0.386	0.350	0.404
11.	$X_{2.5}$	0.441	0.830	0.409	0.483	0.483
12.	$X_{2.6}$	0.453	0.861	0.462	0.514	0.540
13.	$X_{3.1}$	0.413	0.444	0.869	0.491	0.536
14.	$X_{3.2}$	0.438	0.450	0.859	0.480	0.531
15.	$X_{3.3}$	0.370	0.410	0.851	0.423	0.454
16.	$X_{3.4}$	0.243	0.389	0.630	0.399	0.403
17.	$X_{3.5}$	0.489	0.479	0.855	0.555	0.603
18.	$X_{3.6}$	0.201	0.342	0.610	0.385	0.348
19.	$Y_{1.1}$	0.433	0.408	0.469	0.807	0.518
20.	$Y_{1.2}$	0.409	0.425	0.431	0.684	0.527
21.	$Y_{1.3}$	0.534	0.439	0.515	0.840	0.602
22.	$Y_{1.4}$	0.537	0.490	0.497	0.852	0.586
23.	$Y_{1.5}$	0.446	0.420	0.409	0.756	0.481
24.	$Y_{1.6}$	0.423	0.415	0.390	0.706	0.456
25.	$Y_{2.1}$	0.535	0.595	0.549	0.614	0.836
26.	$Y_{2.2}$	0.550	0.488	0.506	0.527	0.839
27.	$Y_{2.3}$	0.522	0.428	0.453	0.557	0.752
28.	$Y_{2.4}$	0.556	0.493	0.504	0.513	0.825
29.	$Y_{2.5}$	0.431	0.406	0.416	0.520	0.661
30.	$Y_{2.6}$	0.497	0.441	0.497	0.499	0.801

Source: Smart PLS data processing, 2024.

The bolded figures indicate that the construct correlates with the measurement item at a level higher than 0.6, which is greater than the cross-loading with other constructs. This model satisfies the discriminant validity criteria since all construct indicators' loading values are higher than the cross-loading. Considerations of study construct correlation and the Fornell-Larcker Criterion's discriminant validity provide an additional lens through which to view discriminant validity.

Table 4: Discriminant Validity for the Fornell-Larcker Criterion and Correlation Between Research Constructs

	X_1	X_2	X_3	Y_1	Y_2
X_1	0.801				
X_2	0.485	0.784			
X_3	0.472	0.537	0.787		
Y_1	0.601	0.558	0.585	0.777	
Y_2	0.656	0.607	0.621	0.684	0.788

Source: Smart PLS data processing, 2024.

The association with other variables is less than the roots of each construct's AVE (Fornell-Larcker Criterion). This model satisfies the criteria for discriminant validity, as the AVE Root value for every latent variable is greater than the correlation with other constructs.

The internal consistency reliability of an indicator determines how well it measures its hidden concept. We use composite reliability and Cronbach's alpha as our tools for this.

Table 5: Composite Reliability and Cronbach's Alpha Values of Research Construct Variables

Variabel	Composite reliability	Cronbach's alpha
Green human capital (X_1)	0.914	0.885
Green structural capital (X_2)	0.905	0.874
Green relational capital (X_3)	0.905	0.872
Green human resources management (Y_1)	0.901	0.867
Competitive advantage (Y_2)	0.907	0.876

Source: Smart PLS data processing, 2024.

All of the constructs have a composite reliability rating higher than 0.7, indicating they are very reliable. Additionally, every construct has a Cronbach's alpha value of 0.7 or higher.

4.3. Inner model analysis (structural model)

The goal of inner model analysis, a structural model, is to predict cause-and-effect correlations between constructs or latent variables. Smart PLS employs the Bootstrapping method for its inner model analysis.

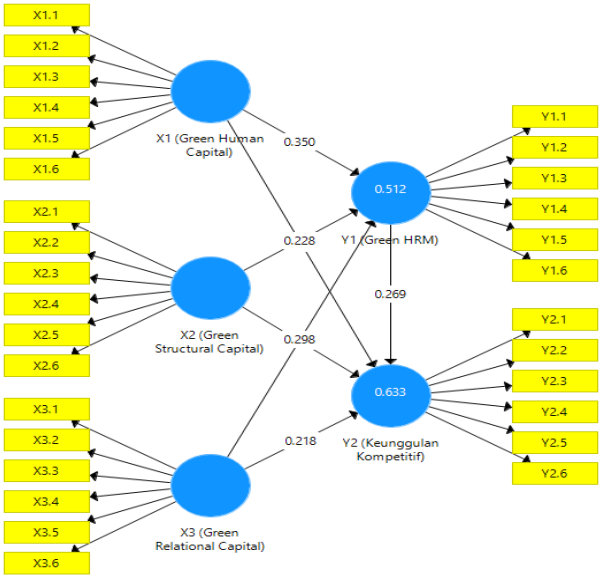


Fig. 3: Inner Model (Structural Model).

R-squared (R^2) measures the accuracy of the inner model. The influence of exogenous constructs on green HRM has an R-squared value of 0.512, corresponding to 51.20% of the variance. Exogenous constructs moderate green HRM, as indicated by R-squared values ranging from 33% to 67%. The effect of an exogenous construct on competitive advantage has an R-squared value of 0.633, or 63.30%. The modest impact of exogenous factors on competitive advantage is indicated by R-squared values ranging from 33% to 67%.

Additionally, the Stone-Geisser Q-square test can be used to assess the predictive prevalence or capacity of the PLS model (Ghozali, 2016). The formula: Q^2=1-{(1-R_1^2)(1-R_2^2)} is used to determine Q^2, also known as the Stone-Geiser Q-square test. This study's model has a relevant predictive value, as the Q-square test calculation yielded 0.821, or 82.10%, indicating that the model can describe the information included in the research data with 82.10% accuracy.

4.4. Direct effect test results

Table 6: Direct Effect Test Results

	Original sample	Standard deviation	T statistics	P values	
X_1 -> Y_1	0.350	0.062	5.630	0.000	Significant
X_2 -> Y_1	0.228	0.055	4.139	0.000	Significant
X_3 -> Y_1	0.298	0.052	5.700	0.000	Significant
X_1 -> Y_2	0.295	0.048	6.119	0.000	Significant
X_2 -> Y_2	0.196	0.050	3.922	0.000	Significant
X_3 -> Y_2	0.218	0.051	4.282	0.000	Significant
Y_1 -> Y_2	0.269	0.060	4.481	0.000	Significant

Source: Smart PLS data processing, 2024.

Given that the path coefficient is 0.350, the T-statistic is 5.630, and the P-value is 0.000, all of which are less than 0.0, we may conclude that green HRM has a positive effect on green human capital. The correlation between green structural capital and green HRM is positive, as indicated by the path coefficient (0.228), T-statistic (4.139), and P-value (0.000), all of which are below the significance level of 0.05. The positive relationship between green relational capital and green human resources management is supported by the data, as evidenced by H1 (path coefficient = 0.298, T-statistic = 5.700, $p < 0.05$).

The evidence suggests that green human capital contributes to competitive advantage, with a path coefficient of 0.295, a T-statistic of 6.119, and a P-value of 0.000 (less than 0.05). With a path coefficient of 0.196, a T-statistic of 3.922, and a P-value of 0.000 (less than 0.05), green structural capital has a positive effect on competitive advantage. It is determined that green relational capital has a favorable effect on competitive advantage, as indicated by a route coefficient of 0.218, a T-statistic of 4.282, and a P-value of 0.000, which is less than 0.05. Our results indicate that green HRM has a positive impact on competitive advantage (P = 0.000, t-statistic = 4.481, and path coefficient = 0.269). Thus, H2 has been greenlit.

4.5. Indirect effect test results

Table 7: Indirect Effect Test Results

	Original sample	Standard deviation	T statistics	P values	
X_1 -> Y_1 -> Y_2	0.094	0.026	3.637	0.000	Significant
X_2 -> Y_1 -> Y_2	0.062	0.023	2.644	0.008	Significant
X_3 -> Y_1 -> Y_2	0.080	0.021	3.749	0.000	Significant

Source: Smart PLS data processing, 2024.

Given that the parameter coefficient X1 -> Y1 -> Y2 is 0.094, the T-statistic is 3.637, and the P-value is 0.000, which is less than 0.05, it has been suggested that green human resources management acts as a mediator between green human capital and competitive advantage. The results indicate that green structural capital influences competitive advantage through green HRM, as supported by a 0.062 parameter coefficient (X2 -> Y1 -> Y2), a 2.644 T-statistic, and a 0.008 P-value, which is less than 0.05. We may accept H3 and conclude that green relational capital influences competitive advantage through green HRM, as evidenced by the parameter coefficient of 0.080, the T-statistic of 3.749, and the P-value of 0.000, which is less than 0.05. Test results show that green HRM variables partially mediate a positive relationship between competitive advantage and green structural capital, relational capital, and human capital. A positive relationship characterises this relationship.

5. Discussion

5.1. The influence of green human capital, green structural capital, and green relational capital on green human resources management

An organization's environmental consciousness can be significantly enhanced by investing in green human capital, which comprises the expertise, experience, and knowledge of environmentally conscious workers. Energy savings, waste management, and resource efficiency are just a few examples of green HRM practices that employees with the knowledge and skills can foster to support such initiatives. Developing environmentally conscious human capital lays the groundwork for more efficient green HRM implementation, which benefits both the environment and the company's bottom line. Green structural capital is crucial for small and medium-sized wood enterprises (SMEs) in enabling and bolstering green HRM adoption. For small and medium-sized wood businesses, having substantial green structural capital is crucial for meeting all environmental standards. It is easier to adopt green HRM in a way that always conforms with rules when procedures and systems are established to fulfill environmental legal criteria. To strengthen and promote the implementation of green HRM, green relational capital is essential. By utilizing green relational capital, small and medium-sized timber businesses can connect with suppliers who share their values and collaborate to minimize their environmental impact. Small and medium-sized wood businesses (SMEs) may face pressure from environmentally conscious clients to implement green HRM practices. Customers, society, and the market at large view timber SMIs favorably due to their commitment to sustainability. Timber SMEs can participate in environmental conservation efforts through CSR programs that encourage staff participation in green initiatives, thanks to their strong relationships with their local communities. For small and medium-sized wood enterprises (SMEs), the key to successful green HRM is networking with other groups, whether they be governmental or non-profit.

The positive association between green HRM and green structural capital, green relational capital, and green human capital has been consistently demonstrated by multiple studies, including those by Yong et al. (2019), Sudin and Saad (2018), Olander et al. (2016), and Akbari et al. (2013). Higher amounts of green structural capital, relational capital, and human capital are associated with a stronger correlation between green HRM and environmental preservation (Budiarti, 2017; Quota, 2020). According to Jirawuttinunt (2018), one of the main characteristics of green HRM is that it encourages employees to support the organization's environmental initiatives.

5.2. The influence of green human capital, green structural capital, green relational capital, and green human resources management on competitive advantage

Green human capital enhances the competitive advantage of timber SMEs through environmentally friendly product and process innovations, as well as operational efficiency that reduces costs. It fosters a positive reputation in a market that is increasingly concerned about the environment. Employees who understand sustainable practices also help timber SMEs comply with regulations, achieve certification, and increase employee loyalty and productivity, strengthening the company's overall competitiveness. Green structural capital can optimize operational efficiency and reduce environmental impacts by implementing environmental management systems, environmental committees, and investment in green technology. The environmentally friendly rules and regulations implemented help timber SMEs meet sustainability standards recognized by the global market. Investments in green technology also enable more efficient and environmentally friendly production, providing a competitive advantage through reduced costs and increased product competitiveness in an increasingly competitive market. Green relational capital strengthens the competitive advantage of timber SMEs by building sustainable relationships with customers, suppliers, and business partners. Through this relationship, SMEs can access environmentally friendly raw materials and green technology, which supports more efficient production. Good relationships also enhance the company's image and foster the loyalty of consumers who value the environment. Collaboration in a sustainable supply chain encourages innovation and efficiency, thereby strengthening the competitiveness of SMEs in a market that is increasingly concerned about environmental issues. Green human resources management helps increase the competitive advantage of timber SMEs through implementing environmentally friendly practices in human resource management. Training that focuses on green skills enables employees to become more proficient in using environmentally friendly technologies, thereby increasing production efficiency.

According to previous studies, innovation with a propensity to attain or acquire competitive advantage can be built with green structural capital, green human capital, and green relational capital (Chen, 2013; Chalal & Bakshi, 2014). A competitive advantage is possible with green HRM. Employees who care about the environment can help their company gain a competitive edge, according to research on the effects of Green HRM (Yong et al., 2019; Huang & Kung, 2011).

5.3. The role of green human resources management mediates the influence of green human capital, green structural capital, and green relational capital on competitive advantage

Green human resources management mediates the influence of green human capital on competitive advantage by managing and developing human resources that focus on sustainability. Green HRM ensures that employees have relevant green skills through training to optimize their abilities. Employees are better equipped to implement environmentally friendly practices in timber SMEs. This enhances efficiency and product quality, thereby strengthening the company's competitiveness and reputation in a market that prioritizes sustainability. Green structural capital influences competitive advantage when mediated by green human resources management. Environmental management systems and environmentally friendly technologies require special skills to be implemented effectively. Employees are given training and development to optimize the use of these green structures. Green HRM ensures that employees can effectively manage systems, drive innovation, and implement sustainable operational processes. This strengthens operational efficiency, improves product quality, and ultimately increases the competitiveness of timber SMEs in a market that demands sustainability. Green human resources management mediates the influence of green relational capital on competitive advantage. Strong relationships with customers, suppliers, and business partners regarding green practices must be supported by employees who possess the skills and understanding of sustainability. Employees can utilize these relationships more effectively through green HRM, increasing collaboration in an environmentally friendly supply chain. Proper management ensures that employees can manage green relations optimally, thereby increasing innovation and operational efficiency, ultimately strengthening the competitiveness of timber SMEs in the market.

The study's findings corroborate those of earlier studies, which have shown that green HRM helps workers internalize an ideology that mediates green human capital, structural capital, and relational capital, thereby giving businesses a market edge through innovation and cost reduction. (Stuti & Wahyuni, 2018; Zaid et al., 2018; Mishra, 2017).

Global relevance is confirmed: the scheme works not only at the level of large companies or banks, but also effectively at the SME and manufacturing levels. Transferable to Badung: By adapting to the local context and scale, timber SMEs can adopt global best practices to enhance their green competitiveness. The key to success lies in a combination of three green capitals, channeled through Green HRM, as well as regulatory support and environmental awareness. Based on this evidence, the research and intervention model for timber SMEs in Badung is not only theoretically relevant but has also proven to be globally effective, with the potential to be applied in the local context for achieving a sustainable competitive advantage.

6. Research findings

Ketakson crafts, which are based on spiritual and behavioral values in the economy as social capital, are tangible assets or capital that are important for the competitive advantage of timber SMEs. Ketakson craft products, produced by skilled craftsmen, will feature a range of environmentally friendly and economically valuable products compared to similar products produced by other craftsmen. Ketakson crafts products from timber produced by SME artisans in Badung Regency, utilizing local wisdom and values that elevate the product's value. This ketakson craft was born from the high skills of artisans whose creativity, taste, and intention are still in demand by consumers because it has strong religious and magical values. Timber SMEs in rural areas in Badung Regency produce ketakson craft products, which differentiate them from timber SMEs from other areas. Ketakson craft products are a diverse cultural treasure, offering great potential for product innovation and the creative industries, all while promoting environmental conservation.

When viewed through the lens of social capital, which encompasses societal norms and values that foster cooperation through an amicable web of contacts and dialogue, the meslisi tradition becomes clearer from an economic perspective. Trust is the basis for the formation of the meslisi tradition, which is a type of social capital, specifically social bridging, a social bond that arises due to various weaknesses in timber SMEs, prompting them to build strengths from these weaknesses within the meslisi group. Meslisi activities are a form of networking oriented towards taking turns helping timber SMEs fulfill orders, and ultimately, everything is done for the common good. Networking interactions in the meslisi tradition will facilitate collaborative relationships with consumers, financial institutions, government, and other institutions, empowering timber SMEs in Badung Regency to strengthen their competitive advantage. Meslisi activities from local wisdom studies show the competitiveness of timber SMEs working together to generate relatively high incomes and face competition from similar business actors.

7. Research contribution

Regarding green HRM, this study expands our understanding of how green structural capital, green relational capital, and green human capital interact and impact one another. Applying this theoretical framework helps shed light on how Green HRM boosts competitive advantage. The mediation model presented in this study introduces Green HRM as a mediator between green intellectualism and competitive advantage. This suggests that small and medium-sized wood companies (SMEs) may benefit from green HRM by leveraging their green structures, people, and relationships. SMEs can also benefit from green management practices by maximizing their green assets. This research aims to illuminate how green HRM may help small and medium-sized wood firms (SMEs) manage and implement green intelligence. Filling a central knowledge gap, we can now comprehend how to apply green HRM theory in various industrial contexts. This research provides a robust theoretical foundation for practitioners to develop and implement sustainable HRM policies. This means that SMEs in the wood industry can better understand how green HRM investments can increase productivity and competitiveness through better green intelligence management. Practical and Policy Implications: The following are practical recommendations and specific and actionable policies, designed to help timber SMEs in Badung improve green relational, structural & human capital through Green HRM, as well as encourage competitive advantage: The implementation of the program can be done through collaboration between the Cooperative & SME Office, the Environment Office, Bappeda, banking (especially P2H and OJK), as well as industry associations such as ASMINDO. With this roadmap, timber SMEs in Badung can achieve a sustainable competitive advantage while supporting the vision of a green district and local economic empowerment.

8. Conclusion

Based on the research and discussions that have already taken place, conclusions can be drawn. Green structural capital, green relational capital, and green human capital all positively affect green HRM and competitive advantage for small and medium-sized wood enterprises

in Badung Regency. Green HRM provides small and medium-sized wood enterprises in Badung Regency with a competitive edge in the marketplace. The competitive advantage of small and medium-sized timber enterprises (SMEs) in Badung Regency is linked to the quality of their green human capital, which is enhanced through green HRM. Green human resource management mediates the connection between green structural capital and the competitive advantage of SMEs in the wood industry of Badung Regency. Green human resource management enables small and medium-sized timber businesses in Badung Regency to gain a competitive edge, thereby enhancing their green relational capital.

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